



# Notice of Public Meeting

## The Board of Retirement of the San Mateo County Employees' Retirement Association will meet on **Tuesday, October 27, 2020 at 10:00 A.M.**

In accordance with the Governor's Executive Order N-29-20 (3) the Members of the Board will be participating via Zoom video conference and teleconference. Pursuant to Government Code §54954.3, members of the public, to the extent required by law, will have the opportunity to directly address the Board concerning matters within the jurisdiction of the Board. The public can participate and provide comment using the instructions below:

### To Join the Meeting

- To join the meeting via video conference, click here: <https://zoom.us/j/91638229574>
- To join the meeting via telephone, dial: (669) 900-9128, and enter Meeting ID: 916 3822 9574

### Public Comment During the Meeting

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

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

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

### Public Comment Prior to the Meeting

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

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

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

- 1. Call to Order, Roll Call and Miscellaneous Business**
- 2. Oral Communications**
  - 2.1 Oral Communications from the Board
  - 2.2 Oral Communications from the Public
- 3. Approval of the Minutes**
  - 3.1 Approval of Board Meeting Minutes from September 29, 2020

# Notice of Public Meeting

## Page 2 of 3

---

#### **4. Approval of the Consent Agenda\***

- 4.1 Disability Retirements (none)
- 4.2 Survivor Death Benefits
- 4.3 Service Retirements
- 4.4 Continuances
- 4.5 Deferred Retirements
- 4.6 Member Account Refunds
- 4.7 Member Account Rollovers
- 4.8 Member Account Redeposits
- 4.9 Acceptance of Trustees' Reports of Educational Activities
- 4.10 SACRS Business Meeting November 2020

#### **5. Benefit & Actuarial Services**

- 5.1 Consideration of Agenda Items, if any, Removed from the Consent Agenda
- 5.2 Approval of Resolution that Further Defines Compensation Earnable for On-Call Duty
- 5.3 Annual Review of SamCERA's Actuarial Services Firm, Milliman, Inc

#### **6. Investment Services**

- 6.1 Report on Preliminary Monthly Portfolio Performance Report for the Period Ended September 30, 2020
- 6.2 Report on Inflation Hedge Manager Annual Review
- 6.3 Report on Opportunistic Credit Manager Annual Review
- 6.4 Report on Absolute Return Manager Annual Review
- 6.5 Report on Trading Cost Analysis for Public Equity and Fixed Income Managers
- 6.6 Approval of Proposed Alternative Investment (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C2)

#### **7. Board & Management Support**

- 7.1 Presentation by Brown Armstrong of 2020 Financial Audit Management Reports
- 7.2 Approval of SamCERA's 2020 Comprehensive Annual Financial Report (CAFR)
- 7.3 Approval of Resolution Authorizing CEO to Enter into an Agreement with Digital Deployment Inc.
- 7.4 Approval of Resolution Setting the Board of Retirement Meeting Schedule for 2021

#### **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
- C2 Approval of Proposed Alternative Investment (to be heard in Closed Session, Confidential Under Gov. Code § 54956.81 and 6254.26, see item 6.6)

#### **9. Report on Actions Taken in Closed Session**

# Notice of Public Meeting

## Page 3 of 3

---

### 10. Adjournment in Memory of the Following Deceased Members:

Nava, Robert	September 11, 2020	Assessor's Office
Molina, Celestino	September 14, 2020	DPW
Samuelson, Helen	September 13, 2020	General Services
Rinonos, Maria	September 24, 2020	H.S.A.
Wong, Donald	September 24, 2020	Aging & Adult Services
Domeniconi, John	September 29, 2020	Probation
Hassell, Mark	October 8, 2020	Human Services



Scott Hood, Chief Executive Officer

Posted: October 21, 2020

(\* 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 NORMALLY MEETS AT 100 MARINE PARKWAY, SUITE 160**, WHICH IS LOCATED ON THE SE CORNER OF TWIN DOLPHIN & MARINE PARKWAY IN REDWOOD CITY. Detailed directions are available on the "Contact Us" page of the website [www.samcera.org](http://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**  
SEPTEMBER 29, 2020 – REGULAR BOARD MEETING MINUTES

2009.1 **Call to Order, Roll Call and Miscellaneous Business**

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

**Roll Call:**

Present: Sandie Arnott, Mark Battey, Ben Bowler, Al David, Paul Hackleman, Kurt Hoefer, Katherine O'Malley, Robert Raw and Eric Tashman.

Absent: None.

Alternates present: Susan Lee and Alma Salas.

Staff: Brenda Carlson, Michael Coultrip, Lili Dames, Scott Hood, Elizabeth LeNguyen, Doris Ng, Gladys Smith and Anne Trujillo.

Consultants and speakers: Joe Abdou, Margaret Jadallah, Jeff MacLean and Faraz Shooshani (Verus); Nick Collier and Craig Glyde (Milliman, Inc.); and Graham Schmidt (Cheiron).

2009.2.1 **Oral Communications from the Board:** None.

2009.2.2 **Oral Communications from the Public:** Mr. David asked if there was any public comment from those individuals participating on the telephone or via Zoom. There were no public oral comments and no written comments received ahead of the meeting.

2009.3.1 **Approval of Regular Board Meeting Minutes from August 25, 2020:** Mr. David asked if there were any changes or corrections, or objections, to the meeting minutes from the Board meeting held on August 25, 2020.

**Action:** Mr. Hackleman moved to approve the minutes from the Board meeting on August 25, 2020. The motion was seconded by Ms. Arnott and carried with a vote of 7-0, with trustees Arnott, Battey, David, Hackleman, Hoefer, O'Malley and Raw all in favor; Bowler abstained; none opposed.

2009.4.0 **Approval of the Consent Agenda:** Mr. David asked if there were any items to be removed for discussion from the Consent Agenda. No items were removed.

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

Mr. Tashman joined the Zoom conference at 10:05 a.m.

2009.4.1 **Disability Retirements:** None.

2009.4.2 **Survivor Death Benefits:** None.

2009.4.3 **Service Retirements:**

<b>Name</b>	<b>Effective Retirement Date</b>	<b>Department</b>
Alvarez-Javonillo, Veronica	August 1, 2020	San Mateo County Health
Chun, Denise	July 13, 2020	Def'd - San Mateo County Health
Gutschick, Pernille	August 1, 2020	Mental Health
Haug, Donald	July 7, 2020	Deferred – Public Works
Leonor, Joseph	July 16, 2020	Probation
Reyes, Cydney	July 22, 2020	Mental Health
Santillan, Margarita	July 18, 2020	San Mateo County Health
Zilahi, Patrizia	July 18, 2020	Behavioral Health & Recovery Svcs

2009.4.4 **Continuances:**

<b>Survivor's Name</b>	<b>Beneficiary of:</b>
Hernandez, Guadalupe	Hernandez, Frank
Pagmanua, Cynthia	Pagmanua, Roberto
Seager, Donald	Seager, Linda
Tan, Jauw	Tan, Lourdes

