



Notice of Public Meeting

The Board of Retirement of the San Mateo County Employees' Retirement Association will meet on **Tuesday, October 25, 2016, at 10:00 A.M.**

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

1. Call to Order, Roll Call and Miscellaneous Business

- 1.1 Administration of Oath of Office to Ben Bowler
- 1.2 Announcement of Committee Appointments

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 Regular Board Meeting Minutes from September 27, 2016

4. Approval of the Consent Agenda*

- | | |
|--------------------------------|--------------------------------------|
| 4.1 Disability Retirements (2) | 4.5 Member Account Refunds |
| • Garcia, Elizabeth | 4.6 Member Account Rollovers |
| • Terreforte, Araceli | 4.7 Member Account Redeposit |
| 4.2 Service Retirements | 4.8 Approval of Resolutions Amending |
| 4.3 Continuances | Definitions of Compensation Earnable |
| 4.4 Deferred Retirements | and Pensionable Compensation |

5. Benefit & Actuarial Services

- 5.1 Consideration of Agenda Items, if any, removed from the Consent Agenda

6. Investment Services

- 6.1 Report on Preliminary Monthly Portfolio Performance for the Period Ending September 30, 2016
- 6.2 Report on Opportunistic Credit Manager Annual Review- Brigade
- 6.3 Report on Alternative Manager Annual Review- Standard Life GARS
- 6.4 Approval of New Asset Allocation Policy Portfolio
- 6.5 Approval of Resolution Amending the Investment Policy

7. Board & Management Support

- 7.1 Acceptance of Financial Audit Management Reports and Findings
- 7.2 Approval of SamCERA's 2016 Comprehensive Annual Financial Report (CAFR)
- 7.3 Workshop on Delegation of Investment Activities and Direction to Staff
- 7.4 Discussion of SACRS Business Meeting Topics
- 7.5 Approval of Board of Retirement Meeting Schedule for 2017

Notice of Public Meeting

Page 2 of 2

8. Management Reports

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

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

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

9. Report on Actions Taken in Closed Session

10. Adjournment in Memory of the Following Deceased Members:

Artigues, Raymond	September 8, 2016	Chope Hospital
Hansen, Jay	September 11, 2016	Engineer & Road Dept.
Holl, Theodore	September 14, 2016	Public Works
Alota, Richard	September 24, 2016	Hospital
Benson, Harold	September 27, 2016	General Services



Scott Hood, Chief Executive Officer

Posted: October 19, 2016

(* 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 REGULAR AGENDA MAY BE TRANSFERRED TO THE CONSENT 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 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
Board of Retirement

October 25, 2016

Agenda Item 1.1

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer



SUBJECT: Administration of the Oath of Office to Newly Appointed Trustee

In this agenda item, the Trustee Oath of Office will be given to Ben Bowler, fifth member, appointed by the Board of Supervisors on September 6th, 2016.

Attachment

Board of Supervisors' Appointment Memorandum



COUNTY OF SAN MATEO
Inter-Departmental Correspondence
Board of Supervisors



APPROVED BY
BOARD OF SUPERVISORS

SEP 06 2016

CLERK OF BOARD
BY S. Slocum DEPUTY

Date: August 8, 2016

Board Meeting Date: September 6, 2015

Special Notice / Hearing: None

Vote Required: Majority

To: Honorable Board of Supervisors

From: Supervisor Dave Pine
Supervisor Warren Slocum

Subject: Appointments to the Board of Retirement of the San Mateo County
Employees' Retirement Association (SamCERA)

RECOMMENDATION:

Recommendation for the appointment of Ben Bowler (Fifth Member) and Kurt Hoefler (Ninth Member) to the Board of Retirement of SamCERA, each for a term ending June 30, 2019.

BACKGROUND:

The Board of Retirement serves as fiduciary for the members of SamCERA and as a prudent administrator of the retirement fund. Four of the nine members of the Board are appointed for a term of three years. The term for these two appointments would end June 30, 2019.

DISCUSSION:

Ben Bowler is the Treasurer of Matson, Inc. He was first appointed in August 2008 to fill a vacancy and was reappointed in 2013. During his tenure on the Board he has served as Chairman of the Investment Committee.

Kurt Hoefler is a partner at Golub Group, LLC. As an investment adviser and investment banker, he has provided strategic and financial advice to institutions and individuals. This would be his first term on the Board of Retirement.

These appointments contribute to the 2025 Shared Vision statement of a Collaborative Community. Our diverse population works well together to build strong communities, effective government and a prosperous economy, civic engagement – including voting, public service, charitable giving, volunteerism, and participation in public discussions of important issues – is uniformly high among the diverse population of San Mateo County.

FISCAL IMPACT:

None.

COUNTY OF SAN MATEO
COUNTY MANAGER'S OFFICE

John L. Maltbie
County Manager/
Clerk of the Board

County Government Center
400 County Center, 1st Floor
Redwood City, CA 94063
650-363-4121 T
650-363-1916 F
www.smcgov.org

September 6, 2016

Benedict J. Bowler

Subject: Appointment to the Board of Retirement of SamCERA

Dear Benedict J. Bowler:

The Board of Supervisors is pleased to confirm your appointment to the Board of Retirement of SamCERA (Fifth Member) for a term expiring **June 30, 2019**. We appreciate your willingness to devote your time to this important task and hope you will find your efforts rewarding.

You are required to take an oath of office to be personally administered by the Clerk of the Board of Supervisors or a Deputy of said Clerk. The oath will be administered at the County Manager/Clerk of the Board's Office, 400 County Center, Redwood City. The office is open Monday through Thursday from 7:30 a.m. to 5:30 p.m. and on Friday from 8:00 a.m. to 5:00 p.m. Please contact me at sgolestan@smcgov.org or 650-363-4608 to schedule an appointment.

Thank you for your commitment to the Board of Retirement of SamCERA.

Sincerely,



Sherry Golestan, Agenda Administrator

Attachment: Certified Appointment Board Memo

c: Marci Dragun, Legislative Aide
Office of Supervisor Warren Slocum

Scott Hood, Commission Liaison



SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 1.2

TO: Board of Retirement



FROM: Scott Hood, Chief Executive Officer

SUBJECT: Announcement of the Appointment of Board Committees

Staff Recommendation

The Chair will announce the Board members appointed to the Investment Committee, the Audit Committee, the Ad Hoc Education Committee and the Ad Hoc CEO Review Committee, as the Chair deems appropriate.

At the September meeting, Mr. Hackleman appointed Ben Bowler as Chair of the Investment Committee; Shirley Tourel as Chair of the Audit Committee; and Mark Battey, as Chair of the Ad Hoc Education Committee.

Background

The Board Chair is authorized by the Regulations of the Board of Retirement to appoint all committees.

"1.1 Election Of Chair: At the first regular meeting in July, the Board of Retirement shall elect one of its members chair for a term of one year or until his or her successor is duly elected and qualified. The Chair shall preside at all meetings of the Board, **shall appoint all committees** (*emphasis added*) and shall perform all duties incidental to that office."

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
SEPTEMBER 27, 2016 – REGULAR BOARD MEETING MINUTES

1609.1 **Call to Order, Roll Call and Miscellaneous Business**

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

Roll Call:

Present: Sandie Arnott, Mark Battey, Paul Hackleman, Kurt Hoefler, Natalie Kwan Lloyd, Susan Lee (for Shirley Tourel) David Spinello, Eric Tashman.

Excused: Ben Bowler, Shirley Tourel

Alternates present: Alma Salas and Susan Lee

Staff: Scott Hood, Michael Coultrip, Brenda Carlson, Gladys Smith, Elizabeth LeNguyen, Barbara Edwards, and Kristina Perez.

Consultants: Margaret Jadallah, Joe Abdou and Stephen Quirk (*Verus*); Nick Collier and Craig Glyde, Milliman, Inc.

1609.1.4 **Presentation of Certificate to Michal Settles:** In recognition of her service as a trustee on the Board of Retirement, Mr. Hood presented Ms. Settles with a certificate of appreciation and thanked her on behalf of the Board and SamCERA.

1609.1.1 **Administration of Oath of Office to Kurt Hoefler:** Sandie Arnott, County Treasurer, administered the oath of office to Kurt Hoefler (Ninth Member) who was appointed on June 6, 2016, by the San Mateo County Board of Supervisors to serve on the Board of Retirement.

1609.1.2 **Election of Board Officers:** Ms. Arnott presented the recommendations from the Ad Hoc Nominating Committee to the Board. The Committee nominated the following slate of officers for the term ending June 30, 2017: Paul Hackleman, Chair; Mark Battey, Vice Chair; and Natalie Kwan Lloyd, Secretary. There were no other nominations made.

Action: With no other nominations, Mr. Hackleman asked for approval of the proposed slate of officers. The slate was approved with a unanimous voice vote, with trustees Arnott, Battey, Hackleman, Hoefler, Kwan Lloyd, Lee (for Tourel) Spinello, and Tashman all saying aye. There were none opposed.

1609.1.3 **Announcement of Appointment of Board Committees:** Mr. Hackleman announced that Ms. Tourel will be serving as the Chair of the Audit Committee; Mr. Bowler would serve as Chair of the Investment Committee; and Mr. Battey would serve as Chair of the Ad Hoc Education Committee. The announcement of the remaining members of each committee will be continued until the October meeting.

1609.2.1 **Oral Communications from the Board:** Mr. Spinello reported his attendance at the Pacific Institutional Real Estate Investor Forum, on September 22, 2016, in San Francisco. Ms. Lee reported her attendance at the Public Funds Forum, in Park City, Utah, on September 6-8, 2016.

1609.2.2 **Oral Communications from the Public:** None.

1609.3.1 **Approval of Board Meeting Minutes from August 23, 2016:** Mr. Hackleman asked if there were any changes or corrections to the minutes from August 23, 2016 and none were noted.

Action: Mr. Battey moved to approve the minutes from August 23, 2016; the motion was seconded by Ms. Kwan Lloyd. The motion carried with a vote of 6-0-2 with trustees Battey, Hackleman, Kwan Lloyd, Lee (for Tourel) Spinello, and Tashman all in favor; none opposed. Trustees Arnott and Hoefler abstained from voting, as they were not in attendance at the August 23 meeting.

1609.4.0 **Approval of the Consent Agenda:** Mr. Hackleman asked if there were any items to be removed from the Consent Agenda, and the disability applications of Mr. Hinshaw and Ms. Minelli were requested to be removed and heard in closed session.

Action: Mr. Tashman moved to approve the remaining items on the Consent Agenda, and the motion was seconded by Ms. Arnott. The motion carried with a vote of 8-0 with trustees Arnott, Battey, Hackleman, Hoefler, Kwan Lloyd, Lee (for Tourel) Spinello, and Tashman all in favor; none opposed.

1609.4.2 **Survivor Death Benefits**

The Board found that Ray Boulding, would have been entitled to a non-service-connected disability but had died and Maudry Boulding the surviving spouse has elected to receive an optional death allowance pursuant to Government Code § 31781.1.

1609.4.3 **Service Retirements:**

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

Member Name	Effective Retirement Date	Department
Conlan, Michael A	July 30, 2016	Probation
Fuentes, Maria E	August 1, 2016	Deferred from Sheriff's
Harris, Cecily A	July 29, 2016	Deferred from Public Works
Kerr, Paula R	August 1, 2016	Assessor Clerk Recorder
La Mariana, Joseph A	July 30, 2016	County Manager's Office
Mapu, Lusi	July 29, 2016	Human Services Agency
Meyer, Julie N	July 13, 2016	Superior Court
Munks, Gregory A	July 16, 2016	Sheriff's
Roxas, Generosa D	July 16, 2016	Medical Center
Tom, David M	July 9, 2016	Assessor Clerk Recorder

1609.4.4 **Continuances:**

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

Survivor's Name	Beneficiary of:
Luzzi, Else	Luzzi, Robert
Spiker, Mary	Spiker, John

1609.4.5 **Deferred Retirements:**

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

Member Name	Retirement Plan Type
Au, Gloria	G4, Vested - Reciprocity
Davis, Kathryn B.	G5, Vested
Martinez, Arturo	G4, Vested
Mattman, Lon T.	G4, Vested
Morris, Becky A.	G4, Vested
Rands-Preuss, Monica	G4, Vested
Rogelio, Karen	G4, Vested
Stankovich, Michelle A.	S4/G4, QDRO Non-vested
Tawde, Anuradha S.	G4, Vested

1609.4.6 **Member Account Refunds:**

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

Member Name	Retirement Plan Type
Bock, Kylie	G7, Non-vested
Collins, Lauren	G4, QDRO Non-vested
Fantozzi, Peter	G4, Vested

Member Account Refunds (cont.)

Ferry, Christine	G7, Non-vested
Gambucci, Michelle	G7, Non-vested
Gutierrez, Maria	G7, Non-vested
Hayes, April	G7, Non-vested
Hoover, Robert	G5, Non-vested
Iem, Gary	G7, Non-vested
Jenkins, Robert	G7, Non-vested
Logoleo-Tasi, Anna	P4, Vested
Lopez, Yesenia	G4, Vested
Martin, Miranda	G7, Non-vested
Maxwell, Tyler	G7, Non-vested
Moon, Stephen	G5, Non-vested
Prasad, Jessica	G7, Non-vested
Powell, Chaunise	G7, Non-vested
Quan, Sing	G7, Non-vested
Vidrio, Rosemary	G7, Non-vested
Von, Brian	G7, Non-vested

1609.4.7 **Member Account Rollovers:**

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

Member Name	Retirement Plan Type
Davila, Claudia	P7, Non-vested
Garascia, Jean	G7, Non-vested
Jiang, Chun	G7, Non-vested
Martin, Miranda	G7, Non-vested
McNichol, Erin	G7, Non-vested
Sellenthin, Henry	G4, Non-vested
Singh, Sapna	G4, Non-vested
Wilkinson, Jeremy	G4, Non-vested
Wong, Lance	G7, Non-vested

- 1609.4.8 **Amendment to Regulation Article VIII Internal Revenue Compliance:** The Board approved a resolution amending the Board’s regulation Section 8.8(B)(9)(a) of Article VIII “Internal Revenue Code Compliance,” to add subdivision “vii” to address the inclusion of differential wage payments for military pay in the calculation of Internal Revenue Code Section 415’s Annual Limits.

The following items were taken out of order to accommodate the scheduling of the closed session disability items at 10:45 a.m.

- 1609.6.1 **Preliminary Monthly Portfolio Performance Report for the Period Ended August 31, 2016:** Mr. Coultrip discussed the preliminary monthly performance report with the Board. He reported that SamCERA’s net preliminary return for August was 0.4%, while the preliminary trailing twelve-month return ending August 2016 was 7.4% net. This item was informational and for discussion only, no action was taken.

- 1609.6.2 **Report on Fixed Income Manager Annual Reviews (Western Asset, Fidelity and Brown Brothers Harriman):** Mr. Coultrip reported that staff met with representatives from Western Asset Management and Fidelity Institutional Asset Management on August 11, and with Brown Brothers Harriman on August 25, 2016. Mr. Coultrip reported there were no significant concerns identified during the portfolio review. This item was informational and for discussion only, no action was taken.

- 1609.6.3 **Report on Opportunistic Credit Manager Annual Reviews (Beach Point and Angelo Gordon):** Mr. Coultrip reported that staff met with representatives from Beach Point and Angelo Gordon on September 1, 2016. Additionally, staff met with Brigade Capital on September 7, and a report from that meeting will be provided at the October meeting. This item was informational and for discussion only, no action was taken.
- 1609.5.1 **Consideration of Agenda Items, if any, Removed from the Consent Agenda:** The Board adjourned into closed session at 10:45 a.m. to consider the disability applications from Item 4.1. Upon reconvening at 11:45 a.m., Ms. Carlson reported the following action was taken by the Board:
- In the matter of Melville Hinshaw, a motion was made by Mr. Tashman and seconded by Ms. Arnott to refer this matter to a hearing officer. The motion carried with a vote of 8-0 with trustees Arnott, Battey, Hackleman, Hoefer, Kwan Lloyd, Lee (for Tourel) Spinello, and Tashman all in favor; none opposed.
- In the matter of Kimberly Minelli, the Board found that she is permanently incapacitated from the performance of her usual and customary duties as a Senior Deputy Probation Officer III, and found that her disability was the result of an injury arising out of and in the course of her employment. Mr. Battey moved to grant Ms. Minelli's application for a service-connected disability retirement, and the motion was seconded by Mr. Tashman. The motion carried with a vote of 8-0 with trustees Arnott, Battey, Hackleman, Hoefer, Kwan Lloyd, Lee (for Tourel) Spinello, and Tashman all in favor; none opposed.
- The Board adjourned for lunch at 11:48 p.m. and the meeting reconvened at 12:18 p.m. and continued in the order below. Mr. Tashman returned to the meeting at 12:50 p.m.
- 1609.5.2 **Presentation of the June 30, 2016, Actuarial Valuation Report by Milliman, Inc.:** Mr. Collier and Mr. Glyde, from Milliman, Inc. presented the valuation report to the Board. Key points reviewed and discussed included: SamCERA's funded ratio, employer contribution rates, unfunded actuarial accrued liability (UAAL), analysis of member population changes, comparisons with previous years, investment returns and economic assumptions. This item was informational and for discussion only, no action was taken.
- 1609.5.3 **Approval of Resolution Accepting the Fiscal Year 2017-2018 Employer and Member Contribution Rates and Recommendations:** Following the presentation by Milliman, Inc., the Board took action to accept the recommendations in the valuation report.
- Action:** Mr. Battey moved to approve a resolution accepting contribution rates to recommend to the Board of Supervisors for the 2017-2018 fiscal year. The motion was seconded by Ms. Arnott, and carried with a vote of 8-0 with trustees Arnott, Battey, Hackleman, Hoefer, Kwan Lloyd, Lee (for Tourel) Spinello, and Tashman all in favor; none opposed.
- 1609.5.4 **Annual Review of SamCERA's Actuarial Services Firm, Milliman, Inc.:** Mr. Hood reviewed the results of the annual assessment of the services provided by Milliman, Inc., which included a survey of staff and Board members. Milliman, Inc. continues to receive high marks from staff and the Board, and were noted to be very responsive and helpful; no concerns were raised. With no objections, the annual performance report of Milliman, Inc. was accepted.
- 1609.6.4 **Report on SamCERA's Securities Lending Program:** Mr. Coultrip presented the annual review of the securities lending program, which is managed by Northern Trust. He reported the net earnings were slightly lower than last year, as demand was lower. This item was informational and for discussion only, no action was taken.

1609.6.5 **Report on Asset-Liability Study: Asset Allocation Mixes (Continued):** Ms. Jadallah and Mr. Quirk presented a set of asset allocation portfolios for the Board to review and discuss. The investment models were compared to one another and to SamCERA's policy benchmark. Various scenarios were explained and forecasted. Board and staff discussion topics included: risk, inflation, funded ratios, diversification, passive vs. active management of funds, and the effect of stress scenarios on the investment models. The Board provided direction to staff to move toward decreasing the equity risk in the portfolio. This item was informational and for discussion only, no action was taken.

Item 7.2 was heard out of order, as noted below.

1609.7.2 **Educational Presentation on Fiduciary Duty, Delegation and Governance:** Ms. Carlson gave an educational presentation and led a discussion on fiduciary duty, delegation and governance as it relates to the Board, and Board members' responsibilities and obligations. This item was informational and for discussion only, no action was taken.

1609.7.1 **Approval of SACRS Voting Delegate and Alternates for the SACRS Fall 2016 Business Meeting:** Mr. Hood and the Board discussed the upcoming SACRS conference, November 8-11, 2016, in Indian Wells. The recommendation is for the Board to designate Trustee David Spinello as the Voting Delegate, with Scott Hood as the Alternate Voting Delegate. The Voting Delegate is authorized to cast votes on behalf of SamCERA at the SACRS business meeting, scheduled for Friday, November 11. More information about the SACRS business meeting agenda and topics will be reviewed in October.

Action: Mr. Battey moved to approve the voting delegates as proposed. The motion was seconded by Mr. Tashman and carried with a vote of 8-0 with trustees Arnott, Battey, Hackleman, Hoefler, Kwan Lloyd, Lee (for Tourel) Spinello, and Tashman all in favor; none opposed.

1609.8.1 **Chief Executive Officer's Report:** Mr. Hood noted the items in the "Day of Meeting" folder, including the Board calendar and the PRJ publication. He reported that he had discussed possible modifications to the MOU regarding supplemental contributions with the County's budget director. Mr. Hood reported his attendance at the CALAPRS Administrator's Institute in San Diego. He also previewed items that would appear on next month's meeting agenda including a GASB 67 & 68 report, the Board meeting calendar for 2017 and the CAFR.

1609.8.2 **Assistant Executive Officer's Report:** Ms. Smith had no report this month.

1609.8.3 **Chief Investment Officer's Report:** Mr. Coultrip reported on the progress of the liquid pool funding. He informed the Board of a number of upcoming manager annual review meetings. He also noted that the Governor had signed a bill requiring greater reporting by public pension funds of alternative investment fees for commitments made on or after Jan. 1, 2017.

1609.8.4 **Chief Legal Counsel's Report:** Ms. Carlson updated the Board on the Governor's veto of AB 1853; and the progress of the Marin County case involving vested pension rights of public employees.

CLOSED SESSION

C1 **Consideration of Disability Items, if any, Removed from the Consent Agenda:** See Item 5.1 for detail.

1609.9 **Report on Actions Taken in Closed Session:** See item 5.1

1609.10 **Adjournment:** Mr. Hackleman adjourned the meeting at 3:40 p.m. in memory of the deceased members listed below.

Ferrero, Marie	July 12, 2016	Social Services
Boulding, Ray	July 28, 2016	Food Services
Dean, William	July 28, 2016	Human Services Agency
Nichols, Michaelene	August 9, 2016	Social Services
Sarzotti, James	August 10, 2016	Probation
Bland, Nora	August 11, 2016	Tax Collector
Younger, Ruth	August 22, 2016	Probation
Greer, Maryana	August 23, 2016	Chope Hospital
Reed, June	August 24, 2016	Mosquito Abatement
Knupfer, Margaret	August 25, 2016	Assessor's
Hernandez, Ramona	August 31, 2016	Medical Center

Scott Hood
Chief Executive Officer

Kristina Perez
Retirement Executive Secretary

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Items 4.1- 4.6

TO: Board of Retirement

FROM: Elizabeth LeNguyen, Retirement Benefits Manager



SUBJECT: Approval of Consent Agenda Items 4.1 – 4.6

4.1 Disability Retirements

- a) The Board find that Elizabeth Garcia is (1) permanently incapacitated from the performance of her usual and customary duties as Patient Services Supervisor, (2) find that her disability was the result of an injury arising out of and in the course of her employment and (3) grant her application for a service-connected disability retirement.

- b) The Board find that Araceli Terreforte is (1) permanently incapacitated from the performance of her usual and customary duties as a Physical Therapy Aide, (2) find that her disability was the result of an injury arising out of and in the course of her employment and (3) grant her application for a service-connected disability retirement.

4.2 Service Retirements

The Board ratifies the actions as listed below for the following members regarding service retirements:

Member Name	Effective Retirement Date	Department
Boersig, Laura	August 4, 2016	Deferred from Sheriff's
Burke, Joy	August 27, 2016	Information Services
Burns, Dianne	August 2, 2016	Deferred from Sheriff's
Clarno, Candi	August 27, 2016	Information Services
Galay, Delia	August 13, 2016	Behavioral Health
Mattmann, Lon	September 1, 2016	Deferred from Sheriff's
Nunez, Pamela	September 1, 2016	Deferred from Tax Collector's
Quadt, Leisa	September 1, 2016	Public Safety Comm.
Reed, Mary Ellen	September 1, 2016	Deferred from Information Services
Sami, Benjamin	August 3, 2016	Correctional/Food Services
Torres, Estrellita	August 31, 2016	Superior Court

Villamor, Sixta	July 2, 2016	Deferred from Medical Center
Watson, Marian	August 27, 2016	County Counsel's Office

4.3 Continuances

The Board ratifies the actions as listed below for the following members regarding continuances:

Survivor's Name	Beneficiary of:
Hernandez, Aurelio	Hernandez, Ramona
Kierig, Delores Ann	Kierig, Leslie
Ramseur, Walter	Griffin, Mary
Sarzotti, Sharon	Sarzotti, James

4.4 Deferred Retirements

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

Member Name	Retirement Plan Type
Cochran, Jessica S.	G4, Vested
McMillan-Rea, Karina	G4, Vested - Reciprocity

4.5 Member Account Refunds

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

Member Name	Retirement Plan Type
Baldrige, Vanessa	G4, Vested
Barajas-Mejia, Blanca	G7, Non-vested
Franco, Lara	G7, Non-vested
Lambert, Charlotte	G4, QDRO Vested
Nichols, Wyndee	G7, Non-vested
Peacock, Nakeisha	P4, Non-vested
Prudente, Ana	G5, Non-vested
Valera-Clemena, Valerie	G4, Vested

4.6 Member Account Rollovers

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

Member Name	Retirement Plan Type
Asch, Rebecca	G7, Non-vested
Hernandez, Mary L.	G4, Vested
Hitchcock, Clarence	G4, Non-vested
Michaud, Jerrold	G4, Non-vested
Morrison, Lucas	G7, Non-vested
Shitanishi, Dustin	G7, Non-vested
Simpson, Nathaniel	G4, Vested

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 4.8

TO: Board of Retirement

FROM: Gladys Smith, Assistant Executive Officer 

SUBJECT: Approval of Resolutions Amending Definitions of Compensation Earnable and Pensionable Compensation

Staff Recommendation

Approve adding a new earnings code to be effective October 9, 2016 to: (1) Resolution defining compensation earnable, pursuant to Government Code §31461 for members who are not subject to Government Code §7522.34 and (2) Resolution defining Pensionable Compensation for members who are subject to Government Code §7522.34.

Background

Depending upon a member's date of hire and other factors, a member is either subject to County Employees Retirement Law ("CERL") or the Public Employees' Pension Reform Act (PEPRA). Under CERL, compensation earnable is used: (1) to calculate final compensation in order to determine a member's pension benefit and (2) to calculate the ongoing contributions to be paid by the member and the employer. For the PEPRA members, "pensionable compensation" is used for the same purposes. The Board determines which elements of compensation are to be included and which elements are not for both compensation earnable and pensionable compensation.

Discussion

Staff was recently notified that the Controller's Office created a new earnings code for County employees called "Wellness Dividend (203)," that will be effective the pay period commencing October 9, 2016. The Wellness Dividend is a set dollar amount incentive given to those County employees who participated in certain online and in-person health assessments and screenings. This year the amount was set at \$250.

Similar to other employee incentives, such as carpool participation, this payment is not "compensation earnable" nor "pensionable compensation" and is reflected as such in the proposed resolutions. Staff will address any specific questions that the Board may have. The attached resolutions each rescind the previous resolution and add the new earnings code to the updated resolution.

Attachments

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

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

RESOLUTION 2016-__

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

WHEREAS, for those current members who became active members prior to January 1, 2013, and those members who became active members on or after January 1, 2013, but who are not subject to Government Code §7522.34 of the California Public Employees' Pension Reform Act, the determination of compensation earnable for remuneration earned by those members is governed by Government Code §31461; and

WHEREAS, Government Code §31461 provides that compensation earnable by a member means the average compensation as determined by the Board, for the period under consideration upon the basis of the average number of days ordinarily worked by persons in the same grade or class of positions during the period, and at the same rate of pay; and

WHEREAS, Government Code §31461 provides that this Board determine which items of remuneration earned by members shall constitute "compensation earnable"; and

WHEREAS, the Board has reviewed the current pay items and has determined which of those items are to be included in "compensation earnable" and which items are not to be included; and

WHEREAS, it is necessary for this Board from time to time to amend its determinations of compensation earnable due to changes in the compensation schedules of SamCERA employers or changes in the law and the County of San Mateo just notified this Board that when it upgraded its payroll system to Workday, some of the pay codes designations were changed; Therefore, be it

RESOLVED, that effective October 9, 2016, Resolution number 2016-09 is rescinded, and pursuant to Government Code §31461 as interpreted by the courts, the Board hereby makes the following determinations to be effective October 9, 2016, as to what is included in "compensation earnable" and items of remuneration that are not included:

1. Compensation earnable shall include:

Pay Code	Description
(001)	Regular hours worked
(00680)	84/12 Plan (Sheriff)
(010)	Release time with pay
(011)	Night shift differential-com dispatch
(013)	Night shift differential
(014)	Special night shift differential
(015)	Special duty hours
(019)	Charge nurse shift differential
(020)	Split shift
(021-L1)	Bilingual pay
(021-L2)	Bilingual pay

Pay Code	Description
(022)	Staffing differential
(023)	Weekend pay
(027)	On-call hours
(033)	Bomb squad [flight/observer/pilot]
(035)	Sick leave with pay
(041)	Vacation hours with pay
(043)	Holiday hours regular pay
(044)	Holiday worked at 1.5
(045)	Holiday hours worked at straight time
(045O)	Holiday hours worked at straight time-overflow
(048)	Accumulated holiday hours taken
(052)	Comp time hours used
(054)	Administrative leave
(055)	Jury duty with pay
(056)	Military-leave with pay
(057)	Education leave with pay
(058)	Other leave with pay
(059)	Disability leave with pay
(064)	Management overtime used
(080)	Uniform/tool allowance
(080A)	Uniform/tool allowance annual
(081)	Transportation allowance
(087)	Bi-weekly special pay
(088)	Miscellaneous special pay
(090)	Voluntary time off used
(093)	Furlough w/o pay used with payment of contributions
(102)	Annual in-service management administrative leave cash-outs
(104)	LTC shift differential
(104B)	LTC shift differential adjustment
(110)	Compulsory time off
(112)	Bereavement leave
(313)	LC4850 night shift differential
(315)	LC4850 special duty
(359)	LC4850 disability with pay
(502)	Admin leave cash out w/1-time deferred comp
(557)	Educational lv with pay
(827)	Special on call
(30680)	LC4850WC 84/12 plan shf

2. Compensation earnable, at a minimum, shall not include, in any case, the following pay items.

A. The following pay codes are not included:

Pay Code	Description
(007)	EH. relief nurse shift differential
(009)	E.H. relief nurse shift differential
(025)	Call back pay
(025S)	Call back pay SART nurses
(026)	Part-time double shift differential
(028)	On call EH. relief nurse
(029)	Part-time double shift differential
(037)	Layoff sick leave
(040)	Terminal vacation
(046)	Holiday hours accrued
(047)	Holiday hours accrued at 1.5
(049)	Terminal holiday pay
(050)	Terminal compensatory pay
(051)	Comp Time Earned at 1.5
(053)	Comp time earned at straight time
(060)	Absent without leave
(061)	Leave without pay
(062)	Disability leave without pay
(063)	Terminal MOT Pay
(065)	Overtime training hours
(066)	Overtime at time and one-half
(069)	Overtime special duty desk officer
(070)	Overtime special duty
(073)	Overtime special duty night shift
(075)	Overtime night shift premium hours
(076)	Rest period differential
(079)	Overtime special shift differential
(083)	Worker's compensation payment
(084)	Employee incentives
(085)	Disability payment
(086)	Taxable benefits-DP
(091)	Terminal VTO pay
(096)	County Deferred Comp Contribution
(097)	Miscellaneous terminal pay
(098)	Miscellaneous benefit refund
(101)	LTD payments
(103)	FMLA earnings
(105)	Miscellaneous subsidies
(106)	FSLA adjustments
(106 80)	FSLA adjustment for 84/12
(106 980-P1)	FSLA adjustment 9/80 period 1

Pay Code	Description
(106 980-P2)	FSLA adjustment 9/80 period 2
(107)	Overtime at straight time
(108)	Comp hours earned at straight time (OT)
(111)	Terminal compulsory time off
(125)	Call back pay st.
(203)	Wellness Dividend
(225)	Call back pay flat rate
(383)	LC4850 worker's compensation payment
(803)	SART nurses meeting/service
(804)	SART nurses training and education

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

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

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

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

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

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

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

B. Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, in an amount that exceeds that which may be earned and payable in each 12-month period during the final average salary period, regardless of when reported or paid.

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

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

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

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

* * * * *

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on October 25, 2016.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

*Natalie Kwan-Lloyd, Board Secretary
SamCERA*

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

RESOLUTION 2016-__

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

WHEREAS, for those members who became active members on or after January 1, 2013, and who are subject to the California Public Employees' Pension Reform Act contained in Government Code §7522 et seq., the determination of their pensionable compensation is governed by Government Code §7522.34; and

WHEREAS, the pensionable compensation for those employee members who are subject to Government Code §7522.34 shall be the normal monthly rate of pay or base pay of the member paid in cash to similarly situated members of the same group or class of employment for services rendered on a full-time basis during normal working hours, pursuant to publicly available pay schedules; and

WHEREAS, the Board has reviewed the current pay items and has determined which of those items are to be included in "pensionable compensation" and which items are not to be included; and

WHEREAS, it will be necessary for this Board, from time to time, to amend its determinations of pensionable compensation due to changes made by SamCERA employers in their compensation schedules as well as changes in the law; Therefore, be it;

RESOLVED, that effective October 9, 2016, Resolution number 2016-10 is rescinded, and pursuant to Government Code §7522.34 as interpreted by the courts, the Board hereby makes the following determinations to be effective October 9, 2016, as to what is included in "pensionable compensation" and items of remuneration that are not included:

1. Pensionable compensation shall include:

Pay Code	Description
(001)	Regular hours worked
(00680)	84/12 Plan (Sheriff)
(010)	Release time with pay
(011)	Night shift differential-com dispatch
(013)	Night shift differential
(014)	Special night shift differential
(015)	Special duty hours
(019)	Charge nurse shift differential
(020)	Split shift

Pay Code	Description
(021-L1)	Bilingual pay
(021-L2)	Bilingual pay
(022)	Staffing differential
(023)	Weekend pay
(033)	Bomb squad [flight/observer/pilot]
(035)	Sick leave with pay
(041)	Vacation hours with pay
(043)	Holiday hours regular pay
(044)	Holiday worked at 1.5
(045)	Holiday hours worked at straight time
(048)	Accumulated holiday hours taken
(052)	Comp time hours used
(054)	Administrative leave
(055)	Jury duty with pay
(056)	Military leave with pay
(057)	Educational leave with pay
(058)	Other leave with pay
(059)	Disability leave with pay
(064)	Management overtime used
(087)	Bi-weekly special pay
(090)	Voluntary time off used
(093)	Furlough w/o pay used with payment of contributions
(104)	LTC shift differential
(104B)	LTC shift differential adjustment
(110)	Compulsory time off
(112)	Bereavement leave
(313)	LC4850 night shift differential
(315)	LC4850 special duty
(359)	LC4850 disability with pay
(557)	Educational lv with pay
(30680)	LC4850WC 84/12 plan shf

2. Pensionable compensation, at a minimum, shall not include, in any case, the following pay items.

A. The following pay codes are not included:

Pay Code	Description
(007)	E.H. relief nurse shift differential
(009)	E.H. relief nurse shift differential
(025)	Call back pay
(025S)	Call back pay SART nurses
(026)	Part-time double shift differential

Pay Code	Description
(027)	On-call hours
(028)	On call E.H. relief nurse
(029)	Part-time double shift differential
(037)	Layoff sick leave
(040)	Terminal vacation
(0450)	Holiday hours worked at straight time-overflow
(046)	Holiday Hours accrued
(047)	Holiday hours accrued at 1.5
(049)	Terminal holiday pay
(050)	Terminal compensatory pay
(051)	Comp Time Earned at 1.5
(053)	Comp time earned at straight time
(060)	Absent without leave
(061)	Leave without pay
(062)	Disability leave without pay
(063)	Terminal MOT Pay
(065)	Overtime training hours
(066)	Overtime at time and one-half
(069)	Overtime special duty desk officer
(070)	Overtime special duty
(073)	Overtime special duty night shift
(075)	Overtime night shift premium hours
(076)	Rest period differential
(079)	Overtime special shift differential
(080)	Uniform/tool allowance
(080A)	Uniform/tool allowance annual
(081)	Transportation allowance
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Pay Code	Description
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(383)	LC4850 worker's compensation payment
(502)	Admin leave cash out w/1-time deferred comp
(803)	SART nurses meeting/service
(804)	SART nurses training and education
(827)	Special on call

B. Pursuant to Government Code §7522.34, pensionable compensation does not include the following:

- 1) Any compensation determined by the Board to have been paid to increase a member's retirement benefit.
- 2) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member and which was converted to and received by the member in the form of a cash payment.
- 3) Any one-time or ad hoc payments made to a member.
- 4) Severance or any other payment that is granted or awarded to a member in connection with or in anticipation of a separation from employment, but is received by the member while employed.
- 5) Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, regardless of when reported or paid.
- 6) Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.
- 7) Any employer-provided allowance, reimbursement, or payment, including, but not limited to, one made for housing, vehicle, or uniforms.
- 8) Compensation for overtime work, other than as defined in Section 207(k) of Title 29 of the United States Code.

- 9) Employer contributions to deferred compensation or defined contribution plans.
 - 10) Any bonus paid in addition to the compensation described in subdivision (a) of Government Code §7522.34 .
 - 11) Any other form of compensation the Board determines is inconsistent with the requirements of subdivision §7522.34 (a).
 - 12) Any other form of compensation that this Board determines should not be pensionable compensation.
3. Pursuant to Government Code §7522.10, whenever pensionable compensation, as defined in §7522.34, is used in the calculation of a benefit, the pensionable compensation shall be subject to the monetary limitations set forth in subdivision §7522.10.

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

* * * * *

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on October 25, 2016.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

Natalie Kwan-Lloyd, Board Secretary
SamCERA

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 6.1

TO: Board of Retirement



FROM: Michael Coultrip, Chief Investment Officer

SUBJECT: Report on Preliminary Monthly Portfolio Performance Report for the Period Ended September 30, 2016

Staff Recommendation

Accept the preliminary performance report dated September 30, 2016.

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. As discussed previously, preliminary performance estimates are now included for AQR Risk Parity, AQR Delta, PanAgora Risk Parity, and Beach Point Select. The quarterly performance metrics are not yet available for our private equity, 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 (pages 2-3) and net manager returns (pages 4-9) also shown.

Discussion

The fund's net preliminary return for September was 0.7%, while the preliminary trailing twelve-month return ending September 2016 was 10.5% net. The twelve-month net return trails SamCERA's Total Plan Policy Benchmark return of 10.8% but is higher than the Actuarial Assumed Earnings Rate of 7.0%.

Volatility ticked up slightly during the month, although U.S. equity performance was again muted across the broad equity market indices. The broad U.S. equity market (as measured by the S&P 500 Index) was flat (0.0%) on the month, while international equity indices were higher, with developed markets (as measured by MSCI EAFE) up 1.2%, and emerging markets up 1.3%.

Economic data was mostly higher on the month. The real GDP growth forecast was revised higher from 1.1% to 1.4% in the second quarter, while manufacturing activity improved in September. The unemployment rate ticked higher to 5.0% from 4.9%, but job growth continued positive although below expectations. Consumer confidence also rose to a nine-year high during September.



Verus



PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS

SEPTEMBER 2016
Capital Markets Update

Market commentary

ECONOMIC CLIMATE

- The Fed chose not to raise interest rates at its September meeting, citing concerns over below target inflation and soft business investment.
- Weak economic data released in September has lowered expectations for third quarter growth. As of October 7th, the Atlanta Fed GDPNow forecast 2.1% growth, down 1.4% from the forecast at the beginning of the month.
- Inflation showed signs of life in August. The core Personal Consumption Expenditures (PCE) price index, the Fed's favorite inflation measure, rose 0.2% from the previous month and 1.7% from a year ago.
- Non-farm payrolls added 156,000 jobs in September, slightly below consensus expectations of 168,000. Both the unemployment rate and participation rate ticked up 0.1% to 5.0% and 62.9%, respectively.

DOMESTIC EQUITIES

- Domestic equities were flat for the second consecutive month. The S&P 500 returned 0.0% in September.
- September experienced more ups and downs than the prior month. Realized annualized volatility was 14.5%. However, forward looking volatility is still below average as the VIX finished the month at 13.3.
- Energy (+3.1%) was the best performing sector in the S&P 500, influenced by higher oil prices and the announcement that OPEC agreed to cut production. Financials (-2.7%) was the worst performing sector, dragged down by Wells Fargo due to its recent scandal.

DOMESTIC FIXED INCOME

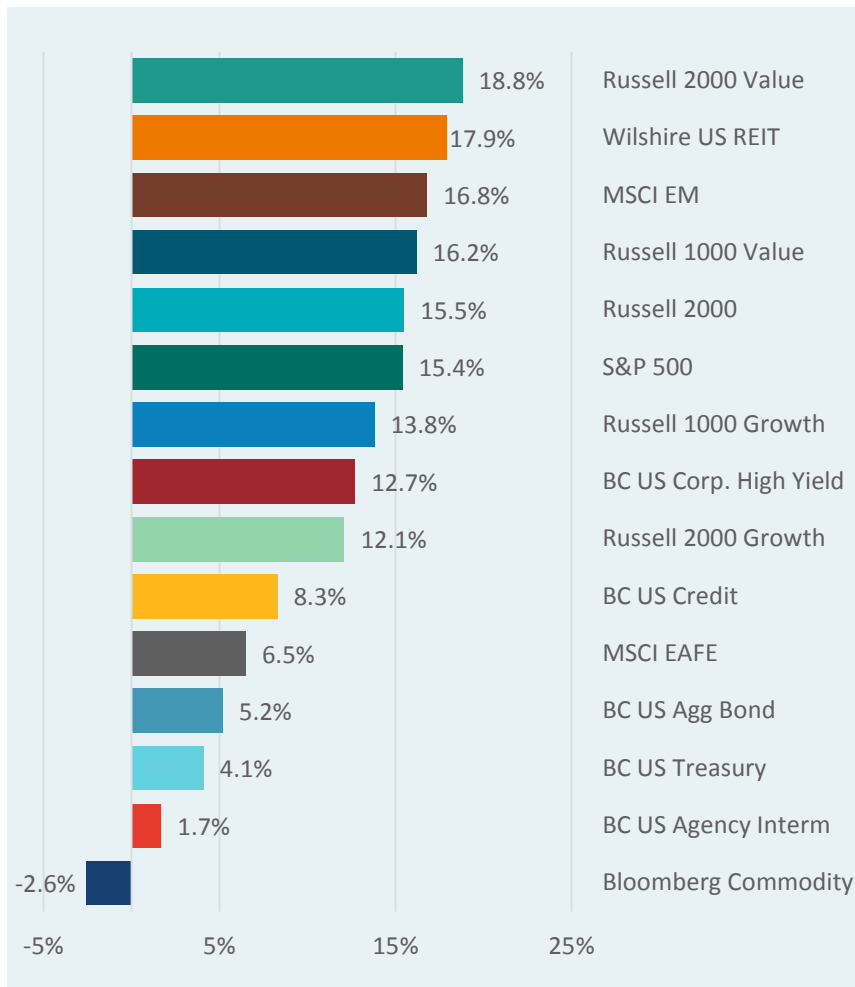
- Treasury yields rose during the month leading up to the Fed meeting over concerns of tighter monetary policy. The 10-year rate peaked at 1.73%, before falling to finish the month at 1.60%, 2 bps higher than the previous month end.
- The Treasury curve steepened slightly in September for the first time in four months. Short term rates fell slightly while long term rates were modestly higher resulting in the spread between the 10 and 2-year yields increasing 5 bps to 0.83%.
- The Barclays Aggregate returned -0.1% in September, marking the second consecutive month of negative performance.

INTERNATIONAL MARKETS

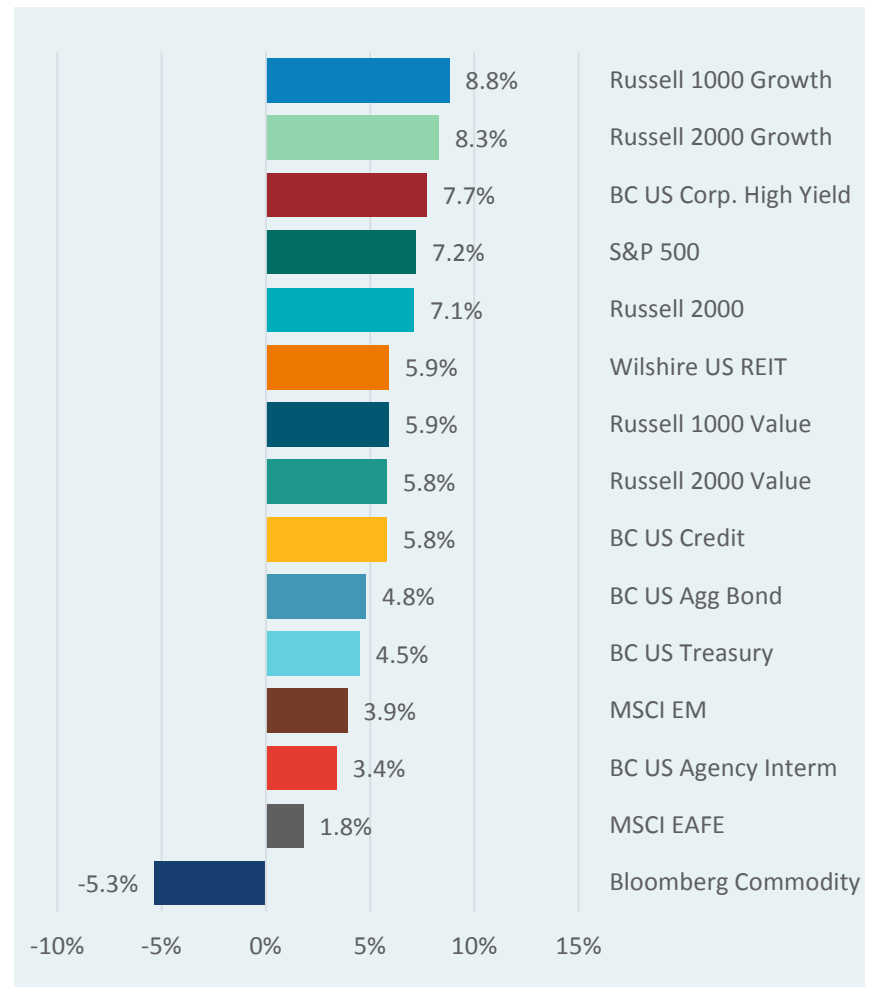
- International equity markets outperformed domestic equities as the MSCI ACWI ex US returned 1.2%
- The ECB left monetary policy unchanged at its September meeting, although it cut economic growth expectations for the next three years. Inflation was higher in the Eurozone with the headline CPI rising 0.4% in August from the prior year, but remains well below the 2% target.
- The BOJ shook up its monetary policy after completing a “comprehensive assessment” of its current easing programs. The central bank stated it will intentionally overshoot its inflation target of 2% and introduced a 0% target for the 10-year yield.
- Concerns over the health of Deutsche Bank emerged this month after the U.S. Department of Justice reportedly could demand a \$14 billion settlement regarding mortgage security cases.

Major asset class returns

ONE YEAR ENDING SEPTEMBER



TEN YEARS ENDING SEPTEMBER



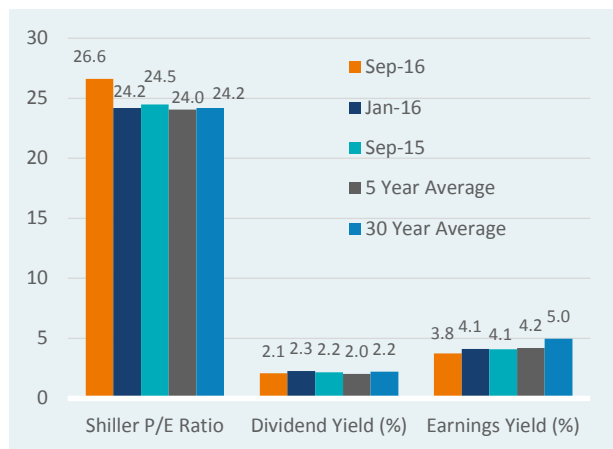
Source: Morningstar, as of 9/30/16

Source: Morningstar, as of 9/30/16

U.S. large cap equities

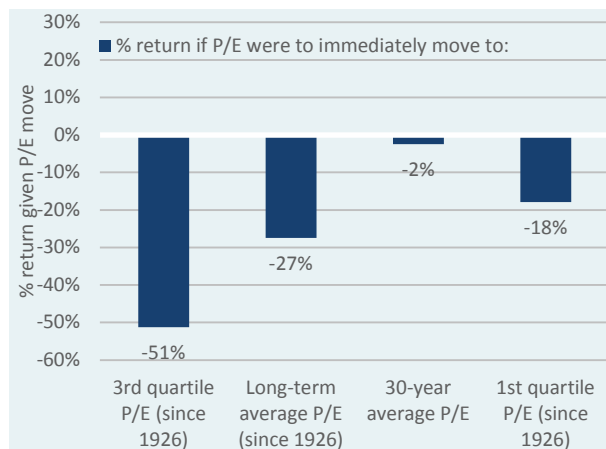
- Large cap equities experienced increased volatility in September relative to the previous month, including a 2.5% one-day drop in the S&P 500, which was the biggest daily move since Brexit. The index managed to recover its losses and returned 0.0%.
- The recent S&P 500 earnings recession has been negatively affected by the impact of lower oil prices on energy companies. If the energy sector is excluded, the estimated Q3 earnings growth would be positive 1.2%.
- The estimated earnings decline for the S&P 500 is -2.1% according to FactSet. If the index does report an earnings decline it would mark the sixth consecutive quarter of year-over-year declines.
- The forward 1-year P/E multiple fell from 19.1 to 18.4 due to higher earnings estimates.

US LARGE CAP (S&P 500) VALUATION SNAPSHOT



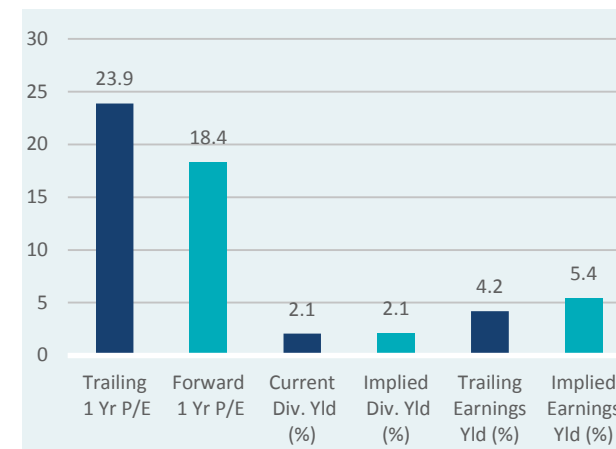
Source: Yale/Shiller, as of 9/30/16

RETURNS IF P/E MOVED TO HISTORIC LEVEL



Source: Yale/Shiller, Verus, as of 9/30/16

S&P 500 VALUATION SNAPSHOT

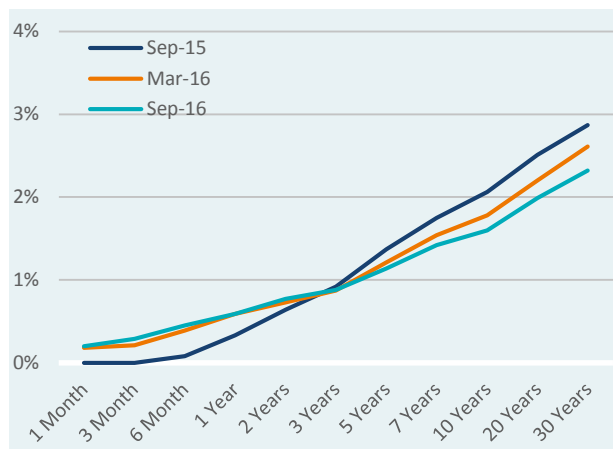


Source: Standard & Poor's, as of 9/30/16

Fixed income

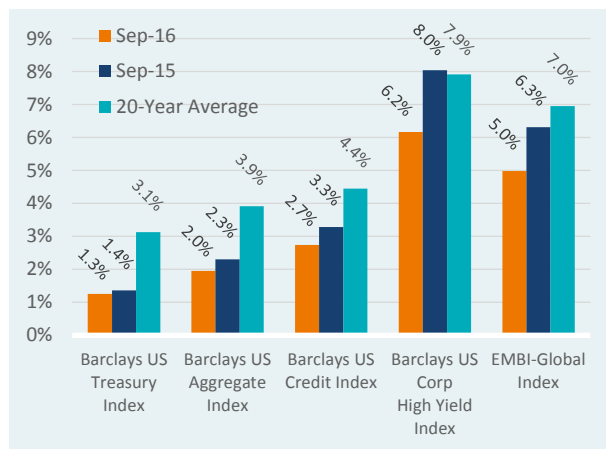
- Treasury yields rose prior to the Federal Reserve meeting, but ended the month with little movement after the decision to leave interest rates unchanged.
- The Fed will meet again in November and December. As of October 7th, the market is pricing in a 70% chance of higher interest rates by the end of the year according to fed fund futures prices.
- Continued spread compression led the high yield market to be one of the best performing fixed income sectors during the month once again. The Barclays Corporate High Yield index returned 0.7%.
- Market expectations for inflation moved higher in September. The 5-year TIPS breakeven rate increased 16 bps to 1.5% and the 10-year rate moved 13 bps higher to 1.6%.

U.S. TREASURY YIELD CURVE



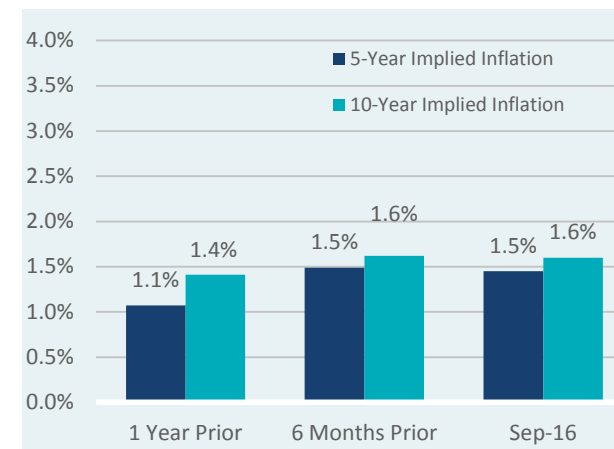
Source: Federal Reserve, as of 9/30/16

NOMINAL FIXED INCOME YIELDS



Source: Morningstar, as of 9/30/16

IMPLIED INFLATION (TIPS BREAKEVEN)



Source: Federal Reserve, as of 9/30/16

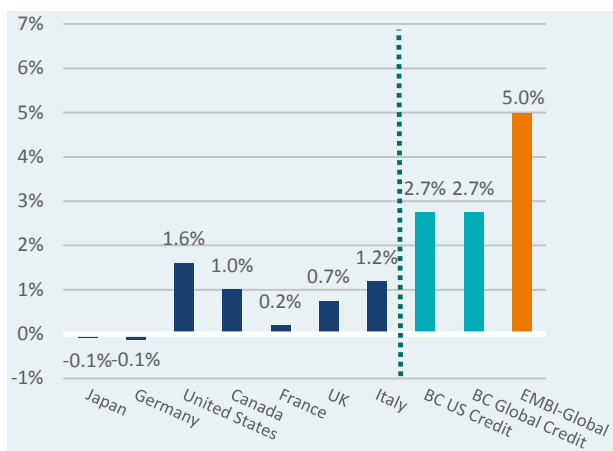
Global markets

- International developed equities (MSCI EAFE 1.2%) outperformed domestic equities (S&P 500 0.0%), and were on par with emerging market equities (MSCI EM 1.3%) in September.
- The FTSE 100 returned 1.8% in local currency terms in September, supported by a weaker pound and fading concerns over the negative impacts of Brexit.
- European sovereign yields rose during the beginning of the month after the ECB took a more hawkish tone and made no changes to its monetary easing

policy. Yields fell to end the month mostly lower, however, as fears of waning stimulus somewhat subsided.

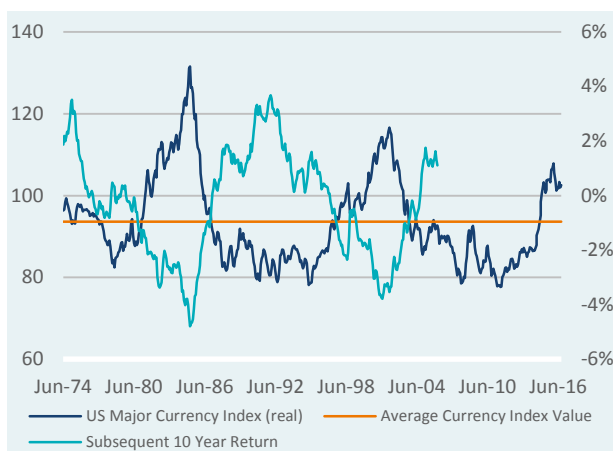
- The German 10-year yield fell 5 bps to end the month firmly back in negative territory at -0.12%.
- The U.S. Dollar Major Currency Index rose 0.5% in September, possibly influenced by growing expectations of a rate hike by year end.

GLOBAL SOVEREIGN 10 YEAR INDEX YIELDS



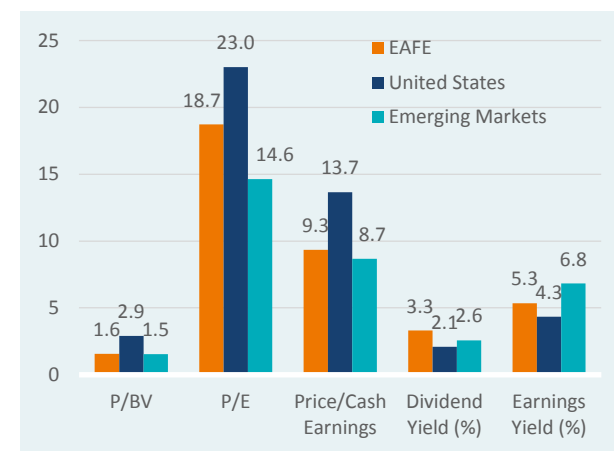
Source: Morningstar, as of 9/30/16

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 9/30/16

MSCI VALUATION METRICS (3 MONTH AVERAGE)



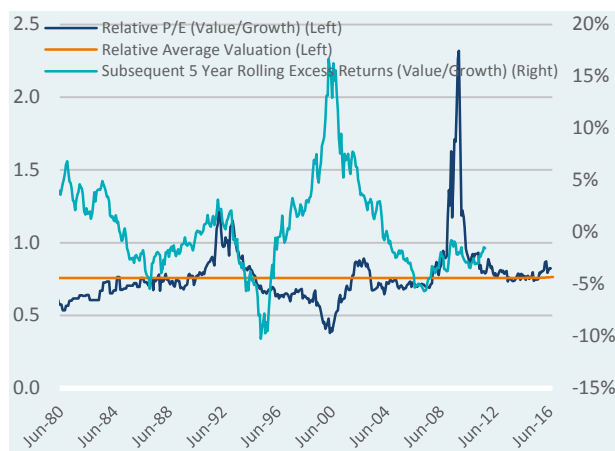
Source: MSCI, as of 9/30/16

Style tilts: U.S. large value vs. growth

- Growth stocks outperformed value stocks in September as the Russell 1000 Growth Index and Russell 1000 Value Index returned 0.4% and -0.2%, respectively.
- The relative P/E ratio of value to growth stocks was 0.82 at month end, slightly above the long-term average of 0.76.