2009.4.5 **Deferred Retirements:**

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

<b>Name</b>	<b>Retirement Plan Type</b>
Abdulmajeed, Zaid Raad	G7, Vested - Reciprocity
Alejandrino, Enrique	G4, Non-vested - Reciprocity
Barberini, Jacqueline	G2, Vested - Reciprocity
Cochrane, Jacquelyn	G7, Non-vested - Reciprocity
Doan, David	G4, Vested - Reciprocity
Elsley, Katherine	G4, Vested
Jacobson, Bradley	G4, Vested
Johnston, Maeve	G7, Vested - Auto Defer - Code 31700
Lopez, Rubi	G4, Vested - Auto Defer - Code 31700
Peters, Heather	G7, Non-vested - Reciprocity
Tauscher, Emily	G4, Vested - Reciprocity

2009.4.6 **Member Account Refunds:**

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

<b>Name</b>	<b>Retirement Plan Type</b>
Cook, Tarah	G7, Non-vested
Diploudis, Maria	G7, Non-vested
Gomez, Joey	G7, Non-vested
Hu, Peiyu	G7, Non-vested
Lambright, Tiffany	G7, Non-vested
Murray, Julia	G7, Non-vested

Sentman, Bradley

G7, Non-vested

2009.4.7 **Member Account Rollovers:**

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

<b>Name</b>	<b>Retirement Plan Type</b>
Diploudis, Maria	G7, Non-vested
Grasty, Bobbette	S4, Vested

2009.4.8 **Member Account Redeposits:**

<b>Name</b>	<b>Retirement Plan Type</b>
Biggs, Arter	G7
Castaneda, Rogelio	G4

2009.4.9 **Acceptance of Trustees' Reports of Educational Activities:** None.

2009.4.10 **Approval of Questions for Annual Review of Brown Armstrong Accountancy:** The Board approved the evaluation questions in the "Questions for Annual Auditor Consultant Evaluation."

2009.5.1 **Consideration of Agenda Items, if any, Removed from the Consent Agenda:** None.

2009.5.2 **Presentation of the June 30, 2020 Annual Actuarial Valuation by Milliman, Inc.:** Nick Collier and Craig Glyde, of Milliman, Inc., discussed the results of the Actuarial Valuation Report and answered questions from the Board. The report was accepted without objection by the Board.

2009.5.3 **Presentation of the June 30, 2020 Annual Actuarial Valuation Audit by Cheiron, Inc.:** Graham Schmidt, of Cheiron, presented their findings and recommendations of the June 30, 2020 Actuarial Valuation. This item was informational and for discussion only, no action was taken.

2009.5.4 **Approval of Resolution Accepting the Fiscal Year 2021-2022 Employer and Member Contribution Rates and Recommendations:** After Milliman and Cheiron's presentations, Mr. David called for a motion to approve the "Resolution Accepting Contribution Rates to Recommend to the Board of Supervisors for Fiscal Year 2021-22."

**Action:** Mr. Hoefer motioned to approve the "Resolution Accepting Contribution Rates to Recommend to the Board of Supervisors for the 2021-2022 Fiscal Year." The motion was seconded by Ms. Arnott and carried by a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley, Raw and Tashman all in favor; none opposed.

The Board was adjourned for break at 10:44 a.m. and reconvened at 10:50 a.m. with Agenda Item 6.4.

2009.6.1 **Report on Preliminary Monthly Portfolio Performance Report for the Period Ended August 31, 2020:** Mr. Coultrip reported that SamCERA's net preliminary return for August was 3.0% bringing the preliminary trailing twelve month return ending August 2020 to 6.6% net. This item was informational and for discussion only, no action was taken.

2009.6.2 **Report on Fixed Income Manager Annual Reviews:** Ms. Ng reported that staff held annual review meetings through teleconference on August 11th with SamCERA's opportunistic credit bond managers, Franklin Templeton, and two core bond managers, FIAM and Western Asset Management.

The discussion included a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook. There were no significant concerns identified during the portfolio reviews. This item was informational and for discussion only, no action was taken.

2009.6.3 **Report on Opportunistic Credit Manager Annual Reviews:** Ms. Ng reviewed the meeting notes of the annual review of SamCERA's private credit managers, White Oak and Blackrock, as well as opportunistic credit manager, Brigade Capital Management. The discussion included a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook. There were no significant concerns identified during the portfolio reviews. This item was informational and for discussion only, no action was taken.

2009.6.4 **Educational Presentation on Cash Flow Analysis:** Jeff MacLean, of Verus, provided an educational presentation on how SamCERA can manage its cash flow needs by potentially establishing a liquidity buffer and also answered questions from the Board. This item was informational and for discussion only, no action was taken.

The Board was adjourned for break at 12:00 p.m. and reconvened at 12:15 p.m. with Agenda Item 6.1.

2009.6.5 **Approved of Proposed Alternative Investment (to be heard in Closed Session):** The Board adjourned into Closed Session at 12:25 p.m. to hear item 6.5 then reconvened in Open Session at 1:20 p.m. See Closed Session report under C2.

2009.7.1 **Approval of Resolution Authorizing the Chief Executive Officer to Execute Documentation for Investments as Required:** Mr. Hood discussed staff's recommendation to increase dollar-limit authority for Alternative Investments up to \$35 million as the size of the fund and the respective amounts invested in Alternative Investments has increased. Mr. Hood also mentioned the remainder of the authorization is unchanged.

**Action:** Mr. Battey motioned to approve a new resolution authorizing for the Chief Executive Officer to execute documentation for investments as required. The motion was seconded by Mr. Bowler and carried by a vote of 8-0, with trustees Battey, Bowler, David, Hackleman, Hoefler, O'Malley, Raw and Tashman all in favor; none opposed. Ms. Arnott left at 1:15 p.m. prior to the vote and did not return to the meeting.

2009.7.2 **Approval of Resolution Amending Policy for Procurement and Contracting Services for Certain Goods and Services:** Mr. Hood discussed the terms of the current policy, authorizing the CEO to enter into agreements for \$100,000 and below. He informed the Board that the limit has recently increased to \$200,000 and the proposed amended policy reflects this change.

**Action:** Mr. Raw motioned to approve the resolution amending the Board's "Policy for Procurement and Contracting for Certain Goods and Services". The motion was seconded by Ms. O'Malley and carried by a vote of 8-0, with trustees Battey, Bowler, David, Hackleman, Hoefler, O'Malley, Raw and Tashman all in favor; none opposed.

2009.8.1 **Chief Executive Officer's Report:** Mr. Hood reported that staff is continuing to work remotely due to COVID-19 and guidance from the County Manager's Office. He reported his attendance to the CALAPRS Administrator's Institute recently held online. Mr. Hood informed the Board that Liz Lederman, from the Federal Reserve Bank of SF, will likely present to the Board in February or March of next year. Mr. Hood also informed the Board that the SACRS Fall Conference will be held virtually from November 10<sup>th</sup> - 13<sup>th</sup> and will be offering a 2-hour Ethics Training course. He mentioned a few

agenda items for next month's Board meeting including the annual Audit Report, CAFR and Board Schedule for 2021.

2008.8.2 **Assistant Executive Officer's Report:** Ms. Smith reported that she will be sending out the annual Actuarial survey for Milliman, Inc. within the next day or two and plans to share the results at the next Board meeting. She informed the Board that she will be sending out the link to the mandated Sexual Harassment Training. Ms. Smith provided the Board with an update on staff's search for a Medical Advisor and plans for the interim. Ms. Trujillo informed Board members about upcoming educational events.