- Despite underperforming in September, value has outperformed growth by 4.0% year-to-date and 2.4% over the past 12 months, reversing the trend of outperformance by growth equities in recent periods.

RELATIVE PE RATIO OF U.S. VALUE VS. GROWTH



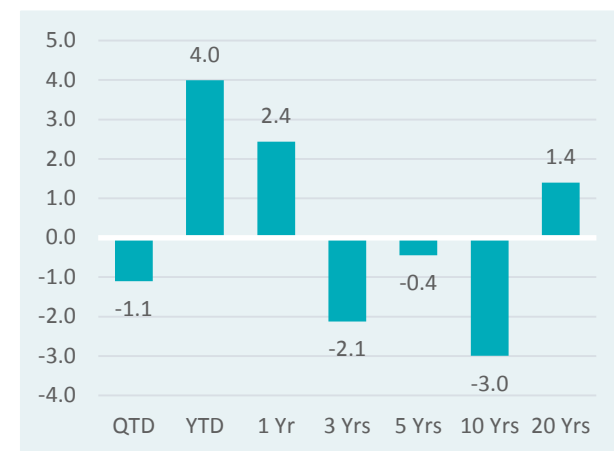
Source: Russell, Bloomberg, as of 9/30/16

U.S. VALUE VS. GROWTH ABSOLUTE PERFORMANCE

	RUSSELL 1000 GROWTH	RUSSELL 1000 VALUE
	ANNUALIZED RETURN TO DATE %	
QTD	4.6	3.5
YTD	6.0	10.0
1 YEAR	13.8	16.2
3 YEARS	11.8	9.7
5 YEARS	16.6	16.2
7 YEARS	14.1	12.3
10 YEARS	8.8	5.9
20 YEARS	7.1	8.5
	SHARPE RATIO	
3 YEARS	1.03	0.91
5 YEARS	1.37	1.38
7 YEARS	1.06	0.95
10 YEARS	0.57	0.38
20 YEARS	0.35	0.47

Source: Morningstar, as of 9/30/16

U.S. VALUE VS GROWTH RELATIVE PERFORMANCE

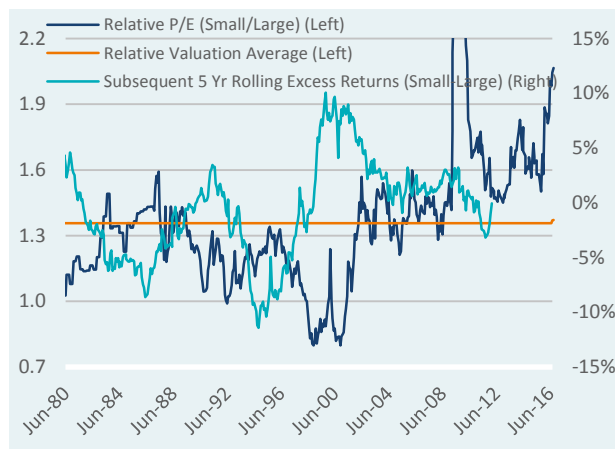


Source: Morningstar, as of 9/30/16

Style tilts: U.S. large vs. small

- Small cap equities outperformed large cap equities for the third consecutive month as the Russell 2000 and Russell 1000 returned 1.1% and 0.1%, respectively. Small caps increased their year-to-date outperformance to 3.5% over large caps.
- The relative trailing P/E ratio of small to large cap equities at the end of September was 2.07, well above its long-term average of 1.39, suggesting small cap stocks are relatively overvalued.
- The Russell 1000 Index has outperformed the Russell 2000 Index on a risk-adjusted basis in every time period examined over the last 20 years.

RELATIVE PE RATIO OF U.S. SMALL VS. LARGE



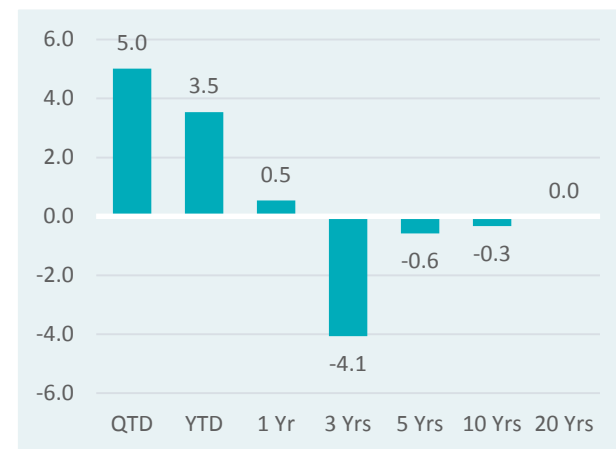
Source: Russell, Bloomberg, as of 9/30/16

U.S. LARGE VS. SMALL ABSOLUTE PERFORMANCE

	RUSSELL 1000 INDEX ANNUALIZED RETURN TO DATE %	RUSSELL 2000 INDEX ANNUALIZED RETURN TO DATE %
QTD	4.0	9.0
YTD	7.9	11.5
1 YEAR	14.9	15.5
3 YEARS	10.8	6.7
5 YEARS	16.4	15.8
7 YEARS	13.2	12.5
10 YEARS	7.4	7.1
20 YEARS	8.1	8.1
	SHARPE RATIO	SHARPE RATIO
3 YEARS	0.99	0.51
5 YEARS	1.40	1.05
7 YEARS	1.01	0.76
10 YEARS	0.49	0.40
20 YEARS	0.43	0.38

Source: Morningstar, as of 9/30/16

U.S. SMALL VS. LARGE RELATIVE PERFORMANCE



Source: Morningstar, as of 9/30/16

Commodities

- The Bloomberg Commodity Index rose 3.1% during the month, supported by higher energy and food prices.
- Oil prices jumped in September, with WTI finishing the month at \$48.24 per barrel, up 7.9%. The sharp increase came after OPEC agreed to cut production for the first time since 2008. The preliminary plan is to cut production to 32.5 million barrels per day from 33.2 million barrels in August.

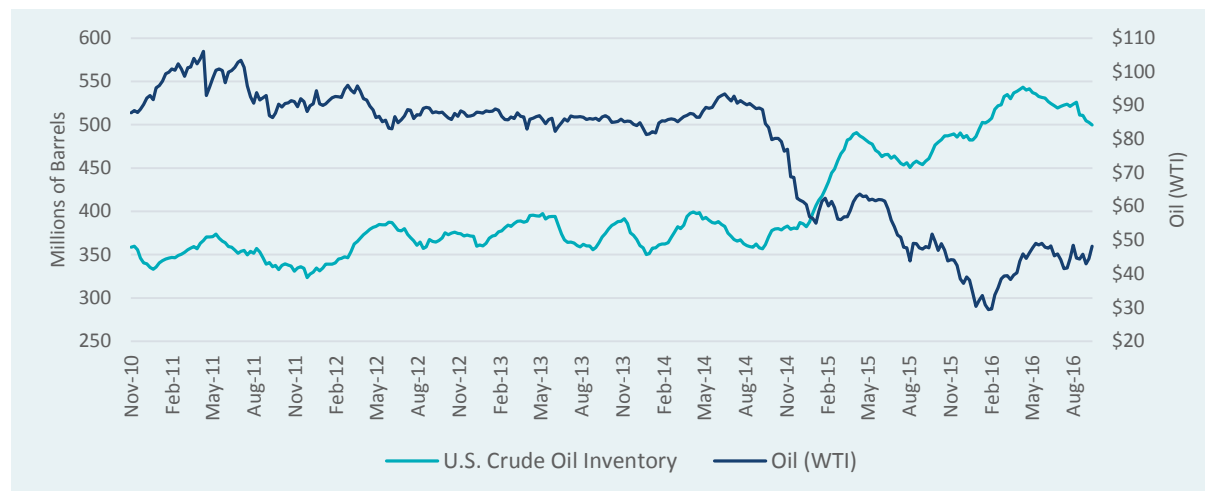
- OPEC will still need to finalize the details of this agreement at its annual meeting in November. Historically, the group's track record on adhering to production cuts has been poor.
- Softs (7.7%) and petroleum (7.0%) were the top contributors to the Bloomberg Commodity Index in September, while livestock (-13.2%) was the sole detractor from performance.

INDEX AND SECTOR PERFORMANCE

	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	(3.9)	8.9	(2.6)	(12.3)	(9.4)	(5.3)
Bloomberg Agriculture	(8.1)	4.3	2.0	(8.7)	(6.3)	0.9
Bloomberg Energy	(3.7)	5.1	(18.7)	(25.9)	(17.6)	(17.2)
Bloomberg Grains	(13.6)	(7.2)	(14.4)	(13.8)	(7.1)	(0.4)
Bloomberg Industrial Metals	4.1	13.0	3.7	(8.3)	(7.4)	(6.3)
Bloomberg Livestock	(21.3)	(21.9)	(24.6)	(11.4)	(8.7)	(9.3)
Bloomberg Petroleum	(2.0)	8.1	(16.9)	(27.9)	(14.4)	(10.7)
Bloomberg Precious Metals	0.2	27.4	21.0	(1.7)	(5.8)	6.8
Bloomberg Softs	6.9	27.5	41.7	(1.4)	(8.9)	(0.2)

Source: Morningstar, as of 9/30/16

WTI CRUDE OIL VS. U.S. TOTAL CRUDE OIL INVENTORY



Source: Bloomberg, as of 9/30/16

Appendix

Periodic table of returns

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	YTD	5-Year	10-Year
Small Cap Value	74.8	16.6	38.4	23.2	35.2	38.7	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	10.1	16.0	16.6	8.8
Emerging Markets Equity	32.9	8.1	37.8	23.1	32.9	27.0	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	15.5	16.4	8.3
Small Cap Equity	26.3	6.4	37.2	22.4	31.8	20.3	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	11.5	16.2	7.4
Large Cap Value	23.8	4.4	31.0	21.6	30.5	19.3	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	10.0	16.1	7.4
Large Cap Equity	19.3	3.2	28.5	21.4	22.4	16.2	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	8.9	15.8	7.1
60/40 Global Portfolio	18.9	2.6	25.7	16.5	16.2	15.6	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	8.0	15.4	5.9
Small Cap Growth	18.1	0.4	19.6	14.4	13.9	8.7	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	7.9	11.5	5.8
US Bonds	13.4	-1.5	18.5	11.3	12.9	4.9	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	7.5	7.4	4.8
Large Cap Growth	10.2	-1.8	15.2	10.3	10.6	1.2	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	6.0	7.2	4.6
Commodities	9.7	-2.0	11.6	9.9	9.7	-2.5	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	5.8	3.2	3.9
Real Estate	3.1	-2.4	11.1	6.4	5.2	-5.1	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	4.3	3.1	1.8
International Equity	2.9	-2.9	7.5	6.0	2.1	-6.5	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	1.7	3.0	1.8
Cash	1.4	-3.5	5.7	5.1	-3.4	-25.3	-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	0.2	0.1	0.8
Hedge Funds of Funds	-1.1	-7.3	-5.2	3.6	-11.6	-27.0	-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	-0.1	-9.4	-5.3

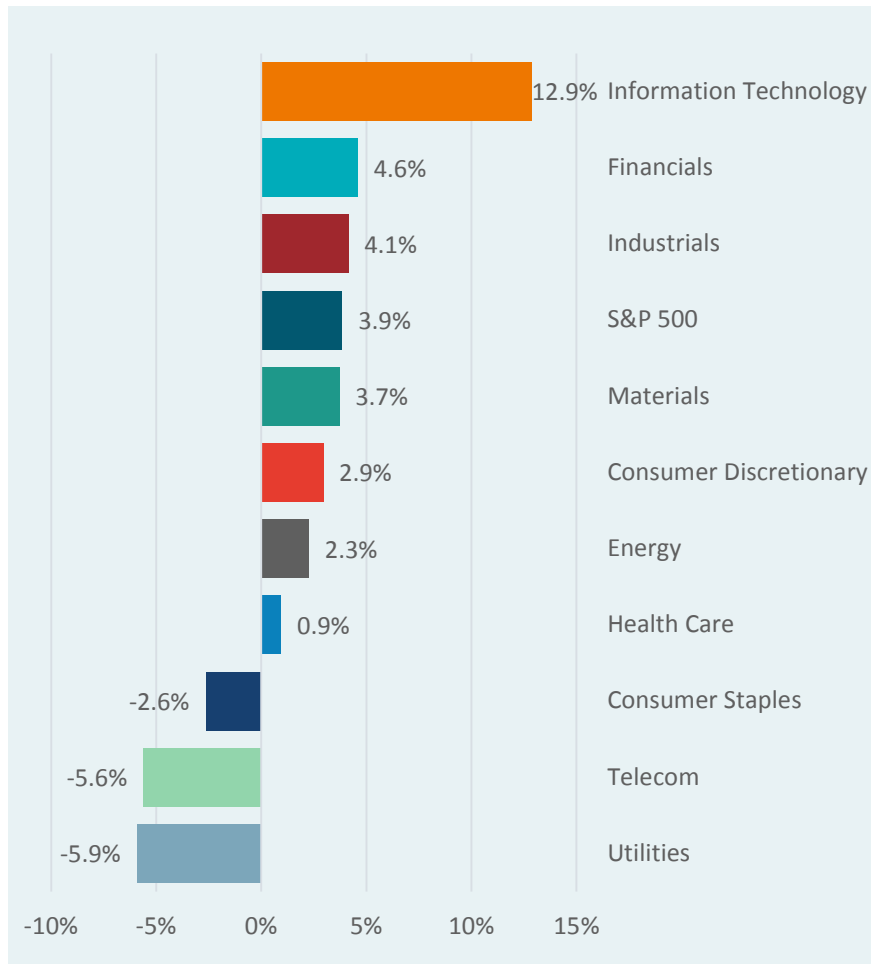
WORST

- 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% BC Global Bond
- 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, BC Agg, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BC Global Bond. NCREIF Property Index performance data as of 6/30/16.

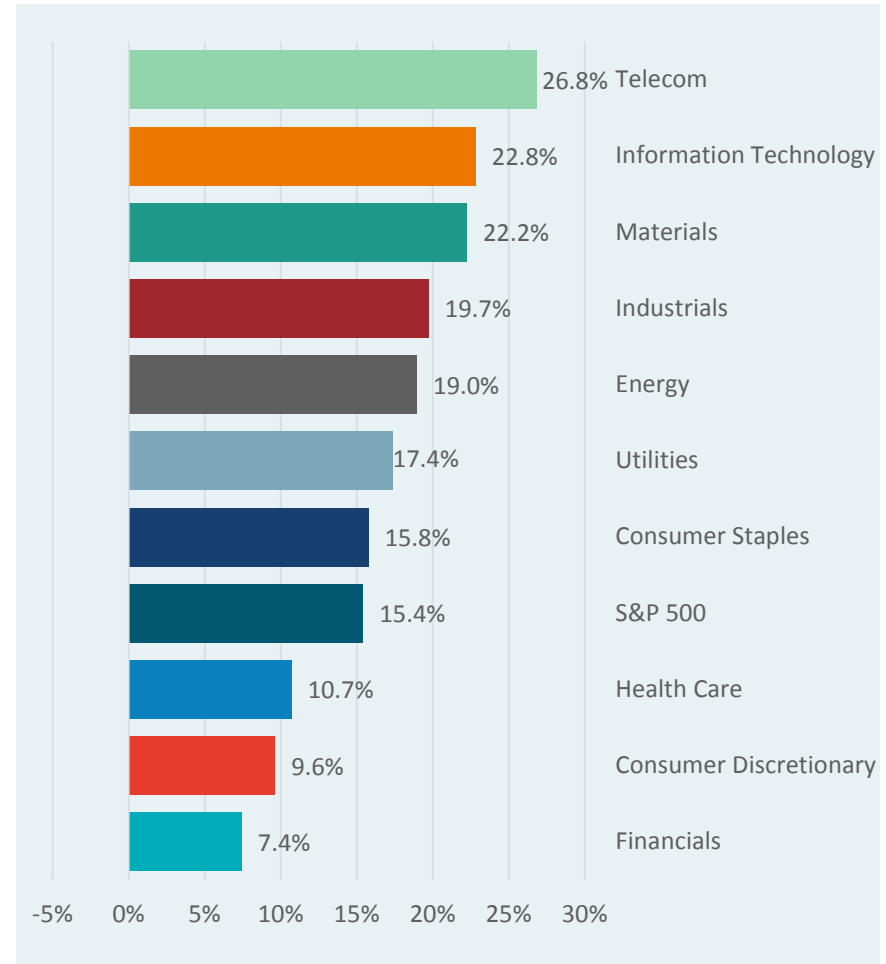
S&P 500 and S&P 500 sector returns

QTD



Source: Morningstar, as of 9/30/16

ONE YEAR ENDING SEPTEMBER



Source: Morningstar, as of 9/30/16

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	0.0	3.9	7.8	15.4	11.2	16.4	7.2
S&P 500 Equal Weighted	0.1	4.5	10.6	16.1	10.8	17.4	8.8
DJ Industrial Average	(0.4)	2.8	7.2	15.5	9.2	13.8	7.4
Russell Top 200	0.0	3.8	7.0	15.2	11.3	16.3	7.0
Russell 1000	0.1	4.0	7.9	14.9	10.8	16.4	7.4
Russell 2000	1.1	9.0	11.5	15.5	6.7	15.8	7.1
Russell 3000	0.2	4.4	8.2	15.0	10.4	16.4	7.4
Russell Mid Cap	0.2	4.5	10.3	14.2	9.7	16.7	8.3
Style Index							
Russell 1000 Growth	0.4	4.6	6.0	13.8	11.8	16.6	8.8
Russell 1000 Value	(0.2)	3.5	10.0	16.2	9.7	16.2	5.9
Russell 2000 Growth	1.4	9.2	7.5	12.1	6.6	16.1	8.3
Russell 2000 Value	0.8	8.9	15.5	18.8	6.8	15.4	5.8

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	0.6	5.3	6.6	12.0	5.2	10.6	4.3
MSCI ACWI ex US	1.2	6.9	5.8	9.3	0.2	6.0	2.2
MSCI EAFE	1.2	6.4	1.7	6.5	0.5	7.4	1.8
MSCI EM	1.3	9.0	16.0	16.8	(0.6)	3.0	3.9
MSCI EAFE Small Cap	3.0	8.6	5.2	12.3	5.1	11.1	4.4
Style Index							
MSCI EAFE Growth	1.5	5.0	2.6	9.5	2.4	8.7	3.1
MSCI EAFE Value	1.0	8.0	0.8	3.5	(1.5)	6.0	0.4
Regional Index							
MSCI UK	1.0	4.0	0.8	1.5	(1.8)	6.0	1.4
MSCI Japan	1.6	8.6	2.5	12.1	3.3	7.4	1.0
MSCI Euro	0.7	7.3	(0.6)	2.8	(0.9)	7.3	0.2
MSCI EM Asia	1.3	10.5	13.0	16.9	3.5	6.3	5.6
MSCI EM Latin American	(0.8)	5.4	32.2	28.6	(7.9)	(3.9)	2.4

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BC US Treasury US TIPS	0.5	1.0	7.3	6.6	2.4	1.9	4.5
BC US Treasury Bills	0.0	0.1	0.3	0.3	0.2	0.1	1.0
BC US Agg Bond	(0.1)	0.5	5.8	5.2	4.0	3.1	4.8
Duration							
BC US Treasury 1-3 Yr	0.1	(0.1)	1.3	0.9	0.9	0.7	2.3
BC US Treasury Long	(1.6)	(0.4)	14.7	13.1	11.2	5.5	8.1
BC US Treasury	(0.1)	(0.3)	5.1	4.1	3.4	2.2	4.5
Issuer							
BC US MBS	0.3	0.6	3.7	3.6	3.6	2.6	4.7
BC US Corp. High Yield	0.7	5.6	15.1	12.7	5.3	8.3	7.7
BC US Agency Interm	0.2	(0.0)	2.3	1.7	1.8	1.4	3.4
BC US Credit	(0.3)	1.2	8.9	8.3	5.4	4.8	5.8

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	3.1	(3.9)	8.9	(2.6)	(12.3)	(9.4)	(5.3)
Wilshire US REIT	(2.1)	(1.2)	9.7	17.9	14.3	15.8	5.9
Regional Index							
JPM EMBI Global Div	0.4	4.0	14.8	16.2	8.2	7.8	7.7
JPM GBI-EM Global Div	2.0	2.7	17.1	17.1	(2.6)	0.1	5.5
Currency (Spot)							
Euro	0.9	1.2	3.5	0.7	(6.0)	(3.5)	(1.2)
Pound	(0.8)	(2.8)	(11.9)	(14.2)	(7.1)	(3.6)	(3.6)
Yen	2.1	1.3	18.8	18.3	(1.0)	(5.3)	1.5

Source: Morningstar, as of 9/30/16

Notices & disclosures

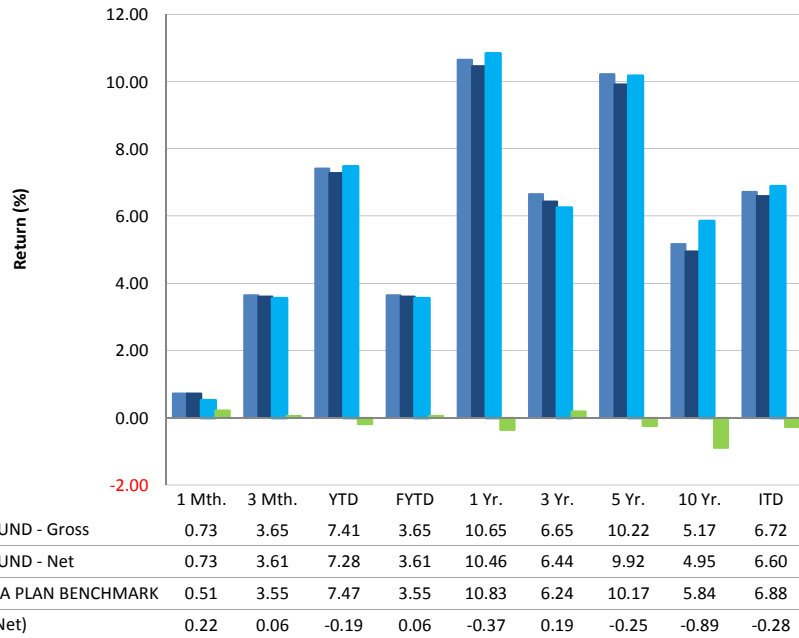
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San Mateo County Total Fund Characteristics

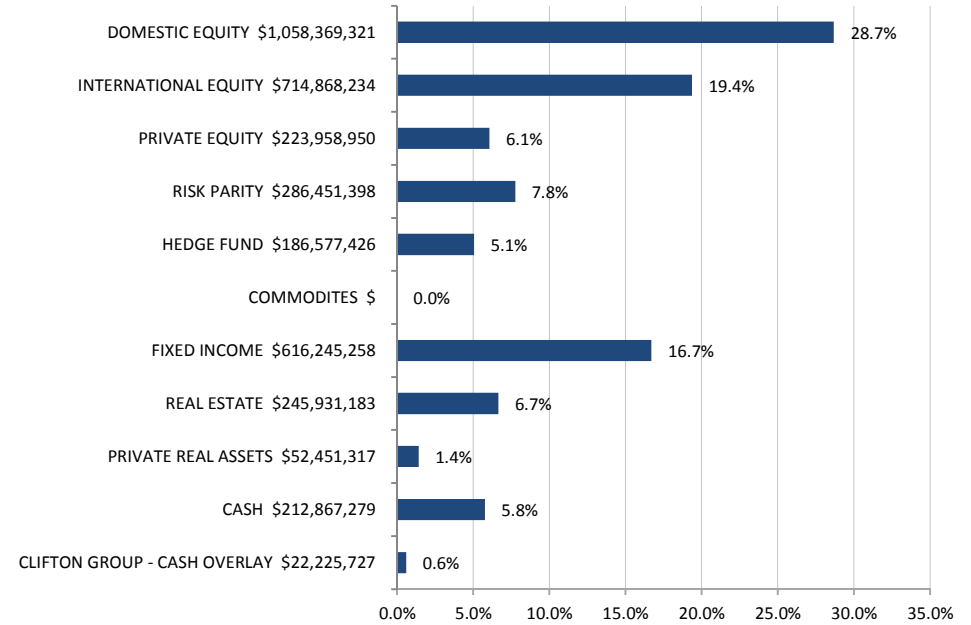


September 30, 2016

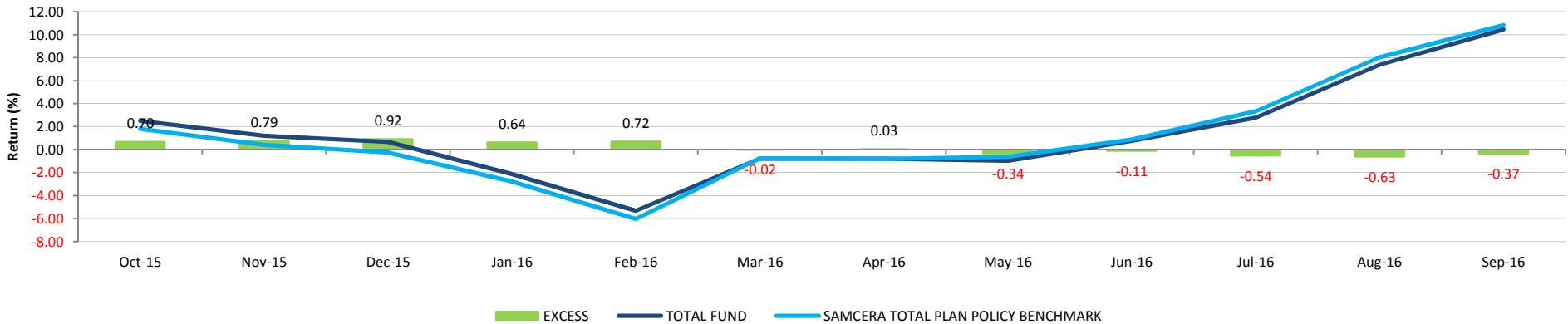
Total Fund Performance



Asset Allocation



Rolling Month End Annual Returns

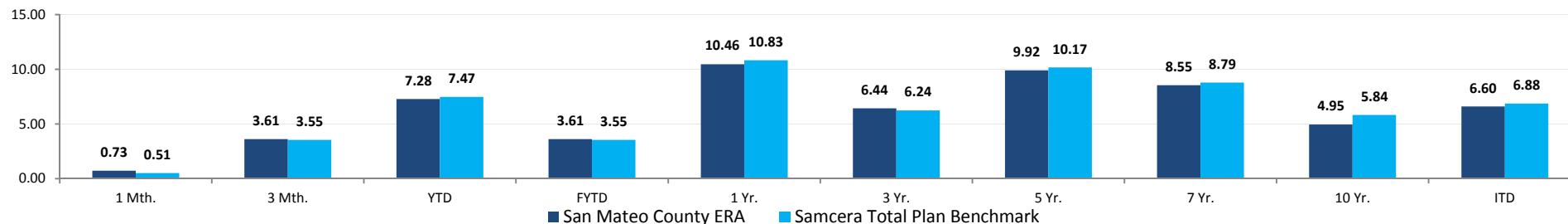


San Mateo County Composite Return Summary



September 30, 2016

Return Comparison



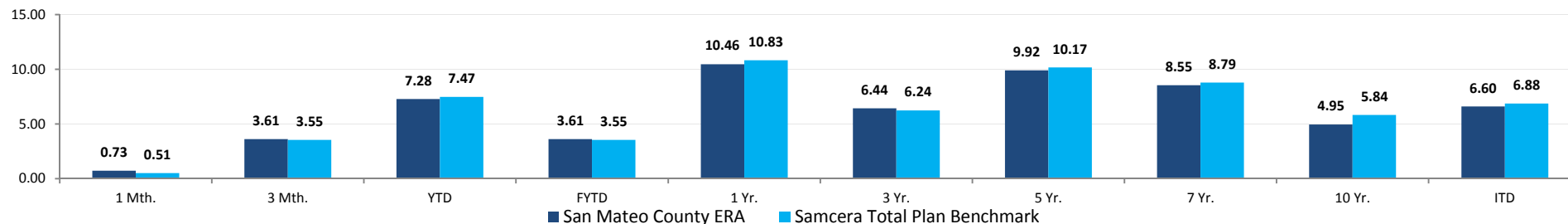
Composite Returns (Net of Manager Fees)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
San Mateo County ERA	3,690,867,166	0.73	3.61	7.28	3.61	10.46	6.44	9.92	8.55	4.95	6.60
Samcera Total Plan Benchmark		0.51	3.55	7.47	3.55	10.83	6.24	10.17	8.79	5.84	6.88
Excess		0.22	0.06	-0.19	0.06	-0.37	0.19	-0.25	-0.24	-0.89	-0.28
San Mateo Ex-Clifton Overlay	3,668,641,439	0.65	3.73	7.06	3.73	10.14	6.30	9.84	8.49	4.82	6.52
Samcera Total Plan Benchmark		0.51	3.55	7.47	3.55	10.83	6.24	10.17	8.79	5.84	6.88
Excess		0.14	0.18	-0.41	0.18	-0.69	0.05	-0.33	-0.30	-1.02	-0.36
Total Equity	1,773,237,554	0.68	4.93	6.80	4.93	12.69	6.48	12.62	9.54	4.53	7.37
Samcera Total Equity Benchmark		0.46	5.24	7.99	5.24	13.95	7.80	13.67	10.55	6.06	7.94
Excess		0.22	-0.31	-1.19	-0.31	-1.26	-1.32	-1.04	-1.01	-1.52	-0.57
Total Fixed Income	616,245,258	0.03	2.06	6.69	2.06	6.36	3.96	4.99	5.91	5.20	5.66
Samcera Fixed Income Benchmark		0.16	1.55	8.10	1.55	7.60	4.02	3.25	4.29	4.92	5.30
Excess		-0.13	0.52	-1.41	0.52	-1.24	-0.06	1.74	1.63	0.28	0.36
Total Risk Parity	286,451,398	0.62	2.27	15.99	2.27	14.53	7.43	7.50	--	--	6.55
Samcera Risk Parity Benchmark		0.07	2.82	7.35	2.82	11.17	8.00	11.05	--	--	8.46
Excess		0.55	-0.55	8.63	-0.55	3.36	-0.57	-3.55	--	--	-1.91

San Mateo County Composite Return Summary



September 30, 2016

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
Total Hedge Fund Composite	186,577,426	0.70	1.46	-1.55	1.46	-0.14	7.76	6.47	--	--	5.02
Samcera LIBOR + 4%		0.37	1.11	3.33	1.11	4.39	4.25	4.24	--	--	4.24
Excess		0.33	0.36	-4.88	0.36	-4.53	3.52	2.23	--	--	0.78
Total Private Real Assets	52,451,317	18.06	21.75	--	21.75	--	--	--	--	--	39.74
Samcera CPI + 5%		0.00	0.74	--	0.74	--	--	--	--	--	3.17
Excess		18.06	21.01	--	21.01	--	--	--	--	--	36.57
Total Real Estate	245,931,183	0.00	0.07	--	0.07	--	--	--	--	--	4.85
Samcera NCREIF ODCE EW (gross)		0.00	0.00	--	0.00	--	--	--	--	--	2.18
Excess		0.00	0.07	--	0.07	--	--	--	--	--	2.67
Total Cash	212,867,279	0.04	0.61	0.79	0.61	0.86	0.62	0.59	0.69	0.96	2.08
Samcera Cash Benchmark		0.05	0.10	0.24	0.10	0.27	0.11	0.10	0.11	0.92	1.91
Excess		-0.01	0.52	0.55	0.52	0.59	0.51	0.49	0.58	0.05	0.17

San Mateo County Manager Return Summary



September 30, 2016

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Equity	1,773,237,554	0.68	4.93	6.80	4.93	12.69	6.48	12.62	9.54	4.53	7.37
Samcera Total Equity Benchmark		0.46	5.24	7.99	5.24	13.95	7.80	13.67	10.55	6.06	7.94
Excess		0.22	-0.31	-1.19	-0.31	-1.26	-1.32	-1.04	-1.01	-1.52	-0.57
Total Domestic Equity	1,058,369,321	0.09	3.94	6.46	3.94	13.13	8.90	15.46	12.36	5.92	8.10
Samcera Dom. Equity Benchmark		0.16	4.66	8.36	4.66	14.79	9.92	16.28	13.11	7.36	8.53
Excess		-0.07	-0.73	-1.90	-0.73	-1.66	-1.02	-0.82	-0.75	-1.44	-0.43
Total Large Cap Equity	948,571,275	0.10	4.12	7.07	4.12	14.27	10.38	15.94	12.53	6.28	8.89
Russell 1000		0.08	4.03	7.92	4.03	14.93	10.78	16.41	13.25	7.40	9.28
Excess		0.02	0.09	-0.85	0.09	-0.66	-0.40	-0.47	-0.72	-1.12	-0.39
Barrow Hanley	111,806,209	-0.16	4.97	5.13	4.97	10.81	7.80	15.72	12.51	--	13.11
Russell 1000 Value		-0.21	3.48	10.00	3.48	16.20	9.70	16.15	12.34	--	13.44
Excess		0.05	1.49	-4.86	1.49	-5.38	-1.91	-0.43	0.16	--	-0.33
Blackrock S&P 500 Index Fund	597,948,728	0.02	3.85	7.85	3.85	15.39	11.22	--	--	--	13.03
S&P 500		0.02	3.85	7.84	3.85	15.43	11.16	--	--	--	12.98
Excess		0.00	0.00	0.01	0.00	-0.04	0.06	--	--	--	0.05
Brown Advisory	113,885,228	0.47	3.62	2.03	3.62	9.73	8.02	--	--	--	10.06
Russell 1000 Growth		0.37	4.58	6.00	4.58	13.76	11.83	--	--	--	12.84
Excess		0.11	-0.96	-3.97	-0.96	-4.03	-3.81	--	--	--	-2.78
DE Shaw Commingled Fund	124,931,110	0.37	5.12	10.01	5.12	16.50	--	--	--	--	7.24
Russell 1000		0.08	4.03	7.92	4.03	14.93	--	--	--	--	5.00
Excess		0.29	1.09	2.09	1.09	1.57	--	--	--	--	2.24
Total Small Cap Equity	109,798,046	0.00	0.96	1.13	0.96	4.91	1.73	12.85	11.28	4.14	5.71
Russell 2000		1.11	9.05	11.46	9.05	15.47	6.71	15.82	12.49	7.07	7.42
Excess		-1.11	-8.08	-10.33	-8.08	-10.56	-4.97	-2.97	-1.21	-2.93	-1.71

San Mateo County Manager Return Summary



September 30, 2016

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Developed Markets Equity	638,248,196	1.68	6.59	6.38	6.59	11.58	2.43	7.48	4.27	2.22	3.98
MSCI ACW ex US-IMI		1.41	7.05	6.08	7.05	9.81	0.62	6.37	4.05	2.47	4.37
Excess		0.28	-0.46	0.31	-0.46	1.77	1.81	1.11	0.22	-0.25	-0.38
Baillie Gifford	220,570,533	2.08	8.38	8.38	8.38	16.53	3.87	--	--	--	7.70
MSCI ACWI ex US Growth		1.58	6.12	6.55	6.12	11.92	2.60	--	--	--	5.33
Excess		0.50	2.26	1.83	2.26	4.61	1.28	--	--	--	2.37
Blackrock EAFE Index Fund	132,458,109	1.26	6.48	2.09	6.48	6.89	--	--	--	--	-1.20
MSCI EAFE ND		1.23	6.43	1.73	6.43	6.52	--	--	--	--	-1.49
Excess		0.03	0.05	0.36	0.05	0.37	--	--	--	--	0.29
Mondrian Investment Partners	211,274,136	1.27	4.81	6.93	4.81	9.33	1.56	6.00	4.13	2.38	5.04
MSCI ACWI ex US Value		0.97	7.92	6.03	7.92	7.62	-1.37	5.18	2.70	1.57	4.42
Excess		0.30	-3.11	0.90	-3.11	1.71	2.92	0.83	1.43	0.81	0.62
FIAM Intl Small Cap	73,945,419	2.44	6.77	7.33	6.77	12.98	3.61	--	--	--	6.16
MSCI ACWI Small Cap ex US Net		2.47	7.91	7.70	7.91	13.38	3.52	--	--	--	6.30
Excess		-0.03	-1.14	-0.37	-1.14	-0.40	0.09	--	--	--	-0.14

San Mateo County Manager Return Summary



September 30, 2016

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Emerging Markets Equity	76,620,037	0.64	5.32	15.73	5.32	14.56	-1.48	--	--	--	-0.47
MSCI Emerging Markets ND		1.29	9.03	16.02	9.03	16.78	-0.56	--	--	--	-0.57
Excess		-0.64	-3.70	-0.29	-3.70	-2.23	-0.91	--	--	--	0.10
EV Parametric EM	76,620,037	0.64	5.32	15.73	5.32	14.55	--	--	--	--	2.81
MSCI Emerging Markets GD		1.32	9.15	16.36	9.15	17.21	--	--	--	--	2.97
Excess		-0.67	-3.83	-0.62	-3.83	-2.65	--	--	--	--	-0.16
Total Fixed Income	616,245,258	0.03	2.06	6.69	2.06	6.36	3.96	4.99	5.91	5.20	5.66
Samcera Fixed Income Benchmark		0.16	1.55	8.10	1.55	7.60	4.02	3.25	4.29	4.92	5.30
Excess		-0.13	0.52	-1.41	0.52	-1.24	-0.06	1.74	1.63	0.28	0.36
Total Domestic Fixed Income	516,369,668	0.22	2.50	7.78	2.50	6.99	4.53	4.94	6.08	5.37	5.85
Samcera US Fixed Inc Benchmark		0.14	1.63	7.65	1.63	7.24	4.27	3.45	4.49	5.06	5.51
Excess		0.08	0.86	0.13	0.86	-0.25	0.26	1.49	1.59	0.30	0.34
Total Core Fixed Income	356,893,511	0.08	1.66	6.56	1.66	6.45	4.67	4.25	5.61	5.04	5.66
BC U.S. Aggregate		-0.06	0.46	5.80	0.46	5.19	4.03	3.08	4.10	4.79	5.35
Excess		0.14	1.20	0.77	1.20	1.26	0.64	1.17	1.50	0.25	0.31
FIAM Core Bond	250,365,014	0.09	1.24	7.38	1.24	6.94	4.59	3.96	5.21	5.25	5.22
BC U.S. Aggregate		-0.06	0.46	5.80	0.46	5.19	4.03	3.08	4.10	4.79	4.78
Excess		0.15	0.78	1.59	0.78	1.75	0.56	0.88	1.11	0.46	0.45
Western Total Return	106,528,498	0.06	2.67	4.69	2.67	5.35	--	--	--	--	3.35
BC U.S. Aggregate		-0.06	0.46	5.80	0.46	5.19	--	--	--	--	4.91
Excess		0.12	2.21	-1.11	2.21	0.16	--	--	--	--	-1.56
Total Opportunistic Credit	159,476,157	0.54	4.39	9.92	4.39	7.46	5.77	9.89	--	--	9.62
BC BA Intermediate HY Index		0.34	4.04	11.15	4.04	11.17	5.93	7.84	--	--	8.11
Excess		0.20	0.35	-1.22	0.35	-3.71	-0.16	2.05	--	--	1.52

San Mateo County Manager Return Summary



September 30, 2016

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
AG Opportunistic Whole Loan	20,300,880	0.00	0.35	0.38	0.35	0.72	--	--	--	--	-0.13
BC BA Intermediate HY Index		0.34	4.04	11.15	4.04	11.17	--	--	--	--	4.56
Excess		-0.34	-3.68	-10.76	-3.68	-10.45	--	--	--	--	-4.70
Angelo Gordon	26,181,658	0.00	2.21	-1.13	2.21	0.12	7.71	--	--	--	8.08
BC BA Intermediate HY Index		0.34	4.04	11.15	4.04	11.17	5.93	--	--	--	5.44
Excess		-0.34	-1.83	-12.27	-1.83	-11.05	1.79	--	--	--	2.65
Beach Point Select Fund	42,666,232	0.47	4.22	10.54	4.22	9.32	--	--	--	--	8.50
BC BA Intermediate HY Index		0.34	4.04	11.15	4.04	11.17	--	--	--	--	5.35
Excess		0.12	0.18	-0.60	0.18	-1.84	--	--	--	--	3.14
Brigade Cap Mngmt	68,191,237	0.97	6.89	19.83	6.89	12.26	3.76	6.94	--	--	6.79
BC BA Intermediate HY Index		0.34	4.04	11.15	4.04	11.17	5.93	7.84	--	--	7.28
Excess		0.63	2.85	8.69	2.85	1.10	-2.17	-0.90	--	--	-0.49
Total Global Fixed Income	99,875,590	-0.95	-0.13	1.11	-0.13	3.35	0.96	4.87	--	--	3.64
Samcera Global Fixed Benchmark		0.57	1.05	10.21	1.05	9.23	2.22	1.97	--	--	2.60
Excess		-1.52	-1.18	-9.10	-1.18	-5.88	-1.26	2.89	--	--	1.04
Franklin Templeton	99,875,590	-0.95	-0.13	1.11	-0.13	3.35	0.51	4.58	--	--	3.40
BC Multiverse Index		0.57	1.05	10.21	1.05	9.23	2.22	1.97	--	--	2.60
Excess		-1.52	-1.18	-9.10	-1.18	-5.88	-1.72	2.61	--	--	0.80
Total Risk Parity	286,451,398	0.62	2.27	15.99	2.27	14.53	7.43	7.50	--	--	6.55
Samcera Risk Parity Benchmark		0.07	2.82	7.35	2.82	11.17	8.00	11.05	--	--	8.46
Excess		0.55	-0.55	8.63	-0.55	3.36	-0.57	-3.55	--	--	-1.91
AQR Global Risk III	131,355,214	1.40	2.30	12.12	2.30	9.84	3.98	5.42	--	--	4.70
Samcera Risk Parity Benchmark		0.07	2.82	7.35	2.82	11.17	8.00	11.05	--	--	8.46
Excess		1.33	-0.52	4.77	-0.52	-1.33	-4.02	-5.63	--	--	-3.76

San Mateo County Manager Return Summary



September 30, 2016

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Panagora	155,096,184	-0.03	2.24	19.47	2.24	18.83	--	--	--	--	8.12
Samcera Risk Parity Benchmark		0.07	2.82	7.35	2.82	11.17	--	--	--	--	5.34
Excess		-0.10	-0.57	12.12	-0.57	7.66	--	--	--	--	2.78
Total Alternatives	410,536,375	0.35	4.15	1.89	4.15	2.48	5.08	5.43	-7.71	-7.77	-3.77
Samcera Alternatives Benchmark		0.39	3.47	7.39	3.47	8.86	5.65	9.67	8.93	6.29	7.07
Excess		-0.04	0.68	-5.50	0.68	-6.38	-0.57	-4.24	-16.64	-14.06	-10.84
Total Private Equity	223,958,950	0.06	6.49	5.42	6.49	9.08	14.74	9.34	--	--	-27.69
Samcera PE Benchmark		0.40	5.16	10.59	5.16	18.37	13.64	19.75	--	--	16.34
Excess		-0.34	1.33	-5.16	1.33	-9.29	1.10	-10.41	--	--	-44.03
Total Hedge Fund Composite	186,577,426	0.70	1.46	-1.55	1.46	-0.14	7.76	6.47	--	--	5.02
Samcera LIBOR + 4%		0.37	1.11	3.33	1.11	4.39	4.25	4.24	--	--	4.24
Excess		0.33	0.36	-4.88	0.36	-4.53	3.52	2.23	--	--	0.78
AQR Delta XN	153,000,131	0.96	1.69	-1.08	1.69	0.72	8.07	6.65	--	--	5.19
Samcera LIBOR + 4%		0.37	1.11	3.33	1.11	4.39	4.25	4.24	--	--	4.24
Excess		0.59	0.59	-4.40	0.59	-3.67	3.82	2.41	--	--	0.95
Standard Life GARS	33,577,295	-0.48	0.42	-3.65	0.42	-4.06	--	--	--	--	-4.06
Samcera LIBOR + 4%		0.37	1.11	3.33	1.11	4.39	--	--	--	--	4.39
Excess		-0.85	-0.68	-6.98	-0.68	-8.46	--	--	--	--	-8.46
Total Inflation Hedge	369,303,575	2.30	2.80	--	2.80	--	--	--	--	--	8.40
SamCERA Inflation Hedge Index		0.75	-0.56	--	-0.56	--	--	--	--	--	3.80
Excess		1.55	3.36	--	3.36	--	--	--	--	--	4.60
Total TIPS	70,921,074	0.70	1.20	--	1.20	--	--	--	--	--	2.07
BC US Tips		0.55	0.96	--	0.96	--	--	--	--	--	2.69
Excess		0.16	0.24	--	0.24	--	--	--	--	--	-0.62

San Mateo County Manager Return Summary



September 30, 2016

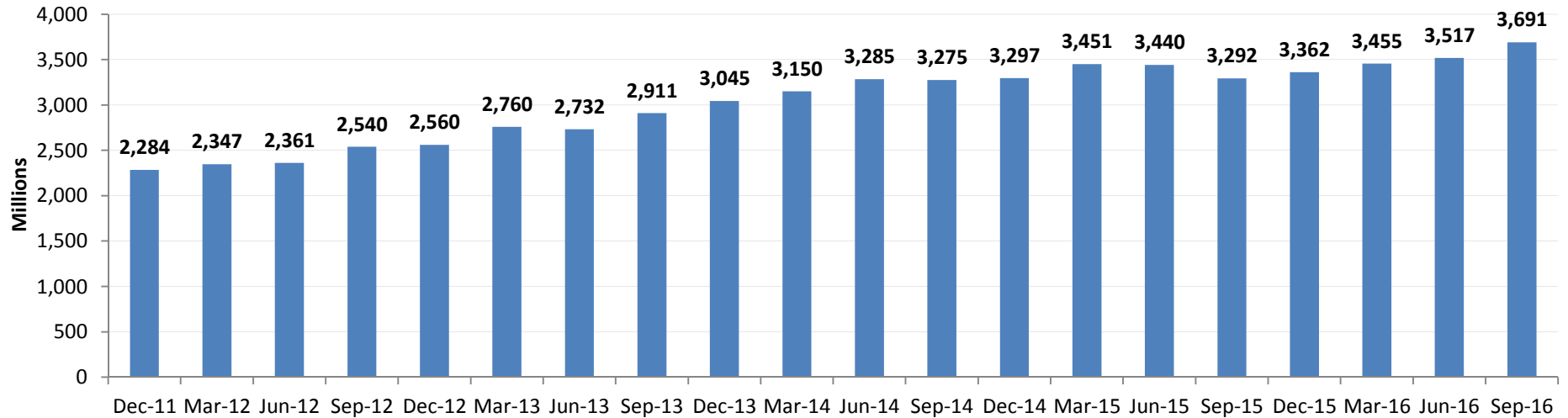
Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Brown Brothers Harriman	70,921,074	0.70	1.20	5.51	1.20	5.28	0.90	1.09	--	--	2.85
BC US Tips		0.55	0.96	7.27	0.96	6.58	2.40	1.93	--	--	3.51
Excess		0.16	0.24	-1.76	0.24	-1.30	-1.50	-0.83	--	--	-0.66
Total Real Estate	245,931,183	0.00	0.07	--	0.07	--	--	--	--	--	4.85
Samcera NCREIF ODCE EW (gross)		0.00	0.00	--	0.00	--	--	--	--	--	2.18
Excess		0.00	0.07	--	0.07	--	--	--	--	--	2.67
Invesco Core Real Estate	236,273,275	0.00	0.00	7.50	0.00	10.60	11.83	11.44	11.65	5.35	7.76
Samcera NCREIF ODCE EW (gross)		0.00	0.00	4.67	0.00	8.26	11.79	11.92	11.93	5.57	7.57
Excess		0.00	0.00	2.83	0.00	2.34	0.04	-0.48	-0.28	-0.21	0.19
Invesco US Val IV	9,657,908	0.00	2.04	18.28	2.04	--	--	--	--	--	12.99
Samcera NCREIF ODCE EW (gross)		0.00	0.00	4.67	0.00	--	--	--	--	--	8.26
Excess		0.00	2.04	13.61	2.04	--	--	--	--	--	4.72
Total Private Real Assets	52,451,317	18.06	21.75	--	21.75	--	--	--	--	--	39.74
Samcera CPI + 5%		0.00	0.74	--	0.74	--	--	--	--	--	3.17
Excess		18.06	21.01	--	21.01	--	--	--	--	--	36.57
Total Cash	212,867,279	0.04	0.61	0.79	0.61	0.86	0.62	0.59	0.69	0.96	2.08
Samcera Cash Benchmark		0.05	0.10	0.24	0.10	0.27	0.11	0.10	0.11	0.92	1.91
Excess		-0.01	0.52	0.55	0.52	0.59	0.51	0.49	0.58	0.05	0.17
SamCera General Account	194,219,670	0.05	0.13	0.37	0.13	0.41	0.27	0.22	0.25	1.14	2.05
County Treasury Pool	18,096,463	0.00	0.00	0.00	0.00	0.00	0.24	0.43	0.62	0.82	2.76
San Mateo County ERA	3,690,867,166	0.73	3.61	7.28	3.61	10.46	6.44	9.92	8.55	4.95	6.60
Samcera Total Plan Benchmark		0.51	3.55	7.47	3.55	10.83	6.24	10.17	8.79	5.84	6.88
Excess		0.22	0.06	-0.19	0.06	-0.37	0.19	-0.25	-0.24	-0.89	-0.28

September 30, 2016

Record of Asset Growth

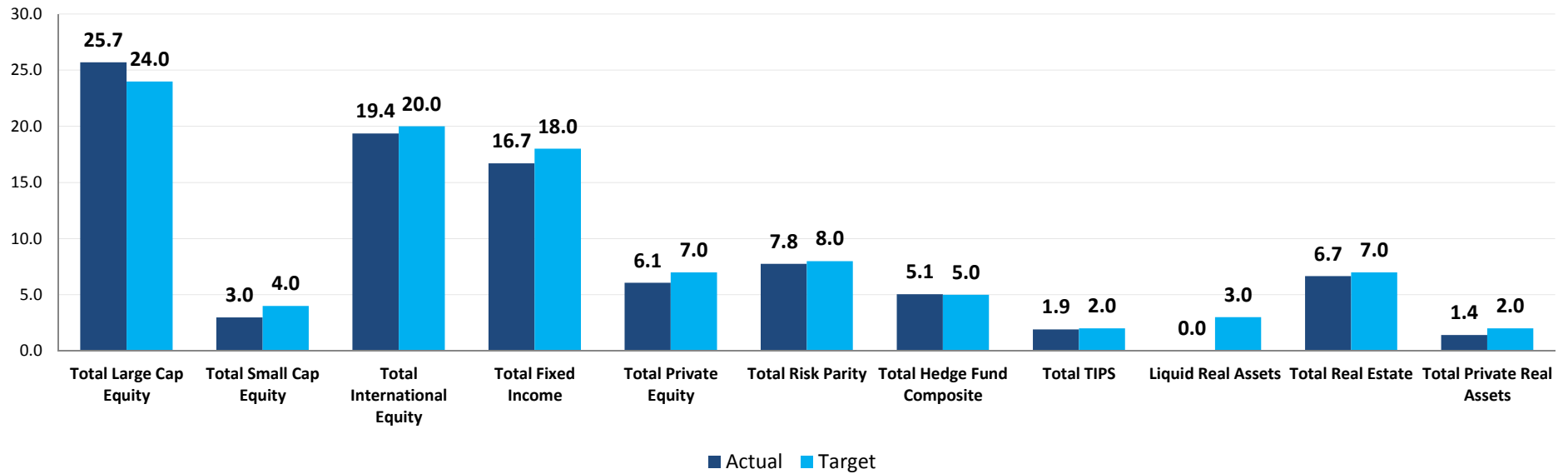
	Three Months	One Year
TOTAL FUND		
Beginning Market Value	3,517,196,261	3,292,427,331
Contributions	200,722,615	342,904,144
Withdrawals	-157,470,899	-299,709,219
Income Received	5,430,532	39,451,532
Gain/Loss	124,941,889	314,732,057
Ending Market Value	3,690,867,166	3,690,867,166

Net Asset Values Over Time (\$000)



September 30, 2016

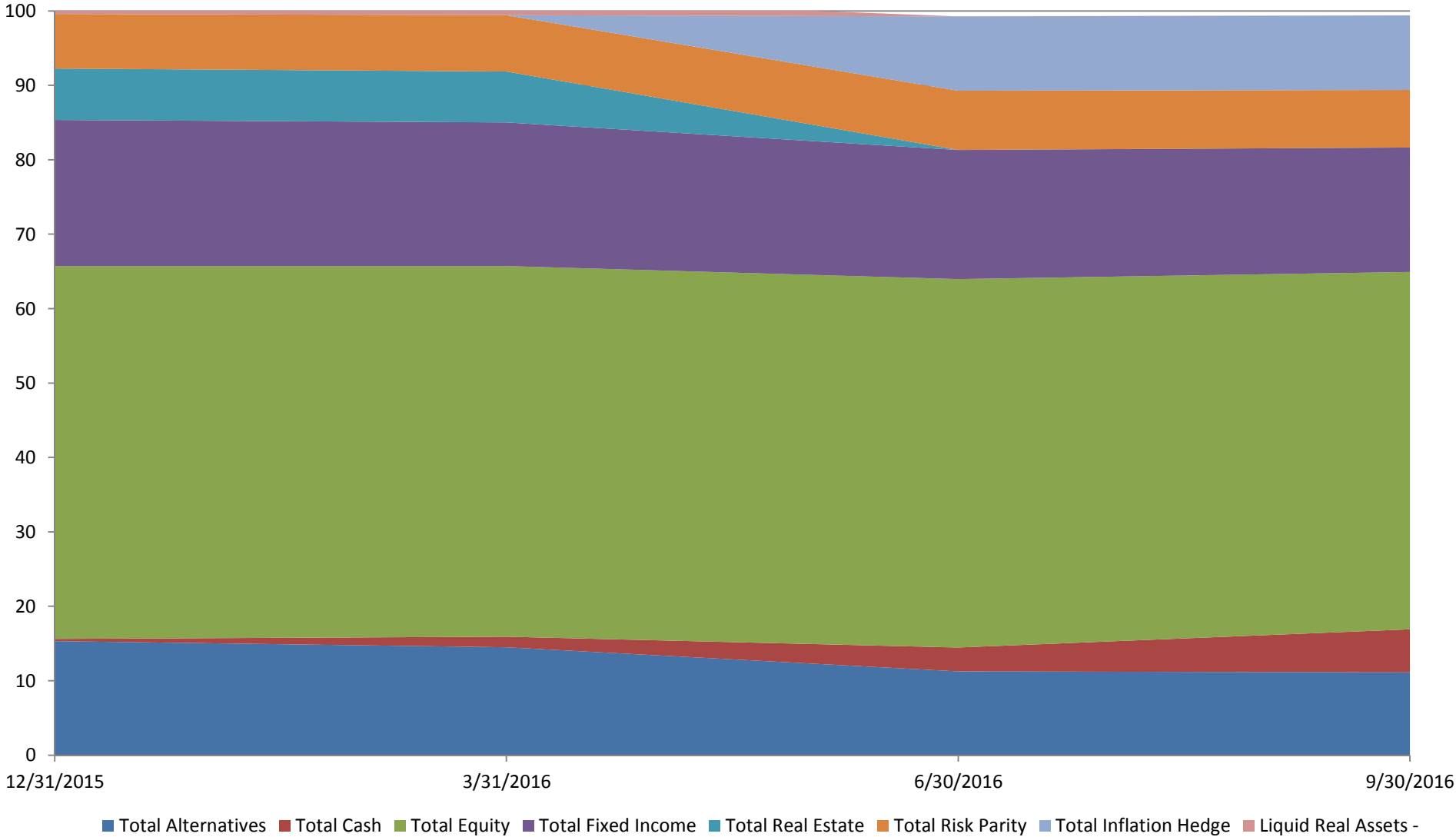
Actual vs Target Weights



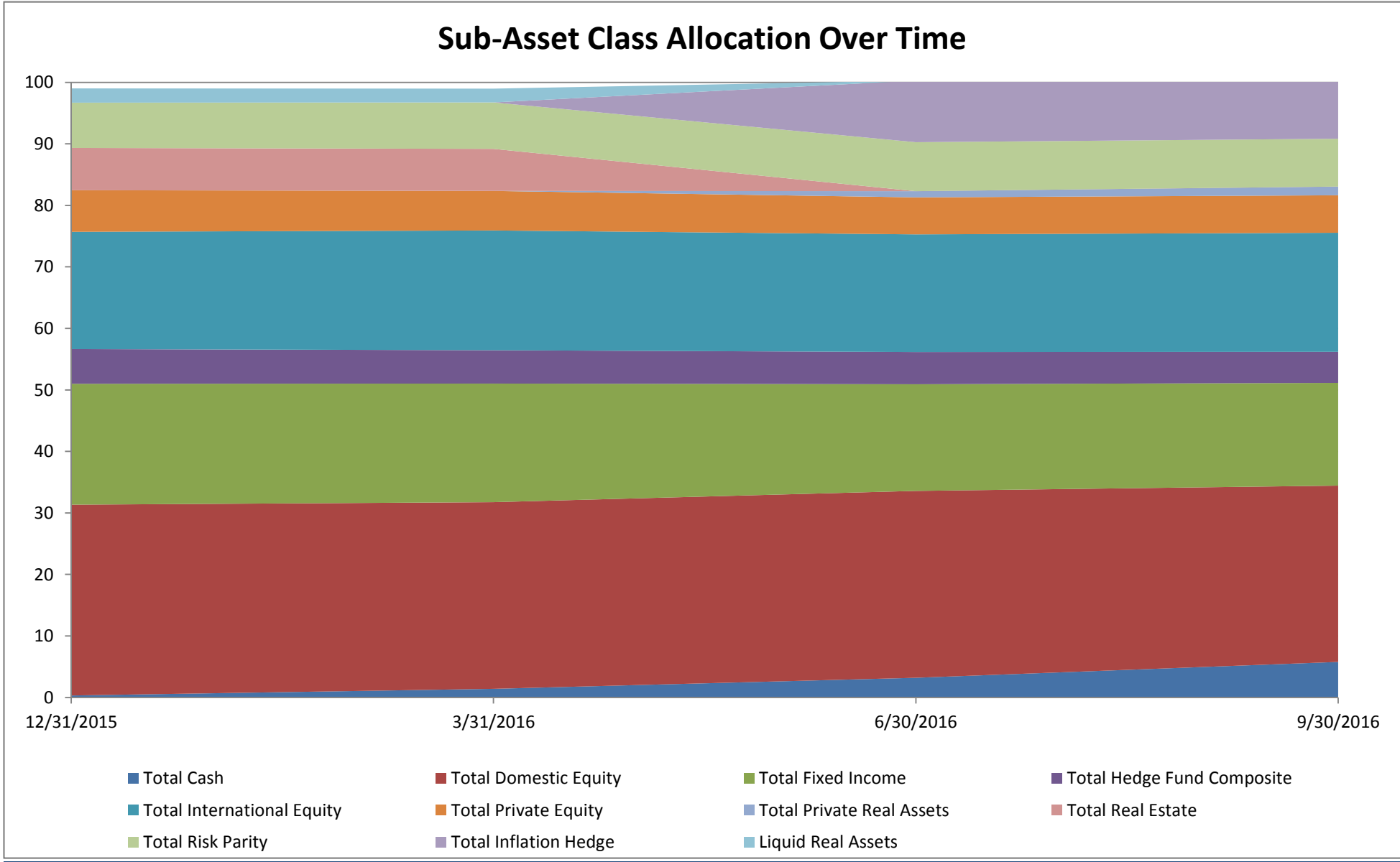
	Min	Actual	Target	Deviation	Max
Total Large Cap Equity	22.0	25.7	24.0	1.7	26.0
Total Small Cap Equity	2.0	3.0	4.0	-1.0	6.0
Total International Equity	18.0	19.4	20.0	-0.6	22.0
Total Fixed Income	16.0	16.7	18.0	-1.3	20.0
Total Private Equity	5.0	6.1	7.0	-0.9	9.0
Total Risk Parity	6.0	7.8	8.0	-0.2	10.0
Total Hedge Fund Composite	3.0	5.1	5.0	0.1	7.0
Total TIPS	0.0	1.9	2.0	-0.1	4.0
Liquid Real Assets	1.0	0.0	3.0	-3.0	5.0
Total Real Estate	5.0	6.7	7.0	-0.3	9.0
Total Private Real Assets	0.0	1.4	2.0	-0.6	4.0

September 30, 2016

Asset Allocation over Time



September 30, 2016



SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 6.2

TO: Board of Retirement

FROM: Doris Ng, Investment Analyst 

SUBJECT: Report on Opportunistic Credit Manager Annual Review – Brigade

Staff Recommendation

Review the report on the annual review of SamCERA's Opportunistic Credit manager, Brigade Capital Management.