2009.8.3 **Chief Investment Officer's Report:** Mr. Coultrip reported staff will be holding the following annual manager reviews: State Street Public Real Assets on October 1<sup>st</sup> at 8 a.m., Angelo Gordon Credit Solutions Fund on October 6<sup>th</sup> at 9 a.m. and Standard Life Gars on October 8<sup>th</sup> at 8 a.m.

2009.8.4 **Chief Legal Counsel's Report:** None.

C1 **Consideration of Disability Items, if any, removed from the Consent Agenda:** None.

C2 **Approval of Proposed Alternative Investment (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26):**

Ms. Carlson reported out that the Board approved:

A commitment of \$30 million to Clayton, Dubilier & Rice (CD&R) Fund XI, LP. The motion passed a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley, Raw and Tashman all in favor; none opposed.

A re-up commitment of \$35 million to White Oak Yield Spectrum Fund V. The motion passed a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley, Raw and Tashman all in favor; none opposed.

An initial investment of \$30 million (with a \$75 million total investment within a nine-month timeframe) in the CFM Systematic Global Macro strategy. The motion passed a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley, Raw and Tashman all in favor; none opposed.

An initial investment of \$45 million in the Acadian Multi-Asset Absolute Return Strategy. The motion passed a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley, Raw and Tashman all in favor; none opposed.

C3 **Conference with Legal Counsel – Anticipated Litigation. Significant Exposure to litigation pursuant to paragraph (2) of subdivision (d) of Section 54956.9 (One case.):** Ms. Carlson reported that no reportable action was taken.

2009.10 **Adjournment:** Mr. David adjourned the meeting at 2:34 p.m. in memory of the deceased members listed below.

Lambert, Thomas  
Simmons, Kevin  
Leed, Donald  
Wilson, Brent

March 16, 2020  
August 9, 2020  
August 13, 2020  
August 14, 2020

General Services  
Sheriff's  
Sheriff's  
DPW



Burns, Mary  
Monto, Alexander  
Beber Vanzo, Barbara  
Gerhardt, Jack  
Lesui, Clark

August 22, 2020  
August 29, 2020  
August 31, 2020  
September 3, 2020  
September 4, 2020

Parks  
Health Dept.  
Mental Health  
Sheriff's  
H.S.A.

---

Al David  
Board Chair

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

October 27, 2020

Agenda Items 4.1- 4.9

**TO:** Board of Retirement

**FROM:** Elizabeth LeNguyen, Retirement Benefits Manager



**SUBJECT:** Approval of Consent Agenda Items 4.1 – 4.9

**4.1 Disability Retirements**

None.

**4.2 Survivor Death Benefits**

None.

**4.3 Service Retirements**

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

<b>Name</b>	<b>Effective Retirement Date</b>	<b>Department</b>
Aguirre, Dennis	August 7, 2020	Planning & Building
Barberini, Edmund	August 30, 2020	Deferred - Sheriff's Office
Benavides, Benjamin	September 1, 2020	Deferred – Dept. of Public Works
Brown, A Joy	August 5, 2020	Probation
Charan, Kanchan	August 31, 2020	Retired - Plan 3 Portion
Cullen, Craig	August 7, 2020	Sheriff's Office
Ferguson, Curt	August 23, 2020	Sheriff's Office
Lao, Evelyn	August 15, 2020	San Mateo County Health
McHenry, Caroline	July 29, 2020	Human Resources
Montoya, Carlos	August 22, 2020	Human Services Agency
Newton, James	August 29, 2020	Deferred - Probation
Ramirez, Rosa Maria	August 14, 2020	San Mateo County Health
Rivera, Deborah	August 29, 2020	San Mateo County Health
Ruparel, Haresh	September 1, 2020	San Mateo County Health
Vance, Chris	August 29, 2020	Library
Warner, Lisa	August 19, 2020	Deferred - Social Services

#### 4.4 Continuances

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

<b>Survivor's Name</b>	<b>Beneficiary of:</b>
Boggs, Gretchen	Nygren, Merilyn
Goad, Dorene	Goad, Roger
Leed, Laurie Jo	Leed, Donald
McHenry, Timothy	McHenry, Caroline

#### 4.5 Deferred Retirements

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

<b>Name</b>	<b>Retirement Plan Type</b>
Bakovic, Dragan	G5, Vested - Reciprocity
Dela Cruz, Glenn	G4, Vested
Esquivel, Svetlana	G4, Vested
Fish, Michael	G7, Non-vested - Reciprocity
Franson, David	S4, Vested - Reciprocity
Galea, Aaron	G4, Vested - Auto Defer - Code 31700
Glocke, Stacy	G7, Vested
Hoang, John	G4, Vested - Auto Defer - Code 31700
Luna, Jessica	G7, Vested
Mendez, Michelle	G4, Vested - Auto Defer - Code 31700
Molina, Ivana	G4, Vested - Auto Defer - Code 31700
Nevin, Timothy	G7, Non-vested - Reciprocity
Nichols, Kameisha	G5, Vested - Auto Defer - Code 31700

#### 4.6 Member Account Refunds

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

<b>Name</b>	<b>Retirement Plan Type</b>
Glensor, Devan	G7, Non-vested
Hawes, Julian	G7, Non-vested
Hernandez, Jessica	G7, Non-vested
Miranda, Dereck	G4, Vested

Mohler, Kristiane	G4, Non-vested
Reid, Brandon	G7, Non-vested

**4.7 Member Account Rollovers**

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

<b>Name</b>	<b>Retirement Plan Type</b>
Cherry, Linda	G7, Non-vested
Kim, Jessica	G7, Non-vested
Kwak, Edward	G7, Non-vested
Soohee, Dalyn	G7, Non-vested

**4.8 Member Account Redeposits**

None.

**4.9 Acceptance of Trustees' Reports of Educational Activities Through Outside Provider**


None.

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

October 27, 2020

Agenda Item 4.10

**TO:** Board of Retirement

**FROM:** Scott Hood, Chief Executive Officer 

**SUBJECT:** SACRS Business Meeting Topics for the Fall 2020 Conference

**Recommendation**

Authorize SamCERA's Voting Delegate to Approve the Minutes of the SACRS Fall 2019 Business Meeting and to vote in the best interest of SamCERA on any new action items that may be added to the November 2020 Business Meeting Agenda.

**Background**

The SACRS Business Meeting will be held Friday, November 13, 2020. Prior to each Business Meeting, the Board discusses items to be voted on and gives SamCERA's Voting Delegate direction.

**Discussion**


This is the first SACRS business meeting since last fall, as the Spring SACRS Conference was cancelled. As with the conference itself, the Business Meeting will be held using a web-based platform. The meeting will be potentially comprised of action items from the Secretary, Treasurer and the audit and bylaws committees. The business meeting packet will be made available to the Board when SACRS provides it to the systems.

SamCERA needs to return the proxy form by October 31, 2020. Voting delegates and Alternate voting delegates will be required to participate on Friday, November 13th via the online conference access. Per SamCERA tradition, because additional items could be added prior to the vote, if the Voting Delegate wishes to vote, the Voting Delegate is bound to vote in a manner that the delegate considers to be in the best interests of SamCERA.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
Board of Retirement

October 27, 2020

Agenda Item 5.2

**TO:** Board of Retirement  
**FROM:** Scott Hood, Chief Executive Officer   
**SUBJECT:** Resolution Defining Compensation Earnable

**Recommendation**

Approve a resolution defining compensation earnable, pursuant to Government Code §31461 for members who are not subject to Government Code §7522.34 to further define compensation earnable for on-call duty.

**Background**

The California Supreme Court's recent decision in *Alameda County Deputy Sheriffs' Assoc. v. Alameda County Employees' Retirement Association*, (2020) 9 Cal. 5th 1032, (the Alameda Decision) upheld the constitutionality of the amendments made as part of the Public Employees' Pension Reform Act of 2013 (PEPRA) to Government Code § 31461. The decision does not apply to PEPRA Plan 7 members as they are subject to Government Code §7522.34.

Section 31461 defines compensation earnable for legacy members in Plans 1-6. Amended §31461 added several exclusions to compensation earnable. However, there is only one exclusion, "additional services outside of normal working hours" and one pay item "on-call" that is to be addressed because of the Court's recent decision. Since 2013, it is estimated that the legacy members who received this pay code represent less than 5% of SamCERA's total membership (actives, deferred and retirees).

**Discussion**

The Board's resolution defines compensation earnable for legacy members by delineating the pay items that are includable as compensation earnable and the pay items that are excluded. The current resolution provides that on-call pay code 027 is included. It also states that "additional services outside of normal working hours" are excluded.

The Alameda Decision addresses on-call pay and the exclusion for additional services outside of normal working hours. It states that on-call duty pay is "provided to employees in return for voluntarily making themselves available to be called to work outside their normal working hours" and that the exclusion "prevents employees from volunteering, during their final compensation period, to perform additional services outside of normal working hours to artificially inflate their daily rate of pay."

In order to comply with the Alameda Decision, and in recognition that our participating employers may require members to work on-call on a regularly scheduled basis, staff recommends that on-call pay code 027, remain included in compensation earnable for on-call duty that is part of the regular work

assignment. However, the resolution should clarify the conditions under which on-call pay code 027 may be used and would be amended to read as follows:

“To be included as pay code 027, the time for on-call hours which compensation is received must be within the normal working hours set forth in the applicable employment agreement, resolution, and/or departmental policies, which should reflect that on-call is ordinarily worked by others in the same grade or classification or organizational unit at the same rate of pay; is a part of the regular work assignment (as distinguished from ad hoc or voluntarily worked) for all members in the organizational unit; reflect the amount of assigned and scheduled on-call hours (or method of regular rotation of assignment of scheduled on-call among all members of the organizational unit); and reflect that the method of filling vacancies or absences in such a schedule is accomplished through a rotational basis as distinguished from ad hoc or volunteering.”

The proposed amendment to the resolution lists pay code 027 for “Regular and Required On-Call” as includable in compensation earnable and a new pay code 024 “Voluntary or Ad Hoc On-Call” as not includable. A courtesy email regarding staff’s recommendation was sent to labor representatives.

Staff anticipates that most on-call duty will continue to be coded under 027, but that some on-call services will be coded under pay code 024. If approved, staff will then provide assistance to SamCERA employers so that they can instruct their employees and supervisors to correctly complete and approve timecard submissions in a manner that reflects the criteria contained in the above description for the use of pay code 027. SamCERA will monitor the data and review employer on-call policies as needed, to ensure continued compliance with the Alameda Decision. In this review process, staff will analyze whether any adjustments need to be made regarding the inclusion of pay code 027 for certain members who received it after the 2013 amendment to §31461. If any such adjustments are required, staff will first update the Board and then notify any affected members. Staff is making no predetermination at this time as to whether any adjustments will be required.

The attached resolution rescinds the previous resolution and adds the description under which pay code 027 may be used and adds pay code 024. It also deletes the erroneous listing of pay codes 127 (used only by PEPRA members) and 827 (not a SamCERA employer code) as these codes are not used by legacy members.

**Attachment**

Resolution Defining Compensation Earnable Pursuant to Government Code §31461  
for Members who are not subject to Government Code §7522.34

**SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**

**RESOLUTION 2020-\_\_**

***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 Resolution number 2020-13 is rescinded, and pursuant to Government Code §31461 as interpreted by the courts, the Board hereby makes the following determinations 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
001-G	Regular hours worked (grace paid)
001-M	Regular hours worked (mandatory meeting)
001-T	Regular hours worked (training)
001-TW	Regular hours worked (telecom)
006	Sheriff's 84/12 Plan
00680	84/12 Plan (Sheriff)
010	Release time with pay
011	Night shift differential-com dispatch
013	Night shift differential



Pay Code	Description
014	Special night shift differential
015	Special duty hours
016	Inspection/Testing/Repair with a Certification
019	Charge nurse shift differential
020	Split shift
021-L1	Bilingual pay
021-L2	Bilingual pay
022	Staffing differential
023	Weekend pay
<b>027</b>	<b>Required and Regular On-Call hours</b>
033	Bomb squad (flight/observer/pilot)
035	Sick leave with pay
035B	Sick Leave Supplemental Pay
036	Sick leave with pay (work-related injury)
041	Vacation hours with pay
041-A	X-Vacation hours with pay
041B	Vacation Supplemental pay
041H	Vacation hours with pay on holiday
043	Holiday hours regular pay
043CNA	Holiday premium for PT CNA
044	Holiday worked at 1.5
045	Holiday hours worked at straight time
045-P	Holiday hours worked at straight time
045O	Holiday hours worked at straight time-overflow
048	Accumulated holiday hours taken
048-A	X-Accumulated holiday hours taken
048B	Accumulated Holiday Supplemental pay
048H	Holiday hours taken on holiday
052	Comp time hours used
052-A	X-Comp/Admin Leave Hours Used
052B	Comp Time Supplemental pay
052H	Comp time hours used on holiday
054	Administrative leave
055	Jury duty with pay
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
Pay Code	Description

087	Bi-weekly special pay
088	Miscellaneous special pay
090	Voluntary time off used
093	Furlough w/o pay used with payment of contributions
1TW	Regular hours teleworked
102	Annual in-service management administrative leave cash-outs
104	LTC shift differential
104B	LTC shift differential adjustment
110	Compulsory time off
112	Bereavement leave
131	Winter Recess HRs Regular Pay
133	Accum Winter Recess Hrs Taken
313	LC4850 night shift differential
315	LC4850 special duty
359	LC4850 disability with pay
502	Admin leave cash out w/1-time deferred comp
557	Educational lv with pay
635	Emergency Sick Leave
636	Emergency FMLA Paid
641	Essential Worker COVID19 Leave
306	LC4850WC 84/12 plan shf
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
024	Voluntary or Ad Hoc On-Call hours
025	Call back pay
025-P	Call back pay (premium)
025S	Call back pay SART nurses
025-S	Call back pay SART nurses
026	Part-time double shift differential
028	On call EH. relief nurse
029	Part-time double shift differential
037	Layoff sick leave
040	Terminal vacation
042	Mandatory Time Off
046	Holiday hours accrued
046CNA	Holiday premium hours accrued for PT CNA
046-P	Holiday hours accumulated at straight time
Pay Code	Description
047	Holiday hours accrued at 1.5