Background

The annual manager review for Brigade Capital Management occurred on September 7, 2016. The meeting lasted approximately 1.5 hours and consisted of a firm/organizational update, an investment process review, and a review of performance and attribution. Their current positioning and market outlook were also discussed.

Discussion

Brigade Capital Management's Opportunistic Credit product 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.

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

Attachment

Brigade Capital Management Opportunistic Credit Annual Review Meeting Note (*Confidential*)

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 6.3

TO: Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer 

SUBJECT: Report on Alternative Manager Annual Review – Standard Life GARS

Staff Recommendation

Review the report on the annual review of SamCERA's Alternative manager, Standard Life.

Background

The annual manager review for Standard Life occurred on October 6, 2016. The meeting lasted approximately 1.5 hours and consisted of a firm/organizational update, an investment process review, and a review of performance and attribution. Their current positioning and market outlook were also discussed.

The annual review for SamCERA's other Hedge Fund /Absolute Return strategy, AQR Delta, occurred on October 13th and will be presented to the Board at the next meeting.

Discussion

Standard Life Global Absolute Return Strategies (GARS) product is a multi-strategy fundamentally-driven approach that targets absolute returns with significantly less volatility than equity investments.

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

Attachment

Standard Life GARS Annual Review Meeting Note (*Confidential*)

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 6.4

TO: Board of Retirement



FROM: Michael Coultrip, Chief Investment Officer

SUBJECT: Approval of New Asset Allocation Policy Portfolio

Staff Recommendation

Approve new asset allocation policy portfolio.

Background

During the April Board retreat, Verus provided a session on our upcoming asset-liability study. They introduced the topic and provided an overview of the asset-liability process. In May, Verus sent an enterprise risk tolerance survey to the Board and shared the results with the Board during the June meeting.

In July, Verus presented a range of asset allocation portfolios, and the Board provided feedback in terms of preferred risk tolerance levels and return/risk tradeoffs. The general consensus developed during the meeting was to focus on the risk profile range between that of the 50/20/20 and 40/25/25 portfolios. In September the Board reviewed a range of potential policy portfolios within this risk range, and the direction to staff was to present an asset allocation policy portfolio recommendation consistent with the 50/20/20 risk level.

Discussion

The proposed policy has a reduction to Growth assets of 9%, with a corresponding increase to Diversifying (3%) and Inflation (6%).

	Current Policy	Proposed Policy	Change
Growth	63%	54%	-9%
Diversifying	15%	18%	3%
Inflation	14%	20%	6%
Risk Parity	8%	8%	
Total:	100%	100%	

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

The attached recommendation from Verus details the rationale for the proposed changes to the policy portfolio. Margaret Jadallah and Stephen Quirk from Verus will present this topic.

Attachment

Verus Asset Allocation Policy Recommendation

Memorandum

To: SamCERA Board
CC: Michael Coultrip
From: Verus
Date: October 25, 2016
RE: Asset Allocation Recommendation

Summary

Pursuant to the Asset Liability Study conducted in 2016, this memo outlines Verus and SamCERA's staff's recommendation to update SamCERA's Asset Allocation.

SamCERA's current and proposed target asset allocations are below:

	Current Policy	Proposed Risk Diversified Allocation	Alternate Risk Diversified Allocation*
US Equity	28.0%	18.0%	12.0%
International Equity	19.0%	18.0%	12.0%
Private Equity	7.0%	7.0%	7.0%
Opportunistic Credit	5.0%	6.0%	7.0%
Private Credit	1.0%	2.0%	2.0%
Global Fixed Income	3.0%	3.0%	3.0%
Growth	63.0%	54.0%	43.0%
Core Fixed Income	10.0%	12.0%	15.0%
Absolute Return/HF	5.0%	6.0%	8.0%
Diversifying	15.0%	18.0%	23.0%
Real Estate	7.0%	10.0%	12.0%
Private Real Asset	2.0%	4.0%	5.0%
Liquid Pool	3.0%	6.0%	7.0%
TIPS	2.0%	0.0%	0.0%
Inflation	14.0%	20.0%	24.0%
Risk Parity	8.0%	8.0%	10.0%
Total	100.0%	100.0%	100.0%

* Included for illustrative purposes as a potential long term target as SamCERA's funding status improves.

Asset Liability Modeling Process

The ALM study started at the Board retreat on April 27, 2016 with an introduction to the process. The Board was educated as to how Verus developed its Capital Market Expectations. Verus also introduced the concept of viewing the portfolio from a risk perspective, as well as the role of asset classes in economic diversification.

Following the retreat, a questionnaire was set to the SamCERA Board. The questionnaire was intended to gain perspective into each Board member's risk tolerance and comfort with the current portfolio risks. Verus compiled the resulting distribution of risk tolerances, and presented the results for discussion and debate on June 7th. The discussion provided guidance to what risks were of most concern to the Board, as well as the most important objectives for the Plan. The Board showed concern for another Black Swan event and indicated they would like to lower the equity risk of the portfolio. The most important objectives for the Plan were to meet liabilities, and to ensure the long term sustainability of the Plan.

To analyze SamCERA's liabilities, Milliman provided actuarial data to Winklevoss Technologies, a global software application used by actuaries and investment consultants. Winklevoss then built a liability model based on the data provided, and Verus incorporated the resulting liability model in the ALM (asset-liability integration) presentation on July 27th. Verus also presented a broad range of asset mixes based on the results from the Enterprise Risk Tolerance discussion. The Board gave guidance as to a preferred direction for the portfolio in this meeting. The Board wanted to see more options lowering Growth assets to around 50%. Verus and Staff also discussed with the Board using functional labels for asset classes. Functional labels allow for transparency of roles when viewing what assets are in the portfolio. Verus identified three functional labels to use going forward (Growth, Diversifying, and Inflation).

Verus and SamCERA staff analyzed a variety of portfolio asset mixes and presented a group of preferred asset mixes within a narrower range of risk to the SamCERA Board on September 27th. Verus also modeled assets and liabilities using various inflation scenarios to analyze the impact of adding to the allocation of Inflation Assets as well as the impact on liabilities. After discussing with Board members and SamCERA staff, the Proposed Risk Diversified Allocation was agreed upon for reasons identified in the section below.

Proposed Changes to Asset Allocation

Summary of Proposed Changes

Verus recommends lowering Growth assets from 63% to 54% and Increasing Diversifying and Inflation assets by 3% and 6% respectively. A detailed summary of proposed changes for each functional asset class are listed on page one. The risks and returns forecasts for current policy and the proposed asset allocation are found in the table below.

	Policy	Proposed	Alternate
Forecasted Return	7.1%	7.0%	6.80%
Standard Deviation	13.8	13.5	12.4
Sharpe Ratio	0.46	0.47	0.48

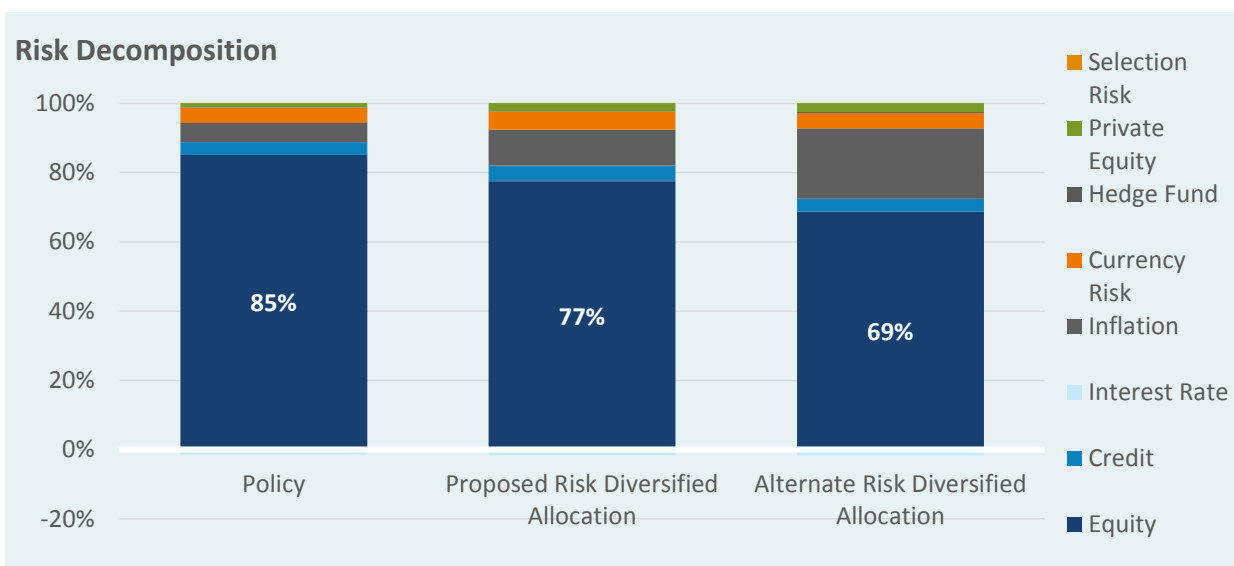
Growth Assets

Growth assets are a major driver of performance for most portfolios because, on average, assets in these asset classes have higher expected returns. However, the growth is typically tied to higher equity risk. As a result, Verus and staff recommend lowering Growth assets to lower the portfolio's equity risk and diversify the risk profile of the portfolio. Verus also recommends having an equal weight between US and International Equity. Currently, the portfolio has an overweight bias towards the US (approximately 60%), while the global equity market, as measured by the MSCI ACWI Index, has only 50% US exposure. Lowering the US equity allocation in the portfolio will align the portfolio with the market weights. This also increases the portfolio's expected return as Verus' International Equity forecast has a higher expected return compared to US Equity.

In order to lessen the return impact on the portfolio from lowering the equity risk of the portfolio, Verus recommends increasing Opportunistic Credit and Private Credit by 1% each. This also diversifies the risk profile of the portfolio by allocating more risk to credit and counterparty risk. Investments in the Opportunistic Credit and Private Credit are idiosyncratic in nature, with SamCERA's managers looking for undervalued and mispriced securities in Opportunistic Credit and direct lending income from credit-worthy borrowers in the case of Private Credit.

We have carved out Private Credit from Opportunistic Credit in the asset allocation modeling to provide transparency. Private credit is a new sub-asset class within Opportunistic Credit and was recently funded with Tennenbaum Capital Partners. Private credit, also known as direct lending, complements SamCERA's existing portfolio because: 1) direct lending managers generate most of their returns from the contractual cash yield of underlying loans which are less correlated with credit market volatilities, 2) the majority of private loans are either floating rate or fixed rate with high coupons so they are less sensitive to rising interest rates, and 3) expected returns are high because the managers are taking on illiquidity risk for the underlying loans. (Note that the proposed allocation to private credit is small as a percentage of Plan assets for this reason.) Direct lending is an area that has been growing institutionally as banks and other financial intermediaries have reduced their lending following the Great Financial Crisis.

The table below shows the decrease in equity risk from the current policy to the proposed risk diversified allocation.



Diversifying Assets

Diversifying assets provide protection from equity risk through low expected correlation to equity assets. Diversifying assets are defensive assets that help provide stability if equity markets fall. As illustrated in the correlation matrix in the appendix, Fixed Income is modeled to have close to a zero correlation with equities. The Hedge Funds/Absolute Return correlation is higher; however, the range of strategies in hedge funds are heterogeneous and range from uncorrelated to strategies with higher betas. In implementation we will use hedge fund strategies with better diversification properties. Also, we will continue to focus on absolute return managers that have lower fees that better align the manager’s incentives with its investors. The proposed increase in hedge funds is modest (5% to 6%) and can easily be implemented using SamCERA’s existing managers.

To recap, Verus recommends increasing the allocation to Diversifying assets to better diversify the portfolio, and lower the return volatility of the overall portfolio.

Inflation Assets

Inflation assets provide additional diversification from equity risk. Inflation assets also provide a potential hedge against unexpected inflation, and have slightly higher return forecasts than Fixed Income. With lower expected risk than for Growth assets as a whole, higher expected return than Fixed Income, and the additional inflation hedging characteristics, Verus recommends increasing the Inflation assets exposure by 6% to 20% of SamCERA’s portfolio.

Within Inflation assets, TIPS has the best inflation hedging characteristics, but currently lacks the potential for robust returns. While returns from Real Assets are less directly tied to changes in inflation, and therefore provide a less optimal hedge against inflation risk, they can potentially generate more attractive returns and also provide diversification relative to other equity-oriented

strategies. Verus recommends increasing the Real Asset allocation by 2% and eliminating TIPS. The additional 6% to Inflation Assets will be split equally among the Liquid Pool and Real Estate.

Recommendation

Our recommendations for SamCERA's asset allocation policy resulting from the ALM study is intended to lower the overall risk of the portfolio through diversification away from equity risk. The recommendation for the Proposed Risk Diversified Allocation also increases the allocation to Inflation assets to help mitigate the shock of the portfolio to unexpected changes in inflation. The additional diversification slightly lowers the forecasted standard deviation of the portfolio, with minimal impact to the forecasted return.

Appendix

Assumptions

Asset Class	Ten Year Return Forecast	Standard Deviation Forecast
	Geometric	
Equities		
US Large Cap	7.0%	16.5%
US Small Cap	7.5%	20.5%
International Stock	7.7%	22.0%
Emerging Market Equity	8.7%	36.0%
Private Equity	9.4%	33.0%
High Yield	5.5%	12.0%
Diversifying		
US Fixed Income	2.7%	5.0%
International Bond	1.0%	10.0%
TIPS	2.7%	5.5%
Bank Loans	4.4%	8.5%
Absolute Return	4.7%	10.0%
Inflation		
Commodities	4.0%	30.0%
Infrastructure	5.5%	21.0%
Natural Resources	7.5%	24.0%
Real Estate	5.6%	17.0%
Risk Parity	5.5%	10.8%

Past performance is no guarantee of future results. This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Verus Advisory Inc. and cCVerus Investors, LLC ("Verus") file a single form ADV under the United States Investment Advisors Act of 1940, as amended.




Correlation Matrix

	U.S. Large Cap	U.S. Small Cap	U.S. Fixed	Int'l Developed	Emerging Mkt	Int'l Fixed	Private Equity	Real Estate	U.S. High Yield	Bank Loan	U.S. Tips	Infrastructure	Natural Resource	Commodities	Hedge Funds
U.S. Large Cap Stock	1														
U.S. Small Cap Stock	0.86	1													
U.S. Fixed Income	0.07	-0.02	1												
Int'l Developed Mkt Stock	0.76	0.72	0.02	1											
Emerging Mkt Stock	0.53	0.61	-0.02	0.69	1										
Int'l Fixed Income	0.05	-0.02	0.52	0.34	0.17	1									
Private Equity	0.76	0.70	-0.09	0.54	0.49	0	1								
Real Estate	0.60	0.71	0.17	0.53	0.49	0	0.31	1							
U.S. High Yield	0.65	0.68	0.33	0.60	0.60	0.29	0.54	0.69	1						
Bank Loan	0.64	0.63	0.12	0.61	0.58	0.10	0.42	0.68	0.79	1					
U.S. Tips	0.01	-0.05	0.72	0	0.15	0.49	-0.11	0.26	0.29	0.22	1				
Infrastructure	0.49	0.52	0.43	0.49	0.45	0.26	0.16	0.64	0.62	0.17	0.37	1			
Natural Resources	0.56	0.53	0.15	0.71	0.68	0.29	0.37	0.49	0.58	0.28	0.27	0.58	1		
Commodities	0.30	0.30	0.03	0.35	0.43	0.25	0.20	0.30	0.21	0.11	0.44	0.34	0.64	1	
Hedge Funds	0.57	0.54	0.30	0.66	0.50	0.28	0.35	0.36	0.45	0.35	0.25	0.61	0.64	0.46	1

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 6.5

TO: Board of Retirement 
FROM: Michael Coultrip, Chief Investment Officer
SUBJECT: Approval of Resolution Amending the Investment Policy

Staff Recommendation

Adopt a resolution amending the SamCERA Investment Policy Statement.

Background

Since the latest revision to the Investment Policy in January 2016, in which the Board amended the policy to address whether and how investment managers consider environmental, social and governance ("ESG") criteria, along with amendments to reflect a two percent reduction to the domestic equity allocation and a corresponding one percent increase to alternative assets (hedge funds/absolute return) and real estate, the Board took action on certain investment related items which staff has determined should be memorialized in the Investment Policy Statement in order that the statement reflects current practice.

Discussion

The following proposed revisions to the Investment Policy Statement memorialize the Board's actions regarding the Fund's asset allocation that were implemented since the January revision. The changes are summarized below:

1. Establishment of a dedicated Inflation Hedge composite that combines SamCERA's inflation-sensitive assets under one composite. Inflation-sensitive assets in fixed income (TIPS), real estate, and alternatives (private real assets and commodities) were moved to this new dedicated Inflation Hedge composite. The above action was approved by the Board in March 2016.
2. Final implementation of the asset allocation policy that the Board approved in August of 2015. In June 2016, the Board approved a commitment to a new Opportunistic Credit strategy. The asset allocation policy was changed to reflect this, with International Equity reduced by 1% and Fixed Income (Opportunistic Credit) increased by 1%.
3. In July 2016, the Board approved changing SamCERA's commodity exposure to a Liquid Pool, which includes liquid exposure to commodities, listed natural resource equities, and listed infrastructure equities.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

4. In July 2016, the Board approved simplifying the U.S. small-capitalization equity program by eliminating its dedicated small growth and small-value managers, and replacing them with a single small-cap core equity manager. As part of this change, the U.S. equity benchmark was changed from 85% Russell 1000 Index /15% Russell 2000 Index to 100% Russell 3000 Index.

Attachments

- A. Proposed Amendments to the Investment Policy Statement (Redlined Version)
- B. Resolution Revising the Investment Policy Statement and Attached Investment Policy Statement
- C. Proposed Amendments to the Investment Policy Statement (Clean Version)



SamCERA's Investment Policy Statement

Approved June 2014

Revised September 2014

Revised September 2015

Revised January 2016

Revised October 2016

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 ROLES AND PRINCIPAL DUTIES

The Fund investments shall be prudently planned, implemented, managed, and monitored. The Board, Investment Committee (the “Committee”), Investment Staff (the “Staff”), Investment Consultant (the “Consultant”), Custodian Bank (the “Custodian”), and Investment Managers (the “Managers”) shall coordinate this process. The roles and principal duties of the above-mentioned parties are defined below:

A. THE BOARD shall review and approve Committee recommendations. The Board also will review, adopt and monitor all investment policies, guidelines and procedures required to prudently administer the Fund and to effectively mitigate risk to the Fund.

B. THE COMMITTEE shall identify issues pertinent to the effective investment and administration of the Fund and, on Board approval, initiate analysis of such issues by Staff, Consultant or Managers. It also reviews Staff’s and Consultant’s recommendations regarding all investment policies and Fund management. The Committee provides recommendations to the Board for adoption, oversees implementation, and monitors the investment programs in accordance with all applicable laws and Board-established policies, guidelines and procedures. Refer to Attachment A – Charter of SamCERA’s Investment Committee of the Board for detailed Committee responsibilities.

C. THE STAFF shall oversee the Fund’s investment program activities, implement the Board decisions, make recommendations to the Committee regarding Fund management, and recommend investment-related policies and procedures to the Committee. Additionally, Staff shall monitor the performance and compliance of Managers in accordance with all applicable laws, Board-established policies, guidelines and procedures, as well as Schedule B Investment Guidelines set out in the Investment Management Agreements (IMA) between SamCERA and each Manager. Staff shall also facilitate the Committee meetings and complete activities as directed by the Board.

D. THE CONSULTANT shall review, analyze and evaluate the Fund’s effectiveness and efficiency and make fund management related recommendations. Consultant assists Staff in implementing the Board decisions and developing all investment-related policies. Consultant’s responsibilities are detailed in the service agreement between SamCERA and Consultant.

E. THE CUSTODIAN shall provide custody of SamCERA’s investment assets. In addition, the Custodian will manage the securities lending program. The Custodian’s responsibilities will be detailed in the service agreement between SamCERA and Custodian.

F. THE MANAGERS shall prudently manage their mandated allocations in accordance with all applicable laws, Board-established policies, guidelines and procedures, as well as specific investment guidelines. Managers’ responsibilities will be detailed in the Investment Management Agreements (IMA) between SamCERA and each Manager.

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. Move toward full actuarial funding of the Pension Benefit Obligation based on GASB 25 and the Board's policy of layered fifteen-year unfunded actuarial accrued liability (UAAL) amortization periods.
- C. 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).
- D. 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.
- 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 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).
- G. Adopt objectives that encourage investment managers to maximize their performance, within acceptable risk parameters, relative to their individual investment style benchmark.
- H. Refrain from drastically shifting asset class allocations over short time spans, unless it is in the Fund's best interest to do so.
- I. Rebalance the portfolio in accordance to the Rebalancing Policy set forth in Section 7.0.

6.0 ASSET ALLOCATION & PORTFOLIO STRUCTURE

The target asset class allocation, rebalancing ranges, and the sub-asset class portfolio structure of the Fund shall be allocated as follows:

ASSET CLASS	TARGET ALLOCATION	REBALANCE RANGE
Public Equity	47 8%	±3%
Fixed Income	19 8 20 %	±2%
Risk Parity	8%	±2%
Alternative Assets *	12 7%	±2%
<u>Inflation Hedge Pool *</u>	<u>14%</u>	<u>±2%</u>
<u>Real Estate *</u>	<u>7%</u>	<u>±2%</u>

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

A. Public Equity Assets shall be allocated to managers within the following sub-asset classes:

PUBLIC EQUITY ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Large Capitalization Domestic	254.0%	±2%
Passive Core	165.0%	±2%
Active Core	3.0%	±2%
Growth	3.0%	±2%
Value	3.0%	±2%
Small Capitalization Domestic	34.0%	±2%
Active Core	32.0%	±2%
Growth	2.0%	±2%
Value		
International	1920.0%	±2%
Passive Core	4.0%	±2%
Growth	5.56-0	±2%
Value	5.56-0	±2%
	%	
Small Capitalization	2.0%	±2%
Emerging Market	2.0%	±2%
TOTAL PUBLIC EQUITY	478.0%	

B. Fixed Income Assets shall be allocated to managers within the following sub-asset classes:

FIXED INCOME ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Core	7.0%	±2%
Core Unconstrained	3.0%	±2%
Opportunistic Credit	65.0%	±2%
Inflation Protection	2.0%	±2%
Global Fixed Income	3.0%	±2%
TOTAL FIXED INCOME	19820.0	
	%	

~~C. Alternative Assets shall be allocated to managers within the following sub-asset classes:~~

ALTERNATIVE ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Private Equity	7	±2%
Hedge Funds (Absolute Return)	5	±2%
Commodities	3	±2%
Real Assets	2	±2%
TOTAL ALTERNATIVE ASSETS	17	

C. Risk Parity Assets shall be allocated as follows:

~~D. Risk Parity Assets shall be allocated as follows:~~

RISK PARITY ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Risk Parity	8.0%	±2%
TOTAL RISK PARITY	8.0%	

D. Alternative Assets shall be allocated to managers within the following sub-asset classes:

<u>ALTERNATIVE ASSET CLASSES</u>	<u>TARGET ALLOCATION</u>	<u>REBALANCE RANGE</u>
<u>Private Equity</u>	<u>7.0%</u>	<u>±2%</u>
<u>Hedge Funds (Absolute Return)</u>	<u>5.0%</u>	<u>±2%</u>
<u>TOTAL ALTERNATIVE ASSETS</u>	<u>12.0%</u>	

E. ~~Real Estate~~Inflation HedgePool Assets shall be allocated as follows:

REAL ESTATE INFLATION HEDGE POOL ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Real Estate Real Estate	7.0%	±2%
Private Real Assets	25.0%	±2%
Liquid Pool	32.0%	±2%
TIPS	2.0%	±2%
TOTAL	71.0	

F. 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 (E) 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
Public Equity	47.8%
Russell 3000 Index	28.4%
Russell 2000 Index	4%
MSCI ACWI x US IMI Index	19.2%
Fixed Income	12.9%
BC Aggregate Index	10%
BC BA Intermediate High Yield Index	6.5%
BC Capital US TIPS Index	2%
BC Multiverse Index	3%
Risk Parity	8%
60% Russell 3000 / 40% BC Aggregate	8%
Alternatives	17.1%

Russell 3000 +3%	7%
LIBOR + 4%	5%
Bloomberg Commodity Index	3%
CPI +5%	2%
Real Estate Inflation Hedge Pool	147%
<hr/>	
NCREIF ODCE	7%
CPI + 5%	5%
Custom Real Asset Index* Liquid Pool	
Benchmark	52.0%
BC TIPS Index	2%

*Comprised of 34% Bloomberg Roll Select Commodity Roll Select Index, 33% S&P Global Large-Midcap Natural Resources Index, and 33% 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 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 PUBLIC EQUITY INVESTMENT POLICIES

PUBLIC EQUITY OVERVIEW: 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 the general economic growth. There are two primary parts to the Public Equity category: 1) Domestic Equity, and 2) International Equity.

PUBLIC EQUITY MANAGER STRUCTURE:

Domestic Equity: 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. The large-cap composite will consist of Core, Value, and Growth. Core will consist of two strategies, one a passive and another a low-tracking error active, while the Growth and Value categories will consist of higher tracking error active strategies. The Small-Capitalization strategy will consist of an actively-managed Value and Growth ~~Core Value and Growth~~ strategies.

International Equity: International Equity will consist of two sub-composites: 1) Developed Equity, and 2) Emerging Equity. Developed Equity will consist of a passive Core component and active Value, Growth (although both have exposure to emerging markets) and Core Small-Capitalization strategies. Emerging Market Equity will consist of an active Core mandate.

PUBLIC EQUITY PERFORMANCE OBJECTIVE:

The performance objective of the Public Equity Category is to outperform on a net-of-fee basis a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for both the domestic and international equity parts (which results in the following weights: 59.650% Russell 31000, 8.3% Russell 2000, and 401.47% MSCI World ex US IMI), with a maximum tracking error of 3% to this benchmark.

PUBLIC EQUITY RISK EXPOSURES AND RISK MITIGATION:

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 and emerging market equities will help ensure adequate diversification within the equity portion of the SamCERA portfolio.

ASSET CLASS	BENCHMARK INDEX
Total Public Equity	Customized Benchmark Portfolio
Domestic Equity	85% Russell 31000 / 15% Russell 2000
Large Capitalization Domestic Equity	Russell 1000
Passive Core	S&P 500
Active Core	S&P 500
Large Growth	Russell 1000 Growth
Large Value	Russell 1000 Value
Small Capitalization Domestic Equity	Russell 2000
Active Core Small Growth	Russell 2000 Growth
Small Value	Russell 2000 Value
Small Growth	Russell 2000 Growth
Small Value	Russell 2000 Value
International Equity	MSCI All Country World ex US IMI
Developed International	MSCI All Country World ex US
Developed International Passive Core	MSCI EAFE
Developed International Growth	MSCI ACWI Free ex US Growth
Developed International Value	MSCI ACWI Free ex US Value
International Small	MSCI ACWI Small Cap ex US
Emerging Markets	MSCI Emerging Markets Free

10.0 FIXED INCOME INVESTMENT POLICIES

FIXED INCOME OVERVIEW: Fixed income is expected to provide a lower but steadier stream of returns than public equity asset classes, but is also expected to reduce the risk of the overall portfolio because bonds have lower risk than most other major asset classes. That said, there are a number of sub-categories within fixed income that exhibit very different risk/return trade-offs and hold different tasks in terms of role in the portfolio. Fixed Income is broken out into five-four subcategories:

- 1) Core, 2) Core Unconstrained, 3) Opportunistic Credit, ~~4) Inflation Protection,~~ and 45) Global Fixed Income

Core: Core is generally considered the lowest-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 Barclays Aggregate Index. Core's role in the portfolio is to dampen portfolio volatility and protect the portfolio in times of economic duress.

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 combined with some moderate return enhancement.

Opportunistic Credit: _Opportunistic Credit is expected to be the highest-risk fixed income category, and will be used to enhance return by investing in non-traditional sectors of the bond market, including bank loans, high yield bonds, convertible bonds, and CMBS/ABS securities. This sub-category will be exposed to general economic risk factors, similar to public equities.

~~**Inflation Protection:** Inflation Protection is expected to provide some protection against higher rates of inflation.~~

Global Fixed Income: Global Fixed Income has characteristics similar to a combination of Core and Core Unconstrained but extended to a global opportunity set, and is expected to provide some portfolio volatility dampening along with some return enhancement.

FIXED INCOME PERFORMANCE OBJECTIVE:

The performance objective of the Fixed Income Composite is to outperform, on a net-of-fee-basis, a customized index incorporating the weighted average components for five-four sub-categories highlighted above (which results in the following weights: 552.646% Barclay's Capital Aggregate Bond Index, 2831.65% Barclays BA Intermediate High Yield Index, 10% ~~Barclays Capital US TIPS Index~~, and 191715.8% Barclays Capital Multiverse Index), with a maximum tracking error of 3% to this benchmark.

FIXED INCOME RISK EXPOSURES AND RISK MITIGATION:

The fixed income sub-sectors have very different risk factor exposures, with Core being generally the lowest risk, highest liquidity sub-category, while Opportunistic Credit is generally the highest risk, lowest liquidity sub-category. SamCERA will take into account these 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.

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 Unconstrained: Typically includes 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.

Opportunistic Credit: Typically includes the risk factors contained in Core and Core Unconstrained, but, depending on the mandate, with higher emphasis to high-yield default risks, emerging markets sovereign/corporate default risk, and potential illiquidity.

~~**Inflation Protection:** The primary risk factors are to changes in real interest rates, deflationary environments (although deflation floors could mitigate some of this risk), and potential illiquidity.~~

Global Fixed Income: The primary risk factors are sensitivity to global interest rates, sovereign credit risk (including emerging markets), corporate default risk, and currency impacts.

ASSET CLASS	BENCHMARK INDEX
Fixed Income	Customized Benchmark Portfolio
Domestic Fixed Income	Barclays Capital Aggregate Bond Index
Core/Core Unconstrained	Barclays Capital Aggregate Bond Index
Opportunistic Credit	Barclays Capital BA Intermediate High Yield Index
Inflation Protection	Barclays Capital US TIPS Index
Global Fixed Income	Barclays Capital Multiverse Index

11.0 INFLATION HEDGEPOOL INVESTMENT POLICIES

INFLATION HEDGEPOOL OVERVIEW: The Inflation HedgePool 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, Risk Parity, 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 HedgePool is expected to provide a high degree of inflation beta, attractive risk-adjusted returns and diversification benefits to the overall plan.

Inflation HedgePool is broken out into ~~four~~three subcategories:

- 1) Real Estate, 2) Private Real Assets, ~~and~~ 3) Liquid Pool, and 4) TIPS

Real Estate: Real Estate is expected to provide a return and risk profile between that provided by fixed income and equities. 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. The remainder will be Value-Add properties that are expected to provide somewhat higher return potential along with somewhat higher risk. Income will be a large part of the return stream generated from this 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 Equity composite due to their higher-risk, longer time horizon, and the less liquid nature of the investment set compared to Core and Value-Add strategies.

~~Commodities: Commodities are meant to provide some protection from higher levels of unanticipated inflation while providing a diversifying return stream from that of public markets.~~

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 three sub-categories: 1) Infrastructure (Core, Secondary, Midstream Energy, and Power), 2) Mining, and 3)

Farmland/Timber/Water. These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation target allocation and ranges around target are summarized below:

<u>Sub-Category</u>	<u>Target Allocation</u>	<u>Range</u>
<u>Infrastructure</u>	<u>50%</u>	<u>+/- 50%</u>
<u>Mining</u>	<u>0%</u>	<u>0 – 50%</u>
<u>Farmland/Timber/Water</u>	<u>0%</u>	<u>0 – 50%</u>

Liquid Pool: Similar to Private Real Assets, the Liquid Pool is expected to provide positive correlation to inflation, but with potentially higher beta to public equity markets. The Liquid Pool will be used to fund new strategies in Private Real Assets and will be composed of three sub-categories: 1) Commodities, 2) Listed Global Natural Resources, and 3) Listed Global Infrastructure. All three 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. Listed Global Natural Resource and Listed Global Infrastructure may be implemented through the use of relatively inexpensive, passive indices.

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

<u>Sub-Category</u>	<u>Target Allocation</u>	<u>Range</u>
<u>Commodities</u>	<u>34%</u>	<u>+/- 50%</u>
<u>Listed Global Natural Resources</u>	<u>33%</u>	<u>0 – 50%</u>
<u>Listed Global Infrastructure</u>	<u>33%</u>	<u>0 – 50%</u>

TIPS Inflation Protection: Inflation Protection is expected to provide some protection against higher rates of inflation.

INFLATION HEDGEPOOL PERFORMANCE OBJECTIVE:

The performance objective of the Inflation HedgePool Composite is to outperform, on a net-of-fee basis, a customized index incorporating the weighted average components for ~~four~~ three composite sub-asset classes ~~highlighted above~~ (which results in the following weights: 50% NCREIF ODCE, 35.7% Custom Real Asset Index GPI+5%, and 14.35% BC TIPS Index Liquid Pool Benchmark).

INFLATION HEDGEPOOL 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 investments. Value-add 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. Opportunistic-oriented strategies will reside in our Private Equity 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.

~~Liquid Pool: Leverage may be utilized by the managers to enhance overall risk adjusted returns. SamCERA will control leverage exposure through strategy and product selection and diversification.~~

~~TIPS Inflation Protection: The primary risk factors are to changes in real interest rates, deflationary environments (although deflation floors could mitigate some of this risk), and potential illiquidity.~~

<u>ASSET CLASS</u>	<u>BENCHMARK INDEX</u>
<u>INFLATION HEDGE POOL</u>	<u>CUSTOMIZED BENCHMARK PORTFOLIO</u>
<u>REAL ESTATE</u>	<u>NCREIF ODCE</u>
<u>PRIVATE REAL ASSETS</u>	<u>CUSTOM REAL ASSET INDEX CPI + 5%</u>
<u>LIQUID POOL</u>	<u>CUSTOM REAL ASSET INDEX</u>
<u>TIPS</u>	<u>BC TIPS INDEX</u>

REAL ESTATE INVESTMENT POLICIES

~~REAL ESTATE OVERVIEW: Real Estate is expected to provide a return and risk profile between that provided by fixed income and equities. 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. The remainder will be Value-Add properties that are expected to provide somewhat higher return potential along with somewhat higher risk. Income will be a large part of the return stream generated from this 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 Equity composite due to their higher-risk, longer time horizon, and the less liquid nature of the investment set compared to Core and Value-Add strategies.~~

REAL ESTATE PERFORMANCE OBJECTIVE:

The performance objective of the Real Estate Composite is to outperform, on a net of fee basis, the NCREIF ODCE Index over a 5-year rolling period.

REAL ESTATE RISK EXPOSURES AND RISK MITIGATION:

Many real estate funds utilize leverage to enhance returns. Lack of liquidity is also a concern, but less so for core real estate investments. Value add 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. Opportunistic-oriented strategies will reside in our Private Equity 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.

<u>ASSET CLASS</u>	<u>BENCHMARK INDEX</u>
<u>Real Estate</u>	<u>NCREIF ODCE</u>

12.0 ALTERNATIVE ASSETS INVESTMENT POLICIES

ALTERNATIVES OVERVIEW: Alternatives are investments that do not neatly fit into public equities, or fixed income, or real estate. SamCERA's alternatives program is broken out into the following four-two sub asset classes:

- 1) Private Equity, and 2) Hedge Funds, 3) Commodities, and 4) Private Real Assets

Private Equity: Private Equity is expected to be the highest returning asset class 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 target allocation and ranges around target 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: No more than twenty (20) percent of the private equity portfolio's target allocation may be committed to any one investment manager (excluding fund of funds).

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.

Hedge Funds (Absolute Return): The hedge fund 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, 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).

~~**Commodities**: Commodities are meant to provide some protection from higher levels of unanticipated inflation while providing a diversifying return stream from that of public markets.~~

~~**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 three sub-categories: 1) Infrastructure (Core, Secondary, Midstream Energy, and Power), 2) Mining, and 3) Farmland/Timber/Water. These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation target allocation and ranges around target are summarized below:~~

Sub-Category	Target Allocation	Range
Infrastructure	50%	+/- 50%
Mining	0%	0-50%
Farmland/Timber/Water	0%	0-50%

ALTERNATIVES PERFORMANCE OBJECTIVE:

The performance objective of the Alternatives Composite is to outperform, on a net-of-fee basis, a customized index incorporating the weighted average components for ~~four~~ two sub-asset classes highlighted above (which results in the following weights: 58.41% Russell 3000+3%, and 29.42% LIBOR+4%, ~~18% Dow Jones UBS Commodity, and 12% CPI+5%~~).

ASSET CLASS	BENCHMARK INDEX
Alternatives	Customized Benchmark Portfolio
Private Equity	Russell 3000 + 3%
<u>Commodities</u>	<u>Bloomberg Commodity</u>
Hedge Funds <u>(Absolute Return)</u>	LIBOR + 4%
<u>Real Assets</u>	<u>CPI + 5%</u>

ALTERNATIVES RISK EXPOSURES AND RISK MITIGATION

Alternatives, while expected to provide attractive returns that are less correlated to the returns provided by public asset classes, also have a number of risks. Chief among these are illiquidity risk and leverage. By their nature ~~both Private Equity and Private Real Assets are~~ 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 alternative managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

13. RISK PARITY INVESTMENT POLICIES

RISK PARITY OVERVIEW: Risk Parity is a risk-diversified balanced portfolio that is expected to provide a more diversified return and risk profile than that of a traditional 60% equity / 40% fixed income portfolio. It is generally designed to be more balanced between equity risk, interest rate risk, [credit risk](#), and inflation risk than a traditional balanced portfolio.

RISK PARITY PERFORMANCE OBJECTIVE:

The performance objective of the Risk Parity Composite is to outperform, on a net-of-fee basis, the 60% Russell 3000 / 40% BC Aggregate over a 5 year rolling period.

RISK PARITY RISK EXPOSURES AND RISK MITIGATION:

Risk parity managers utilize leverage in order to enhance returns. Moderate leverage may be utilized and the portfolio managers should avoid strategies that might place the portfolio outside the expected ranges outlined. Gross exposures are expected to range from 250% to 350%. In addition, the risk parity portfolio shall consist of a portfolio of generally liquid trading instruments.

Counter-parties for Over the Counter (OTC) derivatives must either: (1) have a long-term rating from Standard & Poor's of at least A-, or from Moody's of at least A3; or (2) be approved by the manager's counter-party committee. In the event that the OTC derivative counterparty is an unrated affiliate whose performance is unconditionally guaranteed by the parent company, the parent's credit rating shall apply.

ASSET CLASS	BENCHMARK INDEX
Risk Parity	60% Russell 3000 / 40% BC Aggregate

14.0 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.

15.0 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.

16.0 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.

17.0 SECURITIES LENDING

A. Pursuant to Section 2.0 (E), 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 marketable fixed income securities with maturities not greater than one year, including (1) Commercial Paper with quality ratings of P-1 and/or A-1 by Moody's Investors Services or Standard & Poor's Corporation, or their equivalents; (2) Banker's acceptances, certificates of deposits and time deposits; (3) United States Treasury and Government Agency short-term obligations; and (4) Repurchase Agreements with United States Treasury Securities and Agencies of the United States Government as collateral.

(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.

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
- ~~1211~~.0 INITIATE & EVALUATE SPECIAL INVESTMENT STUDIES
- ~~123~~.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

DUE DILIGENCE POLICY

MANUAL

POLICY

SamCERA's due diligence process requires: 1) Staff to perform on-going due diligence monitoring, 2) Consultant and Managers to make regularly scheduled due diligence presentations to Staff in SamCERA's offices, and 3) Staff and available Board members to make on-site visitations to the Consultant and Managers' offices on an as-needed basis.

PURPOSE

To discharge the fiduciary responsibilities of the Board and staff, regular due diligence with the San Mateo County Employees' Retirement Association investment managers is essential to the Board's ability to effectively monitor the performance of its investment professionals, and to the prudent discharge of the board's fiduciary duty to the beneficiaries of this multi-billion dollar retirement system.

F.01 – Due Diligence Monitoring

Individual investment managers will be monitored monthly, quarterly and annually. The managers' organizations and operations will be qualitatively monitored on a continual basis.

The Chief Investment Officer, with assistance from the Consultant, will present an investment performance report to the Board on a quarterly basis, as specified in Section 14.0 (Quarterly Investment Performance Reporting) in the Investment Policy. Performance will be measured for the total portfolio as well as individual components such as equities, fixed income and real estate portfolios. In addition, the performance of each component will be broken down into individual portfolios.

Comparisons will be made against market indices defined in this document. A variance from the stated performance objective will be calculated each quarter. Additionally, the portfolios' actual investment approach will be monitored against the required investment style to determine whether the manager is adhering to its acknowledged investment style.

The quarterly investment performance report will compare the total fund, each asset class and individual portfolio return to appropriate market indices and a representative peer group of similar funds or similar style investment managers. The report will note significant changes in the attribution of investment manager performance.

Annually, staff will request and review the Investment Manager's ADV Part II form and inform the board of significant changes in the firm or apparent conflicts of interest. In addition staff will request an annual insurance certification from each professional service provider. Where appropriate a Statement of Standards for Attestation Engagements (SSAE) No. 16 will be obtained and reviewed.

F.02 – Due Diligence Presentations

Consultants and Managers that are under contract with the Board to provide services will make a presentation to Staff at least once a year. The presentation shall include, but not be limited to, an update on the Manager's organization and business plan, changes to the investment process and investment performance. Staff may request presentations more frequently as circumstances demand. The Managers will provide on a semi-annual basis a completed Compliance Certification Statement and in-depth responses to a list of questions submitted by staff.

F.03 – Asset Categories

On-site meetings will be grouped by asset categories. This approach enables staff to readily compare and contrast investment approaches, systems, and controls utilized by the investment managers. It will also allow for a better evaluation of the existing asset diversification.

F.04 – Manager Selection Due Diligence

The Board, with the assistance of Staff and Consultant, selects Managers to manage the assets of the Fund. The Board authorizes Staff and Consultant to initiate a public markets search for a manager either to replace a manager or to fill a new mandate approved by the Board. The Consultant and Staff will conduct the search in accordance with criteria established for the search. The search criteria will include the scope of the mandate, the investment style, benchmark, and the minimum qualifications for candidates. When appropriate to better understand an investment strategy, Staff, and Consultant may perform on-site due diligence on the final candidate prior to signing the investment agreement.

The Board may require a public markets Manager being considered as provider of professional services for SamCERA to make a formal presentation to it at a public Board meeting. The presentation may include, but not be limited to: 1) manager's organization and its staff, 2) investment philosophy and process, 3) the resources available to provide the service, 4) proposed fees and 4) performance characteristics.

Appendix D

DISCLOSURE OF PLACEMENT AGENT FEES, GIFTS, AND CAMPAIGN CONTRIBUTIONS

***Adopted by the Board of Retirement
December 14, 2010. Amended January 25, 2011.***

This policy is effective immediately upon adoption. This policy is intended to supplement any applicable provisions of state or federal law.

I. PURPOSE

This Policy sets forth the circumstances under which the San Mateo County Employees' Retirement Association (SAMCERA) shall require the disclosure of payments to *Placement Agents*, as that term is defined by Government Code section 7513.8, in connection with SAMCERA investments in or through *External Managers*, as that term is defined by Government Code section 7513.8. This Policy is intended to apply broadly to all of the types of investment partners with whom SAMCERA does business, including the general partners, managers, investment managers and sponsors of hedge funds, private equity funds, real estate funds and infrastructure funds, as well as investment managers retained pursuant to a contract. SAMCERA adopts this Policy to require broad, timely, and updated disclosure of all Placement Agent relationships, compensation and fees. The goal of this Policy is to help ensure that SAMCERA investment decisions are made solely on the merits of the investment opportunity by individuals who owe a fiduciary duty to SAMCERA.

II. APPLICATION

This Policy applies to all agreements with External Managers that are entered into after the date this Policy is adopted. This Policy also applies to existing agreements with External Managers if, after the date this Policy is adopted, the agreement is amended in any way 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.

IV. 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. Providing a statement in writing that the External Manager will comply with this policy.
2. Providing the following information to the 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 14 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.

- D. 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 investment discussions are initiated, but in any event, prior to the completion of due diligence and any recommendation to proceed with the 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 is entitled to the greater of the reimbursement of any management or advisory fees paid by SAMCERA for the prior two years or an amount equal to the amounts paid or promised to be paid to the Placement Agent as a result of the SAMCERA investment; and
 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 a quarterly report to the Board containing (a) the names and amount of compensation agreed to be provided to each Placement Agent by each External Manager as reported in the Placement Agent Information Disclosures, and (b) any material violations of this Policy; and maintaining the report as a public record.

DEFINITIONS:

The following definitions are current as of January 7, 2011. Should the legislature subsequently amend the definitions below, the definition of these terms as amended shall supersede the definitions contained in this policy.

As defined in California Government Code section 7513.8, “**External Manager**” means either of the following: (1) a person who is seeking to be, or is, retained by a board to manage a portfolio of securities or other assets for compensation; (2) a person who is engaged, or proposes to be engaged, in the business of investing, reinvesting, owning, holding, or trading securities or other

assets and who offers or sells, or has offered or sold, securities to a board. (All code section references are to the Government Code, unless otherwise noted.)

As defined in section 7513.8, “**Person**” means an individual, corporation, partnership, limited partnership, limited liability company, or association, either domestic or foreign.

As defined in section 7513.8, “**Placement Agent**” means any person hired, engaged, or retained by, or serving for the benefit of or on behalf of, an External Manager, or on behalf of another placement agent, who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker or other intermediary in connection with the offer or sale of the securities, assets, or services of an External Manager to a board or an Investment Vehicle, either directly or indirectly. Notwithstanding the preceding sentence, an individual who is an employee, officer, director, equity holder, 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.

As defined in section 7513.8, “**Investment Vehicle**” means a corporation, partnership, limited partnership, limited liability company, association, or other entity, either domestic or foreign, constituting or 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.

“**Compensation**” means, for the purposes of this policy, remuneration and other benefits (including without limitation, favors) of any kind.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

RESOLUTION 2016-___

**RESOLUTION AMENDING SAMCERA'S
INVESTMENT POLICY STATEMENT**

WHEREAS, pursuant to Article XVI, Section 17, of the California Constitution, the Board of Retirement (the "Board"), has the exclusive authority and exclusive fiduciary responsibility for the investment and administration of the assets of the retirement system (the "Fund"), and on June 3, 2014, 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 1937 Act"), 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, since the Policy's last amendment in January 2016, the Board established a dedicated Inflation Hedge composite that combines the inflation-sensitive assets under one composite, instituted a commitment to a new Opportunistic Credit strategy, changed the commodity exposure to a Liquid Pool, eliminated the dedicated small growth and small-value managers and added a single small-cap core equity manager, and related actions; and

WHEREAS, the Board has determined that the revisions to the following sections of the Investment Policy Statement reflect these changes: Section 6 "Asset Allocation & Portfolio Structure," Section 9 "Public Equity Investment Policies," Section 10 "Fixed Income Investment Policies", Section 11 "Inflation Hedge Investment Policies," and Section 12 "Alternative Assets Investment Policies,"; and

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.



SamCERA's Investment Policy Statement

Approved June 2014

Revised September 2014

Revised September 2015

Revised January 2016

Revised October 2016

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 ROLES AND PRINCIPAL DUTIES

The Fund investments shall be prudently planned, implemented, managed, and monitored. The Board, Investment Committee (the “Committee”), Investment Staff (the “Staff”), Investment Consultant (the “Consultant”), Custodian Bank (the “Custodian”), and Investment Managers (the “Managers”) shall coordinate this process. The roles and principal duties of the above-mentioned parties are defined below:

A. THE BOARD shall review and approve Committee recommendations. The Board also will review, adopt and monitor all investment policies, guidelines and procedures required to prudently administer the Fund and to effectively mitigate risk to the Fund.

B. THE COMMITTEE shall identify issues pertinent to the effective investment and administration of the Fund and, on Board approval, initiate analysis of such issues by Staff, Consultant or Managers. It also reviews Staff’s and Consultant’s recommendations regarding all investment policies and Fund management. The Committee provides recommendations to the Board for adoption, oversees implementation, and monitors the investment programs in accordance with all applicable laws and Board-established policies, guidelines and procedures. Refer to Attachment A – Charter of SamCERA’s Investment Committee of the Board for detailed Committee responsibilities.

C. THE STAFF shall oversee the Fund’s investment program activities, implement the Board decisions, make recommendations to the Committee regarding Fund management, and recommend investment-related policies and procedures to the Committee. Additionally, Staff shall monitor the performance and compliance of Managers in accordance with all applicable laws, Board-established policies, guidelines and procedures, as well as Schedule B Investment Guidelines set out in the Investment Management Agreements (IMA) between SamCERA and each Manager. Staff shall also facilitate the Committee meetings and complete activities as directed by the Board.

D. THE CONSULTANT shall review, analyze and evaluate the Fund’s effectiveness and efficiency and make fund management related recommendations. Consultant assists Staff in implementing the Board decisions and developing all investment-related policies. Consultant’s responsibilities are detailed in the service agreement between SamCERA and Consultant.

E. THE CUSTODIAN shall provide custody of SamCERA’s investment assets. In addition, the Custodian will manage the securities lending program. The Custodian’s responsibilities will be detailed in the service agreement between SamCERA and Custodian.

F. THE MANAGERS shall prudently manage their mandated allocations in accordance with all applicable laws, Board-established policies, guidelines and procedures, as well as specific investment guidelines. Managers’ responsibilities will be detailed in the Investment Management Agreements (IMA) between SamCERA and each Manager.

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. Move toward full actuarial funding of the Pension Benefit Obligation based on GASB 25 and the Board's policy of layered fifteen-year unfunded actuarial accrued liability (UAAL) amortization periods.
- C. 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).
- D. 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.
- 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 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).
- G. Adopt objectives that encourage investment managers to maximize their performance, within acceptable risk parameters, relative to their individual investment style benchmark.
- H. Refrain from drastically shifting asset class allocations over short time spans, unless it is in the Fund's best interest to do so.
- I. Rebalance the portfolio in accordance to the Rebalancing Policy set forth in Section 7.0.

6.0 ASSET ALLOCATION & PORTFOLIO STRUCTURE

The target asset class allocation, rebalancing ranges, and the sub-asset class portfolio structure of the Fund shall be allocated as follows:

ASSET CLASS	TARGET ALLOCATION	REBALANCE RANGE
Public Equity	47%	±3%
Fixed Income	19%	±2%
Risk Parity	8%	±2%
Alternative Assets *	12%	±2%
Inflation Hedge *	14%	±2%

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

A. Public Equity Assets shall be allocated to managers within the following sub-asset classes:

PUBLIC EQUITY ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Large Capitalization Domestic	25.0%	±2%
Passive Core	16.0%	±2%
Active Core	3.0%	±2%
Growth	3.0%	±2%
Value	3.0%	±2%
Small Capitalization Domestic	3.0%	±2%
Active Core	3.0%	±2%
International	19.0%	±2%
Passive Core	4.0%	±2%
Growth	5.5%	±2%
Value	5.5%	±2%
Small Capitalization	2.0%	±2%
Emerging Market	2.0%	±2%
TOTAL PUBLIC EQUITY	47.0%	

B. Fixed Income Assets shall be allocated to managers within the following sub-asset classes:

FIXED INCOME ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Core	7.0%	±2%
Core Unconstrained	3.0%	±2%
Opportunistic Credit	6.0%	±2%
Global Fixed Income	3.0%	±2%
TOTAL FIXED INCOME	19.0%	

C. Risk Parity Assets shall be allocated as follows:

RISK PARITY ASSET CLASS	TARGET ALLOCATION	REBALANCE RANGE
Risk Parity	8.0%	±2%
TOTAL RISK PARITY	8.0%	

D. Alternative Assets shall be allocated to managers within the following sub-asset classes:

ALTERNATIVE ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Private Equity	7.0%	±2%
Hedge Funds (Absolute Return)	5.0%	±2%
TOTAL ALTERNATIVE ASSETS	12.0%	

E. Inflation Hedge Assets shall be allocated as follows:

INFLATION HEDGE ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Real Estate	7.0%	±2%
Private Real Assets	2.0%	±2%
Liquid Pool	3.0%	±2%
TIPS	2.0%	±2%
TOTAL INFLATION HEDGE ASSETS	14.0%	

F. 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 (E) 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
Public Equity	47%
Russell 3000 Index	28%
MSCI ACWI x US IMI Index	19%
Fixed Income	19%
BC Aggregate Index	10%
BC BA Intermediate High Yield Index	6%
BC Multiverse Index	3%
Risk Parity	8%
60% Russell 3000 / 40% BC Aggregate	8%
Alternatives	12%

Russell 3000 +3%	7%
LIBOR + 4%	5%
Inflation Hedge	14%
<hr/>	
NCREIF ODCE	7%
Custom Real Asset Index*	5%
BC TIPS Index	2%

*Comprised of 34% Bloomberg Roll Select Commodity Index, 33% S&P Global Large-Midcap Natural Resources Index, and 33% 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 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 PUBLIC EQUITY INVESTMENT POLICIES

PUBLIC EQUITY OVERVIEW: 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 the general economic growth. There are two primary parts to the Public Equity category: 1) Domestic Equity, and 2) International Equity.

PUBLIC EQUITY MANAGER STRUCTURE:

Domestic Equity: 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. The large-cap composite will consist of Core, Value, and Growth. Core will consist of two strategies, one a passive and another a low-tracking error active, while the Growth and Value categories will consist of higher tracking error active strategies. The Small-Capitalization strategy will consist of an actively-managed Core strategy.

International Equity: International Equity will consist of two sub-composites: 1) Developed Equity, and 2) Emerging Equity. Developed Equity will consist of a passive Core component and active Value, Growth (although both have exposure to emerging markets) and Core Small-Capitalization strategies. Emerging Market Equity will consist of an active Core mandate.

PUBLIC EQUITY PERFORMANCE OBJECTIVE:

The performance objective of the Public Equity Category is to outperform on a net-of-fee basis a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for both the domestic and international equity parts (which results in the following weights: 59.6% Russell 3000, and 40.4% MSCI World ex US IMI), with a maximum tracking error of 3% to this benchmark.

PUBLIC EQUITY RISK EXPOSURES AND RISK MITIGATION:

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 and emerging market equities will help ensure adequate diversification within the equity portion of the SamCERA portfolio.