049	Terminal holiday pay
050	Terminal compensatory pay
051	Comp Time Earned at 1.5
051-P	Premium portion for call back
053	Comp time earned at straight time
060	Absent without leave
061	Leave without pay
061-A	X-Leave without pay
062	Disability leave without pay
063	Terminal MOT Pay
065	Overtime training hours
066	Overtime at time and one-half
069	Overtime special duty desk officer
069-P	Overtime special duty desk officer
070	Overtime special duty
073	Overtime special duty night shift
075	Overtime night shift premium hours
076	Rest period differential
079	Overtime special shift differential
083	Worker's compensation payment
084	Employee incentives
085	Disability payment
086	Taxable benefits-DP
089	Relocation Allowance
091	Terminal VTO pay
096	County Deferred Comp Contribution
097	Miscellaneous terminal pay
101	LTD payments
103	FMLA earnings
105	Miscellaneous subsidies
106	FSLA adjustments
106 80	FSLA adjustment for 84/12
106 980-P1	FSLA adjustment 9/80 period 1
106 980-P2	FSLA adjustment 9/80 period 2
107	Overtime at straight time
108	Comp hours earned at straight time (OT)
111	Terminal compulsory time off
125	Call back pay st.
132	Winter Recess Hours Accrued
134	Terminal Winter Recess Pay
203	Wellness Dividend
Pay Code	Description
225	Call back pay flat rate
383	LC4850 worker's compensation payment
637	Emergency FMLA Unpaid

637M	Emergency FMLA Unpaid
640	Terminal EW COVID19 Leave
642	Essential Worker Onsite
642M	Essential Worker Onsite Memo Note
803	SART nurses meeting/service-flat rate
804	SART nurses training and education-flat rate
P25	Call in phone

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

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

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

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

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

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

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

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

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

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

4. To be included as pay code 027, the time for on-call hours which compensation is received must be within the normal working hours set forth in the applicable employment agreement, resolution, and/or departmental

policies which should reflect that on-call is ordinarily worked by others in the same grade or classification or organizational unit at the same rate of pay; is a part of the regular work assignment (as distinguished from ad hoc or voluntarily worked) for all members in the organizational unit; reflect the amount of assigned and scheduled on-call hours (or method of regular rotation of assignment of scheduled on-call among all members of the organizational unit); and reflect that the method of filling vacancies or absences in such a schedule is accomplished through a rotational basis as distinguished from ad hoc or volunteering.

5. Pursuant to Government Code §31641(c), the terms listed above in paragraph 3 and 4 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 and *Alameda County Deputy Sheriffs' Assoc. v. Alameda County Employees' Retirement Association* (2020) 9 Cal.5th 1032.

**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 27, 2020.*

*Ayes, Trustees:*

*Noes, Trustees:*

*Absent, Trustees:*

*Abstain, Trustees:*

---

*Katherine O'Malley, Board Secretary*  
SamCERA

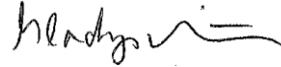
SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
**Board of Retirement**

October 27, 2020

Agenda Item 5.3

**TO:** Board of Retirement

**FROM:** Gladys Smith, Assistant Executive Officer



**SUBJECT:** Annual Review of SamCERA's Actuarial Services Firm, Milliman, Inc.

**Recommendation**

Accept the annual performance report of Milliman, Inc.'s actuarial services.

**Background**

The annual evaluation of Milliman has three parts:

1. A survey completed by trustees, staff and the actuary;
2. Responses to questions submitted to the actuary;
3. A discussion at the Board meeting with Milliman, Inc. regarding its performance as reflected in the surveys and responses to the questions.

**Discussion**

Milliman, Inc. has consistently received high marks, throughout the years, from the Board and staff for the actuarial services it provides to SamCERA. Ratings this year were similar to those of the past.

Overall, Milliman received high marks from the Board and staff. The rating structure was from 1 to 5 with 1 being Low (poor rating) to 5 (high rating). The average self-assessment rating by Milliman was 4.4 while the Board's was 4.7 and staff's was 5.0. No concerns or issues were raised by the Board or staff.

**Attachment**

Milliman Questionnaire



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

Tel +1 206 624 7940  
Fax +1 206 623 3485

milliman.com

October 19, 2020

**To:** Gladys Smith  
**From:** Nick Collier, Craig Glyde  
**Subject:** Actuarial Review – Milliman Inc.

As requested, we have completed the questionnaire form. Please note that Milliman is a large, multi-office firm with services covering a variety of types of actuarial and other consulting issues. For purposes of this review we have responded with answers that apply to the Western Region Employee Benefits practice and have provided client information regarding only the public sector clients. If additional information on other offices or other clients is needed, please let us know.

### Organizational Update

**1) Has the ownership structure of your firm changed? If so, describe.**

No, Milliman's ownership structure has not changed since last year. Milliman is a corporate organization owned by its approximate 400 Principals. No Principal owns 5% or more of the firm. The firm is comprised of profit centers overseen by Principals who have a considerable amount of flexibility with respect to the management of their profit centers.

**2) Provide an update on your firm's organization, with particular emphasis on (a) changes to your management structure over the past eighteen months, and (b) clients gained or lost in the past eighteen months. All significant changes should be accompanied by an explanation. An organizational chart should accompany this response.**

Milliman is a firm of actuaries and consultants providing actuarial and risk management services, and a range of consulting and technology solutions to private and public businesses, non-profit enterprises, government, and financial organizations in approximately 40 offices around the United States, and worldwide.

(a) Other than the normal growth of the firm, there have been no changes in the management structure of Milliman in the last 18 months. Normal growth includes new Principals being nominated and a few Principals leaving the firm, primarily due to retirement.

(b) The Western Region Employee Benefits has not had any significant gains or losses in clients over the past 18 months. If requested, we can provide a list of public clients added or lost over the past 18 months.

(c) Below is an organizational chart of Milliman. The only change from last year is the retirement of our Chief Operating Officer. The Principals of the firm as a whole are responsible for establishing the governing principles of Milliman. Principals are active senior professionals within Milliman who have been elected in recognition of their technical, professional and business achievements. The Board of Directors of Milliman and the officers of Milliman are delegated the authority by the Principals to assume day-to-day responsibilities for carrying out the management directives established by the Principals. The Board of Directors of Milliman consists of 11 Principals including the President, the Chairman, four National Directors of our major practice areas, and five rotating positions.

## Milliman Organization Chart

### Board of Directors



### Practice Areas



### Administration



**3) Has your firm's policy regarding adding public pension plan clients and other actuarial business changed, if so how?**

The Western Region Employee Benefits practice believes we can add new business only when we have the capacity to maintain the high level of service we promise to all clients. Within the public sector, the opportunity to attain new business is driven by the RFP process. In order to respond to any RFP situations, we are continuing hiring new actuarial analysts – at the rate of about two per year within the western region, and growing from within. In addition, Milliman has access to additional staff from other offices if special projects create a need for a temporary increase in staffing support. We have on occasion, when needed, hired additional experienced staff from other firms, but our preferred method of growth is from within our own staff.

**4) Update all significant personnel changes or expected changes to the "SamCERA Team." Describe the relative strength and longevity of your staff.**

Most of the senior staff in our practice have been with Milliman for more than 15 years.

The SamCERA team consists of Nick Collier, Craig Glyde, and John Talbot. The team is supported by other public plan consultants and analysts..