ASSET CLASS	BENCHMARK INDEX
Total Public Equity	Customized Benchmark Portfolio
Domestic Equity	Russell 3000
Large Capitalization Domestic Equity	Russell 1000
Passive Core	S&P 500
Active Core	S&P 500
Large Growth	Russell 1000 Growth

Large Value	Russell 1000 Value
Small Capitalization Domestic Equity	Russell 2000
Active Core	Russell 2000
International Equity	MSCI All Country World ex US IMI
Developed International	MSCI All Country World ex US
Developed International Passive Core	MSCI EAFE
Developed International Growth	MSCI ACWI Free ex US Growth
Developed International Value	MSCI ACWI Free ex US Value
International Small	MSCI ACWI Small Cap ex US
Emerging Markets	MSCI Emerging Markets Free

10.0 FIXED INCOME INVESTMENT POLICIES

FIXED INCOME OVERVIEW: Fixed income is expected to provide a lower but steadier stream of returns than public equity asset classes, but is also expected to reduce the risk of the overall portfolio because bonds have lower risk than most other major asset classes. That said, there are a number of sub-categories within fixed income that exhibit very different risk/return trade-offs and hold different tasks in terms of role in the portfolio. Fixed Income is broken out into four subcategories:

- 1) Core, 2) Core Unconstrained, 3) Opportunistic Credit, and 4) Global Fixed Income

Core: Core is generally considered the lowest-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 Barclays Aggregate Index. Core's role in the portfolio is to dampen portfolio volatility and protect the portfolio in times of economic duress.

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 combined with some moderate return enhancement.

Opportunistic Credit: Opportunistic Credit is expected to be the highest-risk fixed income category, and will be used to enhance return by investing in non-traditional sectors of the bond market, including bank loans, high yield bonds, convertible bonds, and CMBS/ABS securities. This sub-category will be exposed to general economic risk factors, similar to public equities.

Global Fixed Income: Global Fixed Income has characteristics similar to a combination of Core and Core Unconstrained but extended to a global opportunity set, and is expected to provide some portfolio volatility dampening along with some return enhancement.

FIXED INCOME PERFORMANCE OBJECTIVE:

The performance objective of the Fixed Income Composite is to outperform, on a net-of-fee-basis, a customized index incorporating the weighted average components for four sub-categories highlighted above (which results in the following weights: 52.6% Barclay’s Capital Aggregate Bond Index, 31.6% Barclays BA Intermediate High Yield Index, and 15.8% Barclays Capital Multiverse Index), with a maximum tracking error of 3% to this benchmark.

FIXED INCOME RISK EXPOSURES AND RISK MITIGATION:

The fixed income sub-sectors have very different risk factor exposures, with Core being generally the lowest risk, highest liquidity sub-category, while Opportunistic Credit is generally the highest risk, lowest liquidity sub-category. SamCERA will take into account these 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.

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 Unconstrained: Typically includes 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.

Opportunistic Credit: Typically includes the risk factors contained in Core and Core Unconstrained, but, depending on the mandate, with higher emphasis to high-yield default risks, emerging markets sovereign/corporate default risk, and potential illiquidity.

Global Fixed Income: The primary risk factors are sensitivity to global interest rates, sovereign credit risk (including emerging markets), corporate default risk, and currency impacts.

ASSET CLASS	BENCHMARK INDEX
Fixed Income	Customized Benchmark Portfolio
Domestic Fixed Income	Barclays Capital Aggregate Bond Index
Core/Core Unconstrained	Barclays Capital Aggregate Bond Index
Opportunistic Credit	Barclays Capital BA Intermediate High Yield Index
Global Fixed Income	Barclays Capital Multiverse Index

11.0 INFLATION HEDGE INVESTMENT POLICIES

INFLATION HEDGE OVERVIEW: The Inflation Hedge 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, Risk Parity, 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 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, 3) Liquid Pool, and 4) TIPS

Real Estate: Real Estate is expected to provide a return and risk profile between that provided by fixed income and equities. 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. The remainder will be Value-Add properties that are expected to provide somewhat higher return potential along with somewhat higher risk. Income will be a large part of the return stream generated from this 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 Equity composite due to their higher-risk, longer time horizon, and the less liquid nature of the investment set compared to Core and Value-Add strategies.

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 three sub-categories: 1) Infrastructure (Core, Secondary, Midstream Energy, and Power), 2) Mining, and 3) Farmland/Timber/Water. These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation target allocation and ranges around target are summarized below:

Sub-Category	Target Allocation	Range
Infrastructure	50%	+/- 50%
Mining	0%	0 – 50%
Farmland/Timber/Water	0%	0 – 50%

Liquid Pool: Similar to Private Real Assets, the Liquid Pool is expected to provide positive correlation to inflation, but with potentially higher beta to public equity markets. The Liquid Pool will be used to fund new strategies in Private Real Assets and will be composed of three sub-categories: 1) Commodities, 2) Listed Global Natural Resources, and 3) Listed Global Infrastructure. All three 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. Listed Global Natural Resource and Listed Global Infrastructure may be implemented through the use of relatively inexpensive, passive indices.

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

Sub-Category	Target Allocation	Range
Commodities	34%	+/- 50%
Listed Global Natural Resources	33%	0 – 50%
Listed Global Infrastructure	33%	0 – 50%

TIPS: Inflation Protection is expected to provide some protection against higher rates of inflation.

INFLATION HEDGE PERFORMANCE OBJECTIVE:

The performance objective of the Inflation Hedge Composite is to outperform, on a net-of-fee basis, a customized index incorporating the weighted average components for four composite sub-asset classes (which results in the following weights: 50% NCREIF ODCE, 35.7% Custom Real Asset Index, and 14.3% BC TIPS 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 investments. Value-add 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. Opportunistic-oriented strategies will reside in our Private Equity 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.

TIPS: The primary risk factors are to changes in real interest rates, deflationary environments (although deflation floors could mitigate some of this risk), and potential illiquidity.

ASSET CLASS	BENCHMARK INDEX
INFLATION HEDGE	CUSTOMIZED BENCHMARK PORTFOLIO

REAL ESTATE	NCREIF ODCE
PRIVATE REAL ASSETS	CUSTOM REAL ASSET INDEX
LIQUID POOL	CUSTOM REAL ASSET INDEX
TIPS	BC TIPS INDEX

12.0 ALTERNATIVE ASSETS INVESTMENT POLICIES

ALTERNATIVES OVERVIEW: Alternatives are investments that do not neatly fit into public equities, or fixed income. SamCERA’s alternatives program is broken out into the following two sub asset classes:

- 1) Private Equity, and 2) Hedge Funds

Private Equity: Private Equity is expected to be the highest returning asset class 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 target allocation and ranges around target 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: No more than twenty (20) percent of the private equity portfolio’s target allocation may be committed to any one investment manager (excluding fund of funds).

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.

Hedge Funds (Absolute Return): The hedge fund 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, 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).

ALTERNATIVES PERFORMANCE OBJECTIVE:

The performance objective of the Alternatives Composite is to outperform, on a net-of-fee basis, a customized index incorporating the weighted average components for two sub-asset classes highlighted above (which results in the following weights: 58% Russell 3000+3%, and 42% LIBOR+4%).

ASSET CLASS	BENCHMARK INDEX
Alternatives	Customized Benchmark Portfolio
Private Equity	Russell 3000 + 3%
Hedge Funds (Absolute Return)	LIBOR + 4%

ALTERNATIVES RISK EXPOSURES AND RISK MITIGATION

Alternatives, while expected to provide attractive returns that are less correlated to the returns provided by public asset classes, 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 alternative managers to enhance the overall risk-adjusted

returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

13. RISK PARITY INVESTMENT POLICIES

RISK PARITY OVERVIEW: Risk Parity is a risk-diversified balanced portfolio that is expected to provide a more diversified return and risk profile than that of a traditional 60% equity / 40% fixed income portfolio. It is generally designed to be more balanced between equity risk, interest rate risk, credit risk, and inflation risk than a traditional balanced portfolio.

RISK PARITY PERFORMANCE OBJECTIVE:

The performance objective of the Risk Parity Composite is to outperform, on a net-of-fee basis, the 60% Russell 3000 / 40% BC Aggregate over a 5 year rolling period.

RISK PARITY RISK EXPOSURES AND RISK MITIGATION:

Risk parity managers utilize leverage in order to enhance returns. Moderate leverage may be utilized and the portfolio managers should avoid strategies that might place the portfolio outside the expected ranges outlined. Gross exposures are expected to range from 250% to 350%. In addition, the risk parity portfolio shall consist of a portfolio of generally liquid trading instruments.

Counter-parties for Over the Counter (OTC) derivatives must either: (1) have a long-term rating from Standard & Poor's of at least A-, or from Moody's of at least A3; or (2) be approved by the manager's counter-party committee. In the event that the OTC derivative counterparty is an unrated affiliate whose performance is unconditionally guaranteed by the parent company, the parent's credit rating shall apply.

ASSET CLASS	BENCHMARK INDEX
Risk Parity	60% Russell 3000 / 40% BC Aggregate

14.0 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.

15.0 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.

16.0 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.

17.0 SECURITIES LENDING

A. Pursuant to Section 2.0 (E), 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 marketable fixed income securities with maturities not greater than one year, including (1) Commercial Paper with quality ratings of P-1 and/or A-1 by Moody's Investors Services or Standard & Poor's Corporation, or their equivalents; (2) Banker's acceptances, certificates of deposits and time deposits; (3) United States Treasury and Government Agency short-term obligations; and (4) Repurchase Agreements with United States Treasury Securities and Agencies of the United States Government as collateral.

(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.

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

DUE DILIGENCE POLICY

MANUAL

POLICY

SamCERA's due diligence process requires: 1) Staff to perform on-going due diligence monitoring, 2) Consultant and Managers to make regularly scheduled due diligence presentations to Staff in SamCERA's offices, and 3) Staff and available Board members to make on-site visitations to the Consultant and Managers' offices on an as-needed basis.

PURPOSE

To discharge the fiduciary responsibilities of the Board and staff, regular due diligence with the San Mateo County Employees' Retirement Association investment managers is essential to the Board's ability to effectively monitor the performance of its investment professionals, and to the prudent discharge of the board's fiduciary duty to the beneficiaries of this multi-billion dollar retirement system.

F.01 – Due Diligence Monitoring

Individual investment managers will be monitored monthly, quarterly and annually. The managers' organizations and operations will be qualitatively monitored on a continual basis.

The Chief Investment Officer, with assistance from the Consultant, will present an investment performance report to the Board on a quarterly basis, as specified in Section 14.0 (Quarterly Investment Performance Reporting) in the Investment Policy. Performance will be measured for the total portfolio as well as individual components such as equities, fixed income and real estate portfolios. In addition, the performance of each component will be broken down into individual portfolios.

Comparisons will be made against market indices defined in this document. A variance from the stated performance objective will be calculated each quarter. Additionally, the portfolios' actual investment approach will be monitored against the required investment style to determine whether the manager is adhering to its acknowledged investment style.

The quarterly investment performance report will compare the total fund, each asset class and individual portfolio return to appropriate market indices and a representative peer group of similar funds or similar style investment managers. The report will note significant changes in the attribution of investment manager performance.

Annually, staff will request and review the Investment Manager's ADV Part II form and inform the board of significant changes in the firm or apparent conflicts of interest. In addition staff will request an annual insurance certification from each professional service provider. Where appropriate a Statement of Standards for Attestation Engagements (SSAE) No. 16 will be obtained and reviewed.

F.02 – Due Diligence Presentations

Consultants and Managers that are under contract with the Board to provide services will make a presentation to Staff at least once a year. The presentation shall include, but not be limited to, an update on the Manager's organization and business plan, changes to the investment process and investment performance. Staff may request presentations more frequently as circumstances demand. The Managers will provide on a semi-annual basis a completed Compliance Certification Statement and in-depth responses to a list of questions submitted by staff.

F.03 – Asset Categories

On-site meetings will be grouped by asset categories. This approach enables staff to readily compare and contrast investment approaches, systems, and controls utilized by the investment managers. It will also allow for a better evaluation of the existing asset diversification.

F.04 – Manager Selection Due Diligence

The Board, with the assistance of Staff and Consultant, selects Managers to manage the assets of the Fund. The Board authorizes Staff and Consultant to initiate a public markets search for a manager either to replace a manager or to fill a new mandate approved by the Board. The Consultant and Staff will conduct the search in accordance with criteria established for the search. The search criteria will include the scope of the mandate, the investment style, benchmark, and the minimum qualifications for candidates. When appropriate to better understand an investment strategy, Staff, and Consultant may perform on-site due diligence on the final candidate prior to signing the investment agreement.

The Board may require a public markets Manager being considered as provider of professional services for SamCERA to make a formal presentation to it at a public Board meeting. The presentation may include, but not be limited to: 1) manager's organization and its staff, 2) investment philosophy and process, 3) the resources available to provide the service, 4) proposed fees and 4) performance characteristics.

Appendix D

**DISCLOSURE OF PLACEMENT AGENT FEES, GIFTS, AND CAMPAIGN
CONTRIBUTIONS**

***Adopted by the Board of Retirement
December 14, 2010. Amended January 25, 2011.***

This policy is effective immediately upon adoption. This policy is intended to supplement any applicable provisions of state or federal law.

I. PURPOSE

This Policy sets forth the circumstances under which the San Mateo County Employees' Retirement Association (SAMCERA) shall require the disclosure of payments to *Placement Agents*, as that term is defined by Government Code section 7513.8, in connection with SAMCERA investments in or through *External Managers*, as that term is defined by Government Code section 7513.8. This Policy is intended to apply broadly to all of the types of investment partners with whom SAMCERA does business, including the general partners, managers, investment managers and sponsors of hedge funds, private equity funds, real estate funds and infrastructure funds, as well as investment managers retained pursuant to a contract. SAMCERA adopts this Policy to require broad, timely, and updated disclosure of all Placement Agent relationships, compensation and fees. The goal of this Policy is to help ensure that SAMCERA investment decisions are made solely on the merits of the investment opportunity by individuals who owe a fiduciary duty to SAMCERA.

II. APPLICATION

This Policy applies to all agreements with External Managers that are entered into after the date this Policy is adopted. This Policy also applies to existing agreements with External Managers if, after the date this Policy is adopted, the agreement is amended in any way 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.

IV. 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. Providing a statement in writing that the External Manager will comply with this policy.
2. Providing the following information to the 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 14 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.

- D. 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 investment discussions are initiated, but in any event, prior to the completion of due diligence and any recommendation to proceed with the 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 is entitled to the greater of the reimbursement of any management or advisory fees paid by SAMCERA for the prior two years or an amount equal to the amounts paid or promised to be paid to the Placement Agent as a result of the SAMCERA investment; and
 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 a quarterly report to the Board containing (a) the names and amount of compensation agreed to be provided to each Placement Agent by each External Manager as reported in the Placement Agent Information Disclosures, and (b) any material violations of this Policy; and maintaining the report as a public record.

DEFINITIONS:

The following definitions are current as of January 7, 2011. Should the legislature subsequently amend the definitions below, the definition of these terms as amended shall supersede the definitions contained in this policy.

As defined in California Government Code section 7513.8, “**External Manager**” means either of the following: (1) a person who is seeking to be, or is, retained by a board to manage a portfolio of securities or other assets for compensation; (2) a person who is engaged, or proposes to be engaged, in the business of investing, reinvesting, owning, holding, or trading securities or other

assets and who offers or sells, or has offered or sold, securities to a board. (All code section references are to the Government Code, unless otherwise noted.)

As defined in section 7513.8, “**Person**” means an individual, corporation, partnership, limited partnership, limited liability company, or association, either domestic or foreign.

As defined in section 7513.8, “**Placement Agent**” means any person hired, engaged, or retained by, or serving for the benefit of or on behalf of, an External Manager, or on behalf of another placement agent, who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker or other intermediary in connection with the offer or sale of the securities, assets, or services of an External Manager to a board or an Investment Vehicle, either directly or indirectly. Notwithstanding the preceding sentence, an individual who is an employee, officer, director, equity holder, 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.

As defined in section 7513.8, “**Investment Vehicle**” means a corporation, partnership, limited partnership, limited liability company, association, or other entity, either domestic or foreign, constituting or 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.

“**Compensation**” means, for the purposes of this policy, remuneration and other benefits (including without limitation, favors) of any kind.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 7.1

TO: Board of Retirement

FROM: Tat-Ling Chow, Finance Officer 

SUBJECT: Approval of Financial Audit Management Reports for the Fiscal Year Ended June 30, 2016

Staff Recommendation

Approve the Brown Armstrong's Financial Audit Management Reports for the fiscal year ended June 30, 2016.

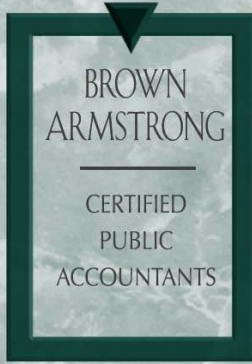
Discussion

Brown Armstrong performed an independent financial audit for the fiscal year ended June 30, 2016. Ashley L. Casey, CPA, of Brown Armstrong, will present highlights from the following Brown Armstrong documents, which are attached:

- 1) *Independent Auditor's Report*, which provides the following an unqualified (a clean) opinion: "In our opinion, the financial statements and the other information referred to above present fairly, in all material respects, the fiduciary net position of SamCERA as of June 30, 2016; their changes in fiduciary net position for the fiscal year then ended; the Schedule of Cost Sharing Employer Allocations of SamCERA for the years ended June 30, 2016, 2015, and 2014; and the Schedule of Employer Pension Amounts Allocated By Cost Sharing Plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense excluding that attributable to employer-paid member contributions (specified column totals) as of and for the year ended June 30, 2016, in conformity with accounting principles generally accepted in the United States of America."
- 2) *Required Communication to the Board of Retirement and Audit Committee in Accordance with Professional Standards*, which provides an overview of the auditor's responsibility under the U.S. Generally Accepted Auditing Standards. The required communications provide useful information to assist in understanding the audit process and auditing procedures to complete the audit.
- 3) *Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards*, which states that there are (1) no instances of noncompliance that are required to be reported under *Government Auditing Standards* and (2) no matters involving the internal control over financial reporting and its operation considered to be material weaknesses.

Attachments

Reports listed above



BROWN ARMSTRONG
Certified Public Accountants

San Mateo County Employees' Retirement Association
Board of Retirement presentation
of the June 30, 2016 Audit Results
By: Andrew J. Paulden, CPA, and Ashley L. Casey, CPA
Brown Armstrong Accountancy Corporation
October 25, 2016

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1. Purpose of the Audit
2. The Audit Process
 - a. Timeline coordination with SamCERA staff
 - b. Understanding and evaluation of SamCERA internal controls through inquiry and observation
 - c. Confirmations with independent third parties
 - d. Interim testing
 - e. Final fieldwork testing
 - f. Report presentation
3. Significant Audit Areas/Scope of Audit Work
 - a. Risk based approach
 - b. Investments and related earnings
 - c. Participant data and actuarial information
 - d. Employee and employer contributions
 - e. Benefit payments
 - f. GASB 67/68
 - g. GASB 72
4. Audit Reports
 - a. CAFR
 - i. Independent Auditor's Report (opinion) on Financial Statements – unmodified (“clean”) opinion
 - b. Report to the Board of Retirement
 - i. Required Communication to the Members of the Board of Retirement and Audit Committee in Accordance with Professional Standards (SAS 114)
 - ii. Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*
5. Questions and/or Comments?

**SAN MATEO COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION**

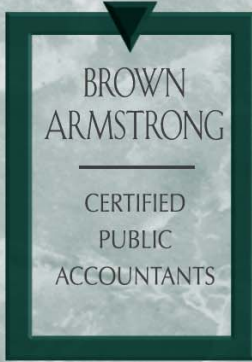
**REPORT TO THE BOARD OF RETIREMENT
AND AUDIT COMMITTEE**

FOR THE FISCAL YEAR ENDED JUNE 30, 2016

**SAN MATEO COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION**

TABLE OF CONTENTS

	<u>Page</u>
I. Required Communication to the Members of the Board of Retirement and Audit Committee in Accordance with Professional Standards	1
II. Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	4



BROWN ARMSTRONG
Certified Public Accountants

**REQUIRED COMMUNICATION TO THE MEMBERS OF THE
BOARD OF RETIREMENT AND AUDIT COMMITTEE
IN ACCORDANCE WITH PROFESSIONAL STANDARDS**

To the Board of Retirement and Audit Committee of
San Mateo County Employees' Retirement Association
Redwood City, California

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We have audited the financial statements of the San Mateo County Employees' Retirement Association (SamCERA) for the fiscal year ended June 30, 2016, and have issued our report dated October 18, 2016. Professional standards require that we provide you with information about our responsibilities under auditing standards generally accepted in the United States of America and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated May 31, 2016. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by SamCERA are described in Note 2, Summary of Significant Accounting Policies, to the financial statements. As discussed in Note 15 of the financial statements, in 2016, SamCERA adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, and GASB Statement No. 82, *Pension Issues - an amendment of GASB Statements No. 67, No. 68, and No. 73*. The objective of GASB Statement No. 72 is to improve financial reporting related to fair value measurements. The objective of GASB Statement No. 82 is to improve financial reporting by enhancing consistency in the application of financial reporting requirements for certain pension issues. We noted no transactions entered into by SamCERA during the fiscal year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting SamCERA's financial statements were:

- Management's estimate of the fair value of investments was derived by various methods as detailed in Note 2, Summary of Significant Accounting Policies. We evaluated the key factors and assumptions used to develop the estimate of the fair value of investments in determining that it is reasonable in relation to the financial statements taken as a whole.

- The contribution amounts and net pension liability which are based on the actuarially-presumed interest rate and assumptions. We evaluated the key factors and assumptions used to develop the estimates of the contribution amount and net pension liability in determining that they are reasonable in relation to the financial statements taken as a whole.

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

- The disclosures for deposits and investments in Notes 2 and 5 to the financial statements, Summary of Significant Accounting Policies and Deposits and Investment Disclosures, respectively, were derived from SamCERA's investment policy. Management's estimate of the fair value of investments was derived by various methods as detailed in the notes.
- Additionally, the disclosures related to the funding policies, net pension liability, and actuarial methods and assumptions in Note 1, Plan Description, Note 6, Pension Disclosures, and Note 7, Funded Status and Funding Progress, were derived from actuarial valuations, which involved estimates of the value of reported amounts and probabilities about the occurrence of future events far into the future.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. In addition, none of the misstatements detected as a result of audit procedures corrected by management were material, either individually or in the aggregate, to the financial statements taken as a whole.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated October 18, 2016.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to SamCERA's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as SamCERA's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to the Schedule of Changes in Net Pension Liability and Related Ratios, Schedule of Employer Contributions, Schedule of Investment Returns, and Notes to the Required Supplementary Information, which are Required Supplementary Information (RSI) that supplements the

basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during the audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

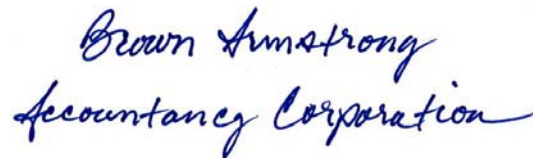
We were engaged to report on the Schedule of Administrative Expenses, Schedule of Information Technology Expenses, Schedule of Investment Expenses, Schedule of Payments to Consultants, and Notes to the Other Supplementary Information, which accompany the financial statements but are not RSI. With respect to this other supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the other supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the introductory, investment, actuarial, statistical, and compliance sections, which accompany the financial statements but are not RSI. We did not audit or perform other procedures on this other information and we do not express an opinion or provide any assurance on it.

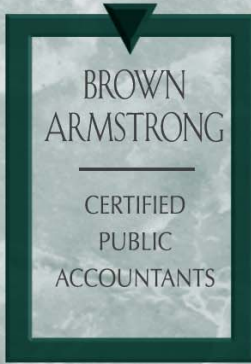
Restriction on Use

This information is intended solely for the use of the Members of the Board of Retirement, Audit Committee, and management of SamCERA and is not intended to be, and should not be, used by anyone other than these specified parties.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

A handwritten signature in blue ink that reads "Brown Armstrong Accountancy Corporation". The signature is written in a cursive style and is positioned below the printed name of the corporation.

Bakersfield, California
October 18, 2016



BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

To the Board of Retirement of
San Mateo County Employees' Retirement Association
Redwood City, California

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We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the San Mateo County Employees' Retirement Association (SamCERA) as of and for the fiscal year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise SamCERA's basic financial statements, and have issued our report thereon dated October 18, 2016.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered SamCERA's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of SamCERA's internal control. Accordingly, we do not express an opinion on the effectiveness of SamCERA's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of SamCERA's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether SamCERA's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

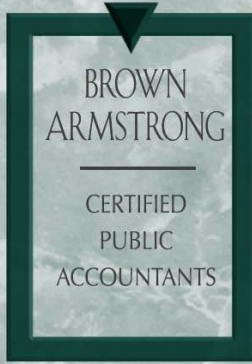
Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of SamCERA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering SamCERA's internal control and compliance. Accordingly, this report is not suitable for any other purpose.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

*Brown Armstrong
Accountancy Corporation*

Bakersfield, California
October 18, 2016



BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

To the Board of Retirement of
San Mateo County Employees' Retirement Association
Redwood City, California

Report on the Financial Statements

We have audited the accompanying Statement of Fiduciary Net Position of the San Mateo County Employees' Retirement Association (SamCERA), a pension trust fund of the County of San Mateo, as of June 30, 2016; the Statement of Changes in Fiduciary Net Position for the fiscal year then ended; and the related notes to the financial statements, which collectively comprise SamCERA's basic financial statements as listed in the table of contents. We have also audited the Schedule of Cost Sharing Employer Allocations of SamCERA for the years ended June 30, 2016, 2015, and 2014, and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense excluding that attributable to employer-paid member contributions (specified column totals) as of and for the year ended June 30, 2016, listed as other information in the table of contents.

Management's Responsibility for the Financial Statements and Other Information

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

Auditor's Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to SamCERA's preparation and fair presentation of the financial statements and other information in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of SamCERA's internal control. Accordingly, we express no such opinion. An audit also includes evaluating

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the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements and other information.

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

Opinions

In our opinion, the financial statements and the other information referred to above present fairly, in all material respects, the fiduciary net position of SamCERA as of June 30, 2016; their changes in fiduciary net position for the fiscal year then ended; the Schedule of Cost Sharing Employer Allocations of SamCERA for the years ended June 30, 2016, 2015, and 2014; and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense excluding that attributable to employer-paid member contributions (specified column totals) as of and for the year ended June 30, 2016, in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 15 to the basic financial statements, in 2016, SamCERA adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, and GASB Statement No. 82, *Pension Issues - an amendment of GASB Statements No. 67, No. 68, and No. 73*. As discussed in Note 6 to the basic financial statements, the total pension liability of the participating employers as of June 30, 2016, was \$4,254,142,000. The fiduciary net position as a percentage of the total pension liability as of June 30, 2016, was 83.25%. The actuarial valuations are very sensitive to the underlying actuarial assumptions, including a discount rate of 7.20%, which represents the long-term expected rate of return.

Additionally, as discussed in Note 2 to the basic financial statements, the financial statements include investments that are not listed on national exchanges or for which quoted market prices are not available. These investments include private equity, real estate, real assets, risk parity, hedge funds, and commodities. Such investments totaled \$1,034,393,412 (28.41% of total assets) at June 30, 2016. Where a publicly listed price is not available, the management of SamCERA uses alternative sources of information including audited financial statements, unaudited interim reports, independent appraisals, and similar evidence to determine the fair value of the investments. Our opinion is not modified with respect to these matters.

Other Matters

Required Supplementary Information

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

Other Supplementary Information

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

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

Additional Information

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

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 18, 2016, on our consideration of SamCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering SamCERA's internal control over financial reporting and compliance.

Report on Summarized Comparative Information

We have previously audited SamCERA's June 30, 2015, financial statements, and our report dated October 20, 2015, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2015, is consistent in all material respects, with the audited financial statements from which it has been derived.

Restrictions on Use

Our report is intended solely for the information and use of SamCERA management, the Audit Committee of SamCERA, the Board of Retirement of SamCERA, and SamCERA employers and their auditors and is not intended to be, and should not be, used by anyone other than these specified parties.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 18, 2016

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 7.2

TO: Board of Retirement

FROM: Tat-Ling Chow, Finance Officer 

SUBJECT: Approval of SamCERA's 2016 Comprehensive Annual Financial Report

Staff Recommendation

Approve SamCERA's Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2016.

Discussion

Staff will provide an oral report on this year's CAFR highlights.

Background

The CAFR is divided into six sections:

- **Introduction:** SamCERA's Mission and Goals, Administrator's Letter of Transmittal, the Government Finance Officers Association Certificate of Achievement for Excellence in Financial Reporting (19th consecutive year for SamCERA), the Public Pension Coordinating Council Public Pension Standards Award for Funding and Administration, Members of SamCERA's Board of Retirement, and SamCERA's Organizational Chart.
- **Financial:** Independent Auditors' Report, Management's Discussion and Analysis, SamCERA's Basic Financial Statements including Notes to the Basic Financial Statements, Required Supplementary Information, Other Supplementary Information, and Other Information
- **Investment:** Chief Investment Officer's Report, Investment Consultant's Report, Asset Allocations, Schedule of Portfolio Returns, and other investment-related schedules.
- **Actuarial:** Actuary's Certification Letter, results of the most recent annual actuarial valuation, overview of the plan funding status, and other actuarial-related information.
- **Statistical:** Detailed statistical data pertaining to SamCERA's activities.
- **Compliance:** Report on internal control over financial reporting and on compliance and other matters based on the most recent audit of financial statements performed in accordance with government auditing standards.

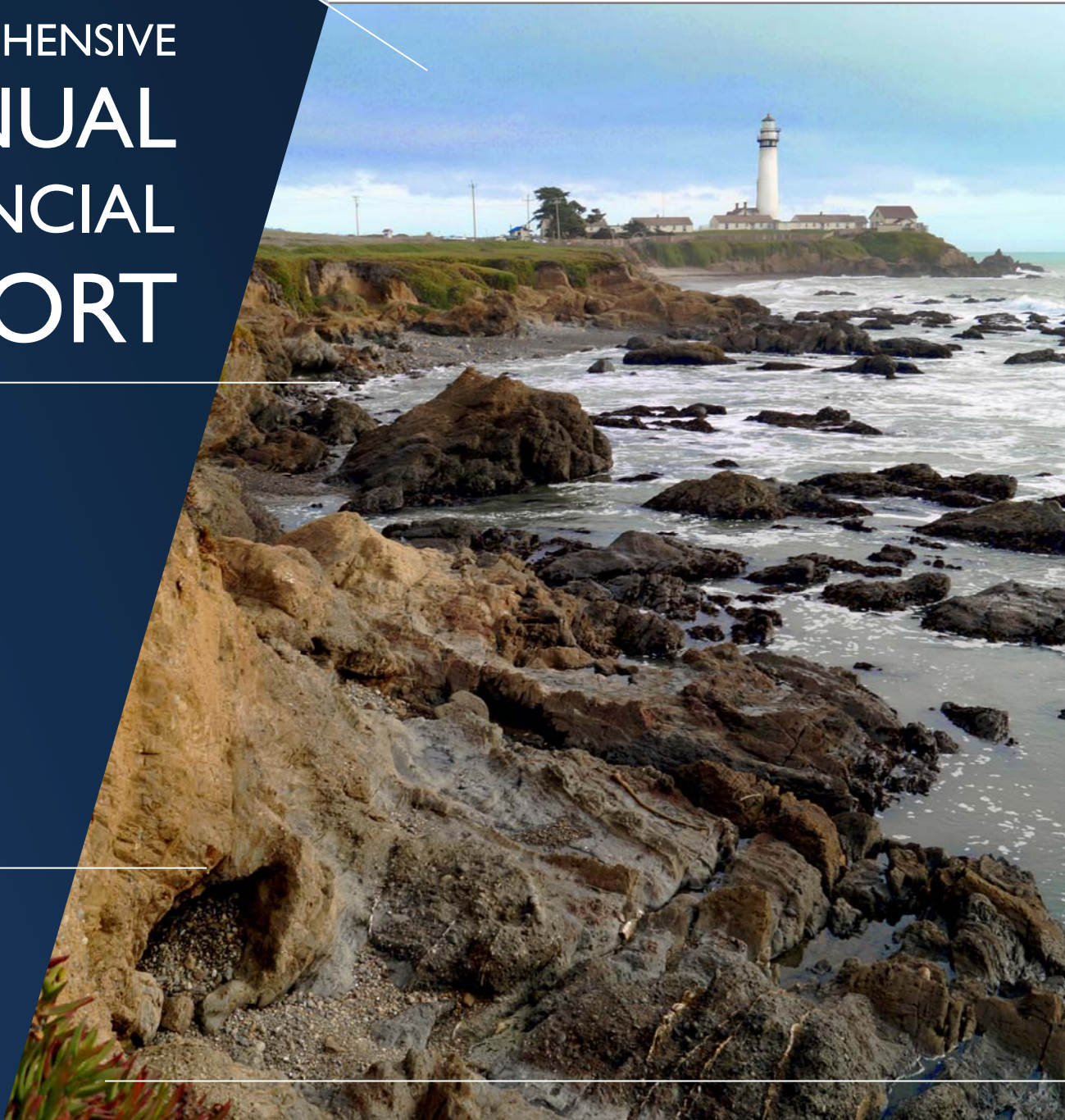
Attachment

2016 Comprehensive Annual Financial Report



COMPREHENSIVE ANNUAL FINANCIAL REPORT

2016



For the Fiscal Year Ended June 30, 2016
A Pension Trust Fund of the County of San Mateo and Participating Employers
Redwood City, State of California

On the cover:
Pigeon Point Lighthouse
San Mateo County, CA

San Mateo County Employees' Retirement Association
A Pension Trust Fund of the County of San Mateo and Participating Employers

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2016

Scott Hood
Chief Executive Officer

Tat-Ling Chow
Finance Officer

Michael Coultrip
Chief Investment Officer

SamCERA
100 Marine Parkway, Suite 125
Redwood City, California 94065

TABLE OF CONTENTS

INTRODUCTORY SECTION

SamCERA’s Mission and Goals.....	9
Administrator’s Letter of Transmittal.....	10
GFOA Certificate of Achievement	17
PPCC Public Pension Standards Award.....	18
Members of the Board of Retirement.....	19
SamCERA Organizational Chart.....	21

FINANCIAL SECTION

Independent Auditor’s Report.....	23
Management’s Discussion and Analysis.....	26
Basic Financial Statements	34
Statement of Fiduciary Net Position.....	34
Statement of Changes in Fiduciary Net Position	35
Notes to the Basic Financial Statements.....	36
Note 1: Plan Description	36
Note 2: Summary of Significant Accounting Policies	40
Note 3: Funding Policy.....	43
Note 4: Employer Contributions.....	44
Note 5: Deposits and Investments.....	46
Note 6: Pension Disclosures	56
Note 7: Funded Status and Funding Progress.....	58
Note 8: Plan Reserves	59
Note 9: Administrative Expenses.....	61
Note 10: Information Technology Expenses.....	62
Note 11: Risk Management.....	62
Note 12: Related Party Transactions	63
Note 13: Commitments.....	63
Note 14: Contingent Liability	63
Note 15: New Accounting and Financial Reporting Standards.....	63

Required Supplementary Information.....	65
Schedule of Changes in Net Position Liability and Related Ratios	65
Schedule of Employer Contributions	66
Schedule of Investment Returns	66
Notes to the Required Supplementary Information.....	67
Other Supplementary Information.....	68
Schedule of Administrative Expenses	68
Schedule of Information Technology Expenses	68
Schedule of Investment Expenses	69
Schedule of Payments to Consultants	69
Notes to the Other Supplementary Information.....	70
Other Information	71
Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan	71
Schedule of Cost Sharing Employer Allocations	72
Notes to the Other Information	72

INVESTMENT SECTION

Actual Historical Quarterly Asset Allocation.....	75
Chief Investment Officer’s Report.....	76
Investment Consultant’s Report on Investment Activities.....	80
Investment Philosophy, Objectives, and Policy	83
Asset Allocation	84
Schedule of Portfolio Returns.....	87
Schedule of Top Ten Equities and Fixed Income Securities	88
Schedule of Professional Services and Fees.....	89
Top 10 Broker Commissions	89

ACTUARIAL SECTION

Actuary’s Certification	91
Employer and Member Contribution Rates	93
Actuarial Valuation	93
Actuarial Methods and Assumptions.....	94

Valuation Assets.....	99
Summary of Significant Actuarial Statistics and Measures.....	100
Rate of Separation From Active Service	101
Solvency Test.....	102
Schedule of Funding Progress.....	102
Member Contribution Rates.....	103
History of Employer Statutory Contribution Rates.....	105
Demographic Activity of Retirees and Beneficiaries.....	107
Actuarial Analysis of Financial Experience.....	107
Summary of Active Member Valuation Data.....	108
Schedule of Average Monthly Salary of Active Members	109
Participating Employers and Active Members	109
Summary of Retired and Inactive Member Benefits.....	110
Average Monthly Retiree Benefit Payment.....	111
Number of Retirees by Category.....	111

STATISTICAL SECTION

Change in Fiduciary Net Position	113
Schedule of Additions to Fiduciary Net Positon by Source.....	115
Schedule of Deductions from Fiduciary Net Positon by Type.....	115
Total Fiduciary Net Position.....	116
Schedule of Employer Contributions	116
Summary of Retired Benefits, Refunds, and Inactive Members.....	117
Summary of Average Pension Benefit Payments	119
Schedule of Average Monthly Salary of Active Members	121
Schedule of Participating Employers and Active Members	122

COMPLIANCE SECTION

SamCERA's Funded Ratio	125
Additions To and Deductions From SamCERA's Net Position	125
Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements performed in accordance with <i>Government Auditing Standards</i>	126

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INTRODUCTORY SECTION



SAMCERA'S MISSION

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

SAMCERA'S GOALS

Provide caring, fair, accurate, timely and knowledgeable professional services and information to members and other stakeholders.

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.

Constantly improve the effectiveness of SamCERA's services and the efficiency of its operations.

ADMINISTRATOR'S LETTER OF TRANSMITTAL



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Scott Hood
SamCERA
Chief Executive Officer

Board of Retirement
San Mateo County Employees' Retirement Association

Dear Trustees:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the San Mateo County Employees' Retirement Association (SamCERA) for the fiscal year ended June 30, 2016.

SamCERA's management is responsible for a fair presentation of financial data and a complete disclosure of all matters of material consequence. Management's discussion and analysis of the data are presented beginning on page 26.

SamCERA's management assumes full responsibility for the completeness and reliability of the information contained in the CAFR, based upon a comprehensive framework of internal control established for this purpose. As the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of material misstatements.

The certified public accounting firm of Brown Armstrong Accountancy Corporation provides financial audit services to SamCERA. The objective of this financial audit is to ensure that SamCERA's financial statements are

presented in conformity with Generally Accepted Accounting Principles (GAAP) in the United States of America and are free of material misstatements. Internal controls are reviewed to ensure that SamCERA's policies and procedures are being adhered to and that sufficient controls are in place to ensure reliable financial reporting and to safeguard SamCERA's assets. This report is prepared in accordance with GAAP as promulgated by the Governmental Accounting Standards Board (GASB).

SamCERA's financial statements presented in the Financial Section are prepared on the accrual basis of accounting. Member and employer contributions are recognized in the period which contributions are due. Benefits and refunds are recognized when due and payable in accordance with plan terms. Investments are reported at fair value.

The duty of SamCERA's Board of Retirement (the Board), its officers, and its employees is to prudently manage plan assets in order to appropriately fund the actuarial liabilities of the retirement system and ensure the ability to pay all earned benefits while minimizing employer contributions and defraying reasonable expenses of administering the system.

SamCERA engages an independent actuarial consulting firm, Milliman, to conduct an annual actuarial valuation of the pension plan. The purpose of this valuation is to reassess the magnitude of the benefit commitments in comparison with the assets expected to be available to support those commitments so that employer and employee contribution rates can be adjusted accordingly. Triennially, SamCERA requests its actuarial consulting firm to perform an

actuarial experience study so that appropriate assumptions can be determined for valuing the plan's liabilities. SamCERA strives to provide the most recent financial and actuarial data in its annual report.

Authority, Responsibilities & Duties

The San Mateo County Board of Supervisors amended the County Charter on February 29, 1944, to establish retirement for County employees effective July 1, 1944, as prescribed by the provisions of Government Code Section 31450 et seq., also known as California's County Employees Retirement Law of 1937 (the CERL). On January 11, 1994, the County Supervisors adopted a resolution enacting Government Code Section 31522.1 and 31522.2, which established the creation of the San Mateo County Employees' Retirement Association (SamCERA).

SamCERA provides retirement, disability, and death benefits for its eligible members and beneficiaries in accordance with the CERL, the California Public Employees' Pension Reform Act of 2013 (PEPRA - Government Code Section 7522 et seq.), and other applicable statutes, regulations and case laws.

The Board of Retirement (the Board), serving as fiduciary for all of SamCERA's members and beneficiaries under the California Constitution, Article XVI, Section 17 and the CERL, is responsible for administering the system. The Board has adopted the Regulations of the Board of Retirement, and among other policies, its Mission & Goals; Investment Policy Statement; Conflict of Interest Code; and Code of Conduct, which reflect the Board's guiding policies. The Board annually adopts

an operating budget for the administration of SamCERA, which is discussed in the Financial Section beginning on page 23. A breakdown of the budget allotment versus expenditures is presented on pages 61-62. In addition, the Board has authorized the execution of contracts for the professional services of an actuary, an auditing actuary, an investment consultant, investment managers, a global custodian, a financial auditor, a medical advisor delegated by the County Health Officer, and an information technology consultant to help the Board fulfill its duties. The Board's primary professional consultants are highlighted in the organizational chart on page 21.

SamCERA's Chief Executive Officer (CEO) serves at the pleasure of the Board and is responsible for managing the day-to-day operations of the plan. SamCERA's staff of 23 full-time employees is responsible for meeting the needs of its members and beneficiaries, participating employers, and the Board in accordance with the high standards set forth in SamCERA's Mission & Goals statements. SamCERA's staff is sworn to carry out its fiduciary duties in accordance with governing laws, SamCERA regulations and policies.

Employers participating in the retirement system include the County of San Mateo (the County), the San Mateo County Mosquito and Vector Control District (the District), and the Superior Court of the County of San Mateo (the Court). SamCERA's members include all active permanent employees of the participating employers, inactive members, retirees, and beneficiaries. Approximately 87% of SamCERA's members are classified as General Members while the remaining are

public safety employees classified as Safety or Probation Members.

Looking Backward and Forward

For a summary of highlights for fiscal year 2015-16, I encourage you to review the following narrative introduction, as well as Management's Discussion and Analysis beginning on page 26. Details on SamCERA's investment portfolio can be found in the Chief Investment Officer's Report beginning on page 76.

Trustees

The SamCERA Board of Retirement consists of nine Trustees. Four positions are appointed by the Board of Supervisors. Four Trustees are elected from their respective membership: two from the General Members, one from the Safety Members, and one from the Retiree Members. The County Treasurer is a member of the Board by virtue of her publicly elected office; all other Trustees serve for a term of three years. In addition, there is one elected Safety Member Alternate and one elected Retiree Member Alternate.

The officers for the Board for fiscal year 2015-16 were: Paul Hackleman, Chair; Michal Settles, Vice Chair; and Natalie Kwan Lloyd, Secretary. Other members of the Board were: Sandie Arnott, Shirley Tourel, Eric Tashman, Benedict J. Bowler, David Spinello and Mark Battey. Alternate Trustees were Susan Lee and Alma Salas. Mark Battey was appointed to the Sixth Seat by the County's Board of Supervisors and began serving his term in September of 2015. The County Elections Division conducted an election on June 13, 2016, for the Third General Member Seat. Natalie Kwan Lloyd was reelected for another three-

year term. Both Paul Hackleman and Alma Salas ran unopposed for the seats they held, the Eight Member and Eight Member Alternate Seats, respectively, and were automatically elected.

Investments

This year's returns were under our long-term average assumed rate of return of 7.25%. Despite that, SamCERA earned a positive return for fiscal year 2015-16 due mainly to the continued strength in the real estate market. For the one-year period ended in June 2016, the fund returned 0.7% net of investment manager fees (1.0% before deducting for investment manager fees). The 0.7% return underperformed the fund's policy benchmark by 30 basis points (0.30%). These results are above median among large (greater than \$1 billion in assets) public plans and strong compared to SamCERA's peers. Over the most recent three-year period ended June 2016, SamCERA's performance was in the upper 20th percentile of its peers.

During the year, the Board approved a slight change to the portfolio allocation in order to slightly reduce equity risk and shift the portfolio more towards yield and absolute return. The Board also created a new "Inflation Hedge" category to better monitor its exposure to inflation sensitive assets. SamCERA was able to benefit during the volatile year by remaining committed to rebalancing the portfolio. Potential lower near-term expected returns are another data point to consider over the coming years as SamCERA looks to concentrate on portfolio risk and asset allocation to better prepare for the certainty of a maturing membership in uncertain markets.

Staffing

In January, SamCERA welcomed Janet Nishimura as a permanent Retirement Support Specialist. The Board also made a change in the Finance Division by reclassifying the Retirement Accounting Technician position into a Retirement Accountant position. In June, we welcomed Hollie Song-Duell into the newly modified position. She has served the County of San Mateo for almost 9 years and joins SamCERA from the Controller's Office where she was an Accountant.

In April, Al David, one of our two Assistant Executive Officers, departed SamCERA for the County's Information Services Department and his position remains vacant. Thus far, SamCERA has filled 23 of the 24 authorized positions.

Actuarial

SamCERA again was pleased to be ranked the 3rd most actuarially conservative among California retirement systems in a May 2016 survey from Roeder Financial. The survey ranks the funding assumptions used by California's public pension systems from "most conservative" to "most optimistic." SamCERA's high ranking was due mainly to its relatively short closed 15-year layered amortization of unfunded liabilities, and its relatively low assumed investment earnings rate, which at the time of the survey was 7.25%. Subsequent to the survey, the Board lowered the assumed rate of return to 7.0% on June 7, 2016.

Plan Funding Status

SamCERA maintains a funding goal that will fully fund the system's liabilities. Contributions, as a percentage of payroll, will remain as level as possible for the plan

sponsors. The independent actuarial consulting firm, Milliman, acts as the plan's actuary and conducts annual actuarial valuations, which are presented to the Board annually. The purpose of the valuation is to recommend the employer and member contribution rates for the coming fiscal year. Triennially, Milliman conducts an experience study of SamCERA members and makes recommendations to the Board on key economic and non-economic assumptions. The most recent triennial experience study was performed for the period ended April 30, 2014.

Milliman's actuarial valuation as of June 30, 2016, determined that the funding ratio increased from 82.6% to 83.1%, using approved assumptions. This increase was due primarily to employer contributions used to amortize the Unfunded Accrued Actuarial Liability (UAAL) as well as the recognition of deferred investment gains from prior years under the asset smoothing method.

The Employer Normal Cost Rate will increase to 10.25% for fiscal year 2017-18 from a mid-year adjusted 10.03% (unadjusted rate was 10.42%) of covered payroll for fiscal year 2016-17. The mid-year decrease was due mainly to negotiated increases in some member Cost of Living Adjustment (COLA) share contribution rates. The Employer Normal Cost decreased due to an increase of the number of members being part of the of the California Public Employees' Pension Reform Act of 2013 (PEPRA) plan. The portion of the employer's statutory contribution rate that finances the UAAL will increase to 23.52% for fiscal year 2017-18 from 21.93% for fiscal year 2016-17. This increase was in large part due to lowering the assumed rate of

return to 7.0%. For almost all plans, member rates and member COLA rates increased over the previous year as a result.

Supplemental Contributions

The County continues to make supplemental contributions to accelerate the pay down of its UAAL in accordance with a Memorandum of Understanding (MOU) between the County and SamCERA dating back to 2013. The contributions paid above the statutorily required contribution rate along with the earnings in the County's Supplemental Contribution Account (CSCA) overall has grown to over \$85 million as of June 30, 2016. Furthermore, the County plans to contribute an estimated \$70 million to the CSCA over the next seven years. In September of 2015, the District also entered into an MOU with SamCERA to make supplemental contributions to pay down its UAAL. The overall contribution and earnings in the District's Supplemental Contribution Account has grown to \$1.6 million as of June 30, 2016.

Cost of Living Adjustment

In 2015, the Bay Area continued to experience higher inflation than the rest of the country but slightly less than the prior year according to the Federal Bureau of Labor Statistics. This resulted in a COLA of 2.0% to 2.5% for most SamCERA retirees and beneficiaries, depending on the COLA limit of their plan membership. The COLA for Plan 1 and Plan 2 was 2.5%, while the COLA for Plans 4, 5, 6 and 7 was 2.0%. Plan 3 does not provide a COLA.

Information Technology

SamCERA is nearing the end of its multi-year Technology Modernization Project to replace its aging Pension Administration

Software System (PASS). SamCERA has been working diligently with its vendor Vitech, Inc., on the design, programming, and testing of the system, which is nearing completion. January 2017 is the planned launch date of the new system.

Tax Determination Letter

SamCERA filed for a follow-up tax determination letter from the Internal Revenue Services (IRS) in early 2015 after demonstrating that the following necessary actions were taken: (1) enactment of CERL legislation to comply with federal law and (2) adoption of Board regulations to further ensure compliance. Additionally, the application explained all of the plan changes made under PEPPRA. After a thorough review, the IRS issued a favorable tax determination letter to SamCERA this year.

Strategic Planning

SamCERA's staff held their annual retreat in February 2016 and began working through the steps in the strategic planning process as recommended by the Government Finance Officers Association (GFOA). The result of these discussions was an update of SamCERA's Strategic Plan Action Matrix. This year SamCERA extended the period covered for the strategic plan to include fiscal year 2017-18. To acknowledge the resources that the PASS implementation has used and will continue to use through the scheduled go-live period, SamCERA limited the inclusion of action items to high priority items or items that cannot wait until the following fiscal year. Progress on these goals will be tracked and updated throughout fiscal year 2016-17. Moving forward, SamCERA will continue to pursue its three major goals described below. All of which are derived from and consistent with SamCERA's mission statement:

1. ASSET MANAGEMENT GOAL

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.

New projects under this goal include (1) performing a cost/benefit analysis to determine if SamCERA should add a risk system to the portfolio, (2) developing an "inflation protection pool" asset class, (3) working with the Information Technology (IT) team to develop a streamlined tech solution to tracking investment manager reporting, and (4) developing a quarterly investment performance snapshot to provide employers and to determine whether standardized reporting can be implemented with our private equity managers.

2. CUSTOMER SERVICES GOAL

Provide caring, fair, accurate, timely and knowledgeable professional services and information to members and other stakeholders.

Over the coming year, meeting this goal will involve continuing to support the design, development and implementation of PASS during the final phase of the implementation project. Since the implementation of PASS is SamCERA's top priority, no new projects were added to this specific goal for the coming fiscal year.

3. OPERATIONS GOAL

Constantly improve the effectiveness of SamCERA's services and the efficiency of its operations.

Operationally, SamCERA will continue to focus on the PASS implementation. Some related and supporting projects will also be undertaken. These projects include developing and executing a PASS

communication plan to inform stakeholders of the impending changes. Likewise, staff will undertake a transition of the retiree health accounting functions back to the County's Human Resources Benefits Division and streamline a payment deduction method that will work with the new PASS system.

Certificate of Achievement and Acknowledgements

For the nineteenth consecutive year, the Government Finance Officers Association (GFOA) has awarded SamCERA its Certificate of Achievement for Excellence in Financial Reporting. This award was in recognition of SamCERA's CAFR for the fiscal year ended June 30, 2015. The certificate is reproduced on page 17.

SamCERA is also the recipient of the GFOA Award for Outstanding Achievement in Popular Annual Financial Reporting (PAFR) for the thirteenth year running and has received this honor for the PAFR for the fiscal year ended June 30, 2015.

Additionally, the Public Pension Coordinating Council (the Council) presented SamCERA its Public Pension Standards Award for 2015. This award recognizes that SamCERA has met professional standards for plan funding and administration as set forth in the Public Pension Standards of the Council. The standards judge retirement systems on their Funding Adequacy, Comprehensive Benefit Program, Actuarial Valuation, Independent Audit, Investments and Communications. The award is reproduced on page 18.

These awards recognize SamCERA's contributions to the practice of government

finance exemplifying outstanding financial management and reporting; in doing so, the awards stress practical, documented work that offers leadership to the profession. The compilation of the Comprehensive Annual Financial Report, in a timely manner, reflects the combined efforts of SamCERA's management and staff under the leadership, dedication and support of the Board of Retirement.

SamCERA continues to maintain the highest financial reporting standards while providing quality services to its members. I am sincerely grateful to the Board of Retirement and staff who always perform so diligently to ensure the successful operation and financial soundness of SamCERA. I am also appreciative for the continuing cooperation and open communication that SamCERA has with all our participating employers.

Respectfully submitted,



Scott Hood
Chief Executive Officer
October 18, 2016

GFOA CERTIFICATE OF ACHIEVEMENT



Government Finance Officers Association

**Certificate of
Achievement
for Excellence
in Financial
Reporting**

Presented to

**San Mateo County
Employees' Retirement Association
California**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2015

A handwritten signature in black ink, reading "Jeffrey R. Emer".

Executive Director/CEO

PPCC PUBLIC PENSION STANDARDS AWARD



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2015***

Presented to

San Mateo County Employees' Retirement Association

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

A handwritten signature in cursive script that reads "Alan H. Winkle".

Alan H. Winkle
Program Administrator

MEMBERS OF THE BOARD OF RETIREMENT (JUNE 30, 2016)



Sandie Arnott
Ex Officio per the CERL, First Member

Sandie Arnott is the San Mateo County Treasurer/Tax Collector and is a member of the Board of Retirement by virtue of her office. She first began serving in this office in January 2011, but served as Assistant County Treasurer for many years during which she was also active on the Board of Retirement. Her current term as Treasurer/Tax Collector expires December 31, 2018.



Shirley Tourel
Elected by the General Members, Second Member

Shirley Tourel is the Assistant Controller for San Mateo County, and has been with the Controller's Office since 2001. She was elected to the Retirement Board in 2015. Her current term expires June 30, 2018.



Natalie Kwan Lloyd
Elected by the General Members, Third Member, Secretary

Natalie Kwan Lloyd is a Senior Appraiser in the San Mateo County Assessor's Office. She joined the Board of Retirement in July 2008, and was reelected in June 2013. She has previously served as Board of Retirement Chair. Her current term expires June 30, 2019.



Eric Tashman
Appointed by the Board of Supervisors, Fourth Member

Eric Tashman is a finance partner in the San Francisco office of Norton Rose Fulbright. He was appointed by the Board of Supervisors in 2009 and reappointed in 2012 and 2015. His current term expires June 30, 2018.



Benedict J. Bowler
Appointed by the Board of Supervisors, Fifth Member

Ben Bowler is the Treasurer of Matson, Inc. He was first appointed in August 2008 to fill the unexpired term of Scott Lee. He was reappointed in 2013 and 2016. His current term expires June 30, 2019.



Mark Battey
Appointed by the Board of Supervisors, Sixth Member

Mark Battey is the owner of Miramar Farms, Inc. He was the managing director of Miramar Capital LLC, which provides strategic planning and investment management consulting services. He was appointed by the Board of Supervisors in September 2015. His current term expires June 30, 2018.



David Spinello
Elected by the Safety Members, Seventh Member

David Spinello is a Deputy with the San Mateo County Sheriff's Office. He was elected to the Board of Retirement in 2009 and reelected in 2012 and 2015.



Paul Hackleman
Elected by the Retired Members, Eighth Member, Chair

Paul served as the County Benefits Manager from 1982 through March 2008. He is also a former member of the Board of Retirement, having served from June 2005 through March 2008 while actively employed. Today he is the head of I.C. Benefits Consulting. He was elected in 2010, and reelected in 2013 and 2016. His current term expires June 30, 2019.



Michal Settles
Appointed by the Board of Supervisors, Ninth Member, Vice-Chair

Michal Settles is a business professor at the City College of San Francisco. She was first appointed by the Board of Supervisors in June 2011, and was reappointed in 2013. Her term expired June 30, 2016.



Alma Salas
Elected by the Retired Members, Retiree Alternate

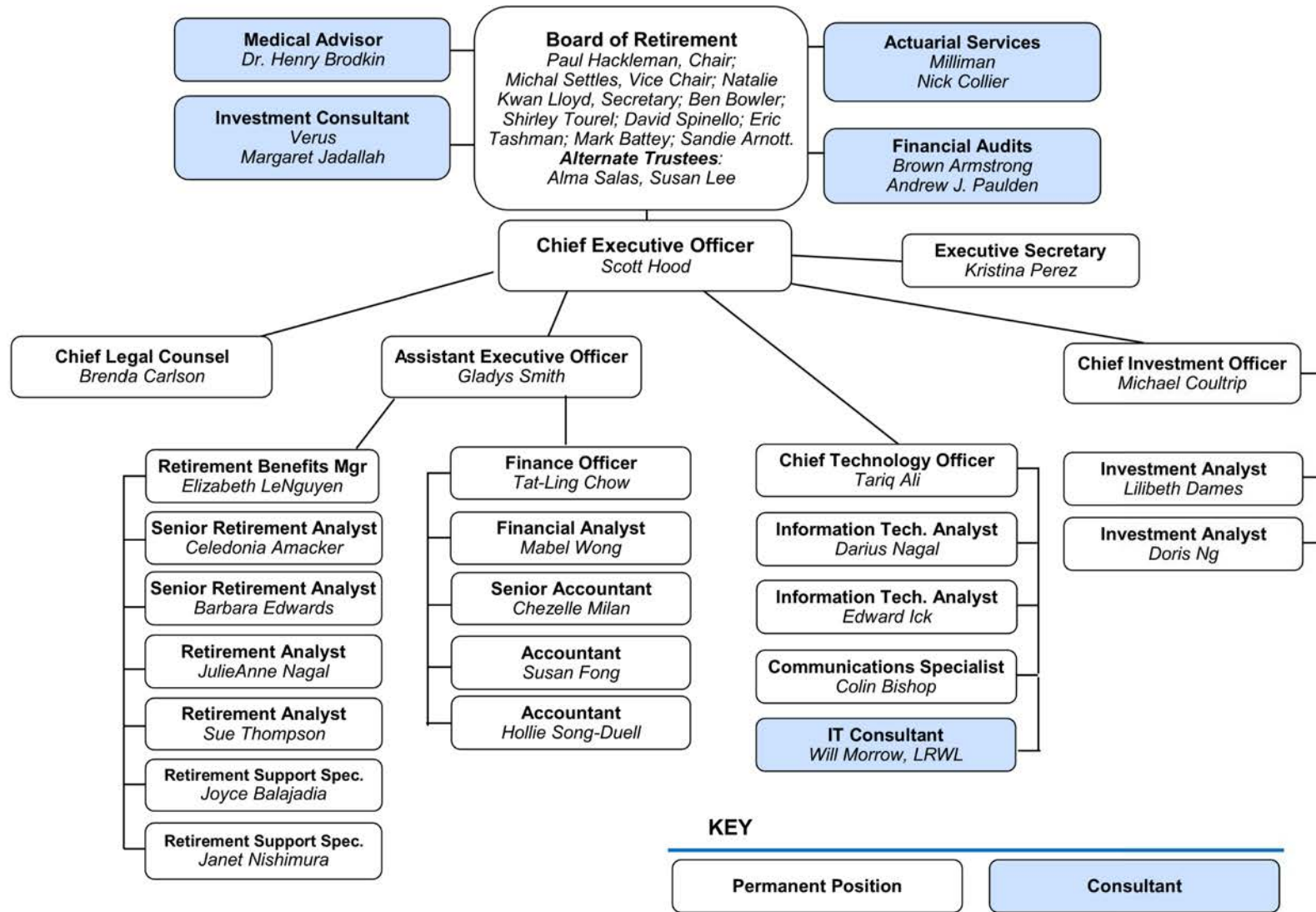
Alma Salas was a Probation Services Manager with the San Mateo County Probation Department before her retirement in May 2013. Alma first joined the Board of Retirement in May of 2001, and served as Board of Retirement Chair during the 2004-05 fiscal year. She was elected in June 2013 to serve as the Retiree Alternate. In this role she substitutes in the absence of the Eighth Member. Her current term expires June 30, 2019.



Susan Lee
Elected by the Safety Members, Safety Alternate

Susan Lee is a Deputy Probation Officer III, who has been with the Probation Department since 2002. She was elected to serve as the Safety Alternate in 2015. In this role, she substitutes in the absence of the Second, Third, or Seventh member. Additionally, if the Eighth member and Retiree alternate are absent, she substitutes for the Eighth member. Her current term expires June 30, 2018.

SAMCERA ORGANIZATIONAL CHART (JUNE 30, 2016)



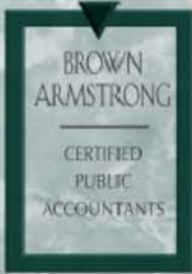
KEY

Permanent Position	Consultant
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See page 89 for the schedule of professional services and fees and the top 10 brokerage firms providing services to SamCERA.

FINANCIAL SECTION





BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

To the Board of Retirement of
San Mateo County Employees' Retirement Association
Redwood City, California

Report on the Financial Statements

We have audited the accompanying Statement of Fiduciary Net Position of the San Mateo County Employees' Retirement Association (SamCERA), a pension trust fund of the County of San Mateo, as of June 30, 2016; the Statement of Changes in Fiduciary Net Position for the fiscal year then ended; and the related notes to the financial statements, which collectively comprise SamCERA's basic financial statements as listed in the table of contents. We have also audited the Schedule of Cost Sharing Employer Allocations of SamCERA for the years ended June 30, 2016, 2015, and 2014, and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense excluding that attributable to employer-paid member contributions (specified column totals) as of and for the year ended June 30, 2016, listed as other information in the table of contents.

Management's Responsibility for the Financial Statements and Other Information

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

Auditor's Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to SamCERA's preparation and fair presentation of the financial statements and other information in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of SamCERA's internal control. Accordingly, we express no such opinion. An audit also includes evaluating

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

the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements and other information.

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

Opinions

In our opinion, the financial statements and the other information referred to above present fairly, in all material respects, the fiduciary net position of SamCERA as of June 30, 2016; their changes in fiduciary net position for the fiscal year then ended; the Schedule of Cost Sharing Employer Allocations of SamCERA for the years ended June 30, 2016, 2015, and 2014; and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense excluding that attributable to employer-paid member contributions (specified column totals) as of and for the year ended June 30, 2016, in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 15 to the basic financial statements, in 2016, SamCERA adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, and GASB Statement No. 62, *Pension Issues - an amendment of GASB Statements No. 67, No. 68, and No. 73*. As discussed in Note 6 to the basic financial statements, the total pension liability of the participating employers as of June 30, 2016, was \$4,254,142,000. The fiduciary net position as a percentage of the total pension liability as of June 30, 2016, was 83.25%. The actuarial valuations are very sensitive to the underlying actuarial assumptions, including a discount rate of 7.20%, which represents the long-term expected rate of return.

Additionally, as discussed in Note 2 to the basic financial statements, the financial statements include investments that are not listed on national exchanges or for which quoted market prices are not available. These investments include private equity, real estate, real assets, risk parity, hedge funds, and commodities. Such investments totaled \$1,034,393,412 (28.41% of total assets) at June 30, 2016. Where a publicly listed price is not available, the management of SamCERA uses alternative sources of information including audited financial statements, unaudited interim reports, independent appraisals, and similar evidence to determine the fair value of the investments. Our opinion is not modified with respect to these matters.

Other Matters

Required Supplementary Information

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

Other Supplementary Information

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

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

Additional Information

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

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated October 18, 2016, on our consideration of SamCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering SamCERA's internal control over financial reporting and compliance.

Report on Summarized Comparative Information

We have previously audited SamCERA's June 30, 2015, financial statements, and our report dated October 20, 2015, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2015, is consistent in all material respects, with the audited financial statements from which it has been derived.

Restrictions on Use

Our report is intended solely for the information and use of SamCERA management, the Audit Committee of SamCERA, the Board of Retirement of SamCERA, and SamCERA employers and their auditors and is not intended to be, and should not be, used by anyone other than these specified parties.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 18, 2016

MANAGEMENT'S DISCUSSION AND ANALYSIS FISCAL YEAR 2015-16

As fiduciaries of the San Mateo County Employees' Retirement Association (SamCERA), we provide this overview and analysis of SamCERA's financial position as of June 30, 2016, and results of operation for the fiscal year ended June 30, 2016. The information presented here, in conjunction with the Notes to the Basic Financial Statements beginning on page 36, provides a clear picture of SamCERA's overall financial status and activities.

Financial Highlights

- SamCERA's fiduciary net position restricted for pension benefits as of June 30, 2016, was about \$3.5 billion, an increase of \$87 million, or 3%, over the prior fiscal year-end.
- Total assets increased by \$60 million, or 2%, over the year. The increase was mainly from investment earnings as well as employer and member contributions.
- Total liabilities decreased by \$26 million, or 21%, over the year. The decrease was due primarily to the payoff of a sizable payable and the decline in securities lending collateral due to borrowers.
- Total additions to SamCERA's fiduciary net position decreased \$64 million, or 19%, to \$276 million from \$340 million last year. The decrease was primarily from a \$87 million decline in net investment income. The net return from SamCERA's investment was 0.7% net of investment management fees compared to 3.5% last year. Throughout the year, the market conditions were

overshadowed by a myriad of concerns, such as global growth concerns, concerns of a hard landing in China, continued heightened geopolitical concerns, and the fallout from the Brexit decision in the United Kingdom.

- Deductions from SamCERA's fiduciary net position increased \$12 million, or 7%, to \$190 million from \$178 million last year. The increase was triggered mainly by an increased number of retirees receiving pension benefits.
- The funded ratio for SamCERA as of June 30, 2016, increased to 83.1% from 82.6% over the year, based upon the most recent actuarial valuation. The improvement in funded ratio was due primarily to employer contributions to amortize the unfunded actuarial accrued liabilities (UAAL), which was partially offset by the increase in UAAL from revised economic assumptions.
- The net pension liability of participating employers was \$713 million as of June 30, 2016, which approximates to 150.88% of collective covered payroll based on the Governmental Accounting Standards Board (GASB) Statement No. 67.
- Despite recent market volatility and increased retirement benefits, the overall financial position of SamCERA has improved. SamCERA remains in good financial position to meet its obligations to plan participants and beneficiaries.

Overview of Financial Statements

The following discussion and analysis serve as an introduction and overview of

SamCERA's basic financial statements. The basic financial statements and required disclosures are prepared in accordance with the accounting principles and reporting standards prescribed by GASB.

Basic Financial Statements

The basic financial statements are prepared using the accrual basis of accounting, which is similar to most private-sector entities.

The *Statement of Fiduciary Net Position* is a snapshot of account balances at fiscal year-end. This statement discloses the assets available for future pension benefits to retirees and their beneficiaries as well as outstanding liabilities as of June 30, 2016. The difference between assets and liabilities is reported as "Net Position Restricted for Pensions," which represents funds available to pay pension benefits.

Over time, increases and decreases in Net Position Restricted for Pensions may serve as an indicator of whether SamCERA's financial position is improving or declining. This statement can be found on page 34 of this report.

The *Statement of Changes in Fiduciary Net Position* provides information about the financial activities during the reporting period that increased or decreased the Net Position Restricted for Pensions. This statement can be found on page 35 of this report.

Member and employer contributions are recognized in the period in which contributions are due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with plan terms. Investment

income is recognized when earned, and expenses are recognized when incurred. The net appreciation (or depreciation) in the fair value of investments is recorded as an increase (or a decrease) to investment income, which includes both realized and unrealized gains and losses on investments based upon investment valuations.

Notes to the Basic Financial Statements

The *Notes to the Basic Financial Statements* are an integral part of the basic financial statements and provide additional information that is essential to obtain a thorough understanding of the data provided in the basic financial statements. The notes also provide detailed information of key policies and activities during the reporting period. The Notes to Basic the Financial Statements can be found on pages 36-64 of this report.

Required Supplementary Information

Required Supplementary Information presents information that GASB requires to accompany the basic financial statements. Such information is an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. In addition to the Management's Discussion and Analysis, Required Supplementary Information consists of schedules discussed below and can be found on pages 65-67.

- Schedule of Changes in Net Pension Liability of Participating Employers – displays changes in net pension liability of all participating employers.

- Schedule of Employer Contributions – helps readers determine if plan sponsors are meeting the statutory actuarially determined contributions over a period of time.
- Schedule of Investment Returns – shows the “money-weighted rate of return” for investments, net of investment expenses. The money-weighted rate of return is a measure of investment performance adjusted for cash flows and the changing amounts actually invested.

Other Supplementary Information

Other Supplementary Information includes several schedules pertaining to administrative expenses, information technology expenses, investment expenses, and payments to consultants (for fees paid to outside professionals other than investment advisors). Other Supplementary Information and the accompanying notes can be found on pages 68-70 of this report.

Other Information

Other Information consists of two schedules pertaining to GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – an Amendment of GASB Statement No. 27*. The two schedules include the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan and the Schedule of Cost Sharing Employer Allocations. Under GASB Statement No. 68, plan sponsors are required to report Net Pension Liability on their balance sheets and changes in Net Pension Liability on their income statements as pension expenses and deferred inflows/outflows of resources as appropriate. Other Information can be found on pages 71-73 of this report.

Financial Analysis

Increases and decreases in fiduciary net position over time may serve as a useful indicator of whether the financial health of SamCERA is improving or declining. Other factors, such as market conditions, should also be considered in measuring SamCERA's overall financial position.

Analysis of Fiduciary Net Position

The table on the next page compares SamCERA's net position as of June 30 for the current and prior fiscal years. SamCERA's fiduciary net position restricted for pensions as of June 30, 2016, was approximately \$3.5 billion, which represents an increase of \$87 million, or 3%, over the reporting period. The chart on the next page compares SamCERA's net position as of June 30 for the last five fiscal years.

Assets. SamCERA's total assets increased \$60 million, or 2%, mainly from the following:

- Cash and cash equivalents increased by \$79 million. In the 4th quarter of fiscal year 2016, SamCERA liquidated an account with its commodities manager for \$80 million in cash.
- Securities lending cash collateral decreased by \$11 million. The amount of securities on loan at year-end was lower than that of last year-end, leading to a proportional decrease in cash collateral.
- Investments decreased by \$5 million. SamCERA's overall investments increased by \$75 million, mainly from market appreciation as well as additional investments funded by supplemental contributions from the County of San Mateo (the County) and the San Mateo County Mosquito and Vector Control

District (the District). About \$80 million of the investments were converted to cash before the year-end.

- Capital assets increased by \$2 million, due primarily to the development of a new pension administration software system that is scheduled to be live in January 2017.

Liabilities. SamCERA's total liabilities decreased by \$26 million, or 21%, caused mainly by the following:

- Payables to broker for investment purchases decreased by \$14 million. The decrease was mainly from the payoff of a sizeable payable of \$18 million due to timing and the closure of the Western Asset fund.

STATEMENT OF FIDUCIARY NET POSITION

June 30 (Dollars in Thousands)

	2016	2015	Increase (Decrease)	
			Amount	Percentage
Assets				
Cash and cash equivalents	\$ 130,111	\$ 51,162	\$ 78,949	154%
Cash management overlay	26,249	26,273	(24)	0%
Security lending cash collateral	88,363	99,387	(11,024)	-11%
Receivables	22,636	27,174	(4,538)	-17%
Prepaid expense	8	8	-	0%
Investments at fair value	3,368,375	3,373,248	(4,873)	0%
Capital assets, net	5,162	3,206	1,956	61%
Total assets	3,640,904	3,580,458	60,446	2%
Liabilities				
Investment management fees	1,808	2,043	(235)	-12%
Due to broker for investments purchased	7,582	21,246	(13,664)	-64%
Collateral payable for securities lending	88,363	99,387	(11,024)	-11%
Other	1,763	3,306	(1,543)	-47%
Total liabilities	99,516	125,982	(26,466)	-21%
Net position restricted for pensions	\$3,541,388	\$3,454,476	\$ 86,912	3%

SAMCERA'S FIDUCIARY NET POSITION

June 30 (Dollars in Millions)



- Securities lending collateral due to borrowers decreased by \$11 million. The decrease was triggered by the decline in cash collateral received from securities lending transactions.

Analysis of Changes in Fiduciary Net Position

The changes in fiduciary net position are determined by total additions less total deductions. The table on the next page shows condensed information about total additions to, and total deductions from, the fiduciary net position. SamCERA's fiduciary net position increased \$87 million, or 3%, for the fiscal year ended June 30, 2016.

Additions. Total additions to SamCERA's net position decreased \$64 million, or 19%, compared to the last fiscal year. The decrease was attributed primarily to the following:

- Employer contributions increased by \$10 million. The County as well as the District both decided to accelerate the payoff of their unfunded liabilities. The County increased its supplemental contribution to \$19.5 million from \$10.9 million last year. In October 2015, the District made a one-time supplemental contribution of \$1.5 million.
- Member contributions increased by \$8 million. The increase was due primarily to various Memoranda of Understanding between the County and its general plan members in certain bargaining units under which members are required to make contributions towards the Cost of Living Adjustment (COLA). As a result, the County's contributions for COLA were reduced

by the amount picked up by the members.

- Net investment income decreased by \$87 million. SamCERA's investment portfolio returned 0.7% net of investment management fees compared to 3.5% last year. Throughout the year, the global markets were overshadowed by global concerns, which included global growth concerns, falling commodity prices, concerns of a hard landing in China, financial repression from negative interest rates in Japan and parts of the European Union, continued heightened geopolitical concerns, and the fallout from the Brexit vote in the United Kingdom.
- Other additions increased by \$5 million. One of the general partners with Everstream Solar Infrastructure Fund Limited Partnership was in default. Its equity was distributed to the remaining general partners, including SamCERA. Consequently, SamCERA recognized an unanticipated gain of \$4.5 million.

Deductions. Total deductions increased by \$12 million, or 7%, compared to last fiscal year. Most of the increase was due to an increase in member benefits of \$11 million, which was triggered mainly by an increased number of retirees receiving pension benefits.

Actuarial Valuation

SamCERA engages an independent actuarial firm, Milliman, to perform an annual actuarial valuation to monitor its funding status and funding integrity. The valuation reassesses the magnitude of SamCERA's benefit commitments, in comparison with the assets expected to be available to support

those commitments. Valuation results will be used to determine employer and member contribution rates for funding purposes.

In the actuarial valuation, the actuary uses several assumptions with regards to

SamCERA's members (such as their life expectancy, projected salary increases, and the age at which members may retire) to determine the assets, liabilities, and future contribution requirements. The actuarial economic and demographic assumptions selected are used to project as closely as

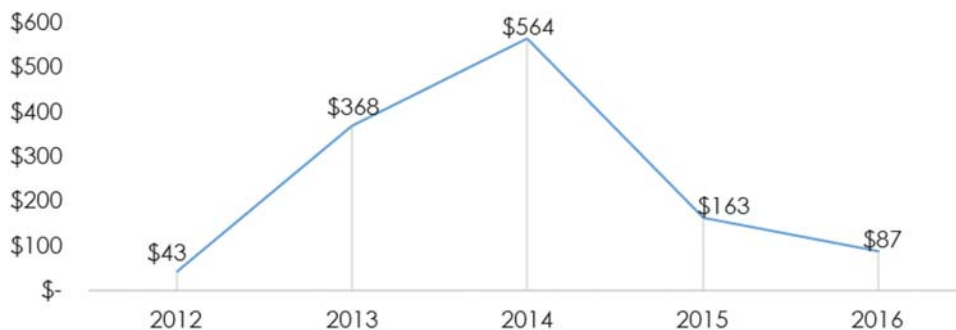
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For the Fiscal Years Ended June 30 (Dollars in Thousands)

	2016	2015	Increase (Decrease)	
			Amount	Percentage
Additions				
Employer contributions	\$ 191,094	\$ 180,704	\$ 10,390	6%
Member contributions	56,069	48,012	8,057	17%
Net investment income	24,112	111,320	(87,208)	-78%
Net securities lending income	278	310	(32)	-10%
Other	4,910	-	4,910	--
Total additions	276,463	340,346	(63,883)	-19%
Deductions				
Service retirement benefits	157,513	147,267	10,246	7%
Disability retirement benefits	21,091	20,039	1,052	5%
Survivor, death and other benefits	894	803	91	11%
Member refunds	3,366	3,357	9	0%
Administrative expense	5,962	5,350	612	11%
Information Technology expense	714	629	85	14%
Other expense	11	119	(108)	-91%
Total deductions	189,551	177,564	11,987	7%
Net increase (decrease)	86,912	162,782	(75,870)	-47%
Net position restricted for pensions				
Beginning of year	3,454,476	3,291,694	162,782	5%
End of year	\$ 3,541,388	\$ 3,454,476	\$ 86,912	3%

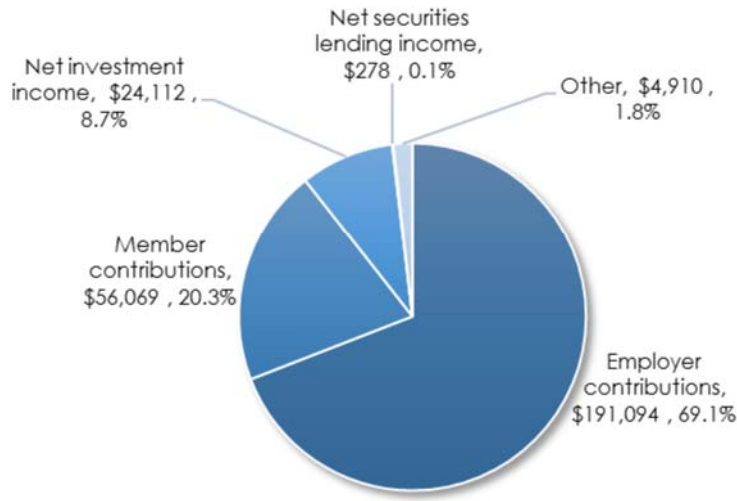
CHANGES IN SAMCERA'S NET POSITION

For the Fiscal Years Ended June 30 (Dollars in Millions)



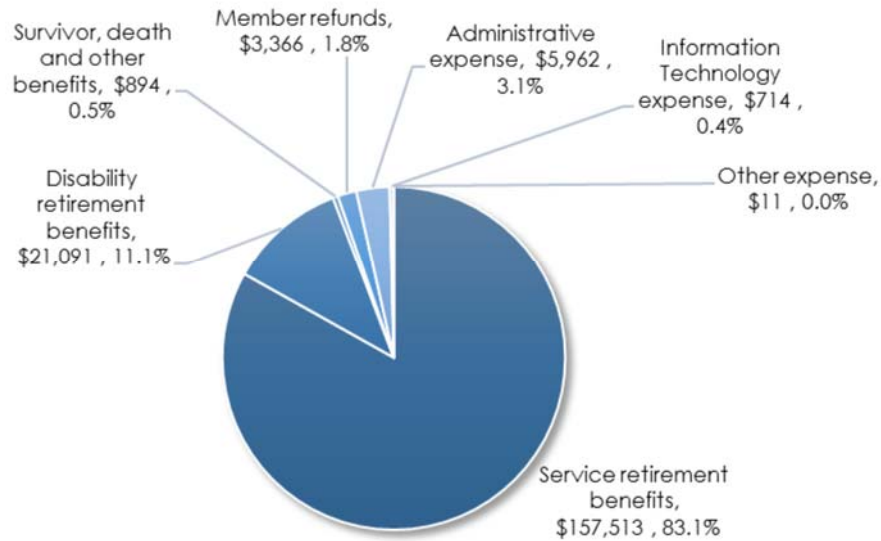
ADDITIONS TO FIDUCIARY NET PENSION

For the Fiscal Year Ended June 30, 2016 (Dollars in Thousands)



DEDUCTIONS FROM FIDUCIARY NET POSITION

For the Fiscal Year Ended June 30, 2016 (Dollars in Thousands)



possible the actuarial cost of the plan. The projection permits an orderly method for setting aside contributions today to provide benefits in the future, and maintain equity among generations of members and taxpayers.

On June 7, 2016, the Retirement Board adopted new economic assumptions effective with the June 30, 2016 valuation. The (Consumer Price Index) CPI was adjusted from 3.0% to 2.75%, the investment return rate was adjusted from 7.25% to 7.00%, and the general wage increase was adjusted from 3.50 to 3.25%. The net effect of the changes in assumptions was about \$89 million increase in (Unfunded Actuarial Accrued Liability) UAAL.

Plan Assets, Liabilities, and Funded Ratio

One measure of the funding adequacy of the retirement system is the Funded Ratio. According to the latest actuarial valuation as of June 30, 2016, the plan's funded ratio (actuarial value of assets to actuarial accrued liabilities) increased to 83.1% as of June 30, 2016, from 82.6% as of June 30, 2015. The increase resulted primarily from employer contributions to amortize the UAAL, which was partially offset by the increase in UAAL due to revised economic assumptions discussed earlier.

As of June 30, 2016, the actuarial value of plan assets was \$3.6 billion, and the actuarial accrued liability was \$4.4 billion. The difference between these two amounts represents the UAAL, which amounted to \$738 million (or 156% of the collective covered payroll of participating employers, totaling \$472 million for the fiscal year ended June 30, 2016). The assets used in the calculation of the funded ratio include the

values of the County's Supplemental Contribution Account and the District's Supplemental Contribution Account.

SamCERA's Fiduciary Responsibilities

SamCERA's Board of Retirement and management staff are fiduciaries of the pension trust fund. Under the California Constitution and the County Employees' Retirement Law of 1937, assets of the retirement system can only be used for the exclusive benefit of plan participants and their beneficiaries.

Requests for Information

This financial report is designed to provide SamCERA's Board of Retirement, members, investment managers, and interested parties with a general overview of SamCERA's financial position and to show accountability for the funds received. Additional information is available on SamCERA's website at www.samcera.org.

Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

San Mateo County Employees'
Retirement Association
100 Marine Parkway, Suite 125
Redwood City, CA 94065
Telephone: (650) 599-1234
Facsimile: (650) 591-1488

STATEMENT OF FIDUCIARY NET POSITION

June 30, 2016 (with comparative amounts as of June 30, 2015)

	2016	2015
ASSETS		
Cash and short-term investments:		
Cash and cash equivalents	\$ 130,111,362	\$ 51,162,210
Cash management overlay	26,249,148	26,273,301
Securities lending cash collateral	88,363,269	99,386,577
Total cash and short-term investments	<u>244,723,779</u>	<u>176,822,088</u>
Receivables:		
Contributions	7,812,557	6,151,530
Due from broker for investments sold	9,809,813	14,438,183
Investment income	4,886,171	6,433,607
Securities lending income	26,788	37,582
Other	100,028	112,810
Total receivables	<u>22,635,357</u>	<u>27,173,712</u>
Prepaid expense	7,669	7,669
Investments at fair value:		
Fixed Income	610,607,729	665,402,082
Equity	1,723,373,856	1,797,854,657
Alternatives	404,376,940	332,946,526
Risk Parity	280,336,352	265,103,721
Inflation Hedge	349,680,120	311,941,279
Total investments at fair value	<u>3,368,374,997</u>	<u>3,373,248,265</u>
Capital assets, net	5,162,123	3,206,047
Total assets	<u>3,640,903,925</u>	<u>3,580,457,781</u>
LIABILITIES		
Payable - Investment management fees	1,807,507	2,042,596
Due to broker for investments purchased	7,582,018	21,246,436
Securities lending collateral due to borrowers	88,363,269	99,386,577
Other	1,762,634	3,305,844
Total liabilities	<u>99,515,428</u>	<u>125,981,453</u>
Net position restricted for pensions	<u>\$ 3,541,388,497</u>	<u>\$ 3,454,476,328</u>

The accompanying Notes to the Basic Financial Statements are an integral part of these financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For the Fiscal Year Ended June 30, 2016

(with comparative amounts for the fiscal year ended June 30, 2015)

	2016	2015
ADDITIONS		
Contributions:		
Employer	\$ 191,094,488	\$ 180,704,280
Member	56,068,706	48,011,698
Total contributions	247,163,194	228,715,978
Investment income:		
Interest and dividends	36,703,717	44,433,648
Net appreciation in fair value of investments	22,197,249	99,877,102
Total investment income	58,900,966	144,310,750
Less: investment expense	(34,789,209)	(32,990,697)
Net investment income	24,111,757	111,320,053
Securities lending income:		
Earnings	423,019	184,442
Rebates	(78,186)	212,304
Fees	(67,054)	(87,101)
Net securities lending income	277,779	309,645
Other additions	4,910,228	338
Total additions	276,462,958	340,346,014
DEDUCTIONS		
Member benefits:		
Service retirement benefits	157,513,099	147,266,945
Disability retirement benefits	21,090,529	20,038,671
Survivor, death and other benefits	893,633	803,591
Total member benefits	179,497,261	168,109,207
Member refunds	3,366,437	3,357,011
Administrative expense	5,961,802	5,349,796
Information Technology expense	714,347	628,909
Other expense	10,942	118,717
Total deductions	189,550,789	177,563,640
Net increase	86,912,169	162,782,374
Net position restricted for pensions		
Beginning of year	3,454,476,328	3,291,693,954
End of year	\$ 3,541,388,497	\$ 3,454,476,328

The accompanying Notes to the Basic Financial Statements are an integral part of these financial statements.

NOTES TO THE BASIC FINANCIAL STATEMENTS

Note 1: Plan Description

The San Mateo County Employees' Retirement Association (SamCERA) is governed by the California Constitution, the County Employees Retirement Law of 1937 (the CERL - a component of the California Government Code), the California Public Employees' Pension Reform Act of 2013 (PEPRA) and the regulations, procedures and policies adopted by the Board of Retirement (the Board). SamCERA is not subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

General

SamCERA is a cost-sharing multiple-employer, defined benefit pension plan established to provide pension benefits for substantially all permanent employees of the County of San Mateo (the County), the San Mateo County Mosquito and Vector Control District (the District), and the Superior Court of the County of San Mateo (the Court). Because of its close relationship with the County, SamCERA is a blended component unit, fiduciary in nature, of the County and is reported as a pension trust fund of the participating employers.

Under the CERL, the management of SamCERA is vested in the Board consisting of nine members: the first member is the County Treasurer; the second and third members are general members of SamCERA elected by their peers; the fourth, fifth, sixth and ninth members are qualified electors of the County and appointed by the County Board of Supervisors; the seventh member is

elected by and a member of SamCERA's safety membership; and the eighth member is a retired member elected from the retired membership. In addition, there is one elected Safety Member Alternate and one elected Retired Member Alternate.

Subject to the following fiduciary responsibilities, the Board oversees and guides the pension plans:

- (1) solely in the interest of, and for the exclusive purpose of, providing economic benefits to participants and their beneficiaries;
- (2) with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character with like objectives; and
- (3) diversify the investments of the plan 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.

Pension Plans

SamCERA has seven pension plans, which cover members classified as general, safety (those serving in law enforcement), and probation. The table on the following two pages provide details for each of these plans.

In addition to the basic member and the cost sharing contributions, certain plan members (except those in Plan 3) are required to make contributions to fund the Cost of Living Adjustments (COLA) discussed in the succeeding section. Certain members in Plans 1, 2, and 4 contribute a

BENEFIT PLANS

June 30, 2016

	<u>General Member</u>	<u>Probation Member</u>	<u>Safety Member</u>
PLAN 1*			
Hire Date	On or before 7/5/80	On or before 7/5/80	On or before 7/5/80
Benefit factor	2%@55.5	3%@50	3%@50
Maximum COLA	5%	3%	5%
FAC Period**	Highest 1 year	Highest 1 year	Highest 1 year
Eligibility for Service Retirement	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.
PLAN 2*			
Hire Date	7/6/80 - 7/12/97	7/6/80 - 7/12/97	7/6/80 - 7/12/97
Benefit factor	2%@55.5	3%@50	3%@50
Maximum COLA	3%	3%	3%
FAC Period	Highest 1 year	Highest 1 year	Highest 1 year
Eligibility for Service Retirement	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 20 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.
PLAN 3*			
Hire Date	On or before 12/22/12, a non-contributory plan.	Not applicable	Not applicable
	(After five years of service, Plan 3 members can elect membership under the eligible contributory plan. Members currently working in a contributory plan with Plan 3 service may purchase an upgrade of their Plan 3 service. Plan 3 closed to new members effective December 23, 2012.)		
	(If retirement occurs prior to age 65, benefit amount will be adjusted by an actuarial equivalent factor.)		
Maximum COLA	No COLA	Not applicable	Not applicable
FAC Period	Highest 3 years (non-consecutive)	Not applicable	Not applicable
Eligibility for Service Retirement	Age 65 with 10 years of service; reduced benefit at age 55 with 10 years of service.	Not applicable	Not applicable

(Continued)

*Plans 1, 2, 3, and 4 are closed to new entrants. However, eligible general members with reciprocity of the District may participate in Plan 4.

** FAC Period stands for "Final Average Compensation" Period.

	General Member	Probation Member	Safety Member	
PLAN 4*	Hire Date	7/13/97 - 8/6/11 (except Plan 5 transfers discussed under Plan 5 below) (Note: Plan 4 closed simultaneously with the implementation of Plan 5 and Plan 6.)	7/13/97 - 7/9/11	7/13/97 - 1/7/12
	Benefit factor	2%@55.5	3%@50	3%@50
	Maximum COLA	2%	2%	2%
	FAC Period**	Highest 3 years (non-consecutive)	Highest 3 years (non-consecutive)	Highest 3 years (non-consecutive)
	Eligibility for Service Retirement	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.
PLAN 5	Hire Date	8/7/11 - 12/31/12	7/10/11 - 12/31/12	1/8/12 - 12/31/12 (Note: General Plan 5 members after 10 years of service 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.)
	Benefit factor	2% @61.25	3%@55	3%@55
	Maximum COLA	2%	2%	2%
	FAC Period	Highest 3 years (non-consecutive)	Highest 3 years (non-consecutive)	Highest 3 years (non-consecutive)
	Eligibility for Service Retirement	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.
PLAN 6	Hire Date	Not applicable	7/10/11 - 12/31/12	1/8/12 - 12/31/12
	Benefit factor	Not applicable	2%@50	2%@50
	Maximum COLA	Not applicable	2%	2%
	FAC Period	Not applicable	Highest 3 years (non-consecutive)	Highest 3 years (non-consecutive)
	Eligibility for Service Retirement	Not applicable	Age 50 with 10 years of service; any age with 20 years of service.	Age 50 with 10 years of service; any age with 20 years of service.
PLAN 7	Hire Date	On or after 1/1/13	On or after 1/1/13	On or after 1/1/13
	Benefit factor	2%@62	2.7%@57	2.7%@57
	Maximum COLA	2%	2%	2%
	FAC Period	Highest 36 consecutive months	Highest 36 consecutive months	Highest 36 consecutive months
	Eligibility for Service Retirement	Age 52 with 5 years of service.	Age 50 with 5 years of service.	Age 50 with 5 years of service.

*Plans 1, 2, 3, and 4 are closed to new entrants. However, eligible general members with reciprocity of the District may participate in Plan 4.

** FAC Period stands for "Final Average Compensation" Period.

specific percentage of the retirement COLA cost. All members in Plans 5 and 6 contribute 50% of the COLA. Members in Plan 7 contribute 50% of the aggregate normal cost rate (which includes 50% of the COLA) for their plan.

Pension Plan Membership

Plan membership as of June 30, 2016, is displayed in the table below.

Benefit Provisions

SamCERA provides basic service retirement, disability, and death benefits based on defined benefit formulas, which use final average compensation, years of service, and age factors to calculate benefits payable. In addition, SamCERA provides annual COLA upon retirement for members of Plans 1, 2, 4, 5, 6, and 7. The benefits of Plan 3 are

reduced by a portion of the Social Security benefits received by the member. The CERL vests the County Board of Supervisors with the authority to initiate benefits. Each participating employer can make certain limited adjustment for their member benefits.

Active Member Benefits. Members are entitled to receive a retirement benefit based on their plan membership. The seven pension plans cover members classified as general, safety, or probation.

Deferred Member Benefits. A member is entitled to withdraw his/her member contributions plus accumulated interest upon termination of employment. If the member enters a reciprocal retirement system within 180 days, the member can elect to leave the accumulated contributions

SAMCERA MEMBERSHIP

June 30, 2016

	Plan 1*	Plan 2*	Plan 3*	Plan 4*	Plan 5	Plan 6	Plan 7	Total
RETIREES AND BENEFICIARIES CURRENTLY RECEIVING BENEFITS								
General	1,612	1,783	143	561	1	-	-	4,100
Safety	266	167	-	50	-	-	-	483
Probation	68	77	-	20	-	-	-	165
Subtotal	1,946	2,027	143	631	1	-	-	4,748
TERMINATED MEMBERS ENTITLED TO RECEIVE BENEFITS IN THE FUTURE (DEFERRED)								
General	11	371	108	769	35	-	74	1,368
Safety	1	19	-	41	6	-	2	69
Probation	-	11	-	38	-	-	-	49
Subtotal	12	401	108	848	41	-	76	1,486
CURRENT MEMBERS, VESTED								
General	16	702	74	2,124	10	-	6	2,932
Safety	3	81	-	253	-	-	1	338
Probation	1	41	-	189	1	-	-	232
Subtotal	20	824	74	2,566	11	-	7	3,502
CURRENT MEMBERS, NON-VESTED								
General	-	2	17	57	274	-	1,139	1,489
Safety	-	-	-	8	54	1	94	157
Probation	-	-	-	1	8	1	29	39
Subtotal	-	2	17	66	336	2	1,262	1,685
Total Members	1,978	3,254	342	4,111	389	2	1,345	11,421

* Plans closed to new entrants except eligible general members with reciprocity of the District may participate in Plan 4.

with SamCERA and receive a deferred retirement benefit when eligible. Eligible contributory members with five years of service (employees, either permanent or part-time, with the equivalent of five years of full-time service) or non-contributory members in Plan 3 with ten years of service may elect a deferred retirement when eligible by leaving the accumulated contributions with SamCERA.

Disability Benefits. A disability retirement may be service-connected or non-service-connected. Service credit requirements do not apply for members applying for service-connected disability benefits. If members are found permanently incapacitated from performing their job as a result of injury or disease arising out of or in the course of employment, the members are eligible for disability retirement benefits. Members applying for non-service-connected disability must have five or more years of eligible service credit.

Survivor Benefits. Survivor benefits are payable to eligible beneficiaries of retired members. Eligible beneficiaries may receive a percentage of a deceased member's retirement benefit based upon the retirement option selected by the member at the time of retirement.

Cost-of-Living Adjustments (COLA). As of April 1 of each year, the Board will adjust the retirement benefits in accordance with an annual increase in the cost of living as of January 1 of each year to the nearest one-half of one percent.

The COLA is based on information released by the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers in the San Francisco, Oakland, and San Jose Bay

Area. The increase is capped at 5% for General and Safety members in Plan 1; 3% for Probation members in Plan 1 and all members in Plan 2; and 2% for members in Plans 4, 5, 6, and 7. Plan 3 has no COLA.

Note 2: Summary of Significant Accounting Policies

Basis of Accounting

The accompanying financial statements are prepared on the accrual basis of accounting and in accordance with Generally Accepted Accounting Principles (GAAP) in the United States of America. The basis of accounting indicates the timing of transactions or events for recognition in the financial statements.

Employer and member contributions are recognized in the period in which contributions are due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with plan terms. Investment income is recognized as revenue when earned, and expenses are recognized when incurred. The net appreciation (or depreciation) in the fair value of investments is recorded as an increase (or decrease) to investment income, which includes both realized and unrealized gains and losses on investments, based upon investment valuations.

SamCERA is an independent public employee retirement system with its own governing board. SamCERA's management is responsible for maintaining appropriate internal controls and preparing SamCERA's financial statements. Because of its financial relationship with the County (the primary plan sponsor), SamCERA is classified as a blended component unit of the County (fiduciary in nature) and reported as a

pension trust fund in the County's financial statements.

Investment Policy and Valuation

The Board has exclusive control of SamCERA's investments. Government Code Section 31595 of the CERL authorizes the Board to invest, or delegate the authority to invest, the assets of SamCERA in any investment allowed by statute and deemed prudent in the informed opinion of the Board.

The Investment Policy of SamCERA seeks to optimize long-term returns within acceptable risk parameters. In March 2016 the Board approved a new target asset allocation, which included the creation of a dedicated inflation protection pool asset class to better monitor the plan.

The new target asset allocation is incorporated into SamCERA's Investment Policy, which is detailed in the Investment Section. The Board periodically reviews the asset allocation in response to changing market conditions that may affect forward-looking expected returns of asset classes.

Beginning fiscal year 2016, SamCERA adopted a new structure to report its investments in the statement of fiduciary net position. In prior fiscal years, SamCERA's investments were reported under ten categories: domestic fixed income securities, international fixed income securities, domestic equities, international equities, real estate, private equities, private real assets, risk parity, hedge funds, and commodities. Starting fiscal year 2016, these investments were regrouped into five categories: fixed income (domestic and international fixed income securities), equity (domestic and international equities), alternatives (private

equities and hedge funds), risk parity, and inflation hedge (real estate, private real assets, and commodities), under the new structure.

SamCERA records investment transactions on the trade date. Investments are reported at fair value, which represents the amount SamCERA could reasonably expect to receive for an investment in a current sale between a willing buyer and seller. The valuation for each type of investments is as follows:

Cash and cash equivalents. Cash is pooled with other funds of the County or custodians, as appropriate, to earn a higher rate of return than could be earned by investing the funds individually. All highly liquid investments with maturities of three months or less when purchased, in addition to the pooled cash with the County and custodians, are considered cash equivalents.

Short-term investments. Short-term investments are reported at cost, which approximates fair value. Short-term investments include cash held in the money market and securities that are readily convertible to cash.

Domestic and international fixed income securities and equities. Valuations for publicly traded securities, such as stocks and bonds, are provided by SamCERA's custodian, the Northern Trust Corporation, based on end-of-day prices from external pricing vendors. The fair value of public market equity and fixed income investments held in Institutional Commingled Funds or Partnerships are typically provided by a third party fund administrator, who performs this service for the fund manager.

Real estate. Real estate assets are reported at fair value utilizing an income approach to valuation. An independent appraisal is conducted every quarter to determine the fair value of the real estate assets.

Private equity and real assets. Private equity and real asset partnerships are reported based on the fair value provided by the General Partner on a quarterly basis. The General Partner considers the financial conditions and operating results of the portfolio companies, the nature of the investments, marketability, and other relevant factors.

Risk parity, hedge funds, and commodities. These investments are reported based on the fair value provided by a third party administrator, who performs this service for the fund manager.

Interest income is recognized as it accrues. Dividend income is recognized when the dividends are declared. Realized as well as unrealized gains and losses on investments are combined and reported as the net appreciation (depreciation) in the fair value of investments.

Foreign Currency Transactions

Gains and losses from foreign currency transactions during the year (including translation of international investments at fiscal year-end rates of exchange) are recorded as investment income. Forward currency contracts are used by SamCERA's investment managers to control currency exposure and facilitate the settlement of international security purchase and sale transactions. These contracts are agreements to exchange different currencies at specified rates and settlement dates. Differences between the contract and market exchange

rates at settlement result in gains or losses, which are included in net investment income. Risks may arise from the possible inability of counterparties to meet the terms of their contracts as well as from movements in exchange and interest rates.

Securities Lending Activity

Securities lending transactions are short-term collateralized loans of SamCERA's securities for the purpose of generating additional investment income. For each securities lending transaction, SamCERA receives either cash collateral or non-cash collateral. The underlying securities out on loan are reported on SamCERA's statement of fiduciary net position as if the lending transaction had not occurred.

In accordance with Governmental Accounting Standards Board (GASB) Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions*, cash collateral held (or any security that can be sold or pledged without a borrower default) is separately reported on the statement of fiduciary net position among the current assets. A corresponding liability of an equal amount (the obligation to return the cash collateral) is reported simultaneously. Non-cash collateral held that cannot be sold or pledged without a borrower default is not reported on the statement of fiduciary net position nor is there a corresponding liability reported on this statement.

Receivables

Receivables consist primarily of interest, dividends, investments in transition (traded but not yet settled), and contributions owed by participating employers at year-end.

Capital Assets

Capital assets including intangible assets are items with an initial unit cost of greater than \$5,000 and an estimated useful life in excess of three years. Capital assets are reported at historical cost, net of accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, ranging from three to ten years. Most capital assets are information technology related.

The routine upgrade of information technology systems, hardware, software, and maintenance are deemed appropriate as expenses for the current year. As of June 30, 2016, SamCERA reported \$5 million in capital assets from the development of a new pension administration system with an expected completion date in the year 2017.

Estimates

The preparation of financial statements in accordance with GAAP in the United States of America may require management to make estimates and assumptions that affect certain amounts and disclosures. Accordingly, actual results may differ from those estimates.

Subsequent Events

Subsequent events are those events or transactions that occur subsequent to the effective date of the financial statements, but prior to the issuance of final reports (from July 1 through October 18 of 2016), which may have a material effect on the financial statements or disclosures contained therein.

The Internal Revenue Service has previously ruled that retirement plans, such as SamCERA, under Section 401(a) of the Internal Revenue Code are not subject to tax

under present income tax laws. On August 11, 2016, the Internal Revenue Service issued a favorable Tax Determination Letter for the pension plans administered by SamCERA. Thus, no provision for income taxes has been reported in the accompanying financial statements as the plans are exempt from federal and state income taxes under provisions of the Internal Revenue Code, Section 401.

Reclassification

Certain financial statement items from the prior year's financial statements have been reclassified for comparative purposes. Such reclassifications has no effect on the previously reported fiduciary net position.

Note 3: Funding Policy

The CERL establishes the basic contribution obligations for employers and members to the pension plan. The employer and member contribution rates adopted by the Board are based on recommendations from an independent actuary in accordance with membership type (General, Safety, and Probation) and the plan in which a member belongs. The funding objective of the pension plan is to establish employer and member contribution rates which, over time, will remain as a level percentage of payroll.

Participating employers are required by statute to contribute amounts necessary to fund the estimated benefits accruing to members not otherwise funded by member contributions or expected investment earnings. Employer contribution rates for each plan are determined pursuant to Government Code Section 31453 of the CERL, using the entry age normal cost method based upon a level percentage of

projected payroll. Employer contribution rates include an estimated amount necessary to finance benefits earned by members during the current year (normal cost) and an amount to amortize the unfunded actuarial accrued liability (UAAL).

For members in Plans 1, 2, 4, 5, and 6, contributions are of three types: (1) basic member contributions, (2) cost sharing, and (3) COLA cost sharing. Basic member contributions are determined using the entry age normal cost method and selected actuarial assumptions. In addition to the basic rate, Plan 1, 2, and 4 General members, as well as Plan 5 Safety management and Probation management members, make additional cost sharing contributions. Plan 6 members do not participate in cost sharing. All members in Plan 7 pay contributions equal to one-half of the total normal cost rate. Members in Plan 3 pay no contributions. The cost sharing contributions are fixed and not impacted by changes in assumptions.

Certain members also share the cost of the COLA by making additional contributions, depending on which plan and bargaining unit they belong to. Member contributions along with interest credited are refundable upon termination of membership.

In determining both employer and member contribution rates, assumptions are made about future events that may affect the amount and timing of benefits to be paid and assets to be accumulated. Methods and assumptions used to determine contribution rates are discussed in the Required Supplementary Information section and the Actuarial Section.

The actuarial valuation of plan assets and liabilities is normally carried out as of June 30 of each year. The contribution rates as determined at June 30, 2016, are subject to “one year” deferral. Thus, the new contribution rates in the 2016 valuation are effective on July 1, 2017.

Note 4: Employer Contributions

For the fiscal year ended June 30, 2016, the statutory employer contribution rate for all plans combined was 34.74% of actual covered payroll (with 10.80% attributed to the normal cost and 23.94% to the amortization of the UAAL over a new closed 15 year period). The member contribution rate for all plans combined for the same period was 11.42%. These contribution rates were actuarially determined. The employer statutory contributions, including the normal cost and the UAAL, are separately shown in the table below.

EMPLOYER CONTRIBUTION RATES AS A PERCENTAGE OF COVERED PAYROLL

	2016	2015	Change
Normal Cost	10.80%	11.19%	-0.39%
UAAL Amortization	23.94%	26.28%	-2.34%
Total Contribution Rate	34.74%	37.47%	-2.73%

The employer normal cost rate decreased from 11.19% to 10.80% of covered payroll. The decrease was due primarily to a larger portion of the active population being members in California Public Employees’ Pension Reform Act of 2013 (PEPRA) plans. In addition, negotiated increases in some members’ contribution rates due to additional COLA sharing also helped reduce the contribution rates.

The employers' statutory contribution rate to finance the UAAL over 15 years decreased from 26.28% to 23.94% of covered payroll. The decrease was largely driven by the recognition of investment gains from prior years under the asset smoothing method and supplemental contributions from the County and the District.

Supplemental Contributions from the County

In November 2013, the County reached an agreement with SamCERA to accelerate the pay down of the County's UAAL. Under this agreement, the County provided a supplemental contribution of \$50 million in fiscal year 2014 and will continue to contribute an additional \$10 million annually for the following nine years. A new

account, known as the County Supplemental Contribution Account (CSCA), was set up to separately account for the supplemental contributions.

Deposits in the CSCA less than six months prior to the regular crediting dates of June 30 or December 31 will receive interest credit at the actual market investment return rate. Deposits for more than six months prior to a crediting date will receive interest at the actuarially calculated return.

In fiscal year 2016, in addition to the annual supplemental contribution of \$10 million for the accelerated pay down of the UAAL, the County contributed 37.14% of its actual payroll to SamCERA, which exceeded the statutory rate of 34.92% by 2.2%, or \$9.5

SCHEDULE OF EMPLOYER CONTRIBUTIONS

(Dollars in Thousands)

Fiscal Year Ended June 30	(a)	(b)	(a) - (b)		Percentage of Statutory Contribution Received
	Actual Contribution	Statutory Contribution	Excess Supplemental Contribution		
2007	\$100,550	\$100,550	\$ -		100%
2008	105,340	105,340	-		100%
2009	106,123	106,123	-		100%
2010	106,265	106,265	-		100%
2011	150,475	150,475	-		100%
2012	150,950	139,407	11,543	(1)	100%
2013	144,308	131,294	13,014	(1)	100%
2014	202,877	152,877	50,000	(2)	100%
2015	180,704	169,814	10,890	(3)	100%
2016	191,094	170,046	21,048	(4)	100%

(1) The County contributed at a higher rate than the Actuarially Determined Contribution rate in order to maintain more stable contributions.

(2) The County made a supplemental payment of \$50 million to accelerate the pay down of the County's UAAL.

(3) The County made a supplemental payment of \$10 million to accelerate the pay down of the County's UAAL and \$0.9 million in addition to the required annual contribution.

(4) The County and the District contributed additional funding of \$19.5 million and \$1.5 million, respectively, to accelerate the payoff of their UAAL.

million. Thus, the overall supplemental contribution from the County amounted to \$19.5 million. The CSCA had an aggregate balance of \$85.2 million as of June 30, 2016.

The County paid its annual required contributions for fiscal year 2016 via two semi-annual prepayments in July 2015 and January 2016, respectively. The prepayments were based on the adopted actuarial contribution rate and the projected covered payroll by plan, discounted by the assumed actuarial rate of return.

Throughout the year, the prepayments were periodically reduced by actual contributions as determined by the adopted actuarial contribution rate and the actual covered payroll by plan. At year end, SamCERA performed a “true-up” calculation to ensure that the County’s annual statutory contribution to SamCERA was fully settled. The excess balance in the prepayment account will be applied towards the County’s contribution for fiscal year 2017.

Supplemental Contributions from the San Mateo County Mosquito and Vector Control District

In September 2015, the District entered an agreement with SamCERA to pay down its UAAL with a single payment of \$1.5 million in addition to its statutory contribution for fiscal year 2016. This amount was remitted to SamCERA on October 29, 2015.

SamCERA established a new account, the District Supplemental Contribution Account (DSCA), to separately account for the District’s supplemental contributions. Deposits in the DSCA less than six months prior to the regular crediting dates of June 30 or December 31 will receive interest credit at the actual market investment return

rate. Deposits for more than six months prior to a crediting date will receive interest at the actuarially calculated return. As of June 30, 2016, the DSCA had an aggregate balance of \$1.6 million.

Note 5: Deposits and Investments

The Board established an Investment Policy in accordance with applicable local, state, and federal laws. The CERL vests the Board with exclusive control over SamCERA’s investment portfolio. Except as otherwise expressly restricted by the California Constitution and by regulation, the Board may, in its discretion, invest, or delegate the authority to invest, the assets of SamCERA in any investment allowed by statute and deemed prudent in the informed opinion of the Board.

Deposits

SamCERA has deposits with an outside financial institution, the Northern Trust Corporation, as well as with the County in an investment pool account. Deposits with Northern Trust Corporation are swept into a pooled money market fund, which invests in securities such as repurchase agreements, commercial paper, U.S. Treasury bills and notes. Earnings and losses from the County investment pool are shared among pool participants. All deposits are reported at cost, which approximates fair value.

Custodial Credit Risk – Deposits: The custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, SamCERA will not be able to recover deposits nor be able to recover collateral securities that are in the possession of an outside party. SamCERA has no general policy on custodial credit risk for deposits.

SamCERA maintains cash deposits to support its investment activities and operational needs. As of June 30, 2016, \$111.2 million of cash was held in a pooled money market fund with the Northern Trust Corporation (custodian bank of SamCERA), and \$1.2 million in the investment pool with the County Treasurer. In addition, cash held by investment managers at year-end totaled \$17.7 million, which is swept daily into a pooled short-term investment fund managed by the Northern Trust Corporation.

Cash held with the Northern Trust Corporation in the amount of \$584,062 is uninsured and uncollateralized. Thus, this amount is subject to custodial credit risk. SamCERA does not have a general policy addressing custodial credit risk. The fair value of SamCERA's position in the pool is the same as the value of the pool shares.

The participation in the County investment pool is voluntary. The County investment pool is not registered with the Securities and Exchange Commission as an investment company. In accordance with Article 6 Section 27131 of the California Government Code, the County Board of Supervisors established an eight-member County Treasury Oversight Committee to oversee the management of public funds in the investment pool.

Investments

SamCERA's investments are managed by independent investment management firms in accordance with the guidelines and controls specified in the Investment Policy and contracts executed with the Board. A third party institution is used as an independent custodian, the Northern Trust Corporation.

Investment Policy. The Investment Policy is strategized to reduce risk through a prudent diversification of the investment portfolio across a broad selection of distinct asset classes. In March 2016, the Board approved a new target asset allocation outlined in SamCERA's Investment Policy. As of June 30, 2016, the Board was in the midst of an asset liability study. The study is expected to be completed in fiscal year 2017. The Board undertakes an in-depth asset and liability study every three to five years.

Target Asset Allocation. Effective April 1, 2016, the newly adopted target asset allocation consists of 48% in equity, 18% in fixed income, 12% in alternatives, 8% in risk parity, and 14% in a newly created inflation hedge asset class. With the new inflation hedge asset class, the Board moved Real Estate, Treasury Inflation Protection Securities (TIPS) from fixed income, and Private Real Assets, and Commodities from alternatives into the inflation hedge asset class. SamCERA does not have an allocation policy for cash and cash equivalents. As of June 30, 2016, the actual asset allocation consisted of 49.5% in equities, 17.4% in fixed income, 11.5% in alternatives, 8.0% in risk parity, 9.7% in inflation hedge, and 3.9% in cash and cash equivalents.

Long-Term Expected Rate of Return.

The long-term expected rate of return on pension plan investments was determined using a building-block method. Under this method, a median (or expected) geometric rate of return is developed for each major asset class. The median rates are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage.

As of June 30, 2016, estimates of the median geometric rates of return for each major asset class at the time the asset allocation targets were selected are shown in the table below.

LONG-TERM EXPECTED RATE OF RETURN

June 30, 2016

Asset Class	Target Allocation	Long-Term Expected Rate of Return
Equity	48%	7.8%
Fixed Income	18%	4.0%
Alternatives	12%	8.3%
Risk Parity	8%	5.6%
Inflation Hedge	14%	6.2%
Cash	-	1.5%
Total	100%	7.0%

Money-Weighted Rate of Return. The money-weighted rate of return expresses investment performance, net of pension plan investment expense, adjusted for the timing of cash flows and the changing amounts actually invested. For the fiscal year ended June 30, 2016, the annual money-weighted rate of return was 0.5% on SamCERA's investments, net of related investment expenses.

Investment Risk

SamCERA manages investment risks under GASB Statements No. 40 and 53 by contractually requiring each investment manager to follow specific investment guidelines that are specifically tailored to the investment manager. These investment guidelines typically stipulate the investment style, performance objective, performance benchmarks, and portfolio characteristics.

Each investment manager is required to

follow the “manager standard of care” to act prudently and solely in the best interest of SamCERA. The guidelines require the investment return performance of each manager be compared with the performance of a relative passive market index over specific periods. SamCERA's investment consultant and staff constantly monitor the performance of all investment managers for compliance with respective guidelines.

Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. SamCERA's Investment Policy seeks to maintain a diversified portfolio of fixed income instruments to obtain the highest total return for the fund at an acceptable level of risk within the asset class. The quality of SamCERA's investments in bonds as of June 30, 2016, is summarized in the following table.

QUALITY BREAKDOWN FOR SAMCERA'S INVESTMENT IN BONDS (JUNE 30, 2016)

Credit Risk	Commingled Management
AAA	21.4%
AA	4.1%
A	17.0%
BBB	14.4%
Less than BBB	32.1%
NR	11.0%
Total	100.0%

Interest Rate Risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The longer the duration of the portfolio, the greater its price sensitivity to changes in interest rates. Duration is the measure of the price sensitivity of a fixed income portfolio to changes in interest rates,

and calculated as the weighted average time to receive a bond's coupon and principal payments.

SamCERA has investments in seven external investment pools containing debt securities. Interest rate risk for the fixed income portfolios are displayed in the table below.

SamCERA does not have a formal policy that limits investment duration as a means of managing its exposure to fair value losses arising from increasing interest rates.

Custodial Credit Risk – Investments. The custodial credit risk is the risk that, in the event of the failure of a counterparty to a transaction, SamCERA will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. Under the investment guidelines for each investment manager, managed investments must be held in the name of SamCERA. The master custodian may rely on sub-custodians. As of June 30, 2016, SamCERA had no investments that were exposed to custodian credit risk.

Foreign Currency Risk. Foreign currency risk is the risk that changes in the exchange rates will adversely affect the fair value of an investment or deposit. In its Investment Policy, SamCERA allows forward currency contracts and currency futures as defensive currency hedging to mitigate foreign currency risk on the portfolio. International equity and global bond managers are permitted to invest in authorized countries.

Foreign Currency Risk – Foreign Exchange Contracts. Foreign currency contracts are subject to foreign currency risk as the value of deposits or investments denominated in foreign currency may be adversely affected by changes in foreign exchange rates.

Foreign currency contracts include forward contracts and spot contracts. *Currency forward contracts* are derivatives and generally serve to hedge or offset the impact of foreign currency exchange rate fluctuations. *Spot contracts* are agreements to buy or sell a certain amount of foreign currency at the current market rate for settlement in two business days. Spot contracts are generally

COMMINGLED FIXED INCOME PORTFOLIO (JUNE 30, 2016)

Investment Type	Fair Value	Weighted Average Coupon	Weighted Average Maturity (Years)	Effective Duration (Years)
Angelo Gordon OWL	\$ 23,028,666	4.03%	20.15	2.91
Angelo Gordon STAR	31,853,970	4.61%	21.43	2.71
Beach Point Select	40,939,328	8.40%	6.20	2.48
Brigade Capital Management	63,796,031	7.54%	6.29	2.84
Franklin Templeton	100,003,669	4.68%	3.25	0.29
Fidelity Institutional Asset Management	247,229,262	3.70%	8.04	5.37
Western Asset Management	103,756,803	1.90%	8.13	1.01
Total	\$610,607,729			

used when SamCERA is required to make or receive payments in a foreign currency. SamCERA does not have a formal policy on foreign currency risk. The table below indicates the magnitude of risk for each foreign currency denominated in U.S. dollars.