Nick (30+ years with Milliman) and Craig (15+ years with Milliman plus additional experience with a prior firm) have extensive experience. John Talbot (5 years with Milliman) performs most of the valuation calculations and provides support to Nick and Craig. Nick, Craig and John have been together on the SamCERA team for about five years.



- 5) **Please confirm if there were any lawsuits or legal proceedings requiring notification to SamCERA under section 16 of our agreement. If yes, please described.**

There have been no legal proceedings that would require notification under the agreement.

- 6) **Are any of your operations outsourced? If the answer is yes, provide details regarding the firm(s) with which your firm has contracted.**

No. None of our work with SamCERA is outsourced.

- 7) **Other than the actuarial audit performed by SamCERA's actuarial auditor on your SamCERA actuarial services, was an actuarial audit performed on any of your firm's actuarial products? If yes, discuss the audit and the findings. Any material findings or recommendations must be accompanied by an explanation.**

The following client(s) from our practice have had actuarial audits performed within the past 12 months (auditing firm in parentheses): California State Teachers' Retirement System (Cheiron), Los Angeles County Employees Retirement Association (Cavanaugh Macdonald), Oregon PERS (Gabriel, Roeder & Smith), State of Florida Retirement Systems (Gabriel, Roeder & Smith) and Tacoma Employees' Retirement System (Gabriel, Roeder & Smith). There were no material issues found in the audits.

- 8) **What are your mission critical systems? Has your firm experienced any problems with these systems in the past twelve months? When were these systems implemented and when were they last upgraded? Do you anticipate any changes to these systems in the next twelve months?**

The only critical system we use to perform services for SamCERA at the current time is our valuation system called ProVal. We moved to this valuation system in 2017 as it is the most common system used by pension actuaries and has an extensive support network. This system is continuously being updated and improved to reflect changes in the employee benefit arena.

- 9) **Please describe how your firm monitors and manages cyber security risks as they relate to confidential SamCERA data/information. Has your firm experienced any problems with cyber security in the past 18 months? What is your cyber security breach policy? What procedures do you have in place for a cyber security breach?**

The following is a description of Milliman's cyber security procedures. Note that our procedures have been independent reviewed as part of a SOC 2 audit.

Data security is important and Milliman maintains physical, electronic, and managerial safeguards to prevent unauthorized access to confidential, sensitive, and personal information. Milliman has a comprehensive information security policy based on the ISO 27001 risk management framework. Milliman has implemented a number of layered controls and safeguards, including administrative policies and procedures and automated systems. These controls are employed in a defense in depth arrangement to secure electronic information stored on our systems.

Milliman's data handling policy requires that all confidential data be transmitted using an approved, secure method. We also maintain security protocols for our servers and e-mail system, and physical records retention and destruction policies. All hardware and software to be used for this project reside in our Seattle office. We do not contract with a separate entity for computer services.

In addition, we will comply with any written standards communicated to us by our clients. Our preferred data transmittal method is to use Milliman's Secured File Transfer Protocol (SFTP) server. This method only requires that the user be able to access the internet through an internet browser. No software needs to be installed on the user's computer. Milliman will issue the user a username, a password, and provide the Internet address for the SFTP site. Using Milliman's SFTP server ensures that usernames, passwords, and data files are encrypted while traveling through the internet. Milliman has other alternatives available, which can also include using file encryption or a client-provided encrypted method. Depending on the nature and sensitivity of the data sent, file encryption at rest may also be appropriate. We comply with any written standards communicated to us by our clients.

Once data has been securely obtained by Milliman, we undertake extensive precautions to ensure the continuing security of sensitive information. This includes logical security, firewalls, anti-malware software, employee security protocols, and full-disk encryption of personal desktop and laptop computers used by Milliman staff. In addition, we maintain physical security measures for building and data storage facilities and maintain internal policies to ensure privacy for sensitive client and participant data.

Other security measures we have in place, include:

- **Staff.** Milliman performs employee background checks on all employees before they are allowed to start work. Every Milliman employee signs Milliman's Employee Trade Secret and Client Information Agreement. Mandatory data-handling security training is required for all staff. Security training is monthly for all employees. Milliman has written policies on data handling and acceptable computer use. Terminated users' access is removed on their last day. For involuntary terminations, all access is removed immediately and employees are escorted off the premises.

- **Physical security.** The Seattle office of Milliman is located at 1301 Fifth Avenue, Suite 3800. Keycard access is required to enter the building after hours. The building has security guards on duty 7 days a week, 24 hours a day. The elevators are secured after-hours and only the keycards of Milliman employees and security personnel are code to allow access a Milliman floor. Milliman floors are secured with keycards and door codes that are individualized to each employee. The data center is locked 24/7. It is secured on a separate keycard/door code system with extremely limited access, controlled by the Information Technology Manager. Each door entry system tracks who opens a door. There are cameras in the elevator lobbies and in the data center. The data center uses a motion detection system to monitor access. The data center has no walls on the outside of the building, and no walls are connected to the elevator lobby.
- **PC security.** All PCs lock after 15-minutes of non-use. All PCs use full-disk hardware encryption. All Notebook PCs use personal firewalls. All PCs and servers utilize anti-malware software.
- **Data access security.** System access requires valid user IDs and passwords. Forced password changes are required every 90 days. Complex password rules are in place. (A minimum of eight characters are required. Passwords must contain three of four categories of characters: uppercase, lowercase, numeric value or symbol. No part of the user's name exceeding two characters is allowed to be part of the password. Passwords in history cannot be re-used. Twenty-five passwords retained in history.) Data access is limited by role. This is controlled by two levels of security. Active Directory group permissions are used to control allowed access to applications. Then role-based permissions are used inside the applications themselves to allow very granular access control.
- **Firewalls, intrusion prevention, and detection, etc.** The database is housed behind an intrusion prevention system is in place. It is updated within a day of newly published patterns. Milliman actively blocks tens of thousands of known malicious IP addresses. Intrusion detection monitoring and alerting is provided 24 hours a day. Operating Systems and application security patches are installed within a few days of release and pushed out from a central server to machines automatically. Anti-malware provides anti-virus and anti-SPAM blocking before mail is routed to Milliman. All PCs and Servers run Anti-virus/Anti-Spyware/Malware software. Every file is scanned upon opening. A central server checks for pattern updates multiple times per day and pushes updates out to all machines.
- **Vulnerability scans, penetration testing, audits.** Periodic vulnerability scanning is performed monthly to find and mitigate risks. Penetration testing is performed annually by an external auditing firm. An annual SSAE16 audit of IT systems is performed annually by an external auditing firm. In addition, Milliman has an Information Security Policy which is reviewed internally on a periodic basis and annually by a third party to ensure it is up to date and continues to cover the appropriate scope, and to identify any existing gaps between the security policy and industry practices.

All security incidents are promptly reported to management, including the chief legal officer and information security officer.

In addition, Milliman has an Information Security Policy which is reviewed internally on a periodic basis and annually by a third party to ensure it is up to date and continues to cover

the appropriate scope, and to identify any existing gaps between the security policy and industry practices.

We have an annual independent assessment made of our cyber security processes including annual security penetration testing performed by a third-party. We also have an SSAE18 audit which includes a review of our cyber security controls.

Milliman's cyber security breach policy requires us to notify clients within 48 hours of a confirmed breach. In the event of a cyber security incident, Milliman follows the laws applicable in each state where affected participants reside to notify clients and participants of security breaches. Milliman has a documented Cyber Security Incident Response Plan and a Cyber Security Incident Response Team. Cyber security monitoring and incident response includes the following:

- Preparation & Prevention – includes maintaining a cyber security response team, maintaining firewalls, maintaining access control security, maintaining monitoring systems and alerts
- Identification/Detection – includes user reports, monitoring ingress and egress sensors, event correlation, categorization of incidents by severity (triage) which determines incident response
- Containment – includes possibly isolating hosts depending on the nature of activity associated with a given incident
- Investigation – includes analyzing logs, documenting findings, transferring evidence as needed to law enforcement
- Eradication – includes the use of cleaning utilities, manual reconfigurations, vendor or other approved patches, updated service packs, updated device images
- Post-Incident Recovery – includes verifying that the threat and enabling environment are clear, performing vulnerability scanning and device hardening as applicable, restoring data
- Follow-up – includes conducting effectiveness reviews during each incident response to identify any inadequacies within the process

We have not experienced any cyber security incidents in the past 18 months.

**10) Please describe any changes to Milliman's business continuity plan.**

There have been no substantive changes to Milliman's business continuity plan that we reported to SamCERA last year. Note that Milliman has been able to successfully transition to remote working during the current pandemic.

**Actuarial Process****11) Provide a description, in detail, of your actuarial process used when providing services to SamCERA and highlight any changes to the process..**

The following summarizes our standard valuation procedures (as stated in our proposal):

**1. Data Checking and Preliminary Processing**

SamCERA supplies us with information for each active, vested, and retired member, along with certain financial items. The data is checked for reasonableness and any data questions and issues are submitted to SamCERA staff for verification.

**2. Choosing Assumptions**

Actuarial valuations are necessarily based on assumptions as to future rates of retirement, disablement and death among active members, rates of mortality after retirement, rates of investment income, rates of salary increases, and rates of increase in the Consumer Price Index, where applicable. In valuing SamCERA's benefits, we use the assumptions adopted by the Board, based on the most recent experience investigation.

**3. Valuation Calculations**

Each valuation determines the actuarial present value of all future benefits payable from SamCERA. These benefits are those provided to members under current law. We determine the actuarial present value of future benefit payments using our valuation program. The program can calculate costs under the entry age normal cost method, which is specified in the '37 Act. Liability calculations are checked for accuracy and reasonableness on both an individual and aggregate basis.

We then calculate each valuation group's unfunded actuarial accrued liability (UAAL) as the value of the benefits in excess of the sum of the future normal cost contributions and the current value of assets. Finally, we determine the contribution rate needed for each group to satisfy the amortization period requirements.

**4. Funding Valuation Report**

Our report includes our conclusions regarding the financial condition SamCERA, the unfunded actuarial accrued liability, recommendations as to future contribution rates, discussion of the calculations, descriptions of the benefit provisions of the applicable laws and summaries of assumptions and data. Our report typically shows a breakdown of liabilities by source of decrement for active members, as well as subtotals for inactive members. We are open to discuss with SamCERA staff and the Board regarding possible changes in the reporting format for their particular needs. We reflect each system's own characteristics in our report.

Our goal is to provide enough information for the Board to make reasonable financial decisions without becoming too complex to undermine the basic intent of disclosing the valuation results. However, we are always open to suggestions for improving the communications of our valuation work, if a modified approach is preferred.

**5. GASB Report**

We develop the information required to be disclosed by Statement Nos. 67 and 68 of the Governmental Accounting Standards Board (GASB). We provide this information both for the system and the participation employers.

There have been no changes in the process since last year. We will be reviewing a potential change to the data extract for future valuations to include information on reciprocal members to more accurately determine the member contribution rates actually being paid.

**12) Provide a description, in detail, of the peer review procedures you used when providing services to SamCERA and include whether and the extent it involves other actuarial firms, highlight any changes to that process.**

Our internal peer review processes provide assurances that the highest quality standards are being maintained at all times. Each valuation, study, or projections will be reviewed by at least two consultants. The first level of review will occur within the SamCERA team. Two of the three consultants on the project team will review each step of the project. The final internal SamCERA team review will be performed by Nick Collier and Craig Glyde. Additionally, another Milliman public sector consultant who did not work on the project will review the work prior to its final release. This provides the project with an independent set of eyes. This review will not only verify the calculations, but will evaluate whether or not the assumptions, methods, and results are reasonable, and all appropriate issues are considered.

## Outlook

**13) What current issues are other clients concerned with in regards to products, services, education and governance?**

The following are some of issues concerning our public sector clients right now.

- Potential COVID-19 Impact – There are a number of ways the current pandemic could impact retirement systems. We view the two most likely impacts are lower investment returns and lower employer payroll. The returns for most systems for the fiscal year ended June 30, 2020 are in the 0% to 4% range which is less than the actuarial assumption and projected to cause future contribution rate increases. If payroll declines, this would have a direct impact on employer contribution rates, causing them to increase if they are funded as a percentage of payroll. The pandemic could also have an indirect impact on system funding if reduced tax revenues affect employer's willingness to make contributions.
- Liability Disclosures – Proposed Actuarial Standard of Practice #4 includes a requirement to disclose a market-related liability which would be based on a currently very low discount rate, and consequently the Low-Default-Risk Obligation Measure would be a much higher number than retirements systems are disclosing for funding purposes. This would only be a disclosure requirement and should not have a direct impact on system funding.
- Risk Assessments – Actuarial Standard of Practice (ASOP) #51 was first effective with SamCERA's 2019 valuation and requires a discussion of risk related to funded status and contributions. We have included a Risk Disclosure section in the annual valuation report that satisfies this ASOP, along with supplemental information on risk in our presentations. Although not required under the standard, some retirement systems have had a more comprehensive analysis of risk completed by their actuary. This has generally been in the form of a separate stand-alone report. The additional analysis has been fairly prevalent in California with CalPERS, CalSTRS, and several of the '37 Act systems preparing risk reports. We have provided a sample risk assessment report to SamCERA's CEO for informational purposes.

- Investment Return Assumption – Always a hot topic in the public sector, continuing declines in interest rates and expected returns will continue to put pressure on systems to reduce their return assumptions.

**14) Describe your assessment of the relationship between your firm and SamCERA. How can SamCERA better assist you in accomplishing the goals it has established for your firm? How can we better utilize your firm's capabilities?**

We believe we have a strong relationship with SamCERA. As with all relationships, communication is the key factor. We have attempted to reply promptly and effectively to all inquiries. We have attempted to alert SamCERA of any relevant issues as they become apparent to us or are reported to us. Similarly, SamCERA staff has kept us up to date on issues that affect our work. We have felt very positive about being supported by SamCERA and we hope the relationship will continue to grow.

We have the actuarial data process working fairly smoothing with SamCERA's new pension administration system. By continuing to improve the consistency and quality of data included in the extract files, SamCERA will help us continue to provide quality service. On the asset side, it is always helpful for us to get the financial information as early as possible in the valuation process.

Probably the most significant way we can continue to assist SamCERA is in the understanding of the volatility of future investment returns and the impact on future contribution rates. We have provided SamCERA some fairly simple projections in the past but have the capability to do more sophisticated analysis as the need arises.