Concentration of Credit Risk. This risk is the risk of loss attributed to the magnitude of SamCERA's investment in a single issuer of securities. Investments issued or explicitly guaranteed by the U.S. Government and pooled investment are excluded from the concentration of credit risk analysis. As of June 30, 2016, SamCERA does not have investments in a single issuer with five percent or more of SamCERA's fiduciary net position.

Derivatives

Derivatives are financial instruments that are connected to a specific financial instrument, indicator or commodity, and through which specific financial risks can be traded in financial markets in their own right. The value of a derivative derives from the price of an underlying item, such as an asset or index. Derivatives are used for a number of purposes (such as risk management, hedging, and arbitrage between markets), and are usually settled by net payments of cash.

SamCERA's investments contain various derivatives, primarily in swaps and foreign currency forward positions.

- The fair values of credit rate swaps, interest rate swaps, warrants, and To Be

FOREIGN CURRENCY RISK

June 30, 2016

Trade Country Name	Common Stock	Foreign Currency	Grand Total
Australia	\$ 14,495,568	\$ 391,735	\$ 14,887,303
Canada	2,217,367	897,507	3,114,874
Switzerland	34,483,861	-	34,483,861
Denmark	12,347,905	-	12,347,905
Europe	63,936,904	18,130	63,955,034
United Kingdom	74,204,970	1,155,397	75,360,367
Hong Kong	4,227,927	589,296	4,817,223
Japan	72,214,800	80,863	72,295,663
South Korea	3,193,981	-	3,193,981
Mexico	1,531,319	-	1,531,319
Malaysia	954,240	(954,407)	(166)
Philippines	923,766	-	923,766
Sweden	20,540,440	-	20,540,440
Singapore	13,961,154	-	13,961,154
South Africa	6,899,845	-	6,899,845
Grand Total	\$ 326,134,047	\$ 2,178,522	\$ 328,312,569

Announced (TBA) transactions, are determined using the custodian pricing vehicles.

- The fair values of currency forward contracts are determined using a proprietary pricing service, which uses published foreign exchange rates as the primary source.
- The fair values of other derivatives are determined using a pricing service and validated by SamCERA’s custodian.

The derivatives held at fiscal year-end are summarized in the table below. Compared to SamCERA’s total investments at fair value, the fair value of SamCERA’s derivatives as of June 30, 2016, is not material.

All derivatives held are investment derivatives, and none of them are hedging derivatives. As of June 30, 2016, the derivatives held had an aggregate negative notional amount of \$7.6 million. The fair value of derivatives totaling \$46 is reported in the statement of fiduciary net position as part of the cash management overlay and inflation hedge. Changes in fair value during fiscal year 2016 are reported in the statement of changes in fiduciary net position as a component of investment income.

Custodial Credit Risk – Derivatives. As of June 30, 2016, SamCERA’s derivatives were not subject to custodial credit risk. However, they are subject to other risks.

Credit Risk – Derivatives. SamCERA is exposed to credit risk on investment derivatives that are traded over the counter and are reported in asset positions. Derivatives exposed to credit risk include credit default and interest rate swaps, currency forward contracts, rights, warrants, and TBA transactions.

To minimize credit risk exposure, SamCERA’s investment managers continuously monitor credit ratings of counterparties. Should there be a counterparty failure, SamCERA would be exposed to the loss of the fair value of derivatives that are in asset positions and any collateral provided to the counterparty, net of the effect of applicable netting arrangements.

SamCERA has no general policy with respect to netting arrangements or collateral requirements. Netting arrangements legally provide SamCERA with a right of offset in the event of bankruptcy or default by the counterparty.

INVESTMENT DERIVATIVES

June 30, 2016

Type of Derivatives	Notional Value	Fair Value
Interest Rate Contracts - Short	\$ (17,698,523)	\$ -
Interest Rate Contracts - Forwards	46	46
Commodity Contract Futures - Long	10,137,132	-
Total	\$ (7,561,345)	\$ 46

Securities Lending Activity

SamCERA is authorized by Investment Policy and state law to participate in a securities lending program. Securities lending transactions are short-term collateralized loans of SamCERA's securities for the purpose of generating additional investment income.

SamCERA has a securities lending agreement in place that authorizes its securities lending agent to lend SamCERA's securities to broker-dealers and banks pursuant to a loan agreement. For each type of security loaned, SamCERA receives cash or non-cash collateral. SamCERA invests the cash and receives earnings on it in exchange for paying a loan rebate fee to the borrower. In the case of non-cash collateral, the borrower pays SamCERA a loan premium.

For the fiscal year ended June 30, 2016, on behalf of SamCERA, the securities lending agent lent SamCERA's securities to borrowers under the securities lending agreement. In return, SamCERA received cash, securities issued or guaranteed by the United States government, and sovereign debt or irrevocable bank letters of credit as collateral.

Borrowers were required to deliver collateral for each loan equal to (1) loaned securities denominated in U.S. dollars or sovereign debt issued by foreign governments, with a margin of at least 102% of the fair value of the loaned securities; and (2) loaned securities not denominated in U.S. dollars, or whose primary trading market was not located in the United States, with a margin of at least 105% of the fair value of the loaned securities. In addition, borrowers were required to maintain the designated

margin percentage of collateral on a daily basis.

SamCERA did not impose any restrictions on the amount of loans that the securities lending agent made on SamCERA's behalf. The securities lending agent indemnified SamCERA by agreeing to purchase replacement securities or to supplement the amount of cash collateral provided to SamCERA. Such indemnification will become effective in the event the borrower fails to return the loaned securities and the collateral is inadequate to replace the securities lent or the borrower fails to pay SamCERA for any income distributions on loaned securities. SamCERA did not experience any loss from a default of the borrowers or the securities lending agent during the reporting period. SamCERA and the borrowers maintained the right to terminate all securities lending transactions on demand.

As of June 30, 2016, the fair value of securities on loan reported and the total collateral held amounted to \$89.1 million and \$90.8 million (with \$88.4 million in cash collateral and \$2.4 million in non-cash collateral), respectively. The amount of collateral exceeded the amount of securities on loan by \$1.7 million. The securities on loan include international equities, international government fixed income securities, U.S. agencies securities, U.S. corporate fixed income securities, U.S. equities, and U.S. government fixed income securities.

The cash collateral received on each loan was invested in a short-term investment pool, the Northern Institutional Liquid Assets Portfolio (NILAP), managed by the securities

lending agent. The average maturity of securities on loan was approximately 42 days as of June 30, 2016, which generally matches the average duration of maturities of 34 days for the NILAP cash collateral pool at June 30, 2016.

SamCERA does not have the ability to pledge or sell collateral securities delivered absent a borrower default. Therefore, such non-cash collateral is not reported on the statement of fiduciary net position.

Securities Lending Collateral Credit Risk.

All of the cash collateral received for securities lending is invested in the NILAP Cash Collateral Fund (the Fund), which is not rated by credit rating agencies. All investments qualify as “eligible securities” within the meaning of Rule 2(a)-7 of the Investment Company Act of 1940. The Fund seeks to maintain a stable net position value per share of \$1 by valuing its Fund using an amortized cost method and comply with the requirements of Rule 2(a)-7.

Securities Lending Collateral Interest Rate Risk. Cash collateral from loans of securities are invested in the Fund. The Fund’s average effective duration is restricted to 90 days or less. As of June 30, 2016, the Fund had an interest sensitivity of 34 days.

Fair Value Measurement

In fiscal year 2016, SamCERA adopted GASB Statement No. 72, *Fair Value Measurement and Application*. This Statement establishes a fair value hierarchy based on three types of input to develop the fair value measurements for investment.

- Level 1 – reflects prices quoted in active markets.

- Level 2 – reflects prices that are based on a similar observable asset either directly or indirectly, which may include inputs in markets that are not considered to be active.
- Level 3 – reflects prices based upon unobservable sources.

The categorization of SamCERA’s investments within the fair value hierarchy is based upon the pricing transparency of the instrument and should not be perceived as the particular investment’s risk. See details on pages 54-55.

Assets classified in Level 1 of the fair value hierarchy are valued directly from a predetermined primary external pricing vendor. Assets classified in Level 2 are subject to pricing by an alternative pricing source due to lack of information available by the primary vendor. As of June 30, 2016, SamCERA did not hold any investments classified in Level 3.

FAIR VALUE MEASUREMENT

June 30, 2016

Investments by Fair Value Level	6/30/2016	Fair Value Measurements Using	
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
DEBT SECURITIES			
U.S. Government Securities	\$ 67,969,922		\$ 67,969,922
Total Debt Securities	67,969,922		67,969,922
EQUITY SECURITIES			
Foreign Stocks	326,134,046	\$ 326,134,046	
U.S. Common & Preferred Stock	395,816,701	395,816,701	
Total Equity Securities	721,950,747	721,950,747	
COMMINGLED FUNDS			
Domestic Bond Funds	103,756,803		103,756,803
Domestic Equity Funds	575,736,217		575,736,217
International Equity Funds	197,068,776		197,068,776
Total Commingled Funds	876,561,796		876,561,796
Total Investments by Fair Value Level	1,666,482,465	\$ 721,950,747	\$ 944,531,718

Investments Measured at the Net Asset Value (NAV)

Domestic Bond Funds	406,847,249
Global Bond Funds	100,003,677
Domestic Equity Funds	118,848,435
International Equity Funds	109,769,681
Real Estate Funds	244,562,681
Risk Parity Funds	280,336,352
Absolute Return/Hedge Funds	183,886,218
Private Equity Funds	220,490,722
Private Real Asset Funds	37,147,517
Total Investments Measured at NAV	1,701,892,532

Total Investments	\$ 3,368,374,997
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Derivatives (1)

Currency Exchange Contracts - Forwards	\$ 46	\$ 46
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(1) Derivatives are reported under "Cash management overlay" on the Statement of Fiduciary Net Position.

INVESTMENTS MEASURED AT NET ASSET VALUE

June 30, 2016

Investments Measured at NAV	6/30/2016	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period
Domestic Bond Funds ⁽¹⁾	\$ 406,847,248	\$ -	Daily, Quarterly	15-90 days
Global Bond Funds ⁽¹⁾	100,003,677	-	Monthly	15 days
Domestic Equity Funds ⁽¹⁾	118,848,435	-	Daily	1-5 days
International Equity Funds ⁽¹⁾	109,769,681	-	Daily	1-10 days
Real Estate Funds ⁽²⁾	244,562,681	22,700,000	Quarterly, Not Eligible	45 days
Risk Parity Funds ⁽³⁾	280,336,352	-	Monthly	15 days
Hedge Funds/Absolute Return ⁽⁴⁾	183,886,219	-	Semi-Monthly, Monthly	5-75 days
Private Equity Funds ⁽⁵⁾	220,490,722	134,000,000	Not Eligible	Not applicable
Private Real Asset Funds ⁽⁵⁾	37,147,517	57,300,000	Not Eligible	Not applicable
Total Investments Measured at NAV	\$ 1,701,892,532	\$ 214,000,000		

- (1) **Bond and Equity Funds.** This type includes five domestic bond funds, one global bond fund, one domestic equity fund, and two international equity funds that are considered to be in commingled in nature. Each is valued at the NAV of units held at the end of the period based upon the fair value of the underlying investments.
- (2) **Real Estate Funds.** This type includes two real estate funds that invest primarily in a diversified portfolio of institutional quality multi-family, industrial, retail and office assets in the United States. The fair values of the investments in this type have been determined using the NAV (or its equivalent) of the Plan's ownership interest in partners' capital. One investment has quarterly liquidity while the other is ineligible for redemption.
- (3) **Risk Parity Funds.** This type includes two risk parity funds that seek to generate returns from a risk diversified portfolio of asset exposures. The fair values of the investments in this type have been determined using the NAV (or its equivalent) of the Plan's ownership interest in partners' capital. The funds can be redeemed on a monthly basis.
- (4) **Hedge Funds/Absolute Return.** This strategy consists of two multi-strategy absolute return/hedge funds. One fund delivers efficient exposure to a well-diversified portfolio of hedge fund strategies and the other builds a broad range of return-seeking positions (i.e. multi-strategy) with high underlying liquidity that incorporates multiple risk views.
- (5) **Private Equity and Real Asset Funds.** SamCERA's private equity portfolio consists of eighteen funds, investing primarily in buyout funds, venture capital, and debt/special situations. The private real asset portfolio comprises of six funds, investing in infrastructure, mining finance, solar, energy, and farmland. The fair values of these funds have been determined using net assets values one quarter in arrears plus current quarter cash flows. These funds are not eligible for redemption. Distributions are received as underlying investments with the funds are liquidated, which on average can occur over the span of 5 to 10 years.

Note 6: Pension Disclosures

Net Pension Liability

GASB Statement No. 67, *Financial Reporting for Pension Plans – an Amendment of GASB Statement No. 25*, requires public pension plans to disclose the employer net pension liability information. The net pension liability of all participating employers was determined based upon plan assets as of the measurement date at June 30, 2016.

The schedule of net pension liability as of June 30, 2016, is presented in the table on page 57. For financial reporting purposes, the net pension liability is measured as the total pension liability less the amount of the pension fiduciary net position.

The total pension liability represents the present value of projected benefit payments (using the discount rate of 7.20% discussed below) to be provided through the pension plan to current active and inactive plan members that is attributed to those members' past periods of services.

Actuarial Assumptions

Each year SamCERA engages an independent actuarial firm to perform an annual actuarial valuation in accordance with requirements under GASB Statement No. 67. In the valuation, the actuary employs generally accepted actuarial methods and assumptions to determine the total pension liability, the fiduciary net position, and the employers' net pension liability.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and that actuarially determined amounts are subject to continual revision as

results are compared to past expectations and new estimates are made about the future.

Calculations, which reflect a long-term perspective, are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point.

Discount Rate

The discount rate (the assumed investment rate of return) used to measure the total pension liability was 7.20% as of June 30, 2016. The projection of cash flows used to determine the discount rate assumed both employer and member contributions will be made at rates equal to the actuarially determined contribution rates.

According to the latest actuarial study, SamCERA's fiduciary net position is projected to be available to make all projected future benefit payments of current active employees, inactive members, retirees, and beneficiaries. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return, gross of administrative expenses.

Sensitivity Analysis

The employers' net pension liability changes with adjustments to the discount rate. The table on page 58 presents the net pension liability of participating employers calculated using the current discount rate of 7.20%, as well as what the net pension liability would be using a discount rate that is one percent lower (6.20%) or one percent higher (8.20%) than the current discount rate.

SCHEDULE OF NET PENSION LIABILITY AS OF JUNE 30, 2016

This schedule displays the total pension liability, the plan fiduciary net position, and the net pension liability of all participating employers, which were determined in conformity with the requirements prescribed by GASB Statement No. 67.

Net Position Liability	June 30, 2016
Total pension liability	\$ 4,254,142,477
Less: fiduciary net position	<u>(3,541,388,497)</u>
Net pension liability	<u>\$ 712,753,980</u>

Fiduciary net position as a % of total pension liability	83.25%
Covered payroll	\$ 472,384,955
Net pension liability as a % of covered payroll	150.88%

The total pension liability was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial assumptions and methods shown below.

Discount rate	7.20%
Long-term expected rate of return, net of expenses*	7.00%

* The fiduciary net position was projected to be available to make all projected future benefit payments of current active employees, inactive members, retirees, and beneficiaries. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return, gross of administrative expenses.

Valuation date	June 30, 2016
Measurement date	June 30, 2016

Key assumptions

Investment rate of return ⁽¹⁾	7.20%
Inflation	2.75%
Mortality	Various rates based on RP-2000 mortality tables as described in the June 30 actuarial valuation.

Actuarial experience study	July 1, 2011 to April 30, 2014
	Individual Entry Age

Actuarial cost method	Normal
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Asset Valuation Method	Fair market value
Smoothing period	5 years
Recognition method	Non-asymptotic
Corridor	80% to 120% of fair value

Amortization of Unfunded Actuarial Accrued Liability (UAAL) ⁽²⁾ UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers that are determined annually ("layer" amortization).

⁽¹⁾ Differs from actuarial valuation for funding purposes due to addition of administrative load of 0.20%.

⁽²⁾ Contribution "credits" are applied to the County of San Mateo (the County) and the San Mateo County Mosquito & Vector Control District (the District) contributions rates. These rates reflect supplemental contributions by the County and the District, which are tracked separately in the County and District Supplemental Contribution Accounts. Contributions in a given year are amortized as a level percentage of pay over a 15-year closed period.

SCHEDULE OF SENSITIVITY ANALYSIS*June 30, 2016 (Dollars in Thousands)*

	1% Decrease (6.20%)	Current Discount Rate (7.20%)	1% Increase (8.20%)
Total pension liability	\$4,840,673	\$4,254,142	\$3,771,714
Less: Fiduciary net position	(3,541,388)	(3,541,388)	(3,541,388)
Net pension liability	\$1,299,285	\$ 712,754	\$ 230,326

Note 7: Funded Status and Funding Progress

The funding status was established using the entry age normal cost method and based on various selected actuarial economic and demographic assumptions, including an investment rate of return of 7.00%, inflation rate of 2.75%, and general wage increase of 3.25%. According to the latest actuarial valuation as of June 30, 2016, the plan was 83.1% funded (the ratio of plan assets to plan liabilities) with the actuarial value of plan assets at \$3.6 billion and the actuarial accrued liability at \$4.4 billion. The

difference between these amounts represents the UAAL, which was \$738 million, or 156% of \$472 million in the annual covered payroll.

The actuarial value of assets is determined such that 20% of the investment gains and losses in a given year are recognized annually for the next five years. Thus, such investment gains and losses are fully recognized after five years. In addition, SamCERA adopts a “corridor” approach under which the actuarial value of assets cannot be less than 80% or greater than 120% of the fair value.

Beginning with the June 30, 2008 actuarial valuation, SamCERA converted to a closed 15-years layered amortization method. The UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers. Details of the funding progress, annual required contribution for employers and members, and the latest actuarial valuation are presented in the Actuarial Section of this report.

RESERVES REQUIRED FOR REPORTING PURPOSES BY THE CERL*June 30, 2016***Valuation Reserves**

Member Deposit Reserve	\$ 679,245,500
Employer Advance Reserve	751,265,520
County Supplemental Contribution Account	85,235,512
District Supplemental Contribution Account	1,593,122
Retired Member Reserve	966,121,611
COLA Reserve	1,213,653,695
Subtotal - Valuation Reserves	<u>3,697,114,960</u>

Non-Valuation Reserves

Contingency Reserve	36,613,393
Unallocated Earnings (Losses) Reserve	(72,299,960)
Subtotal - Non-Valuation Reserves	<u>(35,686,567)</u>

Market Stabilization Account

(120,039,896)

Total Reserves\$ 3,541,388,497

Note 8: Plan Reserves

Plan reserves (components of net position) are established to account for resources accumulated from employer contributions, member contributions, and investment income after satisfying all expenses. The plan reserves do not represent the present value of assets needed, as determined by the actuarial valuation, to satisfy retirement as well as other benefits when they become due.

SamCERA uses three different types of accounts to record the plan reserves: the valuation reserve, the non-valuation reserve, and the market stabilization account. The plan reserves as of June 30, 2016, are presented in the table below.

Valuation Reserves

The valuation reserves generally receive interest at the assumed actuarial interest rate semi-annually. The valuation reserves are made up of the following:

Member Deposit Reserve represents funding provided by active and inactive (deferred) members. Additions include member contributions and interest credited. Deductions include refunds to members and transfers to Retired Member Reserve at the time a member retires.

Employer Advance Reserve represents funding provided by employers for future retirement payments to active and inactive (deferred) members. Additions include employer contributions and interest credited. Deductions include lump-sum death benefit payments to members' survivors, supplementary disability payments, and transfers to the Retired Member Reserve at the time a member

retires. When a member elects to receive a refund of member contributions upon termination, the balance in this reserve account will not be affected since the employers' contribution rates are based on an actuarial assumption that take into account the expected termination rate for members.

County Supplemental Contribution Account Reserve captures all the supplemental contributions made by the County in excess of the statutory contributions plus interest credited since fiscal year 2014.

District Supplemental Contribution Account Reserve captures all the supplemental contributions made by the District in excess of the statutory contributions plus interest credited since fiscal year 2016.

Retired Member Reserve represents funding set aside for retirement benefits. Additions include transfers from the Member Deposit Reserve and the Employers' Advance Reserve (both made at the time a member retires) as well as interest credited. Deductions include payments to retired members, beneficiaries, and survivors.

COLA Reserve represents employer contributions accumulated for future cost of living adjustments under provisions of the CERL. Additions include contributions from employers and interest credited. Deductions include payments to retired members, beneficiaries, and survivors.

Non-Valuation Reserves

The Board established two non-valuation reserve accounts: Contingency Reserve and

Unallocated Earnings/Losses Reserve. The balance in these non-valuation reserve accounts are not used to determine employers' statutory contribution rates.

Contingency Reserve is established to meet the reserve requirement under Section 31592 of the CERL that at least one percent of the fund's actuarial value of assets be kept as reserves against future earning deficiencies, investment losses, and other contingencies. Additions to the reserve include investment income and other revenues. Deductions from the reserve include investment expenses, administrative expenses, and interest allocated to other reserves.

The Board adopted an *Interest Crediting Policy* stipulating that interest to the valuation reserves should be assessed at the actuarial interest rate. The interest crediting policy acknowledges that actual earnings may be greater or less than the actuarial interest rate. When there are insufficient allocable earnings to cover interest credited to the reserves specified in the interest crediting policy, the funding in the Contingency Reserve may be used to cover the shortage. However, in no event may the Contingency Reserve be allowed to drop lower than one percent of the actuarial value of assets.

Under the CERL, excess earnings exceeding one percent of SamCERA's total assets may be transferred from the Contingency Reserve into the Employers' Advance Reserve for payment of benefits. However, SamCERA strives to keep the Contingency Reserve at 3% of the actuarial value of assets as described in its Interest Credit Policy.

SamCERA semi-annually updates reserve

balances as of December 31 and June 30 each year to reflect interest credited as specified in Article 5 of the CERL (Semi-Annual Interest Crediting). The amount of "net earnings" to be distributed for each semi-annual period is based on the actuarial smoothing process described later.

To the extent that net earnings are available, interest is credited to all components of reserves (except the Member Deposit Reserve) at the actuarial assumed interest rate semi-annually in a prescribed sequence. The Member Deposit Reserve is credited at the lesser of the actuarial smoothed earnings rate or the actuarial assumed interest rate pursuant to the Board's interest crediting policy. The rate credited cannot be less than zero.

Earnings from the five-year smoothing process were mostly sufficient to provide interest credits to the valuation reserves at the actuarial assumed rate in effect during the year, which was 3.625% semi-annually. The actuarial smoothed rates of return were 3.30% and 3.01% at December 31, 2015, and June 30, 2016, respectively.

Unallocated Earnings/Losses Reserve is established to account for periods when actual earnings do not equal the actuarial interest rate. The Board adopted a *Five-year Actuarial Smoothing Policy* to value actuarial assets and calculate the UAAL. The smoothing process operates semi-annually (with calculation periods ending December 31 and June 30) to spread the difference between actual and expected market return over five years (or ten successive semi-annual periods). This smoothing process affects the net investment income reported on the statement of changes in fiduciary net position.

For the fiscal year ended June 30, 2016, smoothed earnings of \$25.4 million were distributed to the Unallocated Earnings/Losses Reserve, which increased the balance in this account to a negative \$72.3 million from a negative \$46.9 million.

Market Stabilization Account

The Market Stabilization Account is designed to minimize the impact of short-term volatility in the fair value of the retirement fund on employer and member contribution rates by smoothing market returns over a five-year period. The Board adopted a Market Stabilization Account policy to limit the actuarial value of assets not to exceed ±20% of the fair value.

The balance in this account, arising from a *Five-year Actuarial Smoothing Policy*, represents the difference between (1) the aggregate amount initially deferred (smoothed) from the ten most recent semi-annual periods and (2) the aggregate amount subsequently

recognized for semi-annual interest crediting from the same ten periods. Deferred investment earnings/losses are amortized over five years in accordance with a schedule established by the actuary. At June 30, 2016, the Market Stabilization Account had a negative balance of \$120 million.

Note 9: Administrative Expenses

The Board annually adopts an operating budget for the administration of SamCERA. Administrative expenses are charged against earnings of the retirement fund and cannot exceed twenty-one hundredth of one percent (0.21%) of the accrued actuarial liabilities as set forth under Government Code Section 31580.2 of the CERL.

The budget-to-actual analysis of administrative expenses for the fiscal year ended June 30, 2016, is presented in the tables below.

ADMINISTRATIVE EXPENSES FOR THE FISCAL YEAR ENDED JUNE 30, 2016, COMPARED TO ACTUARIAL ACCRUED LIABILITY AS OF JUNE 30, 2014

(Dollars in Thousands)

Actuarial Accrued Liability (AAL) as of 6/30/14	\$	3,797,042	(a)
Maximum Allowed for Administrative Expense (AAL*0.21%)	\$	7,974	(b)
Operating Budget for Administrative Expense	\$	6,615	(c)
Actual Administrative Expense	\$	5,962	(d)
Excess of Allowed over Actual Administrative Expense	\$	2,012	=(b) - (d)
Excess of Budgeted over Actual Administrative Expense	\$	653	=(c) - (d)

Actual Administrative Expense as a Percentage of Actuarial Accrued Liability as **0.16%** = (d)/(a)

SAMCERA'S ADMINISTRATIVE EXPENSES, BUDGET VS. ACTUAL

For the Fiscal Year Ended June 30, 2016

	Budget	Actual	Under Budget	% of Budget Remaining
Salaries and benefits	\$ 4,846,317	\$ 4,526,016	\$ 320,301	7%
Services and supplies	1,768,268	1,435,786	332,482	19%
Total expenses	\$ 6,614,585	\$ 5,961,802	\$ 652,783	10%

SamCERA has a policy in place to monitor compliance with the Government Code. SamCERA's administrative expenses for the reporting period amounted to 0.16% of accrued actuarial liability at June 30, 2014, (the latest information available when preparing the administrative budget for fiscal year 2016). Information technology is excluded from this limit.

The overall salaries and expenses for the fiscal year 2016 were closely in line with the budget. The overall expenses for services and supplies were 19% below the budget. Major reasons include the following:

- Petitions for disability benefits requiring independent medical examinations were much less than anticipated.
- Some but not all requested training sessions and conferences were attended.
- SamCERA did not need to hire a consultant to assist in preparing a new Tax Determination Letter as planned.

Note 10: Information Technology Expenses

The budget-to-actual analysis of technology expenses for the fiscal year ended June 30, 2016, is presented in the table below.

Pursuant to Government Code Section 31580.2 of the CERL, expenses for computer software, computer hardware, and computer technology consulting services in support of these computer products are not subject to the mandated limit of 0.21% discussed earlier. As a result, SamCERA prepares a separate information technology budget since this Government Code was implemented in fiscal year 2012.

For the fiscal year 2016, the overall Information Technology (IT) expenses were below the budget due primarily to the following:

- Purchase of property and equipment was much less than anticipated.
- Certain IT projects as well as research and development efforts were postponed since IT resources were supporting the implementation of a new pension administration software system.

Note 11: Risk Management

SamCERA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; injuries to employees; and natural disasters. Such risks are managed by SamCERA through its participation with the County's self-

SAMCERA'S INFORMATION TECHNOLOGY EXPENSES, BUDGET VS. ACTUAL

For the Fiscal Year Ended June 30, 2016

	Budget	Actual	Under Budget	% of Budget Remaining
Property and equipment	\$ 100,000	\$ 30,580	\$ 69,420	69%
Information technology infrastructure	1,558,815	683,767	875,048	56%
Research and Development	100,000	-	100,000	100%
Capital asset	3,500,000	-	3,500,000	(1)
Total expenses	\$ 5,258,815	\$ 714,347	\$ 4,544,468	(1)

(1) SamCERA incurred a total of \$1,956,076 in capital expenses during fiscal year 2016. This amount was capitalized and reported as capital assets on the Statement of Fiduciary Net Position for financial reporting purposes.

insurance program and commercial insurance policies.

SamCERA is covered by the County's self-insurance program for general liability and workers' compensation with coverage up to \$1 million per occurrence. Additional coverage for various types of risks are provided through the County's commercial insurance carriers in accordance with the terms set forth in individual insurance policies. Pursuant to a Memorandum of Understanding between SamCERA and the County, SamCERA pays a pro-rata share of total insurance cost incurred by the County based on the employee count. Settled claims have not exceeded the insurance coverage in the past three fiscal years.

The Board members and senior staff purchase separate Fiduciary Liability coverage for actual or alleged breach of fiduciary duties through a policy provided by AIG Nation Union Fire Insurance Company of Pittsburgh, Pennsylvania. The coverage is limited to \$10 million in the aggregate for all loss combined (including defense costs).

Note 12: Related Party Transactions

SamCERA has business transactions with the various County offices: County Counsel, Treasurer, Controller, Procurement, Human Resources, Information Services, Health System, Sheriff, and Elections. Payments for the services provided was based on a cost-reimbursement basis.

Note 13: Commitments

At June 30, 2016, SamCERA had a total "uncalled capital" of \$214 million, with \$134 million in private equity investments,

\$57.3 million in private real asset investments, and \$22.7 million in real estate investments. SamCERA is still in the process of building out its private equity and private real asset portfolios and intends to make additional capital commitments over the next three to five years.

SamCERA is also in the process of replacing its existing pension administration software system. The new system is estimated to cost about \$9.1 million and is expected to be in operation around January 2017. The remaining capital committed for this project was approximately \$4.0 million.

Note 14: Contingent Liability

SamCERA is subject to legal proceedings and claims arising from the normal course of its business. Currently, no such actions are adjudicated or reported.

Note 15: New Accounting and Financial Reporting Standards

GASB Statement No. 72

In March 2015, GASB issued Statement No. 72, *Fair Value Measurement and Application*. This Statement requires state and local governments to use specific valuation techniques to measure the fair value of assets and liabilities that are appropriate to the circumstances. SamCERA implemented this Statement in fiscal year 2016.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. GASB Statement No. 72 establishes a fair value hierarchy according to the three distinct types of input to develop the fair value measurements.

- Level 1 reflects measurements based on quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date.
- Level 2 reflects measurements based on inputs, other than quoted prices, that are observable for an asset or a liability, either directly or indirectly.
- Level 3 reflects measurements based on unobservable inputs for an asset or a liability.

GASB Statement No. 72 also expands disclosures regarding the fair value hierarchy and valuation techniques that are used for the fair value measurements. Overall, GASB Statement No. 72 has no material impact on SamCERA's basic financial statements.

[GASB Statement No. 82](#)

In April 2016, GASB issued Statement No. 82, *Pension Issues*, to address a few concerns raised under Statements No. 67, 68, and 73 regarding the financial reporting for local governmental employers and pension plans.

The Statement provides additional guidance for the following: (1) the presentation of payroll-related measures in the Required Supplementary Information section, (2) the treatment of deviations from the actuarial standards of practice when selecting actuarial assumptions, and (3) the classification of member contributions (i.e. "pick-up" contributions) for reporting purposes.

This Statement improves financial reporting by enhancing consistency in the application of financial reporting requirements for

certain pension issues. SamCERA elected the early application of this Statement in fiscal year 2016.

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS ⁽¹⁾

For the Fiscal Years Ended June 30

This schedule displays the components of the total pension liability, the fiduciary net position, and the net pension liability of all participating employers, which were determined in conformity with the requirements prescribed by GASB Statement No. 67.

	2016	2015	2014
Total Pension Liability			
Service cost	\$ 96,308,679	\$ 90,955,831	\$ 87,512,515
Interest on total pension liability	290,843,506	272,953,777	265,430,896
Effect of assumption changes or inputs	85,538,873	-	37,853,852
Effect of economic/demographic gains (losses)	17,875,272	50,655,233	(31,415,241)
Benefit payments and refund of contributions	(182,863,698)	(171,466,218)	(162,556,107)
Net change in total pension liability	307,702,632	243,098,623	196,825,915
Total pension liability, beginning	3,946,439,845	3,703,341,222	3,506,515,307
Total pension liability, ending (a)	\$ 4,254,142,477	\$ 3,946,439,845	\$ 3,703,341,222
Fiduciary Net Position			
Employer contributions	\$ 191,094,488	\$ 180,704,280	\$ 202,877,362
Member contributions	56,068,706	48,011,698	46,593,698
Investment income net of investment expenses	29,299,764	111,630,036	482,663,965
Benefit payments and refund of contributions	(182,863,698)	(171,466,218)	(162,556,107)
Administrative and other non-investment expenses	(6,687,091)	(6,097,422)	(5,710,296)
Net change in plan fiduciary net position	86,912,169	162,782,374	563,868,622
Fiduciary net position, beginning	3,454,476,328	3,291,693,954	2,727,825,332
Fiduciary net position, ending (b)	\$ 3,541,388,497	\$ 3,454,476,328	\$ 3,291,693,954
Net pension liability, ending = (a) - (b)	\$ 712,753,980	\$ 491,963,517	\$ 411,647,268
Fiduciary net position as a % of total pension liability	83.25%	87.53%	88.88%
Covered payroll ⁽²⁾	\$ 472,384,955	\$ 439,017,764	\$ 416,273,731
Net pension liability as a % of covered payroll	150.88%	112.06%	98.89%

⁽¹⁾ Trend Information: This schedule will ultimately show information for ten years. Additional years will be displayed as they become available prospectively.

⁽²⁾ In accordance with Statement No. 82 of the Governmental Accounting Standards Board (GASB), Covered Employee Payroll is the payroll on which contributions are based. SamCERA has elected early application of this Statement. Thus, these amounts may be different than shown in fiscal year ended 2015 and earlier reports.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Last Ten Fiscal Years

This schedule provides information about the statutory contributions of all participating employers and the percentage of the statutory contributions recognized by the plan.

Fiscal Year Ended June 30	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll ⁴	As a % of Covered Payroll	
					Actuarially Determined Contribution	Actual Employer Contribution
2007	\$ 100,549,570	\$ 100,549,570	\$ -	\$ 400,654,774	25.10%	25.10%
2008	105,339,570	105,339,570	-	411,293,295	25.61%	25.61%
2009	106,123,055	106,123,055	-	433,668,170	24.47%	24.47%
2010	106,265,329	106,265,329	-	434,295,179	24.47%	24.47%
2011	150,474,872	150,474,872	-	427,041,368	35.24%	35.24%
2012	139,406,807	150,949,791	(11,542,984)	418,915,989	33.28%	36.03%
2013	131,293,846	144,308,171	(13,014,325)	404,360,891	32.47%	35.69%
2014	152,877,362	202,877,362	(50,000,000)	416,273,731	36.73%	48.74%
2015	169,814,170	180,704,280	(10,890,110)	439,017,764	38.68%	41.16%
2016	170,046,059	191,094,488	(21,048,429)	472,384,955	36.00%	40.45%

¹ Employers contributed at a higher rate than the Actuarially Determined Contribution rate in order to maintain more stable contributions.

² In 2014, the Board of Supervisors implemented a policy to eliminate the County UAAL by 2023. Contributions in excess of the Actuarially Determined Contribution are related to that policy unless noted otherwise.

³ In October 2015, the San Mateo County Mosquito & Vector Control District contributed \$1.5 million more than as actuarially determined contribution.

⁴ In accordance with GASB Statement No. 82, Covered Employee Payroll is the payroll on which contributions are based. SamCERA has elected early application of this Statement and updated the covered payroll column to show pensionable payroll for the last ten fiscal years.

SCHEDULE OF INVESTMENT RETURNS ⁽³⁾

For the Fiscal Years Ended June 30

The money-weighted rate of return measures investment performance, net of investment expenses, adjusted for the changing amounts actually invested.

	2016	2015	2014
Annual money-weighted rate of return, net of investment expenses ⁽¹⁾	0.50% ⁽²⁾	3.37% ⁽²⁾	17.22%

⁽¹⁾ The calculation of SamCERA's money-weighted rate of return, net of investment expenses, was provided by SamCERA's investment consultant, Verus Investments.

⁽²⁾ Investment return was much lower than the prior year due to market conditions, which were affected by numerous global concerns throughout the year.

⁽³⁾ Trend Information: This schedule will ultimately show information for ten years. Additional years will be displayed as they become available prospectively.

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION

Actuarial Valuation Methods and Assumptions

The employer statutory contribution rates for the fiscal year ended June 30, 2016, are those calculated in the actuarial valuation as of June 30, 2014. Details of actuarial methods and assumptions selected for the actuarial valuation as of June 30, 2014, are summarized in the table below.

Changes in Assumptions

On June 7, 2016, the Retirement Board adopted new economic assumptions effective with the June 30, 2016 valuation. To reflect changes in market conditions, the investment return rate was adjusted from 7.25% to 7.00%, the Consumer Price Index was adjusted from 3.00% to 2.75%, and the general wage increase was adjusted from 3.50% to 3.25%.

ACTUARIAL VALUATION AS OF JUNE 30, 2014 (FOR FUNDING PURPOSES)

VALUATION DATE	June 30, 2014
ACTUARIAL COST METHOD	Entry Age Normal
AMORTIZATION METHOD	Level Percent of Payroll
AMORTIZATION PERIOD	UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers which are determined annually.
ASSET VALUATION METHOD	5-year smoothed recognition of asset gains and losses (determined as the difference of the actual fair value to the expected fair value), which cannot vary more than 20% from the fair value.
ACTUARIAL ASSUMPTIONS:	
INVESTMENT RATE OF RETURN	7.25%, net of pension plan investment and administrative expenses
INFLATION RATE (CPI)	3.00%
GENERAL WAGE INCREASE	3.50%
COST OF LIVING ADJUSTMENT	3.00% for general and safety members in Plan 1; 2.90% for probation members in Plan 1; 2.65% for all members in Plan 2; 1.90% for all members in Plans 4, 5, and 7; and 1.90% for all safety and probation members in Plan 6.
DEMOGRAPHIC ASSUMPTIONS:	
SALARY INCREASE DUE TO SERVICE	See June 30, 2014 actuarial valuation report for details.
RETIREMENT	See June 30, 2014 actuarial valuation report for details.
DISABILITY	See June 30, 2014 actuarial valuation report for details.
MORTALITY	See June 30, 2014 actuarial valuation report for details.

OTHER SUPPLEMENTARY INFORMATION

Schedule of Administrative Expenses

The schedule below depicts the administrative expenses incurred by San Mateo County Employees' Retirement Association (SamCERA) in the normal course of its business.

SCHEDULE OF ADMINISTRATIVE EXPENSES

For the Fiscal Year Ended June 30, 2016

Salaries & Benefits

Salaries	\$ 2,985,998
Benefits	1,540,018
Total Salaries & Benefits	<u>4,526,016</u>

Services & Supplies

Board Expenses	6,200
Insurance	64,200
Medical Evaluation	8,550
Member Education	62,173
Education & Conference	107,136
Transportation & Lodging	83,141
Property & Equipment	25,739
General Office Supplies	23,644
Postage, Printing & Copying	50,347
Leased Facilities	568,044
County Services	381,080
Audit Services	50,401
Other Administration	5,131
Total Services & Supplies	<u>1,435,786</u>

Total Administrative Expenses	\$ 5,961,802
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Schedule of Information Technology Expenses

The schedule below depicts the information technology expenses incurred by SamCERA in the normal course of its business.

SCHEDULE OF INFORMATION TECHNOLOGY EXPENSES

For the Fiscal Year Ended June 30, 2016

Property and Equipment	\$ 30,580
Information Technology Infrastructure	683,767
Total Information Technology Expenses	\$ 714,347

Schedule of Investment Expenses

The schedule below shows the investment expenses for the generation of investment income during the reporting period.

SCHEDULE OF INVESTMENT EXPENSES

For the Fiscal Year Ended June 30, 2016

Investment Management Fees (by Asset Class)

Equity	\$	5,909,782
Fixed Income		2,624,191
Alternatives		7,574,137
Risk Parity		963,317
Inflation Hedge		3,569,299
Cash		150,647
Total Investment Management Fees		20,791,373

Other Investment Expenses

Investment Consultant		450,000
Actuarial Consulting		90,000
Master Custodian		325,316
Other Professional Services		23,036
Total Other Investment Expenses		888,352

Other Investment Related Expense 10,399,645

Interest Paid on Prepaid Contribution 2,709,839

Total Investment Expenses \$ 34,789,209

Schedule of Payments to Consultants (for fees paid to outside professionals other than investment advisors)

The schedule of payments to consultants provides information on fees paid to outside professionals other than investment advisors (itemized by individual or firm). Fees paid to investment professionals can be found in the investment section of this report.

SCHEDULE OF PAYMENTS TO CONSULTANTS (OTHER THAN INVESTMENT ADVISORS)

For the Fiscal Year Ended June 30, 2016

CUSTODIAN SERVICES

Northern Trust Corporation \$ 325,316

ACTUARIAL CONSULTANT EXPENSE

Milliman, and Segal Consulting 90,000

AUDIT SERVICES ⁽¹⁾

Brown Armstrong Accountancy Corporation 50,401

OTHER PROFESSIONAL FEES

eVestment 23,036

Total Payment to Consultants \$488,753

⁽¹⁾ Audit fees were included in administrative expenses whereas remaining items were reported under investment expenses.

NOTES TO THE OTHER SUPPLEMENTARY INFORMATION

Administrative Services Budget

The passage of Assembly Bill 609 in October 2010 changed the County Employees' Retirement Law of 1937's (the CERL) system administration expense limit from 23 basis points of total assets to 21 basis points of Accrued Actuarial Liabilities.

Information Technology Budget

Pursuant to the CERL, expenses for computer software, computer hardware, and computer technology consulting services in support of these computer products shall not be considered a cost of administration of the retirement system. SamCERA's information technology expenses are separately accounted for since fiscal year 2011-12.

Professional Services Budget

SamCERA's professional services budget is funded by investment earnings or SamCERA's assets as prescribed by Government Code §31596.1 below.

Government Code §31596.1 states that "The expenses of investing its moneys shall be borne solely by the system. The following types of expenses shall not be considered a cost of administration of the retirement system, but shall be considered a reduction in earnings from those investments or a charge against the assets of the retirement system as determined by the board:

- (a) The costs, as approved by the board, of actuarial valuations and services rendered pursuant to §31453.
- (b) The compensation of any bank or trust company performing custodial services.
- (c) When an investment is made in deeds of trust and mortgages, the fees stipulated in any agreement entered into with a bank or mortgage service company to service such deeds of trust and mortgages.
- (d) Any fees stipulated in an agreement entered into with investment counsel for consulting or management services in connection with the administration of the board's investment program, including the system's participation in any form of investment pools managed by a third party or parties.
- (e) The compensation to an attorney for services rendered pursuant to §31607 or legal representation rendered pursuant to §31529.1."

OTHER INFORMATION

SCHEDULE OF EMPLOYER PENSION AMOUNTS ALLOCATED BY COST SHARING PLAN (GASB STATEMENT NO. 68)

Employer	Deferred Outflows of Resources			Deferred Inflows of Resources			Pension Expense Excluding that Attributable to Employer-Paid Member Contributions				
	Net Pension Liability	Differences Between Expected and Actual Economic Experience	Net Differences Between Projected and Actual Investment Earnings	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Assumptions	Differences Between Expected and Actual Economic Experience	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Assumptions					
County of San Mateo	\$685,811,879	\$ 43,003,948	\$151,105,633	\$ 80,413,595	\$ 2,443,405	\$ 12,091,098	\$ 124,457,289	\$ 898,302	\$ 125,355,591		
San Mateo County Superior Court	24,661,288	1,546,390	5,433,647	2,891,613	-	434,787	-	3,158,790	(1,220,555)	3,254,837	
San Mateo County Mosquito & Vector Control District	2,280,813	143,019	502,534	267,432	1,247,591	40,212	-	-	413,909	322,253	736,162
Total		\$44,693,357	\$ 83,572,640	\$ 3,690,996	\$288,998,807	\$ 12,566,097	\$ 3,690,996	\$ 16,257,093	\$ 129,346,590	\$ 1,293,466,590	

SCHEDULE OF COST SHARING EMPLOYER ALLOCATIONS (GASB STATEMENT NO. 68)

Employer	Fiscal Year Ended June 30, 2016			Net Pension Liability
	Actual Employer Contributions	Actuarially Determined Contributions	Employer Allocation Percentage ⁽¹⁾	
County of San Mateo	\$ 183,155,682	\$ 163,617,682	96.22%	\$ 685,811,879
San Mateo County Superior Court	5,883,993	5,883,993	3.46%	24,661,288
San Mateo County Mosquito & Vector Control District	2,054,813	544,384	0.32%	2,280,813
Total	\$ 191,094,488	\$ 170,046,059	100.00%	\$ 712,753,980

Employer	Fiscal Year Ended June 30, 2015			Net Pension Liability
	Actual Employer Contributions	Actuarially Determined Contributions	Employer Allocation Percentage ⁽¹⁾	
County of San Mateo	\$ 174,263,295	\$ 163,373,185	96.21%	\$ 473,318,100
San Mateo County Superior Court	5,914,688	5,914,688	3.48%	17,120,330
San Mateo County Mosquito & Vector Control District	526,297	526,297	0.31%	1,525,087
Total	\$ 180,704,280	\$ 169,814,170	100.00%	\$ 491,963,517

Employer	Fiscal Year Ended June 30, 2014			Net Pension Liability
	Actual Employer Contributions	Actuarially Determined Contributions	Employer Allocation Percentage ⁽¹⁾	
County of San Mateo	\$ 196,708,770	\$ 146,708,770	95.97%	\$ 395,057,883
San Mateo County Superior Court	5,704,224	5,704,224	3.73%	15,354,443
San Mateo County Mosquito & Vector Control District	464,368	464,368	0.30%	1,234,942
Total	\$ 202,877,362	\$ 152,877,362	100.00%	\$ 411,647,268

⁽¹⁾ Employer allocation percentage is based on statutory (actuarially determined) contributions.

NOTES TO THE OTHER INFORMATION

Basis of Presentation and Basis of Accounting

Employers participating in SamCERA are required to report pension information in their financial statements for fiscal periods beginning on or after June 15, 2014, in accordance with Governmental Accounting

Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions - an Amendment of GASB Statement No. 27*. The Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan and Schedule of Cost Sharing Employer Allocations, along with SamCERA's audited financial statements, the GASB Statement No. 67 Actuarial Valuation as of June 30, 2016, and the GASB Statement No. 68

Actuarial Valuation Based on a June 30, 2016 Measurement Date for Employer Reporting as of June 30, 2017, prepared by SamCERA's independent actuary, provide the required information for financial reporting related to SamCERA that employers may use in their financial statements.

The accompanying schedule was prepared by SamCERA's independent actuary and was derived from information provided by SamCERA in accordance with accounting principles generally accepted in the United States of America as applicable to governmental organizations.

Use of Estimates in the Preparation of the Schedules

The preparation of these schedules in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain amounts and disclosures. Actual results could differ from those estimates.

Amortization of Deferred Outflows and Deferred Inflows of Resources

The difference between projected and actual investment earnings on pension plan investments is amortized over 5 years on a straight-line basis. One-fifth was recognized in pension expense during the measurement period, and the remaining difference between projected and actual investment earnings on pension plan investments at June 30, 2016, is to be amortized over the remaining periods.

The changes in assumptions and differences between expected and actual experience are recognized over the average of the expected

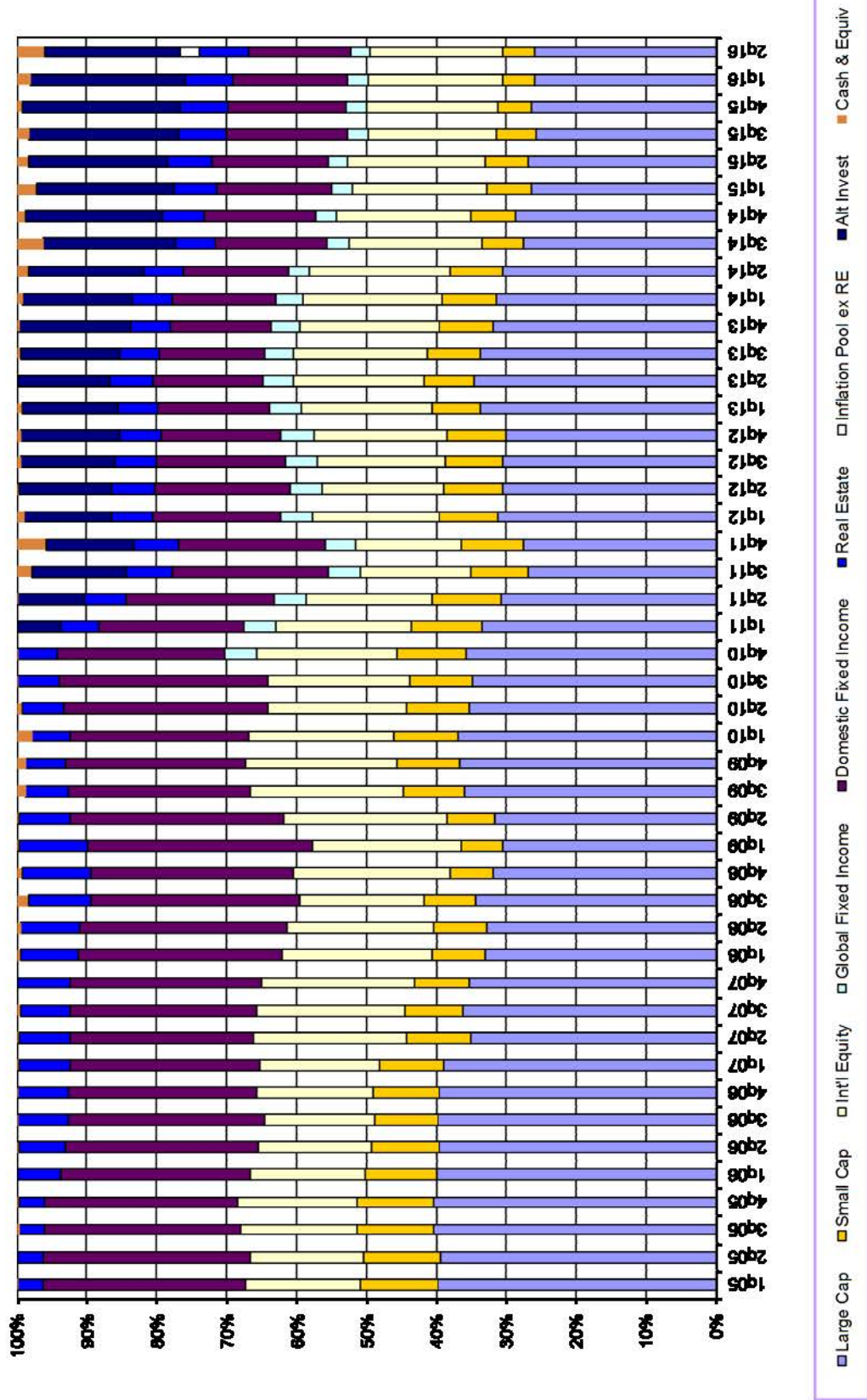
remaining service lives of all employees that are provided with pensions through SamCERA (active and inactive employees) determined as of June 30, 2015 (the beginning of the measurement period ending June 30, 2016) and is 5 years. Prior period changes of assumptions and differences between expected and actual experience are continued to be recognized based on the expected remaining service lives of all employees calculated as of those prior measurement dates.

In addition, the net effect of the change in the employer's proportionate share of the collective net pension liability and collective deferred outflows of resources and deferred inflows of resources is also recognized over the average expected remain service lives of all employees noted above. The difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ending on June 30, 2016 is recognized over the same period as noted above. The Schedule of Pension Amounts by Employer does not reflect contributions made to SamCERA subsequent to the measurement date as defined in GASB Statement No. 68 Paragraphs 54, 55, and 57. Appropriate treatment of such amounts is the responsibility of the employers.

INVESTMENT SECTION



ACTUAL HISTORICAL QUARTERLY ASSET ALLOCATION ENDED JUNE 30, 2016



CHIEF INVESTMENT OFFICER'S REPORT



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Michael Coultrip
SamCERA
Chief Investment Officer

Board of Retirement
San Mateo County Employees' Retirement Association

Dear Trustees:

On behalf of San Mateo County Employees' Retirement Association's (SamCERA) investment team, I am pleased to report on the pension fund's investments and portfolio performance for the period ended June 30, 2016. This data was compiled by SamCERA's investment staff, its investment consultant, Verus Investments (formerly known as Strategic Investment Solutions), and its custodian bank Northern Trust Corporation. All return figures are presented net of investment management fees and time-weighted, and are calculated by SamCERA's investment consultant, Verus Investments.

Portfolio Performance

The net portfolio market value as of June 30, 2016, increased to \$3.54 billion, as the net combination of contributions (primarily) and net portfolio appreciation (secondarily), less total deductions (i.e. benefits paid, administrative expense, etc.), added approximately \$87 million to the pension fund.

SamCERA's portfolio returned 0.7% net of investment management fees (1.0% before deducting for investment management fees) for the fiscal year ended June 30, 2016, underperforming SamCERA's policy benchmark return

by 30 basis points (0.30%). While slightly trailing SamCERA's policy benchmark, these fiscal-year results are strong relative to SamCERA's peers, and are above median among large (greater than \$1 billion in assets) public pension plans.

Three of SamCERA's asset class composites were positive on the year. For the second year running, real estate was SamCERA's best performing asset class composite this fiscal year, up 11 percent. The strong performance was a continuation from the last few years as investors, thirsty for yield generating assets, continued to push up commercial property market prices, especially in high-quality core assets for prime locations in gateway cities. Risk parity (up 5.7%) and fixed income (up 2.4%) were also positive contributors to the fund's absolute performance. Two composites were flat to slightly negative, with domestic equity up 0.7%, and alternatives down 0.7%. One composite was moderately negative, with international equity down 6.8%.

Market Review

As was the case last year, the absolute level of returns disappointed this current fiscal year. Overall volatility of returns was much higher across global stock, bond, currency, and commodity markets this year as the global markets dealt with a myriad of concerns throughout the year, including global growth concerns, falling commodity prices, concerns of a hard landing in China, financial repression from negative interest rates in Japan and parts of the European Union, continued heightened geopolitical concerns, and the fallout from the Brexit vote in the U.K.

Similar to last year, U.S. equities generally provided better returns, albeit at lower levels compared to last year, than most of the major world equity markets, as economic activity in the U.S. was low but generally positive. The Russell 3000 Index, a general broad basket of U.S. stocks, returned 2.1% during the year. However, this positive performance was limited to only large-capitalization companies, as smaller-capitalization companies, as measured by the Russell 2000 Index, were lower by 6.7%. Large-capitalization stocks in the U.S. (as measured by the Russell 1000 Index) were higher by 2.9%. Given the concerns over future growth prospects, higher volatility, and suppressed interest rates, defensive and "bond proxy" sectors generally performed extremely well, with utilities, telecommunications, and consumer staples all higher by over 15%, while more cyclical sectors were generally negative on the year (energy, financials, materials).

While the broad U.S. equity market (as measured by the Russell 3000 Index) was up 2.1% on the year, the broad developed international equity market and emerging equity market, as measured by the Morgan Stanley Capital Investment Europe, Australasia, and Far East Index (MSCI EAFE) and MSCI Emerging Markets Index, were down 10.2% and 12.1%, respectively, as these markets felt the full brunt of the global growth concerns and heightened geopolitical concerns. In addition, commodities, as measured by the Bloomberg Commodity Index, were down 13.3%.

The global bond market rallied given the global growth and geopolitical concerns previously discussed. Given this backdrop, U.S. interest rates generally decreased over the year (providing positive performance - as

lower rates generally result in higher bond prices), except at the short-end of the yield curve. In essence, the yield curve flattened with slightly higher near-term rates, but much lower longer-term rates. Most major bond indices had various levels of positive performance on the year, with longer-maturity bonds outperforming shorter-maturity bonds.

With this as a backdrop, SamCERA continues to focus on balancing risk and further diversifies the portfolio. Even though broad diversification away from large-capitalization U.S. equities and U.S. Government bonds negatively impacted the portfolio this past year, we remain steadfast in the long-term benefits of diversifying the portfolio across fixed income credit, international equity, emerging markets (stocks and bonds), and inflation-sensitive assets. Going forward, we expect this additional diversification will help the portfolio balance out the potential risks over the longer-term.

Portfolio Changes

During the year, SamCERA tweaked its asset allocation policy by modestly reducing public equity exposure by a total of 3%, and reallocating 1% each to Opportunistic Credit, Real Estate, and Hedge Fund/Absolute Return. These minor changes are expected to modestly decrease equity risk while slightly rebalancing towards yield and absolute return. SamCERA implemented this new asset allocation by investing in three new strategies: 1) committing \$35 million to a direct lending manager, 2) committing \$30 million to a value-add real estate manager, and 3) investing \$35 million with a multi-strategy absolute return manager.

In addition to the asset allocation changes above, towards the end of the fiscal year SamCERA changed the makeup of its asset class composites by forming a new “Inflation Hedge” category. SamCERA had inflation assets sprinkled across its portfolio in fixed income, alternatives, and real estate. Forming a dedicated Inflation Hedge category allows SamCERA to better manage the plan and monitor its inflation exposures in one place. The Inflation Hedge composite was formed by renaming Real Estate and certain sub-asset classes under “Inflation Hedge,” such as TIPs from fixed income, and adding commodities, private real assets, and two energy-related private equity funds from alternatives. Please refer to page 47 to see SamCERA’s current asset allocation policy breakdown along the new asset class composites.

Subsequent to fiscal-year end, SamCERA’s Board of Retirement (the Board) approved a new liquid real asset pool strategy as part of the Inflation Hedge category. It will be funded from SamCERA’s commodity allocation, and be a passive allocation to commodities, natural resource listed equities, and infrastructure listed equities.

For the year, SamCERA made commitments to one new private equity partnership, totaling \$10 million. This brings the total commitments for the private equity program to \$313.5 million across venture capital, buyouts, and special situations.

SamCERA also made commitments worth \$40 million to two new partnerships in its private real asset category, bringing the total commitments to \$100 million.

During the year, the plan maintained its asset allocation discipline by continuing to actively rebalance the portfolio to its long-term policy asset allocation portfolio weights. Asset allocation and risk diversification continue to be of primary focus as the plan navigates the market volatility going forward.

Respectfully Submitted,

A handwritten signature in blue ink that reads "Michael R. Coultrip". The signature is written in a cursive, flowing style.

Michael Coultrip
Chief Investment Officer
October 18, 2016

INVESTMENT CONSULTANT'S REPORT ON INVESTMENT ACTIVITIES



October 18, 2016

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

Dear Board Members:

Fiscal year 2016 ended June 30 was a period marked by volatility throughout the year, despite flat returns for U.S. pension plans for the fiscal year end masking the volatility. The fiscal year was characterized by the outperformance of U.S. financial markets relative to the rest of the world. U.S. equity markets were resilient and managed positive returns, while international developed and emerging markets experienced significant losses. Concerns over slowing global growth and the uncertainty of central bank stimulus contributed to a volatile global equity market. The U.S. fixed income market saw positive returns as yields fell significantly, despite the Fed raising interest rates 25 basis points in December. The yield curve also flattened dramatically over the period and long duration strategies enjoyed strong performance. Additional interest rate increases were put on hold as the Fed continued to assess global growth concerns, the health of the labor market, and low inflation expectations.

Meanwhile, the European Central Bank and Bank of Japan continued to pursue aggressive monetary stimulus programs to combat anemic growth and low inflation. Both central banks expanded their asset purchase programs in addition to implementing a negative interest rate policy that charges commercial banks a fee on excess deposits. These monetary stimulus programs helped suppress international sovereign bond yields to all-time lows, including a large portion of bonds that trade at negative yields. The fiscal year ended with the surprise outcome of the United Kingdom voting to leave the European Union. The decision initially jolted global financial markets, but they mostly recovered shortly after.

The U.S. equity market (Russell 3000) returned a modest 2.1% during the fiscal year. Large cap equities (Russell 1000) greatly outperformed small cap equities (Russell 2000) as the benchmarks returned 2.9% and -6.7%, respectively. Style tilts in the large cap space performed similarly. The Russell 1000 Growth returned 3.0% and the Russell 1000 Value returned 2.9%. International equities underperformed in both developed and emerging markets. Developed equities as measured by the Morgan Stanley Capital International Europe, Australasia and Far East Index (MSCI EAFE) returned -10.2%, while emerging equities as measured by the Morgan Stanley Capital International Emerging



Markets Index (MSCI EM) returned -12.1%. In the fixed income market, the Barclays Aggregate index returned 6.0%.

PLAN INVESTMENT RESULTS

The San Mateo County Employees' Retirement Association's (SamCERA) total Plan returned 0.7% net of fees for the fiscal year ended 2016. The total Plan slightly underperformed its policy index which returned 1.0% for this time period. For the fiscal year, the total Plan ranked in the top 26th percentile for Public Fund Defined Benefit Plans greater than \$1 billion.

The U.S. Equity portfolio underperformed its U.S. equity policy benchmark by 40 basis points during the fiscal year net of fees (0.7% versus 1.1% respectively), which placed it in the 45th percentile of the universe. Within the U.S. Equity asset class, the large cap managers as a group slightly underperformed the Russell 1000 Index by 30 basis points. The Small Cap composite returned -8.2% versus the Russell 2000 Index at -6.7%). The Small Cap portfolio was recently restructured, which resulted in changes to the manager line up (see asset allocation and manager structure section for more details).

During the fiscal year, the International Equity Composite beat its benchmark on a relative basis by 2.4%, returning -6.8% net of fees compared to -9.2% for the Morgan Stanley Capital International ex-United States Investable Market Indexes (MSCI ACWI ex-US IMI); this result ranked in the 13th percentile of the peer universe. All of the Association's International managers outperformed their respective benchmarks on a relative basis during the fiscal year. Baillie Gifford and Mondrian were the two largest contributors to performance on a relative basis.

During fiscal year 2016, the Plan's Total Fixed Income Composite net return of 2.4% lagged its Blended Fixed Income benchmark return of 5.8%. The opportunistic credit and global fixed income components of the portfolio were the biggest detractors from returns in the fixed income portfolio. Angelo Gordon's Opportunistic Whole Loan (OWL) Fund owns some loans that are underperforming relative to expectations and has reduced the fund's return expectations. Brigade's Opportunistic Credit strategy lagged over the past fiscal year because of its early exposure to retail lower-rated credit. SamCERA's global bond manager Franklin Templeton underperformed due to its short duration positioning and emerging markets debt exposure.

After several years of lackluster performance, SamCERA's Risk Parity component of the portfolio outperformed its benchmark (5.7% net of fees versus 3.9% for the 60% Russell 3000/40% Barclays Aggregate blended benchmark). PanAgora outperformed the benchmark by a full 8% for the fiscal year.

SamCERA's Alternatives portfolio, comprised of Private Equity and Absolute Return strategies, slightly underperformed for the year ended June 30, 2016 (-0.7% versus -0.5% for the composite benchmark). After several years of strong outperformance, the Private Equity portfolio trailed the Russell 3000 + 3% Index because of its energy exposure, primarily through Sheridan. The Absolute Return composite



was up 6.9% compared to 4.3% for London Interbank Offered Rate (LIBOR) + 4%, ranking in the 1st percentile among its peer group.

Over the fiscal year, SamCERA's Real Estate component provided a strong absolute return of 11%, slightly shy of the National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity (NCREIF ODCE) Index (11.8%). Private Real Assets provided returns meaningfully above Consumer Price Index (CPI) + 5%. The Plan's Commodities manager SSARIS closed in May with assets reallocated to a broader inflation pool.


ASSET ALLOCATION AND MANAGER STRUCTURE

SamCERA has added a broader liquid pool mandate with State Street Global Advisors (SSGA), comprised of 1/3 Commodities/1/3 Natural Resources/1/3 Infrastructure, to replace its dedicated Commodities manager. The liquid pool is a better proxy to real assets, and has a more favorable expected return for the risk assumed than commodities alone. Two small cap managers (The Boston Company and Chartwell) were replaced recently with one core style manager Quantitative Management Associates (QMA) to simplify the manager line up and reduce tracking error in small cap. SamCERA continues to build out its private markets and real assets portfolios.

SamCERA is currently reviewing its asset allocation as part of an asset-liability study that utilizes a recently reduced assumed return of 7.0%. The incremental reduction of equity beta risk and an increased recognition of inflation risk to the portfolio are elements of the study. The Plan will continue to seek to diversify its risks in order to produce the highest possible returns in a cost effective and prudent manner.

In summary, SamCERA continues to take advantage of investment opportunities as they evolve, while adhering to a well thought out strategic plan. Verus believes that SamCERA has constructed a diversified portfolio that will continue to serve its participants well.

Sincerely,


Margaret S. Jadallah

NOTE: Returns for periods greater than one year are annualized. Monthly return calculations are time-weighted, and market value based. The performance calculation methodology is consistent with the Chartered Financial Analyst Institute (CFAI) Global Investment Performance Standards®.

INVESTMENT PHILOSOPHY, OBJECTIVES, AND POLICY

SamCERA's Investment Policy sets forth the Board of Retirement's (the Board) investment philosophy, from which the following extracts have been drawn. The full policy may be viewed on SamCERA's website at www.samcera.org.

Investment Beliefs

The following summarizes the Board's investment beliefs that have guided it in the development of the Investment Policy and will guide the Board 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.
- 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.

Investment Objectives

The Board shall develop an investment program, consistent with the Investment Beliefs and General Investment Policies 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 of the Investment Policy) on a net-of-fee basis over five-year rolling periods.
- B. Move toward full actuarial funding of the Pension Benefit Obligation based on Governmental Accounting Standards Board (GASB) Statement No. 25 and the Board's policy of layered fifteen-year unfunded actuarial accrued liability (UAAL) amortization periods.
- C. 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).
- D. 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.

Investment Policy

The Investment Policy of the Board of Retirement pursues an investment strategy which reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes.

Consistent with the Investment Beliefs, the Board's investment policy is to:

- A. Achieve long-term risk-adjusted returns consistent with its fiduciary duty.

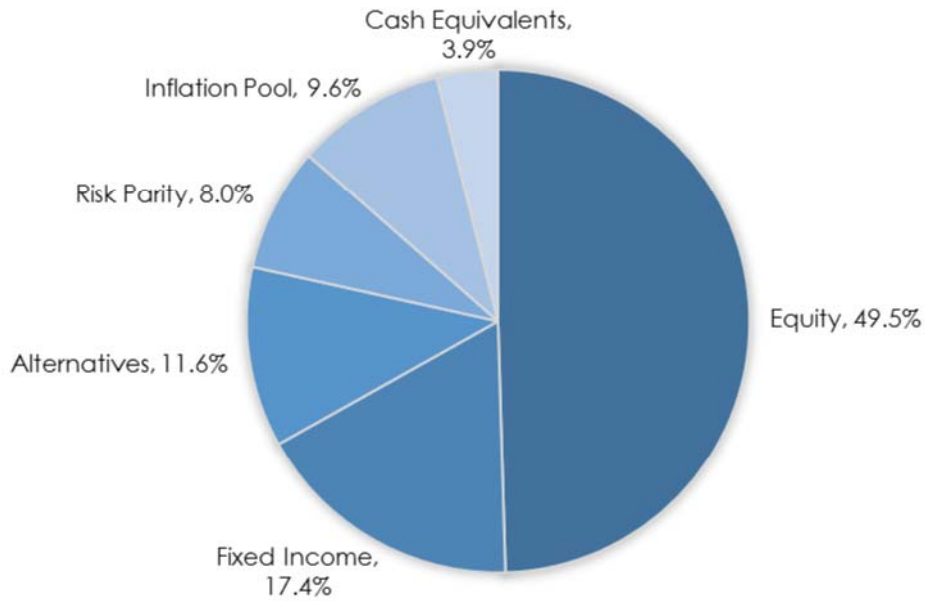
- B. Pursue an investment strategy that reduces the volatility of returns through prudent diversification of the investment portfolio across a broad selection of distinct asset classes, as provided for in Section 6.0 of the Investment Policy.
- C. Further diversify other risks, including extreme events, 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 of the Investment Policy, and reevaluate on an annual basis.
- E. Reevaluate the asset-liability study every three to five years.
- F. 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).
- G. Adopt objectives that encourage investment managers to maximize their performance, within acceptable risk parameters, relative to their individual investment style benchmark.
- H. Refrain from drastically shifting asset class allocations over short time spans, unless it is in the Fund's best interest to do so.
- I. Rebalance the portfolio in accordance to the Rebalancing Policy set forth in Section 7.0 of the Investment Policy.

ASSET ALLOCATION

ASSET ALLOCATION AS A PERCENTAGE OF FAIR VALUE (JUNE 30, 2016)

ASSET CLASS	Target	Actual
Equity	48.0%	49.5%
Fixed Income	18.0%	17.4%
Alternatives	12.0%	11.6%
Risk Parity	8.0%	8.0%
Inflation Hedge	14.0%	9.6%
Cash Equivalents	0.0%	3.9%
Total	100.0%	100.0%

ACTUAL ASSET ALLOCATION (JUNE 30, 2016)



ASSETS UNDER MANAGEMENT (JUNE 30, 2016)

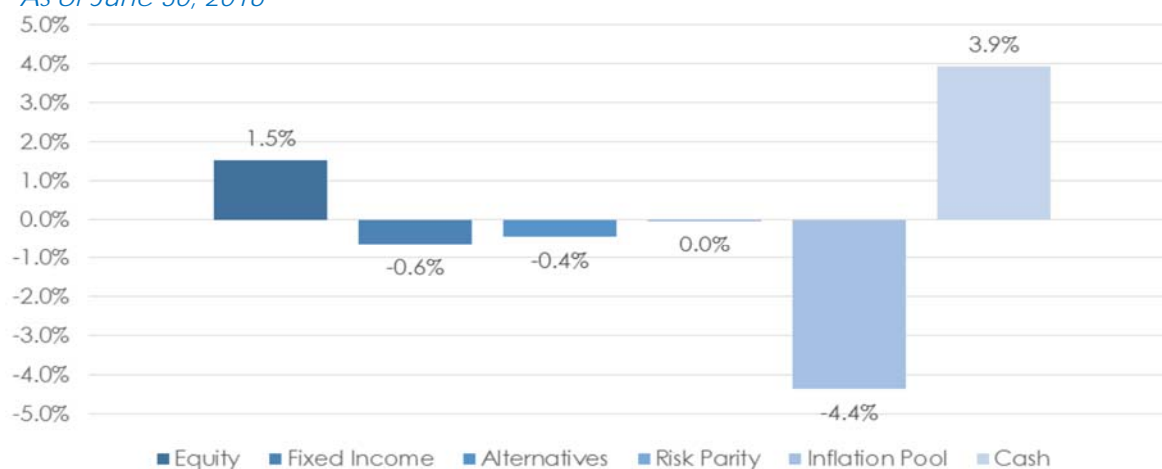
ASSET CLASS	Assets Under Management
Equity	\$ 1,723,373,856
Fixed Income	610,607,729
Alternatives	404,376,940
Risk Parity	280,336,352
Inflation Hedge	349,680,120
Total Net Portfolio Value	<u>\$ 3,368,374,997</u>

RECONCILIATION TO STATEMENT OF FIDUCIARY NET POSITION

Total Net Portfolio Value	\$ 3,368,374,997
Cash Equivalents	244,723,779
Investments receivable	22,635,357
Prepaid Expense	7,669
Net Capital Assets	5,162,123
Investment and other payables	<u>(99,515,428)</u>
Fiduciary Net Position as of June 30, 2016	<u>\$ 3,541,388,497</u>

PERCENT OF DEVIATION FROM ASSET ALLOCATION

As of June 30, 2016



BENCHMARKS (JUNE 30, 2016)

Asset Class

EQUITY BENCHMARK

Domestic Equity Benchmark
International Equity Benchmark

Policy Benchmark

50% Russell 1000, 41.7% Morgan Stanley Capital International ex-United States Investable Market Indexes (MSCI ex-US IMI), 8.3% Russell 2000

85.7% Russell 1000, 14.3% Russell 2000
MSCI ACWI ex US IMI

FIXED INCOME BENCHMARK

Domestic Fixed Income Benchmark
Global Fixed Income Benchmark

55.5% Barclays Aggregate (BA), 27.8% BA Intermediate High Yield (HY), 16.7% Barclays Multiverse

66.7% Barclays Aggregate, 33.3% BA Intermediate HY
Barclays Multiverse

ALTERNATIVES BENCHMARK

Private Equity Benchmark
Hedge Funds/Absolute Return Benchmark

58.3% Russell 3000 + 3%, 41.7% London Interbank Offered Rate (LIBOR) + 4%

Russell 3000 + 3%
LIBOR + 4%

RISK PARITY BENCHMARK

60% Russell 3000, 40% Barclays Aggregate

INFLATION HEDGE BENCHMARK

Real Estate Benchmark
Private Real Asset Benchmark
Liquid Pool Benchmark

50% National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity (NCREIF ODCE), 21.4% Bloomberg Commodity, 14.3% Consumer Price Index (CPI) + 5%, 14.3% Barclays Treasury Inflation Protected Securities (TIPS)

NCREIF ODCE
CPI + 5%
60% Bloomberg Commodities, 40% Barclays TIPS

CASH EQUIVALENTS BENCHMARK

91-day Treasury-Bills

SCHEDULE OF PORTFOLIO RETURNS

Performance as of June 30, 2016, Net of Fees

Asset Class	Total Time Weighted Rate of Return		
	One Year	Three Years	Five Years
EQUITY	-2.20%	7.40%	7.40%
Equity Benchmark	-3.20%	7.20%	7.30%
Domestic Equity	0.70%	10.10%	10.50%
Domestic Equity Benchmark	1.10%	10.70%	11.20%
International Equity	-6.80%	2.70%	1.30%
International Equity Benchmark	-9.20%	2.00%	0.80%
FIXED INCOME	2.40%	3.40%	4.30%
Fixed Income Benchmark	5.80%	3.80%	3.50%
Domestic Fixed Income	3.50%	3.90%	4.60%
Domestic Fixed Income Benchmark	5.30%	3.90%	3.90%
Global Fixed Income	-3.40%	0.60%	2.60%
Global Fixed Income Benchmark	8.60%	2.80%	1.90%
ALTERNATIVES	-0.70%	5.40%	4.10%
Alternatives Benchmark	-0.30%	5.70%	6.50%
Private Equity	3.50%	15.60%	9.70%
Private Equity Benchmark	5.10%	14.10%	14.60%
Hedge Funds/Absolute Return	6.90%	6.70%	5.00%
Hedge Funds/Absolute Return Benchmark	4.30%	4.20%	4.20%
RISK PARITY	5.70%	7.30%	5.90%
Risk Parity Benchmark	3.90%	8.40%	8.60%
INFLATION HEDGE (1)	*	*	*
Inflation Hedge Benchmark	*	*	*
Real Estate (2)	11.00%	12.50%	11.80%
Real Estate Benchmark	11.80%	13.00%	12.70%
Private Real Asset (3)	38.50%	*	*
Private Real Asset Benchmark	6.40%	*	*
Liquid Pool (4)	*	*	*
Liquid Pool Benchmark	*	*	*
CASH EQUIVALENTS	1.40%	0.80%	0.70%
Cash Equivalents Benchmark			
TOTAL	0.70%	7.00%	6.70%
Policy Benchmark	1.00%	7.00%	7.00%

(1) The creation of a dedicated Inflation Hedge asset class was effective April 1, 2016.

(2) Prior to April 1, 2016, Real Estate assets were allocated to SamCERA's allocation to a dedicated Real Estate asset class.

(3) Prior to April 1, 2016, Private Real Assets were allocated as part SamCERA's allocation to Alternatives.

(4) The creation of a dedicated Inflation Pool was effective April 1, 2016.

*Return information is not available.

Return calculations were prepared using a time-weighted rate of return, net of fees, in accordance with the Global Investment Performance Standards.

SCHEDULE OF TOP TEN EQUITIES AND FIXED INCOME SECURITIES

As of June 30, 2016

Top 10 Equity Securities ⁽¹⁾

Shares	Company Name	Ticker	Stock Exchange	Fair Value
171,401	UNILEVER PLC ORD GBP0.031111	ULVR	London	\$ 8,200,521
104,302	NESTLE SA CHF0.10 (REGD)	NESN	Swiss Exchange	8,045,879
508,235	UTD O/S BANK NPV	UOVEY	Singapore	6,955,709
66,141	COCHLEAR LTD NPV	COH	Australia	5,971,391
71,571	SALESFORCE COM INC COM STK	CRM	New York	5,683,453
106,012	NOVO-NORDISK AS DKK0.2 SER'B'	NOVOB	Copenhagen	5,668,812
259,277	GLAXOSMITHKLINE ORD GBP0.25	GSK	London	5,561,221
7,342	AMAZON COM INC	AMZN	NASDAQ	5,254,082
267,226	ABB LTD CHF0.12 (REGD)	ABBN	Swiss Exchange	5,244,674
747,215	IBERDROLA SA EUR0.75	IBE	Madrid	5,052,931
Total Top 10 Equities				\$ 61,638,673

⁽¹⁾ Securities owned in commingled vehicles are not included in this schedule. A complete list of portfolio holdings is available upon request.

Top 10 Fixed Income Securities ⁽¹⁾

Security	Coupon	S&P Rating	Maturity	Fair Value
US Treasury Note	0.125	AA+	1/15/2022	\$ 11,833,024
US Treasury Bond	1.750	AA+	1/15/2028	7,929,709
US Treasury Note	0.125	AA+	1/15/2023	6,842,696
US Treasury Bond	2.375	AA+	1/15/2025	6,334,011
US Treasury Note	1.250	AA+	7/15/2020	6,040,908
US Treasury Note	0.125	AA+	7/15/2022	5,797,182
US Treasury Note	0.250	AA+	1/15/2025	5,588,356
US Treasury Bond	1.375	AA+	2/15/2044	5,013,297
US Treasury Note	0.125	AA+	4/15/2018	3,728,358
US Treasury Bond	1.010	AA+	2/15/2046	2,981,064
Total Top 10 Fixed Income				\$ 62,088,605

⁽¹⁾ Securities owned in commingled vehicles are not included in this schedule. A complete list of portfolio holdings is available upon request.

SCHEDULE OF PROFESSIONAL SERVICES AND FEES

For the Fiscal Years Ended June 30

	2016	2015
INVESTMENT MANAGEMENT FEES		
Equity	\$ 5,909,782	\$ 6,830,128
Fixed Income	2,624,191	4,134,652
Alternatives	7,574,137	6,113,253
Risk Parity	963,317	1,000,164
Inflation Hedge	3,569,299	1,587,447
Cash	150,647	166,657
Total Investment Management Fees	\$ 20,791,373	\$ 19,832,301
OTHER INVESTMENT EXPENSES		
Investment Consultant	\$ 450,000	\$ 444,597
Actuarial Consulting	90,000	217,102
Master Custodian	325,316	311,990
Other Professional Services	23,036	18,130
Total Other Investment Expenses	\$ 888,352	\$ 991,819

TOP 10 BROKER COMMISSIONS

Commission per Share Traded, For the Fiscal Year Ended June 30, 2016

Brokerage Firm	Commission	Number of Shares Traded	Commission per share
Liquidnet Inc	\$ 78,252	2,215,360	\$ 0.04
Goldman Sachs & Company	44,770	2,703,312	0.02
Abel Noser Corp	39,232	1,036,945	0.04
JP Morgan Securities LLC 57079	28,194	805,157	0.04
Raymond James	18,114	469,917	0.04
Stifel Nicolaus and Company	17,602	471,651	0.04
Instinet	16,619	589,872	0.03
Merrill Lynch Pierce Fenner & Smith	14,596	739,531	0.02
Jefferies & Company	13,997	476,495	0.03
RBC Dain Rauscher	13,129	370,618	0.04
All Other Brokerage Firms	219,415	565,215,178	0.01
Total	\$ 503,920	575,094,036	\$ 0.01

ACTUARIAL SECTION





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October 18, 2016

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

Dear Members of the Board:

SamCERA's basic financial goal is to establish contributions which fully fund the System's liabilities and which, as a percentage of payroll, remain level for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

SamCERA measures its funded status as the ratio of the actuarial value of valuation assets over the actuarial accrued liabilities. The funded status based on the past three actuarial valuations is shown below:

Valuation Date	Funded Ratio
June 30, 2014	78.8%
June 30, 2015	82.6%
June 30, 2016	83.1%

The funded ratio increased in the last year primarily due to contributions in excess of the value of benefits, although this was mostly offset by changes in the economic assumptions effective June 30, 2016 and recognition of a net asset loss under the asset smoothing method.

It is our opinion that SamCERA continues in sound financial condition as of June 30, 2016 and will continue to remain in sound financial condition provided that employer contributions are made based on the current funding policy and the valuation is based on reasonable assumptions. To be in a "sound financial condition," we believe the plan should be projected to reach or exceed a 100% funded ratio in 30 years or less. SamCERA meets this criteria. Under SamCERA's funding policy, the employer's contributions are set equal to the net employer normal cost rate plus the amortization payment of any Unfunded Actuarial Accrued Liability (UAAL). The amortization of the initial UAAL as of June 30, 2008 is funded over a closed 15-year period ending June 30, 2023. The amortization of any subsequent changes in the UAAL is funded over separate closed 15-year layers which are determined annually. It should be noted that the 2016 valuation results defer a net market loss on assets. Thus, the funded ratio is expected to be lower once those market losses are reflected in the 2017 and later valuations, assuming future investment earnings are equal to the assumed rate. However, it is the County's intent to make contributions in excess of those required under the funding policy. This, combined with SamCERA's short amortization period, is expected to increase the funded status in the future.

The June 30, 2016 valuation results are based on the membership data and the asset information provided by SamCERA. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

The valuation is also based on our understanding of SamCERA's current benefit provisions and the actuarial assumptions which were reviewed and adopted by the Board. The actuarial assumptions were last reviewed and adopted by the Board in 2016. New economic assumptions for funding purposes were adopted in June 2016. Demographic assumptions were adopted in July 2014, based on the triennial investigation of experience study report as of April 30, 2014 and re-adopted in June 2015 and June 2016. The assumptions and methods used for financial reporting under GASB 67 are the same as the funding assumptions and methods with the following exceptions:

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

Offices in Principal Cities Worldwide



Board of Retirement
October 18, 2016
Page 2

1. The discount rate and investment return assumption of 7.20% differs from the funding valuation due to the addition of an administrative expense load of 0.20%.
2. The asset valuation method is fair market value.

The actuarial computations presented in the valuation report are for purposes of determining the recommended funding amounts for SamCERA consistent with our understanding of its funding requirements and goals. The liabilities are determined by using the entry age normal funding method. The actuarial assets are determined by using a five-year smoothed recognition method of asset gains and losses, determined as the difference of the actual market value to the expected market value. The actuarial assets are restricted to not vary more than 20% from the market value. We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement No. 67 and No. 68 for fulfilling financial accounting requirements. Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements as presented in the valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Our valuation report and this letter have been prepared exclusively for SamCERA for a specific and limited purpose. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. 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. 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.

Milliman provided the following schedules and exhibits for use in the actuarial section:

1. Rate of separation from actuarial service
2. Employer contribution rates as a percentage of covered payroll
3. Summary of significant actuarial statistics and measures
4. Solvency test
5. Schedule of funding progress
6. History of employer Statutory Contribution Rates
7. Demographic activity of retirees and beneficiaries
8. Actuarial analysis of financial experience
9. Summary of active member valuation data
10. Schedule of average monthly salary of active members
11. Participating employers and active members
12. Summary of retired and inactive member benefits

The consultants who worked on this assignment are pension 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 sponsor. We are not aware of any relationship that would impair the objectivity of our work.

We certify that the June 30, 2016 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Sincerely,

Nick J. Collier, ASA, EA, MAAA
Consulting Actuary
NJC/CJG/nlo

Craig J. Glyde, ASA, EA, MAAA
Consulting Actuary

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ACTUARIAL VALUATION

Introduction

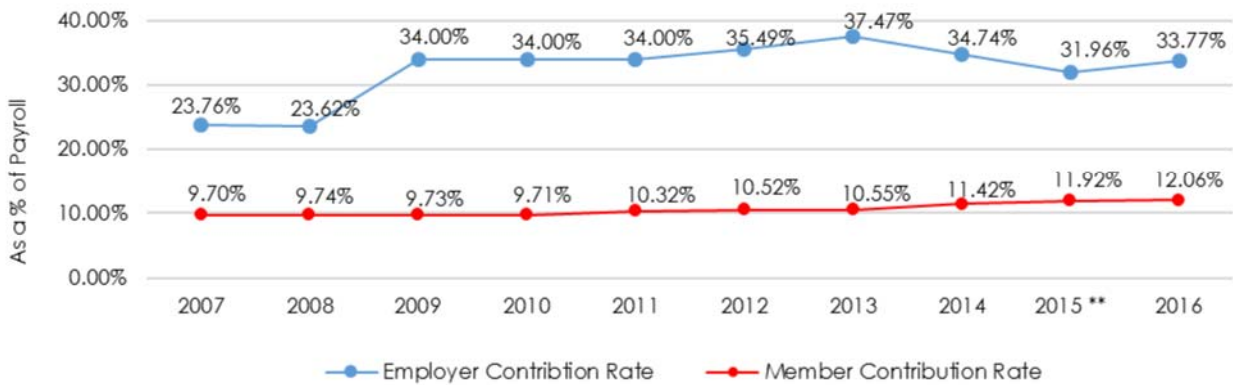
San Mateo County Employees' Retirement Association (SamCERA) provides basic retirement, disability, and death benefits based on a defined formula using final average compensation, years of service, and age of the member to calculate pension benefits. Details of the pension and plan provisions are provided in the Notes to the

Basic Financial Statements (Note 1) in the Financial Section.

The County Employees' Retirement Law of 1937 establishes the basic obligations for employers and members to the pension plan. The Board of Retirement (the Board) is responsible for establishing and maintaining the funding policy by adopting contribution rates recommended by its actuary in accordance with the membership type and the plan in which a member belongs.

EMPLOYER AND MEMBER CONTRIBUTION RATES*

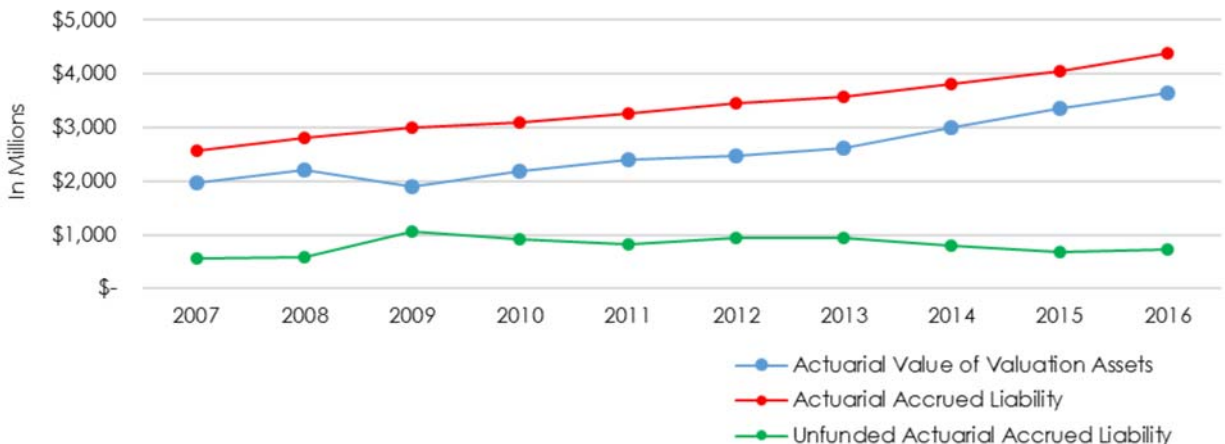
Determined at June 30



* The contribution rates determined as of the valuation date will become effective a year later. For example, the contribution rates determined as of June 30, 2016, will become effective on July 1, 2017.

** The June 30, 2015 Statutory Contribution Rate reflects changes in member rates negotiated subsequent to the 2015 valuation report. The 2015 Statutory Contribution Rate calculated in the 2015 valuation report was 32.35%.

ACTUARIAL VALUATION



Fund Objective

The funding objective is to establish contribution rates which, over time, will remain as a level percentage of payroll. Details for the 10 year schedule of actuarially determined and actual contributions can be found in the Financial Section under the Required Supplementary Information.

Valuation Policy

Each year, SamCERA engages an independent actuarial firm to perform an annual actuarial valuation as of June 30. The actuarial valuation is used to calculate the value of future benefits, assess the funded status, and determine contribution rates for both employers and employees. The contribution rates calculated at each year-end as of June 30 are subject to a “one year” deferral. Thus, the new contribution rates calculated in the valuation at June 30, 2016, will be effective on July 1, 2017. In the actuarial valuation, the actuary applies specific actuarial methods and assumptions to project as closely as possible present contributions to meet future benefit obligations.

Contributions

The members and employers are responsible for contributing to the cost of benefits each year (commonly known as normal cost contributions). The portion not funded by member contributions is the responsibility of the employers (commonly known as the employer normal cost).

The employers are also responsible for funding shortfalls related to accrued liability for past services arising from changes in the economic and non-economic assumptions. The employers’ contribution towards the funding shortfalls is commonly known as the

Unfunded Actuarial Accrued Liability (UAAL) contribution.

Actuarial Cost Method

The entry age normal cost method is selected for the annual actuarial valuation. Under 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 projected compensation between entry age and assumed retirement age. The portion of this actuarial present value allocated to the valuation year is commonly called the normal cost (the actuarial value of benefits accruing for the present year). The portion not provided for at the valuation date represents the UAAL.

The entry age normal cost method is used for both funding and financial reporting purposes. This method was selected for funding purposes because it provides a relatively level normal cost rate as a percentage of pay (assuming no changes in assumptions or benefits) from year to year. In addition, Governmental Accounting Standards Board (GASB) Statement No. 67 requires that this method be used for financial reporting purposes.

Between the funding and financial reporting valuations, the only difference in assumptions is the investment return assumption. The assumed investment return for funding is 7.00%, net of both investment and administrative expense; whereas the assumed investment return for financial reporting is 7.20%, net of investment expenses only. For financial reporting purposes, GASB Statements No. 67 and No. 68 require that the investment return assumption be gross of administrative expenses.

Amortization Method

Contributions are initially applied toward the normal cost. If the plan is less than 100% funded, the remainder is applied toward the UAAL. The UAAL represents the difference between the actuarial accrued liability (AAL) and the actuarial value of assets (AVA). The UAAL is amortized using the “Level Percent of Payroll” amortization method.

The UAAL as of June 30, 2008, is amortized over a closed 15-year period as a level percentage of the projected salaries of present and future members of SamCERA over the remaining period from the valuation date. 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

ACTUARIAL METHODS AND ASSUMPTIONS

VALUATION DATE	June 30, 2016
ACTUARIAL COST METHOD	Entry Age Normal
ACTUARIAL EXPERIENCE STUDY	July 1, 2011 to April 30, 2014
AMORTIZATION METHOD	Level percentage of projected payroll
AMORTIZATION PERIOD	UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers which are determined annually.
ASSET VALUATION METHOD	5-year smoothed recognition of asset gains and losses (determined as the difference of the actual fair value to the expected fair value), which cannot vary more than 20% from the fair value.
ACTUARIAL ASSUMPTIONS	
Economic assumptions:	
Investment rate of return	7.00%
Inflation rate (CPI)	2.75%
General wage increase	3.25%
Cost of living adjustment	2.75% for all members in Plan 1; 2.65% for all members in Plan2; 1.90% for all members in Plans 4, 5, and 7; and 1.90% for all safety and probation members in Plan 6.
Demographic assumptions:	
Salary increases due to service	The total expected increase in salary represents the increase due to promotions and longevity, adjusted for an assumed 3.25% per annum increase in the general wage level of the membership.
Mortality	Rates are primarily based on RP-2000 mortality tables. See the valuation report as of June 30, 2016, for details.
Retirement	See the valuation report as of June 30, 2016, for details.
Disablement	See the valuation report as of June 30, 2016, for details.
Other terminations of employment	See the valuation report as of June 30, 2016, for details.
Refund of contributions on vested termination	See the valuation report as of June 30, 2016, for details.

Note: The actuarial methods and assumptions were selected by the Retirement Board with the recommendation of the actuary.

dates (commonly referred to as 15-year layered amortization).

Beginning with the June 30, 2010, actuarial valuation, the San Mateo County Mosquito and Vector Control District (the District) adopted the same “enhanced” benefit formula that applies to Plans 1, 2, and 4 of the County of San Mateo (the County) General members and the same member rates currently being paid by County members from those plans. Because the District does not participate in cost sharing on the member rates, the District has a separate normal cost rate and expected member contribution rate from the County General Group.

Actuarial Asset Valuation Method

The actuarial asset valuation method used is a 5-year smoothed recognition method with a 20% corridor. This method takes into account appreciation as well as depreciation in investments to smooth asset values by averaging the excess of the actual over the expected income, on a fair value basis, over a five year period. The smoothed asset value is subject to a 20% corridor, or within 20% of the actual asset value.

Actuarial Assumptions

Economic and demographic assumptions are used to determine future contribution requirements. The demographic assumptions utilize the information from the latest Experience Study from July 1, 2011, to April 30, 2014. The assumptions selected are used to estimate the actuarial cost of the pension plan and determine the present contributions necessary to meet the pension benefits in the future.

The actuarial assumptions used in the

valuation are intended to estimate the future experience of SamCERA’s members and SamCERA’s earnings in areas that may affect the projected benefit flow and anticipated investment earning. Any variations in future experience from these assumptions will result in corresponding changes in the estimated costs of SamCERA’s benefits. The assumptions will next be reviewed in detail in 2017 as part of the triennial investigation.

Key Economic Assumptions

Investment Rate of Return. The future investment earnings of SamCERA’s assets are accrued at an annual rate of 7.00%, compounded annually, net of both investment and administrative expenses. This rate was 0.25% lower than the previous assumption and was effective June 30, 2016.

Inflation Rate. The assumed rate of inflation selected for the 2016 valuation is 2.75%.

Projected Salary Increase. The assumed rate of annual salary increase selected for the 2016 valuation is 3.25%.

Cost of Living Adjustment (COLA). The adjustments depend upon the plan in which a member is enrolled and the Consumer Price Index for the San Francisco Bay Area. The COLA is limited to 5% for General and Safety members in Plan 1; 3% for Probation members in Plan 1 and all members in Plan 2; and 2% for members in Plans 4, 5, 6, and 7. Plan 3 members do not receive a COLA.

Key Demographic Assumptions

Salary Increases due to Service. The expected annual increase in salary assumption includes an expected annual increase of 3.25% due to increases in the general wage level of membership, and

expected annual increases due to promotion and longevity which vary depending on a member's years of service.

Retired Mortality Rate. The same postretirement mortality rates are used in the valuation for active members, retired members, and beneficiaries. 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 rates of retired mortality were adopted June 30, 2011 and re-adopted June 30, 2014.

Retired Mortality Rates – Other Than Disabled Members

- General Males: RP-2000 Healthy Combined Mortality Table for Males with adjustment for White Collar workers. Ages are set back three years.
- Safety Males: Same as General.
- General Females: RP-2000 Healthy Combined Mortality Table for Females with adjustment for White Collar workers. Ages are set back three years.
- Safety Females: Same as General.

Retired Mortality Rates –Disabled Members

- General Males: Average of RP-2000 Healthy Combined Mortality Table for Males with adjustment for White Collar workers and the RP-2000 Disabled Annuitant Mortality Table for Males, both set back three years.
- Safety Males: RP-2000 Healthy Combined Mortality Table for Males with adjustment for White Collar workers (minimum is 1.0%).

- General Females: Average of RP-2000 Healthy Combined Mortality Table for Females with adjustment for White Collar workers and the RP-2000 Disabled Annuitant Mortality Table for Females, both set back three years.
- Safety Females: RP-2000 Healthy Combined Mortality Table for Females with adjustment for White Collar workers (minimum is 0.4%).

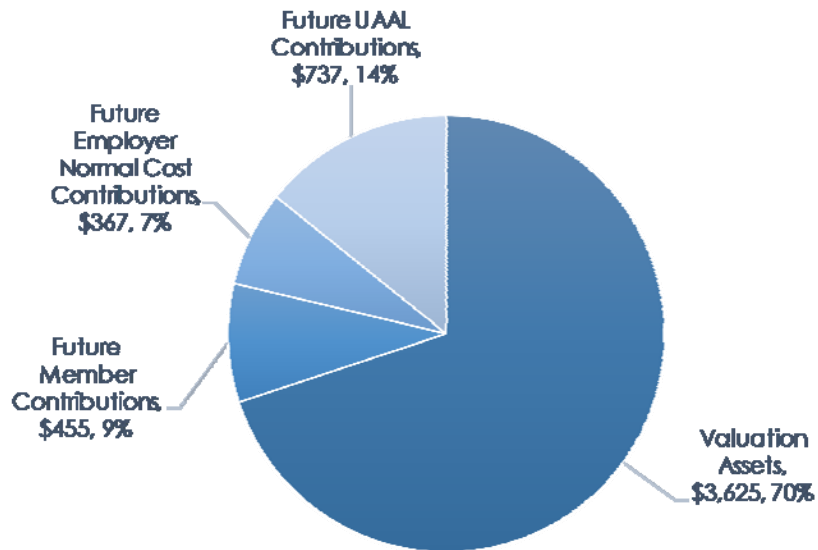
Separation from Active Status. The probabilities of termination of employment due to the causes stated below are presented on page 101.

- Service retirement: Member retires after meeting age and service requirements for reasons other than disability.
- Contribution withdrawal: Member terminates and elects a refund of member contributions, or a deferred vested 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 reason. For example, a rate of 0.0300 for a member's service retirement at age 50 assumes that 30 out of 1,000 members who are age 50 will retire at that age.

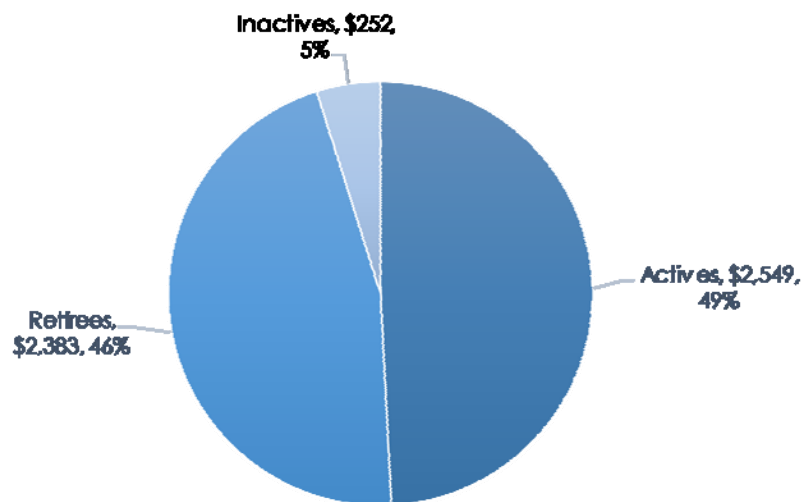
ACTUARIAL VALUATION - SAMCERA'S RESOURCES AT JUNE 30, 2016 (DOLLARS IN MILLIONS)

SamCERA's resources equal the actuarial assets plus the expected future contributions by both the employers and members.



ACTUARIAL VALUATION - SAMCERA'S LIABILITIES AT JUNE 30, 2016 (DOLLARS IN MILLIONS)

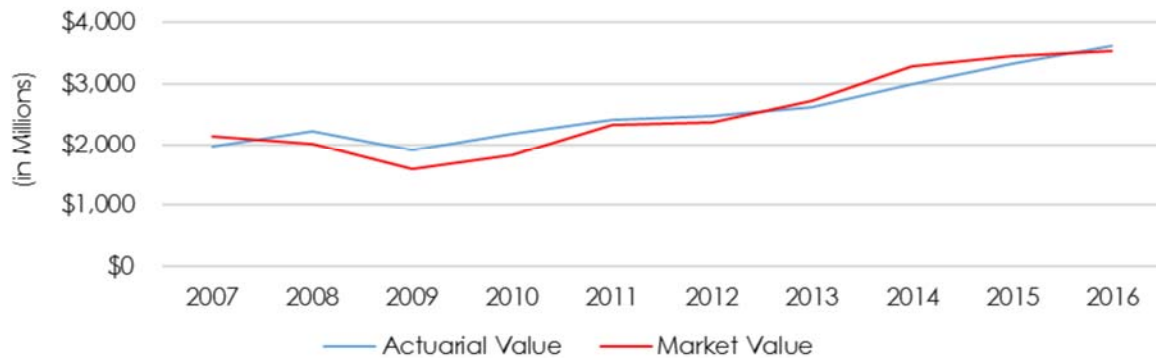
SamCERA's liabilities reflect benefits already earned in the past and those expected to be earned in the future by current members.



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) to be funded outside of the actuarially determined contribution rates.

APPLICABLE VALUATION ASSETS (JUNE 30)



EMPLOYER CONTRIBUTION RATES FOR ALL PLANS COMBINED AS A PERCENTAGE OF COVERED PAYROLL

	Fiscal Year Beginning		
	July 1, 2017 ⁽²⁾	July 1, 2016 ⁽¹⁾	Change
Gross Normal Cost	22.31%	21.95%	0.36%
Less: Member Contributions	(12.06)%	(11.92)%	(0.14)%
Employer Normal Cost	10.25%	10.03%	0.22%
UAAL Amortization	23.52%	21.93%	1.59%
Total Contribution Rate	33.77%	31.96%	1.81%

⁽¹⁾ Contribution rates for fiscal year beginning July 1, 2016, reflects all valuation addendums subsequent to the 2015 valuation.

⁽²⁾ The total employer rate of 33.77% is the aggregate rate for all employers. For the fiscal year beginning July 1, 2017, employer rates by employer are as follows:

- a) The County contribution rate is 33.91% of pay.
- b) The Court contribution rate is 30.44% of pay.
- c) The District contribution rate is 24.52% of pay.

SUMMARY OF SIGNIFICANT ACTUARIAL STATISTICS AND MEASURES

	June 30, 2016	June 30, 2015	Relative Change
ACTIVE MEMBERS			
Number of Members	5,187	5,095	1.8 %
Average Age	45.4	45.5	(0.2)%
Average Credited Service	10.8	11.0	(1.8)%
Covered Compensation (In Thousands) ⁽¹⁾	\$472,385	\$439,018	7.1 %
Average Monthly Salary	\$7,933	\$7,567	4.8 %
RETIRED MEMBERS			
Number of Members			
Service Retirement	3,749	3,628	3.3 %
Disability Retirement	454	442	2.7 %
Beneficiaries	545	568	(4.0) %
Average Age	71.0	71.3	(0.4) %
Actual Retiree Benefits Paid (In Thousands)	\$179,497	\$168,109	6.8 %
Average Monthly Pension	\$3,268	\$3,160	3.4 %
NUMBER OF INACTIVE MEMBERS	1,486	1,384	7.4 %
ASSETS			
Fair Value of Fund (In Thousands)	\$3,541,388	\$3,454,476	2.5 %
Return on Fair Value	0.7%	3.5%	(2.8) %
Valuation Assets (In Thousands)	\$3,624,726	\$3,343,550	8.4 %
Return on Valuation Assets	6.4%	9.7%	(3.3) %
LIABILITY VALUES (IN THOUSANDS)			
Actuarial Accrued Liability	\$4,362,296	\$4,045,786	7.8 %
Unfunded Actuarial Accrued Liability	\$737,570	\$702,236	5.0 %
Deferred Asset (Gains) / Losses	\$119,951	(\$77,153)	(2.6) %
FUNDED RATIO			
Based on Valuation Assets	83.1%	82.6%	0.5 %

⁽¹⁾In accordance with Statement No. 82 of the Governmental Accounting Standards Board (GASB), Covered Employee Payroll is the payroll on which contributions are based. SamCERA has elected early application of this Statement. Thus, these amounts may be different than shown in fiscal year ended 2015 and earlier reports.

RATE OF SEPARATION FROM ACTIVE SERVICE

Years of Service	Other Terminations		Age	Disability		Death while Active		Service Retirement
	Ordinary	Vested		Ordinary	Service	Ordinary	Service	
General Plans 1, 2, 4, 5 & 7 Male Members								
0	0.1300	0.0000	20	0.0003	0.0004	0.0003	0.0000	0.0000
5	0.0285	0.0348	30	0.0004	0.0005	0.0004	0.0000	0.0000
10	0.0172	0.0238	40	0.0008	0.0011	0.0009	0.0000	0.0000
15	0.0099	0.0191	50	0.0013	0.0019	0.0017	0.0000	0.0500
20	0.0040	0.0150	60	0.0018	0.0027	0.0036	0.0000	0.1500
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0000	0.0000	1.0000
General Plans 1, 2, 4, 5 & 7 Female Members								
0	0.1200	0.0000	20	0.0003	0.0004	0.0002	0.0000	0.0000
5	0.0285	0.0348	30	0.0003	0.0004	0.0002	0.0000	0.0000
10	0.0153	0.0212	40	0.0006	0.0008	0.0006	0.0000	0.0000
15	0.0088	0.0172	50	0.0020	0.0029	0.0013	0.0000	0.0400
20	0.0040	0.0150	60	0.0032	0.0048	0.0030	0.0000	0.1500
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0000	0.0000	1.0000
General Plan 3 Male Members								
0	0.1300	0.0000	20	0.0000	0.0000	0.0003	0.0000	0.0000
5	0.0285	0.0348	30	0.0000	0.0000	0.0004	0.0000	0.0000
10	0.0172	0.0238	40	0.0000	0.0000	0.0009	0.0000	0.0000
15	0.0099	0.0191	50	0.0000	0.0000	0.0017	0.0000	0.0000
20	0.0040	0.0150	60	0.0000	0.0000	0.0036	0.0000	0.0300
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0000	0.0000	1.0000
General Plan 3 Female Members								
0	0.1200	0.0000	20	0.0000	0.0000	0.0002	0.0000	0.0000
5	0.0285	0.0348	30	0.0000	0.0000	0.0002	0.0000	0.0000
10	0.0153	0.0212	40	0.0000	0.0000	0.0006	0.0000	0.0000
15	0.0088	0.0172	50	0.0000	0.0000	0.0013	0.0000	0.0000
20	0.0040	0.0150	60	0.0000	0.0000	0.0030	0.0000	0.0400
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plans 1, 2 & 4 Male Members								
0	0.0700	0.0000	20	0.0000	0.0017	0.0003	0.0010	0.0000
5	0.0082	0.0151	30	0.0000	0.0020	0.0004	0.0010	0.0000
10	0.0050	0.0105	40	0.0000	0.0031	0.0009	0.0010	0.0000
15	0.0016	0.0094	50	0.0000	0.0058	0.0017	0.0010	0.1500
20 & Above	0.0000	0.0000	60	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plans 1, 2 & 4 Female Members								
0	0.0700	0.0000	20	0.0000	0.0017	0.0002	0.0010	0.0000
5	0.0082	0.0151	30	0.0000	0.0020	0.0002	0.0010	0.0000
10	0.0050	0.0105	40	0.0000	0.0031	0.0006	0.0010	0.0000
15	0.0016	0.0094	50	0.0000	0.0058	0.0013	0.0010	0.1500
20 & Above	0.0000	0.0000	60	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plan 5, 6 & 7 Male Members								
0	0.0700	0.0000	20	0.0000	0.0017	0.0003	0.0010	0.0000
5	0.0082	0.0151	30	0.0000	0.0020	0.0004	0.0010	0.0000
10	0.0050	0.0105	40	0.0000	0.0031	0.0009	0.0010	0.0000
15	0.0016	0.0094	50	0.0000	0.0058	0.0017	0.0010	0.0500
20 & Above	0.0000	0.0000	60	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plans 5, 6 & 7 Female Members								
0	0.0700	0.0000	20	0.0000	0.0017	0.0002	0.0010	0.0000
5	0.0082	0.0151	30	0.0000	0.0020	0.0002	0.0010	0.0000
10	0.0050	0.0105	40	0.0000	0.0031	0.0006	0.0010	0.0000
15	0.0016	0.0094	50	0.0000	0.0058	0.0013	0.0010	0.0500
20 & Above	0.0000	0.0000	60	0.0000	0.0000	0.0000	0.0000	1.0000

SOLVENCY TEST

(Dollars in Thousands)

Actuarial Valuation Date (as of June 30)	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)
2007	\$ 1,976,731	\$ 359,484	\$1,348,013	\$ 848,007	100%	100%	32%
2008	2,218,937	385,300	1,550,875	870,047	100%	100%	32%
2009	1,909,679	412,147	1,670,547	905,018	100%	90%	0%
2010	2,179,076	449,355	1,745,146	903,952	100%	99%	0%
2011	2,405,140	485,126	1,866,219	895,382	100%	100%	6%
2012	2,480,271	498,569	2,022,791	921,193	100%	98%	0%
2013	2,618,639	534,276	2,157,590	880,884	100%	97%	0%
2014	2,993,187	584,080	2,285,328	927,634	100%	100%	13%
2015	3,343,550	628,287	2,451,544	965,955	100%	100%	27%
2016	3,624,726	679,246	2,635,409	1,047,641	100%	100%	30%

(1) Includes inactive members.

SCHEDULE OF FUNDING PROGRESS

(Dollars in Thousands)

Actuarial Valuation Date (as of June 30)	(a) Actuarial Value of Valuation Assets	(b) Actuarial Accrued Liability	(b-a) Unfunded Actuarial Accrued Liability	(a/b) Funded Ratio	(c) Covered Payroll ⁽¹⁾	[(b-a)/c] UAAL as a Percentage of Covered Payroll
2007	\$ 1,976,731	\$ 2,555,504	\$ 578,773	77.4%	\$ 400,655	144.46%
2008	2,218,937	2,806,222	587,285	79.1%	411,293	142.79%
2009	1,909,679	2,987,712	1,078,033	63.9%	433,668	248.58%
2010	2,179,076	3,098,453	919,377	70.3%	434,295	211.69%
2011	2,405,140	3,246,727	841,587	74.1%	427,041	197.07%
2012	2,480,271	3,442,553	926,282	72.0%	418,916	229.71%
2013	2,618,639	3,572,750	954,111	73.3%	404,361	235.96%
2014	2,993,187	3,797,042	803,855	78.8%	416,274	193.11%
2015	3,343,550	4,045,786	702,236	82.6%	439,018	159.96%
2016	3,624,726	4,362,296	737,570	83.1%	472,385	156.14%

⁽¹⁾ In accordance with GASB Statement No. 82, Covered Employee Payroll is the payroll on which contributions are based. SamCERA has elected early application of this Statement and updated the covered payroll column to show pensionable payroll for the last ten fiscal years.

MEMBER CONTRIBUTION RATES: GENERAL

		7/1/2016	7/1/2015	Change			
General Members (No COLA share) – County and Court⁽¹⁾							
Plan 1 & Plan 2	Age 25	n/a	9.34%	n/a	⁽¹⁾ In fiscal year 2017 99.6% of members in a contributory plan pay 50% of COLA.		
	35	n/a	10.60%	n/a			
	45	n/a	12.13%	n/a			
Plan 4	Age 25	n/a	9.10%	n/a		⁽²⁾ Rates for Plans 1, 2, and 4 include 3% Cost Share and 50% COLA Share. The 50% COLA Share is implemented for all bargaining units and management in fiscal year 2017 except for Court Interpreters and the County Board of Supervisors.	
	35	n/a	10.31%	n/a			
	45	n/a	11.74%	n/a			
General Members (50% COLA share) – County and Court⁽²⁾							
Plan 1	Age 25	11.82%	11.82%	0.00%			⁽³⁾ Rates for non Deputy Sheriff in Plans 1, 2, and 4 include 5% Cost Share. Rates for Plan 5 include 4% Cost Share. Actual Cost Share for Deputy Sheriffs varies as follows: members below age 45 with less than 5 years of service pay 3%, between 5 and 15 years of service 3.5%, and over 15 years of service 4.5%. Members at age 45 and above, regardless of years of service, pay 4.5% Cost Share. Rates for Plans 1, 2, and 4 have zero COLA Share. Rates for Plans 5 and 6 include 50% COLA Cost.
	35	13.58%	13.58%	0.00%			
	45	15.71%	15.71%	0.00%			
Plan 2	Age 25	11.47%	11.47%	0.00%			
	35	13.16%	13.16%	0.00%			
	45	15.20%	15.20%	0.00%			
Plan 4	Age 25	10.50%	10.50%	0.00%			
	35	11.99%	11.99%	0.00%			
	45	13.75%	13.75%	0.00%			
Plan 5	Age 25	6.40%	6.40%	0.00%			
	35	7.68%	7.68%	0.00%			
	45	9.22%	9.22%	0.00%			
Plan 7 ⁽³⁾	All Ages	7.91%	7.91%	0.00%			
General Members – San Mateo County Mosquito and Vector Control District (No COLA share) ⁽⁴⁾							
Plan 1 & Plan 2	Age 25	6.34%	6.34%	0.00%	⁽⁴⁾ Members in this category do not pay toward Cost Share and COLA Share.		
	35	7.60%	7.60%	0.00%			
	45	9.13%	9.13%	0.00%			
Plan 4	Age 25	6.10%	6.10%	0.00%			
	35	7.31%	7.31%	0.00%			
	45	8.74%	8.74%	0.00%			
Plan 7 ⁽³⁾	All Ages	7.35%	7.35%	0.00%			

MEMBER CONTRIBUTION RATES (CONTINUED): SAFETY AND PROBATION

		7/1/2016	7/1/2015	Change
Safety Non-Managers ^{(5) (6)}				
Plan 1 & Pan 2	Age 25	18.62%	13.62%	5.00%
	35	21.35%	15.35%	6.00%
	45	24.26%	17.19%	7.07%
Plan 4	Age 25	16.11%	13.29%	2.82%
	35	18.33%	14.95%	3.38%
	45	21.52%	16.52%	5.00%
Plan 5	Age 25	14.84%	14.84%	0.00%
	35	17.01%	17.01%	0.00%
	45	19.06%	19.06%	0.00%
Plan 6	Age 25	10.62%	10.62%	0.00%
	35	12.75%	12.75%	0.00%
	45	14.76%	14.76%	0.00%
Plan ⁽³⁾	All Ages	13.59%	13.59%	0.00%
Safety Managers (50% COLA share) ⁽⁷⁾				
Plan 1 & Plan 2	Age 25	18.62%	18.62%	0.00%
	35	21.35%	21.35%	0.00%
	45	24.26%	24.26%	0.00%
Plan 4	Age 25	16.11%	16.11%	0.00%
	35	18.33%	18.33%	0.00%
	45	20.43%	20.43%	0.00%
Plan 5	Age 25	14.84%	14.84%	0.00%
	35	17.01%	17.01%	0.00%
	45	19.06%	19.06%	0.00%
Plan 6	Age 25	10.62%	10.62%	0.00%
	35	12.75%	12.75%	0.00%
	45	14.76%	14.76%	0.00%
Plan 7 ⁽³⁾	All Ages	13.59%	13.59%	0.00%
Probation Non-Managers ⁽⁸⁾				
Plan 1 & Plan 2	Age 25	16.78%	12.73%	4.05%
	35	19.44%	14.57%	4.87%
	45	22.27%	16.54%	5.73%
Plan 4	Age 25	14.55%	11.51%	3.04%
	35	16.76%	13.11%	3.65%
	45	18.85%	14.62%	4.23%
Plan 5	Age 25	14.35%	12.69%	1.66%
	35	16.53%	14.54%	1.99%
	45	18.58%	16.27%	2.31%
Plan 6	Age 25	10.50%	8.84%	1.66%
	35	12.60%	10.61%	1.99%
	45	14.59%	12.28%	2.31%
Plan 7 ⁽³⁾	All Ages	12.91%	12.91%	0.00%
Probation Managers (50% COLA share) ⁽⁹⁾				
Plan 1 & Plan 2	Age 25	17.12%	17.12%	0.00%
	35	19.85%	19.85%	0.00%
	45	22.76%	22.76%	0.00%
Plan 4	Age 25	14.61%	14.61%	0.00%
	35	16.83%	16.83%	0.00%
	45	18.93%	18.93%	0.00%
Plan 5	Age 25	14.34%	14.34%	0.00%
	35	16.51%	16.51%	0.00%
	45	18.56%	18.56%	0.00%
Plan 6	Age 25	10.62%	10.62%	0.00%
	35	12.75%	12.75%	0.00%
	45	14.76%	14.76%	0.00%
Plan 7 ⁽³⁾	All Ages	12.91%	12.91%	0.00%

⁽³⁾ Rates for non Deputy Sheriff in Plans 1, 2, and 4 include 5% Cost Share. Rates for Plan 5 include 4% Cost Share. Actual Cost Share for Deputy Sheriffs varies as follows: members below age 45 with less than 5 years of service pay 3%, between 5 and 15 years of service 3.5%, and over 15 years of service 4.5%. Members at age 45 and above, regardless of years of service, pay 4.5% Cost Share. Rates for Plans 1, 2, and 4 have zero COLA Share. Rates for Plans 5 and 6 include 50% COLA Cost.

⁽⁵⁾ Rates for non Deputy Sheriff in Plans 1, 2, and 4 include 5% Cost Share. Rates for Plan 5 include 4% Cost Share. Actual Cost Share for Deputy Sheriffs varies as follows: members below age 45 with less than 5 years of service pay 3%, between 5 and 15 years of service 3.5%, and over 15 years of service 4.5%. Members at age 45 and above, regardless of years of service, pay 4.5% Cost Share.

⁽⁶⁾ All plans include 50% COLA cost.

⁽⁷⁾ Rates for Plans 1, 2, 4 and 5 include 5% Cost Share and 50% COLA Share. Rates for Plan 6 include zero Cost Share and 50% COLA Share.

⁽⁸⁾ Rates for Plans 1, 2, 4, and 5 include 3.5% Cost Share. Rates in Plan 6 have zero Cost Share. Fiscal year 2017 rates for all plans include 50% COLA Share. Fiscal year 2016 rates for Plans 1, 2, and 4 include 25% COLA Cost, and rates for Plans 5 and 6 50% COLA Cost.

⁽⁹⁾ Rates for Plans 1, 2, 4, and 5 include 3.5% Cost Share. Rates in Plans 6 and 7 have zero Cost Share. Effective 7/5/15, all members in this category pay 50% COLA Cost.

HISTORY OF EMPLOYER STATUTORY CONTRIBUTION RATES⁽¹⁾ - GENERAL

Valuation Year	General Members (County & Court)			General Members (Nurses & UAPD) ⁽³⁾			General Members (SMCM&VCD) ⁽²⁾		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2007	10.19%	9.46%	19.65%	Same as County General			8.50%	7.76%	16.26%
2008	10.16%	9.81%	19.97%	Same as County General			8.55%	8.04%	16.59%
2009	10.11%	18.40%	28.51%	Same as County General			8.25%	15.09%	23.34%
2010	10.05%	16.35%	26.40%	Same as County General			11.70%	16.35%	28.05%
2011	9.71%	16.41%	26.12%	8.70%	16.41%	25.11%	11.97%	16.41%	28.38%
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%

	General Members (County) ⁽⁵⁾			General Members (Court) ⁽⁵⁾			General Members (SMCM&VCD) ⁽²⁾		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2015 ⁽⁷⁾	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%	9.14%	21.30%	30.44%	12.02%	12.50%	24.52%

⁽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 San Mateo County Mosquito and Vector Control District (SMCM&VCD) adopted the same benefit formula and member contribution rates as Plans 1, 2 & 4 General County members (excluding cost sharing and COLA sharing on member rates).

⁽³⁾Beginning with the 2011 actuarial valuation, Plans 1, 2, and 4 members of the California Nurses Association contribute 25% of the cost of COLA, in addition to current member rates and cost sharing. Beginning with the 2013 actuarial valuation, Plans 1, 2, and 4 members of the Union of American Physicians and Dentists 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.

⁽⁵⁾Beginning with the 2015 actuarial valuation, Plans 1, 2, and 4 members of the Union of American Physicians and Dentists or the California Nurses Association contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. As a result of having similar COLA share to other County groups, those members have been aggregated with all County groups.

⁽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 Probation and Detention Association bargaining unit. Contribution rates for the 2015 valuation year reflect these changes.

HISTORY OF EMPLOYER STATUTORY CONTRIBUTION RATES⁽¹⁾ - SAFETY AND PROBATION

Valuation Year	Safety Members			Probation Members (excluding Managers) ⁽⁴⁾			Probation Members (Managers) ⁽⁶⁾		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2007	19.94%	29.32%	49.26%	20.83%	14.06%	34.89%	Same as Probation (excluding Managers)		
2008	19.32%	27.31%	46.63%	20.05%	12.81%	32.86%	Same as Probation (excluding Managers)		
2009	19.21%	51.83%	71.04%	19.92%	23.84%	43.76%	Same as Probation (excluding Managers)		
2010	19.01%	44.50%	63.51%	19.85%	21.62%	41.47%	Same as Probation (excluding Managers)		
2011	18.87%	41.75%	60.62%	19.50%	22.30%	41.80%	Same as Probation (excluding Managers)		
2012	19.05%	48.51%	67.56%	19.99%	26.71%	46.70%	Same as Probation (excluding 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 ⁽⁷⁾	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 (excluding Managers)		

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

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

⁽⁶⁾Beginning with the 2015 actuarial valuation, 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 Probation and Detention Association bargaining unit. Contribution rates for the 2015 valuation year reflect these changes.

DEMOGRAPHIC ACTIVITY OF RETIREES AND BENEFICIARIES

(Dollars in Thousands)

Fiscal Year Ended June 30	Added to Rolls ⁽¹⁾		Removed from Rolls		Rolls End of Year		% Increase in Payroll	Average Monthly Benefits
	No.	Annual Benefits	No.	Annual Benefits	No.	Total Retiree Payroll		
2007	155	\$ N/A	74	\$ N/A	3,694	\$ 98,790	8.6	\$ 2,229
2008	218	N/A	70	N/A	3,842	109,616	11.0	2,378
2009	159	12,717	66	3,281	3,935	119,052	8.6	2,521
2010	163	9,076	96	3,240	4,002	124,888	4.9	2,601
2011 ⁽²⁾	209	12,703	64	2,916	4,147	134,675	7.8	2,706
2012	218	14,379	90	4,209	4,275	144,845	7.6	2,823
2013	186	13,024	63	3,095	4,398	154,774	6.9	2,933
2014	203	12,474	83	3,479	4,518	163,769	5.8	3,021
2015	213	16,290	93	4,179	4,638	175,880	7.4	3,160
2016	233	15,347	123	5,030	4,748	186,197	5.9	3,268

N/A - not applicable

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

⁽²⁾ Revised figures from the June 30, 2011 valuation.

ACTUARIAL ANALYSIS OF FINANCIAL EXPERIENCE

(Dollars in Thousands)

Summary of (Gains) / Losses	Change In Unfunded Actuarial Accrued Liability (UAAL)				
	2016	2015	2014	2013	2012
UAAL, beginning of year	\$ 702,236	\$ 803,855	\$ 954,111	\$ 962,282	\$ 841,587
Expected change in UAAL	(96,454)	(76,018)	(88,525)	(34,535)	(39,621)
Salary (gains) losses	24,707	39,129	(15,884)	(59,411)	(45,526)
Retiree COLA greater (less) than expected	(6,275)	3,648	(15,603)	(8,606)	(11,756)
Asset (gains) losses	27,821	(74,068)	(88,035)	93,999	171,268
Change due to assumption changes	89,364	-	59,345	-	36,443
Miscellaneous experience	(3,829)	5,690	(1,554)	382	9,887
UAAL, end of year	\$ 737,570	\$ 702,236	\$ 803,855	\$ 954,111	\$ 962,282

SUMMARY OF ACTIVE MEMBER VALUATION DATA

Valuation Date June 30	No. of Members		Annual Salary	Average Annual Salary	% Change Average Salary
2007	General	4,767	\$ 346,319,017	\$ 72,649	7.1%
	Safety	443	45,386,411	102,452	5.9%
	Probation	329	24,364,268	74,056	5.3%
	Total	5,539	416,069,696	75,116	6.9%
2008	General	4,743	353,518,525	74,535	2.6%
	Safety	432	46,326,906	107,238	4.7%
	Probation	325	24,741,003	76,126	2.8%
	Total	5,500	424,586,434	77,198	2.8%
2009	General	4,777	370,760,830	77,614	4.1%
	Safety	436	48,120,081	110,367	2.9%
	Probation	330	26,270,802	79,608	4.6%
	Total	5,543	445,151,713	80,309	4.0%
2010	General	4,609	363,305,740	78,825	1.6%
	Safety	425	48,576,912	114,299	3.6%
	Probation	313	25,247,595	80,663	1.3%
	Total	5,347	437,130,247	81,752	1.8%
2011	General	4,494	355,876,715	79,189	0.5%
	Safety	446	52,073,940	116,758	2.2%
	Probation	305	24,591,392	80,628	0.0%
	Total	5,245	432,542,047	82,468	0.9%
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	0.5%
	Safety	452	52,233,510	115,561	-1.7%
	Probation	292	23,722,165	81,240	-1.1%
	Total	4,917	414,551,308	84,310	0.4%
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	429,407,376	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%

SCHEDULE OF AVERAGE MONTHLY SALARY OF ACTIVE MEMBERS

(By Plan and Membership Type)

		2016	2015	2014	2013	2012
GENERAL	Plan 1	\$9,945	\$9,235	\$8,617	\$8,104	\$7,843
	Plan 2	8,636	8,186	7,584	7,355	7,340
	Plan 3	7,173	6,747	6,300	6,254	6,138
	Plan 4	7,807	7,386	6,873	6,662	6,580
	Plan 5	8,485	7,735	6,912	6,418	5,799
	Plan 7	6,714	6,315	5,721	5,433	N/A
	Average Monthly Salary - General Plan	7,694	7,351	6,884	6,762	6,726
	SAFETY	Plan 1	15,810	14,712	14,091	13,185
Plan 2		12,505	11,545	11,191	10,935	10,892
Plan 4		10,729	9,919	9,581	9,402	9,351
Plan 5		9,940	9,145	8,958	8,699	9,667
Plan 6		16,793	16,010	14,381	12,374	N/A
Plan 7		7,538	6,701	7,011	6,695	N/A
Average Monthly Salary - Safety Plan		10,364	9,728	9,767	9,630	9,795
PROBATION		Plan 1	7,261	7,038	6,874	6,618
	Plan 2	8,349	8,012	7,699	7,445	7,454
	Plan 4	7,454	7,267	6,922	6,622	6,686
	Plan 5	6,429	6,106	5,916	5,242	4,949
	Plan 6	6,259	5,739	5,216	4,808	5,239
	Plan 7	5,962	5,684	5,807	7,742	5,239
	Average Monthly Salary - Probation Plan	7,391	7,216	6,998	6,770	6,844
	Average Monthly Salary (All Plans)	\$7,933	\$7,567	\$7,151	\$7,026	\$6,995

PARTICIPATING EMPLOYERS AND ACTIVE MEMBERS

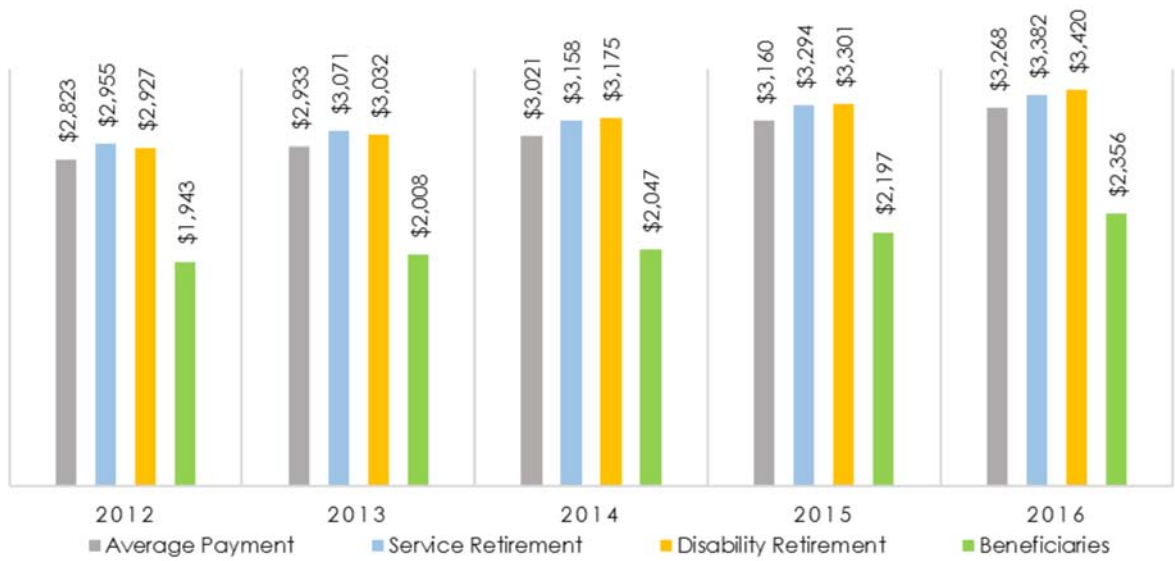
	2016	2015	2014	2013	2012
COUNTY OF SAN MATEO					
General Members	4,170	4,092	4,014	3,906	4,078
Safety Members	495	479	452	452	435
Probation Members	271	282	280	292	299
Subtotal	4,936	4,853	4,746	4,650	4,812
SAN MATEO COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT					
General Members	20	20	19	18	15
SAN MATEO COUNTY SUPERIOR COURT					
General Members	231	222	239	249	268
Total Active Membership	5,187	5,095	5,004	4,917	5,095

SUMMARY OF RETIRED AND INACTIVE MEMBER BENEFITS

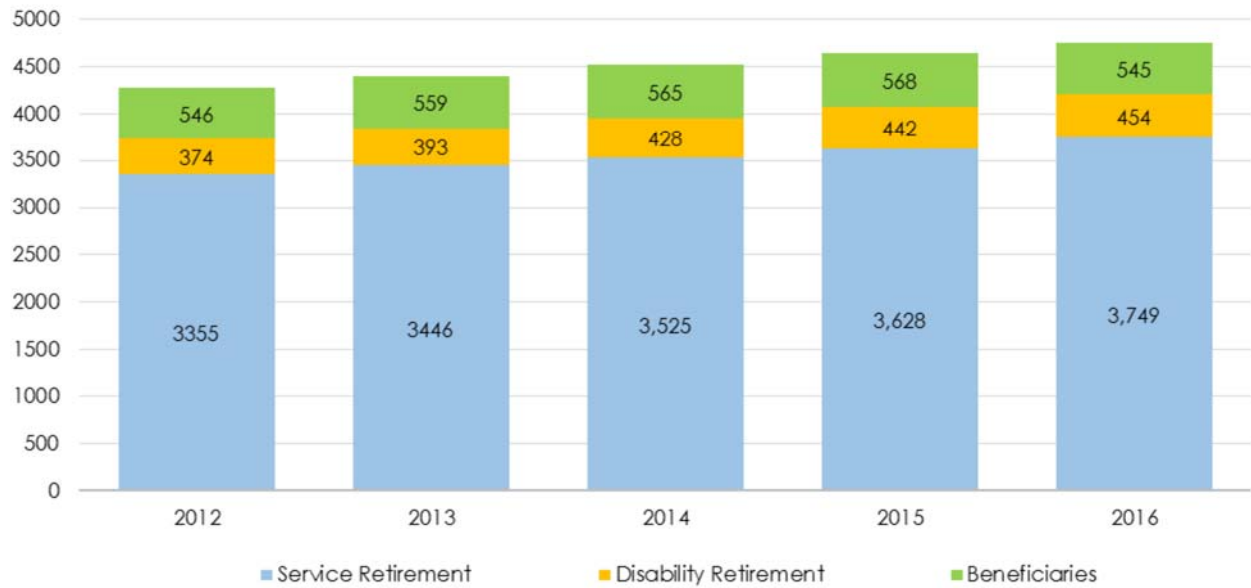
	2016	2015	2014	2013	2012
SERVICE RETIREMENT					
Number	3,749	3,628	3,525	3,446	3,355
Annual Benefits					
Basic Only	\$119,212,000	\$112,557,000	\$105,556,000	\$100,411,000	\$ 94,234,000
COLA	32,949,000	30,835,000	28,027,000	26,594,000	24,748,000
Total	\$152,161,000	\$143,392,000	\$133,583,000	\$127,005,000	\$118,982,000
Average Monthly Payment	\$ 3,382	\$ 3,294	\$ 3,158	\$ 3,071	\$ 2,955
DISABILITY RETIREMENT					
Number	454	442	428	393	374
Annual Benefits					
Basic Only	\$ 14,040,000	\$ 13,303,000	\$ 12,508,000	\$ 10,733,000	\$ 9,909,000
COLA	4,590,000	4,208,000	3,800,000	3,564,000	3,225,000
Total	\$ 18,630,000	\$ 17,511,000	\$ 16,308,000	\$ 14,297,000	\$ 13,134,000
Average Monthly Payment	\$ 3,420	\$ 3,301	\$ 3,175	\$ 3,032	\$ 2,927
BENEFICIARIES					
Number	545	568	565	559	546
Annual Benefits					
Basic Only	\$ 8,944,000	\$ 8,610,000	\$ 7,986,000	\$ 7,668,000	\$ 7,235,000
COLA	6,462,000	6,367,000	5,892,000	5,804,000	5,494,000
Total	\$ 15,406,000	\$ 14,977,000	\$ 13,878,000	\$ 13,472,000	\$ 12,729,000
Average Monthly Payment	\$ 2,356	\$ 2,197	\$ 2,047	\$ 2,008	\$ 1,943
TOTAL RETIRED MEMBERS					
Number	4,748	4,638	4,518	4,398	4,275
Annual Benefits					
Basic Only	\$ 142,196,000	\$134,470,000	\$126,050,000	\$118,812,000	\$111,378,000
COLA	44,001,000	41,410,000	37,719,000	35,962,000	33,467,000
Total	\$ 186,197,000	\$175,880,000	\$163,769,000	\$154,774,000	\$144,845,000
Average Monthly Payment	\$ 3,268	\$ 3,160	\$ 3,021	\$ 2,933	\$ 2,823
INACTIVE MEMBERS					
	1,486	1,384	1,304	1,306	1,212

The data in the table above originates from PensionGold, SamCERA's retirement benefit administration system.

AVERAGE MONTHLY RETIREE BENEFIT PAYMENT



NUMBER OF RETIREES BY CATEGORY



STATISTICAL SECTION



THE STATISTICAL SECTION

Introduction

This section provides detailed information for a more thorough understanding of the financial statements, note disclosures, and required supplementary information. Most of the information in this section is compiled by SamCERA's actuary based on information from the pension administration system.

CHANGE IN FIDUCIARY NET POSITION

For the Fiscal Years Ended June 30 (Dollars in Thousands)

	2016	2015	2014	2013	2012
Additions					
Employer Contributions	\$191,094	\$180,704	\$202,877	\$144,308	\$150,950
Member Contributions	56,069	48,012	46,594	55,408	49,687
Total Contributions	247,163	228,716	249,471	199,716	200,637
Investment Income (Loss), Net of Expenses	24,112	111,320	482,050	326,983	(11,024)
Securities Lending Income	278	310	435	622	721
Miscellaneous Additions (Deductions)	4,910	-	179	160	29
Total Additions	276,463	340,346	732,135	527,481	190,363
Deductions					
Retiree Benefits	179,498	168,109	159,342	149,266	139,208
Member Refunds	3,366	3,357	3,214	5,750	3,627
Administrative Expenses	5,962	5,350	4,914	4,260	4,708
Information Technology Expenses ⁽¹⁾	714	629	731	654	325
Other Expenses	11	119	65	29	(33)
Total Deductions	189,551	177,564	168,266	159,959	147,835
Change in Fiduciary Net Position	\$86,912	\$162,782	\$563,869	\$367,522	\$42,528

⁽¹⁾ Prior to fiscal year 2012, information technology expenses were included in administrative expenses. Since fiscal year 2012, information technology expenses are detached from administrative expenses and are separately accounted for.

CHANGE IN FIDUCIARY NET POSITION (CONTINUED)

For the Fiscal Years Ended June 30 (Dollars in Thousands)

	2011	2010	2009	2008	2007
Additions					
Employer Contributions	\$150,475	\$106,265	\$106,123	\$105,340	\$100,550
Member Contributions	49,013	50,319	50,372	60,111	42,696
Total Contributions	199,488	156,584	156,495	165,451	143,246
Investment Income (Loss), Net of Expenses	437,654	195,412	(457,309)	(177,923)	298,260
Securities Lending Income	530	743	1,631	1,699	0
Miscellaneous Additions	73	41	(16)	181	26
Total Additions (Deductions)	637,745	352,780	(299,199)	(10,592)	441,532
Deductions					
Retiree Benefits	129,835	122,141	113,991	103,970	94,788
Member Refunds	2,474	2,736	2,795	3,075	2,244
Administrative Expenses	3,547	3,373	3,287	3,231	2,582
Other Expenses	10	33	67	8	201
Total Deductions	135,866	128,283	120,140	110,284	99,815
Change in Fiduciary Net Position	\$501,879	\$224,497	\$(419,339)	\$(120,876)	\$341,717

SCHEDULE OF ADDITIONS TO FIDUCIARY NET POSITION BY SOURCE

(Dollars in Thousands)

Fiscal Year Ended June 30	Employee Contributions	Employer Contributions	Investment Income/(Loss)	Other	Total Additions
2007	\$42,696	\$100,550	\$298,260	\$26	\$441,532
2008	60,111	105,340	(177,923)	1,880	(10,592)
2009	50,372	106,123	(457,309)	1,615	(299,199)
2010	50,319	106,265	195,412	784	352,780
2011	49,013	150,475	437,654	603	637,745
2012	49,687	150,950	(11,024)	750	190,363
2013	55,408	144,308	326,983	782	527,481
2014	46,594	202,877	482,050	614	732,135
2015	48,012	180,704	111,320	310	340,346
2016	56,069	191,094	24,112	5,188	276,463

SCHEDULE OF DEDUCTIONS FROM FIDUCIARY NET POSITION BY TYPE

(Dollars in Thousands)

Fiscal Year Ended June 30	Retirement Benefits	Member Refunds	Administrative Expenses ⁽¹⁾	Information Technology Expenses	Other Expenses	Total Deductions
2007	\$ 94,788	\$ 2,244	\$ 2,582	\$ -	\$ 201	\$ 99,815
2008	103,970	3,075	3,231	-	8	110,284
2009	113,991	2,795	3,287	-	67	120,140
2010	122,141	2,736	3,373	-	33	128,283
2011	129,835	2,474	3,547	-	10	135,866
2012	139,208	3,627	4,708	325	(33)	147,835
2013	149,266	5,750	4,260	654	29	159,959
2014	159,342	3,214	4,914	731	65	168,266
2015	168,109	3,357	5,350	629	119	177,564
2016	179,498	3,366	5,962	714	11	189,551

⁽¹⁾ Administrative expenses for investments were classified as investment expenses in fiscal years 2007-2011. Effective 6/30/2012 these expenses are included as administrative expenses.

TOTAL FIDUCIARY NET POSITION (AS OF JUNE 30)



SCHEDULE OF EMPLOYER CONTRIBUTIONS

(Dollars in Thousands)

Fiscal Year Ended June 30	Actuarially Required Contributions (ARC)	Actual Contributions Received ⁽¹⁾	Contributions Made as a % of ARC
2007	\$ 100,550	\$ 100,550	100%
2008	105,340	105,340	100%
2009	106,123	106,123	100%
2010	106,265	106,265	100%
2011	150,475	150,475	100%
2012	139,407	150,950	108%
2013	131,294	144,308	110%
2014	152,877	202,877	133%
2015	169,814	180,704	106%
2016	170,046	191,094 ⁽²⁾	112%

⁽¹⁾ The County of San Mateo (the County) made additional contributions to accelerate the pay down of UAAL during fiscal year 2012 through fiscal year 2016.

⁽²⁾ The County and the San Mateo County Mosquito and Vector Control District contributed supplemental contributions of \$19.5 million and \$1.5 million, respectively, to accelerate the pay down of UAAL.

SUMMARY OF RETIRED BENEFITS, REFUNDS, AND INACTIVE MEMBERS

RETIRED MEMBERS	2016	2015	2014	2013	2012
Service Retirement					
Number	3,749	3,628	3,525	3,446	3,355
Annual Benefits:					
Basic Only	\$119,212,000	\$112,557,000	\$105,556,000	\$100,411,000	\$94,234,000
COLA	32,949,000	30,835,000	28,027,000	26,594,000	24,748,000
Total	<u>\$152,161,000</u>	<u>\$143,392,000</u>	<u>\$133,583,000</u>	<u>\$127,005,000</u>	<u>\$118,982,000</u>
Average Monthly Payment	\$3,382	\$3,294	\$3,158	\$3,071	\$2,955
Disability Retirement					
Number	454	442	428	393	374
Annual Benefits:					
Basic Only	\$14,040,000	\$13,303,000	\$12,508,000	\$10,733,000	\$9,909,000
COLA	4,590,000	4,208,000	3,800,000	3,564,000	3,225,000
Total	<u>\$18,630,000</u>	<u>\$17,511,000</u>	<u>\$16,308,000</u>	<u>\$14,297,000</u>	<u>\$13,134,000</u>
Average Monthly Payment	\$3,420	\$3,301	\$3,175	\$3,032	\$2,927
Beneficiaries					
Number	545	568	565	559	546
Annual Benefits:					
Basic Only	\$8,944,000	\$8,610,000	\$7,986,000	\$7,668,000	\$7,235,000
COLA	6,462,000	6,367,000	5,892,000	5,804,000	5,494,000
Total	<u>\$15,406,000</u>	<u>\$14,977,000</u>	<u>\$13,878,000</u>	<u>\$13,472,000</u>	<u>\$12,729,000</u>
Average Monthly Payment	\$2,356	\$2,197	\$2,047	\$2,008	\$1,943
TOTAL RETIRED MEMBERS					
Number	4,748	4,638	4,518	4,398	4,275
Annual Benefits:					
Basic Only	\$142,196,000	\$134,470,000	\$126,050,000	\$118,812,000	\$111,378,000
COLA	44,001,000	41,410,000	37,719,000	35,962,000	33,467,000
Total	<u>\$186,197,000</u>	<u>\$175,880,000</u>	<u>\$163,769,000</u>	<u>\$154,774,000</u>	<u>\$144,845,000</u>
Average Monthly Payment	\$3,268	\$3,160	\$3,021	\$2,933	\$2,823
REFUND ⁽¹⁾					
General	\$2,991,126	\$3,011,758	\$3,396,690	\$5,161,430	\$3,399,163
Safety and Probation	375,311	345,253	155,265	588,346	228,329
Total	<u>\$3,366,437</u>	<u>\$3,357,011</u>	<u>\$3,551,955</u>	<u>\$5,749,776</u>	<u>\$3,627,492</u>
INACTIVE MEMBERS					
	1,486	1,384	1,304	1,306	1,212

The data in the table above originates from Pension Gold, SamCERA's retirement benefit administration system. The total payroll above differs from the actual payroll due to a last month projection used by the actuary.

⁽¹⁾ Refund by type is not available prior to fiscal year 2009-10.

SUMMARY OF RETIRED BENEFITS, REFUNDS, AND INACTIVE MEMBERS (CONTINUED)

RETIRED MEMBERS	2011	2010	2009	2008	2007
Service Retirement					
Number	3,242	3,108	3,032	2,958	2,835
Annual Benefits:					
Basic Only	\$87,254,000	\$79,007,000	\$73,038,000	\$66,704,000	\$59,687,000
COLA	23,212,000	22,542,000	22,964,000	21,289,000	19,382,000
Total	<u>\$110,466,000</u>	<u>\$101,549,000</u>	<u>\$96,002,000</u>	<u>\$87,993,000</u>	<u>\$79,069,000</u>
Average Monthly Payment	\$2,839	\$2,723	\$2,639	\$2,479	\$2,324
Disability Retirement					
Number	370	365	369	361	351
Annual Benefits:					
Basic Only	\$9,414,000	\$8,988,000	\$8,722,000	\$8,214,000	\$7,571,000
COLA	3,005,000	2,926,000	3,070,000	2,847,000	2,569,000
Total	<u>\$12,419,000</u>	<u>\$11,914,000</u>	<u>\$11,792,000</u>	<u>\$11,061,000</u>	<u>\$10,140,000</u>
Average Monthly Payment	\$2,797	\$2,720	\$2,663	\$2,553	\$2,407
Beneficiaries					
Number	535	529	534	523	508
Annual Benefits:					
Basic Only	\$6,672,000	\$6,309,000	\$6,052,000	\$5,757,000	\$5,220,000
COLA	5,118,000	5,116,000	5,206,000	4,805,000	4,361,000
Total	<u>\$11,790,000</u>	<u>\$11,425,000</u>	<u>\$11,258,000</u>	<u>\$10,562,000</u>	<u>\$9,581,000</u>
Average Monthly Payment	\$1,836	\$1,800	\$1,757	\$1,683	\$1,572
TOTAL RETIRED MEMBERS					
Number	4,147	4,002	3,935	3,842	3,694
Annual Benefits:					
Basic Only	\$103,340,000	\$94,304,000	\$87,812,000	\$80,675,000	\$72,478,000
COLA	31,335,000	30,584,000	31,240,000	28,941,000	26,312,000
Total	<u>\$134,675,000</u>	<u>\$124,888,000</u>	<u>\$119,052,000</u>	<u>\$109,616,000</u>	<u>\$98,790,000</u>
Average Monthly Payment	\$2,706	\$2,601	\$2,521	\$2,378	\$2,229
REFUND ⁽¹⁾					
General	\$2,379,790	\$2,623,439	N/A	N/A	N/A
Safety and Probation	94,655	112,586	N/A	N/A	N/A
Total	<u>\$2,474,445</u>	<u>\$2,736,025</u>	<u>\$2,794,916</u>	<u>\$3,074,453</u>	<u>\$2,243,677</u>
INACTIVE MEMBERS					
	1,190	1,207	1,230	1,225	1,151

The data in the table above originates from Pension Gold, SamCERA's retirement benefit administration system. The total payroll above differs from the actual payroll due to a last month projection used by the actuary.

⁽¹⁾ Refund by type is not available prior to fiscal year 2009-10.

SCHEDULE OF AVERAGE PENSION BENEFIT PAYMENTS

Retirement Date	Years of Service Credit						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
7/1/2015 - 6/30/2016							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$350	\$1,536	\$2,112	\$3,210	\$4,563	\$5,841	\$7,990
Average Final Compensation	\$4,081	\$6,646	\$6,410	\$9,032	\$7,964	\$8,548	\$9,322
Number of Retires	16	47	56	54	26	28	21
Beneficiaries							
Average Monthly Gross Benefit	\$1,732	\$1,038	\$1,368	\$1,361	\$3,304	\$3,036	\$3,554
Average Final Compensation	N/A	\$3,434	\$4,173	\$3,756	\$5,429	\$4,972	\$5,372
Number of Retires	14	9	5	2	4	7	7
7/1/2014 - 6/30/2015							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$552	\$1,448	\$2,487	\$3,669	\$4,161	\$7,067	\$5,993
Average Final Compensation	\$4,191	\$6,262	\$7,158	\$8,074	\$7,548	\$9,423	\$7,751
Number of Retires	21	35	52	35	20	38	31
Beneficiaries							
Average Monthly Gross Benefit	\$1,581	\$1,165	\$1,094	\$2,144	\$2,095	\$4,520	\$5,888
Average Final Compensation	N/A	\$3,587	\$3,867	\$6,360	\$4,521	\$8,971	\$8,071
Number of Retires	13	3	3	7	5	5	6
7/1/2013 - 6/30/2014							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$1,576	\$1,713	\$2,297	\$3,274	\$4,502	\$6,202	\$6,551
Average Final Compensation	\$6,920	\$6,729	\$6,555	\$7,614	\$7,740	\$9,292	\$7,528
Number of Retires	16	61	50	40	32	13	18
Beneficiaries							
Average Monthly Gross Benefit	\$869	\$647	\$1,855	\$895	\$4,348	\$3,463	\$6,087
Average Final Compensation	N/A	\$6,305	\$5,433	\$2,913	\$7,872	\$5,504	\$6,611
Number of Retires	10	3	6	6	3	2	2
7/1/2012 - 6/30/2013							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$629	\$1,302	\$2,461	\$3,433	\$5,100	\$6,413	\$7,133
Average Final Compensation	\$5,234	\$5,831	\$7,321	\$7,344	\$8,135	\$8,317	\$7,818
Number of Retires	16	39	59	21	30	25	20
Beneficiaries							
Average Monthly Gross Benefit	\$1,343	\$1,709	\$1,457	\$1,463	\$1,289	\$5,056	\$4,064
Average Final Compensation	\$552	\$5,140	\$5,255	\$4,536	\$3,446	\$7,516	\$6,039
Number of Retires	16	2	6	4	3	1	4
7/1/2011 - 6/30/2012							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$878	\$1,393	\$2,208	\$3,510	\$5,050	\$5,476	\$7,346
Average Final Compensation	\$4,235	\$5,843	\$6,667	\$7,228	\$7,812	\$7,344	\$7,766
Number of Retires	19	38	47	25	47	32	29
Beneficiaries							
Average Monthly Gross Benefit	\$1,746	\$712	\$2,329	\$2,332	\$881	\$4,241	\$4,722
Average Final Compensation	N/A	\$3,913	\$5,200	\$5,818	\$2,937	\$6,102	\$7,184
Number of Retires	16	1	5	4	4	3	5

SCHEDULE OF AVERAGE PENSION BENEFIT PAYMENTS (CONTINUED)

Retirement Date	Years of Service Credit						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
7/1/2010 - 6/30/2011							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$565	\$1,166	\$2,067	\$3,679	\$4,767	\$6,300	\$7,897
Average Final Compensation	\$3,207	\$6,268	\$5,895	\$7,761	\$7,562	\$8,466	\$8,303
Number of Retires	16	25	52	29	52	26	26
Beneficiaries							
Average Monthly Gross Benefit	\$1,106	\$1,373	\$1,207	\$2,050	\$2,039	\$3,272	\$8,446
Average Final Compensation	N/A	\$6,549	\$4,186	\$5,178	\$5,772	\$5,278	\$7,765
Number of Retires	13	1	7	3	6	2	1
7/1/2009 - 6/30/2010							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$855	\$1,232	\$2,061	\$3,838	\$4,965	\$6,024	\$7,366
Average Final Compensation	\$2,619	\$5,409	\$5,803	\$7,587	\$7,827	\$7,818	\$8,081
Number of Retires	9	36	33	16	41	19	24
Beneficiaries							
Average Monthly Gross Benefit	\$699	\$2,616	\$1,452	\$1,142	\$2,248	\$3,895	\$4,305
Average Final Compensation	N/A	\$7,316	\$5,457	\$3,874	\$5,546	\$5,457	\$5,166
Number of Retires	9	4	2	2	3	1	4
7/1/2008 - 6/30/2009							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$1,508	\$1,447	\$2,318	\$2,120	\$4,873	\$6,046	\$8,801
Average Final Compensation	\$3,654	\$4,581	\$6,562	\$6,798	\$7,646	\$7,141	\$9,061
Number of Retires	7	34	26	29	23	17	32
Beneficiaries							
Average Monthly Gross Benefit	\$2,809	\$631	\$1,323	\$978	\$1,552	\$4,030	\$3,546
Average Final Compensation	N/A	\$3,744	\$5,068	\$3,840	\$6,395	\$6,099	\$4,661
Number of Retires	12	3	6	3	3	1	1
7/1/2007 - 6/30/2008							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$544	\$1,610	\$2,386	\$3,516	\$3,831	\$5,177	\$7,270
Average Final Compensation	\$5,406	\$5,639	\$5,922	\$7,012	\$6,179	\$6,596	\$7,641
Number of Retires	12	29	23	25	47	35	38
Beneficiaries							
Average Monthly Gross Benefit	\$2,070	\$1,057	\$1,912	\$3,199	\$1,438	\$3,822	\$5,636
Average Final Compensation	N/A	\$4,433	\$7,617	\$6,701	\$5,149	\$9,472	\$6,757
Number of Retires	14	2	1	2	3	3	3
7/1/2006 - 6/30/2007							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$1,143	\$1,814	\$1,986	\$2,902	\$3,957	\$6,793	\$8,367
Average Final Compensation	\$3,705	\$7,601	\$5,323	\$5,870	\$6,703	\$8,390	\$7,788
Number of Retires	9	15	31	29	24	25	24
Beneficiaries							
Average Monthly Gross Benefit	\$2,034	\$626	\$1,289	\$1,559	\$3,545	\$3,720	\$4,039
Average Final Compensation	\$2,053	\$3,608	\$3,961	\$5,028	\$7,164	\$4,056	\$5,016
Number of Retires	9	1	5	5	2	2	2

SCHEDULE OF AVERAGE MONTHLY SALARY OF ACTIVE MEMBERS

(by Plan and Membership Type)

	2016	2015	2014	2013	2012
General Plan 1	\$9,945	\$9,235	\$8,617	\$8,104	\$7,843
General Plan 2	8,636	8,186	7,584	7,355	7,340
General Plan 3	7,173	6,747	6,300	6,254	6,138
General Plan 4	7,807	7,386	6,873	6,662	6,580
General Plan 5	8,485	7,735	6,912	6,418	5,799
General Plan 7	6,714	6,315	5,721	5,433	N/A
Average Monthly Salary for General Plan	7,694	7,351	6,884	6,762	6,726
Safety Plan 1	15,810	14,712	14,091	13,185	12,624
Safety Plan 2	12,505	11,545	11,191	10,935	10,892
Safety Plan 4	10,729	9,919	9,581	9,402	9,351
Safety Plan 5	9,940	9,145	8,958	8,699	9,667
Safety Plan 6	16,793	16,010	14,381	12,374	N/A
Safety Plan 7	7,538	6,701	7,011	6,695	N/A
Average Monthly Salary for Safety Plan	10,364	9,728	9,767	9,630	9,795
Probation Plan 1	7,261	7,038	6,874	6,618	6,618
Probation Plan 2	8,349	8,012	7,699	7,445	7,454
Probation Plan 4	7,454	7,267	6,922	6,622	6,686
Probation Plan 5	6,429	6,106	5,916	5,242	4,949
Probation Plan 6	6,259	5,739	5,216	4,808	5,239
Probation Plan 7	5,962	5,684	5,807	7,742	5,239
Average Monthly Salary for Probation Plan	7,391	7,216	6,998	6,770	6,844
Average Monthly Salary for All Plans	7,933	7,567	7,151	7,026	6,995

SCHEDULE OF AVERAGE MONTHLY SALARY OF ACTIVE MEMBERS (CONTINUED)

(by Plan and Membership Type)

	2011	2010	2009	2008	2007
General Plan 1	\$7,630	\$7,543	\$7,534	\$7,252	\$7,175
General Plan 2	7,208	7,193	7,120	6,872	6,688
General Plan 3	5,968	5,818	5,791	5,619	5,287
General Plan 4	6,398	6,348	6,212	5,914	5,714
General Plan 5	N/A	N/A	N/A	N/A	N/A
General Plan 7	N/A	N/A	N/A	N/A	N/A
Average Monthly Salary for General Plan	6,599	6,569	6,468	6,211	6,054
Safety Plan 1	12,073	11,578	10,889	11,113	10,212
Safety Plan 2	10,789	10,548	10,135	9,612	9,299
Safety Plan 4	9,230	8,931	8,610	8,349	7,882
Safety Plan 5	N/A	N/A	N/A	N/A	N/A
Safety Plan 6	N/A	N/A	N/A	N/A	N/A
Safety Plan 7	N/A	N/A	N/A	N/A	N/A
Average Monthly Salary for Safety Plan	9,730	9,525	9,197	8,937	8,538
Probation Plan 1	7,533	8,922	9,751	9,791	8,522
Probation Plan 2	7,349	7,393	7,341	6,960	6,899
Probation Plan 4	6,505	6,456	6,291	5,978	5,766
Probation Plan 5	N/A	N/A	N/A	N/A	N/A
Probation Plan 6	N/A	N/A	N/A	N/A	N/A
Probation Plan 7	N/A	N/A	N/A	N/A	N/A
Average Monthly Salary for Probation Plan	6,719	6,722	6,634	6,344	6,171
Average Monthly Salary for All Plans	6,872	6,813	6,692	6,433	6,260

SCHEDULE OF PARTICIPATING EMPLOYERS AND ACTIVE MEMBERS

	2016	2015	2014	2013	2012
COUNTY OF SAN MATEO ⁽¹⁾					
General Members	4,170	4,092	4,014	3,906	4,078
Safety Members	495	479	452	452	435
Safety/Probation Members	271	282	280	292	299
Total	4,936	4,853	4,746	4,650	4,812
SAN MATEO COUNTY SUPERIOR COURT ⁽¹⁾					
General Members Total	231	222	239	249	268
SAN MATEO COUNTY MOSQUITO & VECTOR CONTROL DISTRICT					
General Members Total	20	20	19	18	15
Total Active Membership	5,187	5,095	5,004	4,917	5,095

Percentage of Membership by Employer

County of San Mateo	95.16%	95.25%	94.84%	94.57%	94.45%
San Mateo County Superior Court	4.45%	4.36%	4.78%	5.06%	5.26%
San Mateo County Mosquito and Vector Control District	0.39%	0.39%	0.38%	0.37%	0.29%
Total:	100.00%	100.00%	100.00%	100.00%	100.00%

SCHEDULE OF PARTICIPATING EMPLOYERS AND ACTIVE MEMBERS (CONTINUED)

	2011	2010	2009	2008	2007
COUNTY OF SAN MATEO ⁽¹⁾					
General Members	4,476	4,589	4,758	4,718	4,742
Safety Members	446	425	436	432	443
Safety/Probation Members	305	313	330	325	329
Total	5,227	5,327	5,524	5,475	5,514
SAN MATEO COUNTY SUPERIOR COURT ⁽¹⁾					
General Members Total	N/A	N/A	N/A	N/A	N/A
SAN MATEO COUNTY MOSQUITO & VECTOR CONTROL DISTRICT					
General Members Total	18	20	19	25	25
Total Active Membership	5,245	5,347	5,543	5,500	5,539

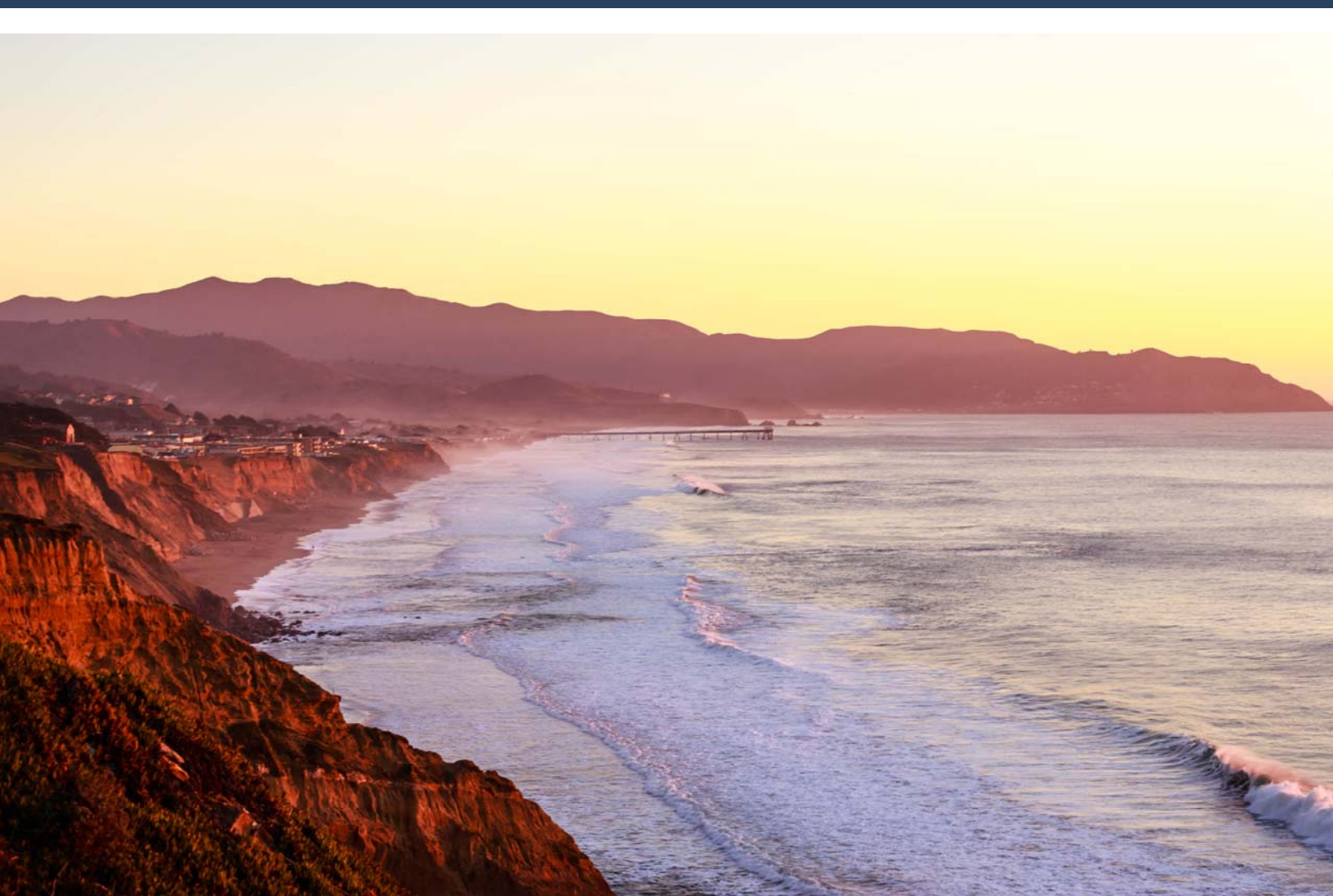
Percentage of Membership by Employer

County of San Mateo	99.66%	99.63%	99.66%	99.55%	99.55%
San Mateo County Superior Court	N/A	N/A	N/A	N/A	N/A
San Mateo County Mosquito and Vector Control District	0.34%	0.37%	0.34%	0.45%	0.45%
Total:	100.00%	100.00%	100.00%	100.00%	100.00%

⁽¹⁾ Prior to fiscal year 2012, membership counts of the San Mateo County Superior Court were combined with and reported under the County of San Mateo.

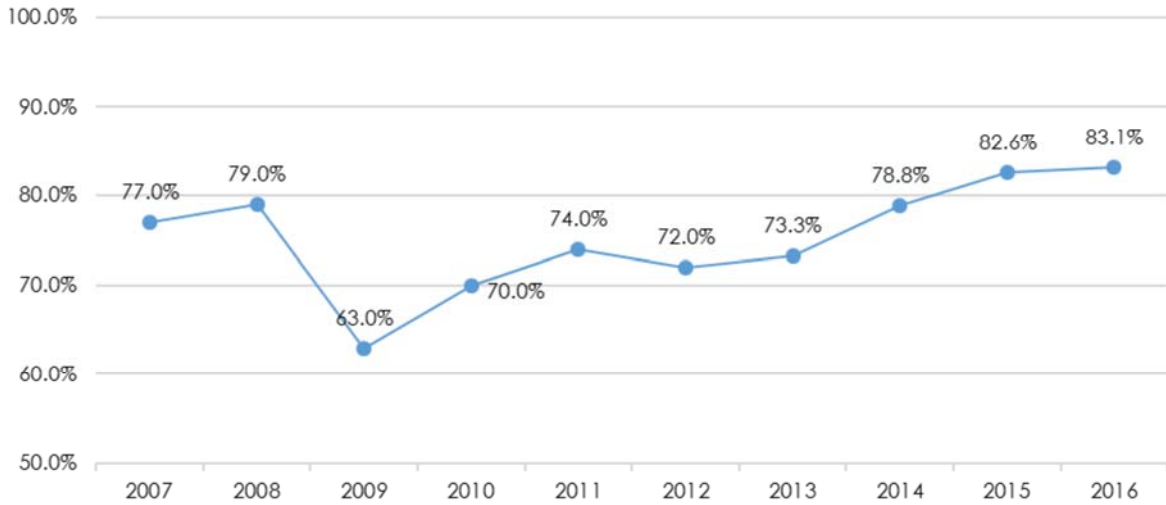
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COMPLIANCE SECTION



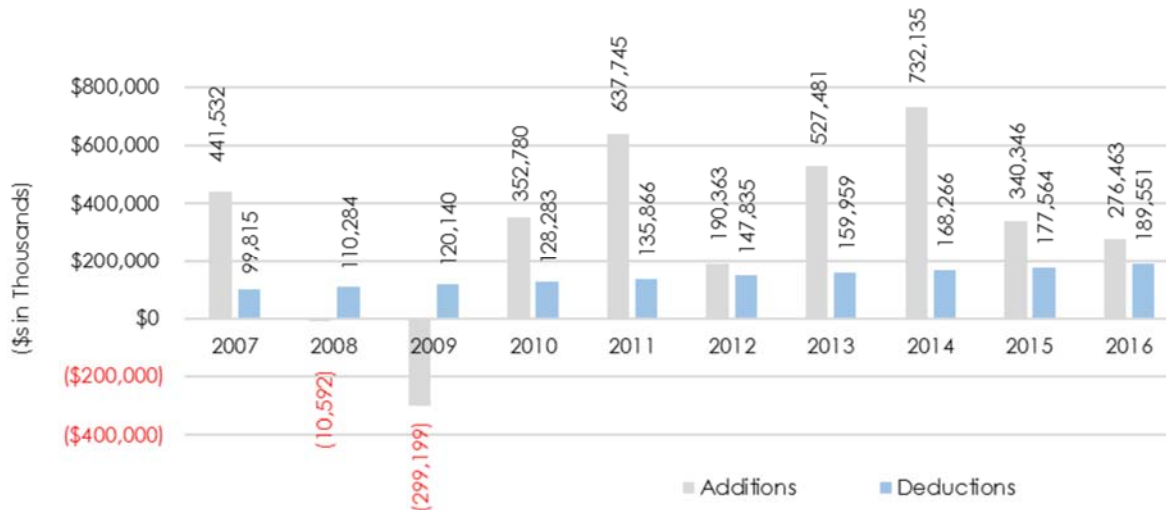
SAMCERA'S FUNDED RATIO

As of June 30



ADDITIONS TO AND DEDUCTIONS FROM SAMCERA'S NET POSITION

For the Fiscal Years Ended June 30





BROWN ARMSTRONG
Certified Public Accountants

**REQUIRED COMMUNICATION TO THE MEMBERS OF THE
 BOARD OF RETIREMENT AND AUDIT COMMITTEE
 IN ACCORDANCE WITH PROFESSIONAL STANDARDS**

To the Board of Retirement and Audit Committee of
 San Mateo County Employees' Retirement Association
 Redwood City, California

We have audited the financial statements of the San Mateo County Employees' Retirement Association (SamCERA) for the fiscal year ended June 30, 2016, and have issued our report dated October 18, 2016. Professional standards require that we provide you with information about our responsibilities under auditing standards generally accepted in the United States of America and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated May 31, 2016. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by SamCERA are described in Note 2, Summary of Significant Accounting Policies, to the financial statements. As discussed in Note 15 of the financial statements, in 2016, SamCERA adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, and GASB Statement No. 82, *Pension Issues - an amendment of GASB Statements No. 67, No. 68, and No. 73*. The objective of GASB Statement No. 72 is to improve financial reporting related to fair value measurements. The objective of GASB Statement No. 82 is to improve financial reporting by enhancing consistency in the application of financial reporting requirements for certain pension issues. We noted no transactions entered into by SamCERA during the fiscal year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting SamCERA's financial statements were:

- Management's estimate of the fair value of investments was derived by various methods as detailed in Note 2, Summary of Significant Accounting Policies. We evaluated the key factors and assumptions used to develop the estimate of the fair value of investments in determining that it is reasonable in relation to the financial statements taken as a whole.

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

- The contribution amounts and net pension liability which are based on the actuarially-presumed interest rate and assumptions. We evaluated the key factors and assumptions used to develop the estimates of the contribution amount and net pension liability in determining that they are reasonable in relation to the financial statements taken as a whole.

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

- The disclosures for deposits and investments in Notes 2 and 5 to the financial statements, Summary of Significant Accounting Policies and Deposits and Investment Disclosures, respectively, were derived from SamCERA's investment policy. Management's estimate of the fair value of investments was derived by various methods as detailed in the notes.
- Additionally, the disclosures related to the funding policies, net pension liability, and actuarial methods and assumptions in Note 1, Plan Description, Note 6, Pension Disclosures, and Note 7, Funded Status and Funding Progress, were derived from actuarial valuations, which involved estimates of the value of reported amounts and probabilities about the occurrence of future events far into the future.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. In addition, none of the misstatements detected as a result of audit procedures corrected by management were material, either individually or in the aggregate, to the financial statements taken as a whole.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated October 18, 2016.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to SamCERA's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as SamCERA's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to the Schedule of Changes in Net Pension Liability and Related Ratios, Schedule of Employer Contributions, Schedule of Investment Returns, and Notes to the Required Supplementary Information, which are Required Supplementary Information (RSI) that supplements the

basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during the audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the Schedule of Administrative Expenses, Schedule of Information Technology Expenses, Schedule of Investment Expenses, Schedule of Payments to Consultants, and Notes to the Other Supplementary Information, which accompany the financial statements but are not RSI. With respect to this other supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the other supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the introductory, investment, actuarial, statistical, and compliance sections, which accompany the financial statements but are not RSI. We did not audit or perform other procedures on this other information and we do not express an opinion or provide any assurance on it.

Restriction on Use

This information is intended solely for the use of the Members of the Board of Retirement, Audit Committee, and management of SamCERA and is not intended to be, and should not be, used by anyone other than these specified parties.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 18, 2016

Order Information

You can find this report on SamCERA's website,
www.samcera.org.

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www.samcera.org





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SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 7.3

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer



SUBJECT: Workshop on Delegation of Investment Activities and Direction to Staff

Staff Recommendation

Provide direction to staff to bring back proposals for delegating certain investment activities.

Discussion

Last month staff provided an educational presentation on the Board's fiduciary duty, delegation of power and governance. Staff led a discussion as to how these three areas are intertwined.

Today's discussion will be more of a workshop on ways the Board may wish to delegate certain activities in the selection of retirement fund investments, with the goal being effective Board governance and prudent investment decisions by having:

- Appropriate delegation of authority, along with proper alignment of responsibilities, authorities and expertise.
- Clear lines of authority and improved decision making.
- The right balance between strategy and oversight and day-to-day management.
- Increased focus on strategy by the Board.
- The best use of the Board's and staff's time.

This discussion will be led by Chief Investment Officer, Michael Coultrip and Investment Consultant, Verus, Inc.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 7.4

TO: Board of Retirement 
FROM: Scott Hood, Chief Executive Officer
SUBJECT: Discussion of SACRS Business Meeting Topics for the Fall 2016 Conference

Staff Recommendation

Provide direction to SamCERA's Voting Delegate and Alternate on SACRS November 2016 Business Meeting topics.

Background

The SACRS Business Meeting will be held Friday, November 11, 2016, at the close of the Fall SACRS Conference.

It is important for the Board to discuss issues that will come to a vote at SACRS in order to give the SamCERA Voting Delegate and Alternates a sense of the Board members' desires. Per SamCERA tradition, the Voting Delegate is only bound to vote in a manner the delegate considers to be in the best interests of SamCERA.

At the September meeting, the Board approved David Spinello as SamCERA's Voting Delegate for the Fall SACRS Business Meeting and Scott Hood as the First Alternate.

Discussion

The SACRS Administrator provided two legislative proposals that may be taken up at the business meeting. The Merced proposal does not have the support of the SACRS legislative committee and the other legislation was dependent upon the enactment of AB 1853, the district status bill, which was vetoed by the Governor.

Merced #1- This bill would expand the alternate retiree trustee voting rights, in certain situations based on whether or not the Alternative Safety member is present and whether or not more than one elected trustee is present.

Ventura #2- This proposal would clarify, if AB 1853 were to have been enacted, that leave balances of County employees may be transferred if they became retirement system "district" employees during implementation of the retirement system becoming a "district."

The other items scheduled for the business meeting are the routine committee reports.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

October 25, 2016

Agenda Item 7.5

TO: Board of Retirement

FROM: Gladys Smith, Assistant Executive Officer



SUBJECT: Approval of Board of Retirement Meeting Schedule for 2017

Staff Recommendation

Approve the meeting schedule of the Board of Retirement for calendar year 2017.

Background

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

Historically, the Board combines its November and December meetings due to conflicts with the Thanksgiving and Christmas holidays, and has combined the meetings in May and June. It is prudent to anticipate these changes by adopting a meeting schedule and placing it on the SamCERA website to provide public notice.

Consistent with recent years, the 2017 proposed schedule includes:

- Ten total meetings;
- Holding most of the meetings on the fourth Tuesday of the month;
- Convening the meetings at 10 a.m. except for the Board/Staff Retreat meetings;
- Holding the annual Board/Staff Retreat on April 25 (fourth Tuesday) and 26, with regular business taken up at 2:30 p.m. Tuesday, April 25;
- Holding **no** meeting in May 2017;
- Holding the June meeting on June 6, the first Tuesday of that month, rather than June 27 to space the time between the April and June meeting;
- Holding the October meeting on October 31, 2017, the fifth Tuesday of that month to give additional time for the completion of the financial audit and the CAFR;
- Holding **no** meeting in November due to the Thanksgiving Day holiday; and
- Holding the December meeting on December 5, 2017, the first Tuesday of that month; because of the holidays and to space the time between the October and December meeting.

Attachment

2017 SamCERA Board Meeting Schedule

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

2017 SamCERA Board Meeting Schedule

All meetings to be held at
100 Marine Parkway, Suite 160,
Redwood City, CA 94065

MONTH	DAY	WEEK & DAY	TIME
January	24	FOURTH TUESDAY	10 A.M.
February	28	FOURTH TUESDAY	10 A.M.
March	28	FOURTH TUESDAY	10 A.M.
April (Board/Staff Retreat)	25 & 26	FOURTH TUESDAY & WEDNESDAY	9 A.M. FOR RETREAT TOPICS, 2:30 P.M., APRIL 25, FOR BUSINESS ITEMS
May	(No meeting scheduled)	NONE	
June	6	FIRST TUESDAY	10 A.M.
July	25	FOURTH TUESDAY	10 A.M.
August	22	FOURTH TUESDAY	10 A.M.
September	26	FOURTH TUESDAY	10 A.M.
October	31	FIFTH TUESDAY	10 A.M.
November	(No meeting scheduled)	NONE	
December	5	FIRST TUESDAY	10 A.M.