## **Conclusion**

**15) What actuarial related changes should SamCERA consider?**

We do not believe there are any actuarially related changes that need to be made at this moment. As noted in our response to question #13, some retirement systems are having their actuary prepare additional risk analysis. We do not currently see a compelling reason for SamCERA to complete this type of analysis, but have provided SamCERA a sample report from another client. At this point in time, we think the focus should be on any adjustments SamCERA or the employers would like to make in preparation for the projected decrease ("the cliff") in the Statutory Contribution Rate.

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

We believe the key trends are as follows:

- Lower CPI / wage growth / Investment Return Assumptions – In response to economic experience and trends, changes in asset allocation, and future expectations of CPI and investment returns of asset classes, retirement systems have been adopting lower CPI, wage growth and investment return assumptions over the last 10 years. We believe there will continue to be downward pressure on economic assumptions given the continuing decline in interest rates.
- Pension Obligation Bonds – There has been an increase in the issuance of pension obligation bonds (POB) in California over the last few years, at least partially driven by the

current low interest rate environment. These issuances have been primarily among cities participating in CalPERS. POBs in theory can reduce employer contributions, but they also increase the potential risk for the employer.

- Plan Maturity – Plans are continuing to become more mature. For example, with the 2020 valuation the number of SamCERA retirees now exceeds the number of active members. This is not necessarily a problem, but it may increase volatility of contribution rates for SamCERA (and the majority of public sector retirement systems). To address this, we will continue to provide SamCERA with sensitivity analysis showing the impact of various future investment returns on contribution rates. We will also work with Verus when they do their asset allocation study to reflect this impact, as well as look at the how to address negative cash flow, which is likely to occur in a few years.



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

October 27, 2020

Agenda Item 6.1

**TO:** Board of Retirement

**FROM:** Michael Coultrip, Chief Investment Officer *Michael R. Coultrip*

**SUBJECT:** Preliminary Monthly Portfolio Performance Report for the Period Ended September 30, 2020

**Recommendation**

Accept the preliminary performance report dated September 30, 2020.

**Background**

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

The attached performance report shows both net and gross of fee returns for the total plan on page one, with net composite returns (pages 2-3) and net manager returns (pages 4-11) also shown.

**Discussion**

The fund's net preliminary return for September was -1.2%, bringing the preliminary trailing twelve-month net return ending September 2020 to 4.3%. The preliminary twelve-month net return is below both SamCERA's Plan Benchmark return of 6.0% and SamCERA's Actuarial Assumed Earnings Rate of 6.5%.

Global markets pulled back in September and took a breather from the impressive rally that has taken place since the March lows. The U.S. equity market (measured by the S&P 500 Index) was down 3.8% (+5.6% YTD) after hitting an all-time high during the month. Small-cap stocks were down 3.3% (-8.7% YTD). International markets were also lower on the month. Developed international equity (as measured by MSCI EAFE) was down 2.6% (-7.1% YTD), while emerging markets were down 1.6% (-1.2% YTD).

Economic data was generally positive, but the improvement in conditions continue to soften. The ISM Manufacturing Index increased (although at a lower level than last month), while the improvement in the U.S. labor market continued to slow. However, consumer confidence rebounded nicely in September after showing weakness last month.

The general U.S. fixed income market was lower by 0.1% as interest rates were relatively stable across the yield curve. The 10-year U.S. Treasury yield was lower by 2 basis points during the month and ended at 0.68% by month-end. High Yield returns were down 1.0% as credit spreads widened.

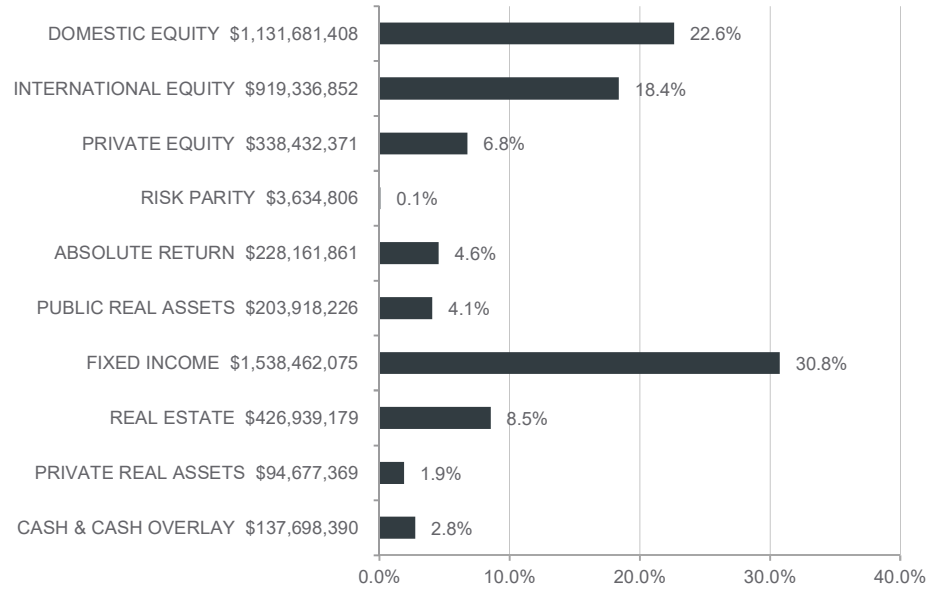
**Attachments**

Northern Trust Monthly Preliminary Performance Report  
Verus Capital Market Update

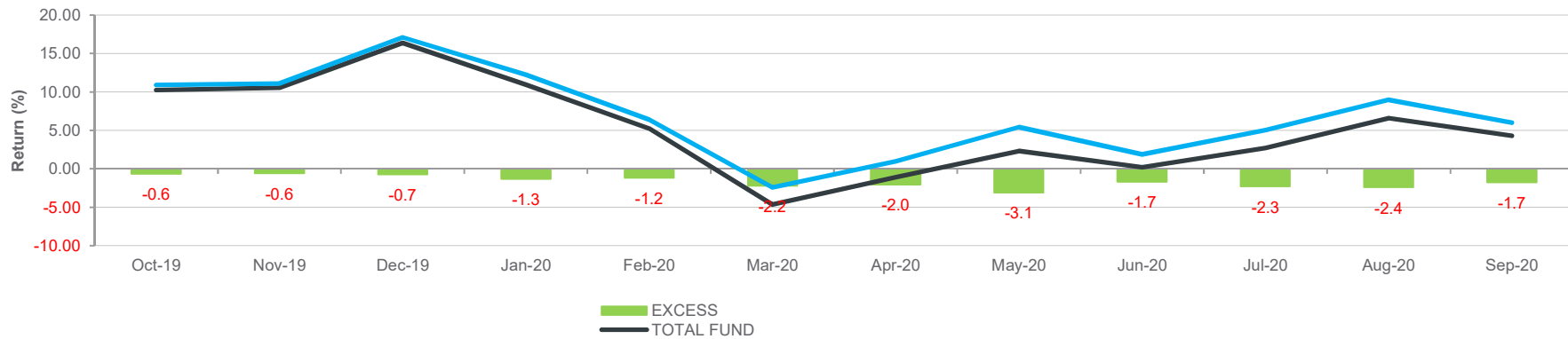
**Total Fund Performance**



**Asset Allocation**

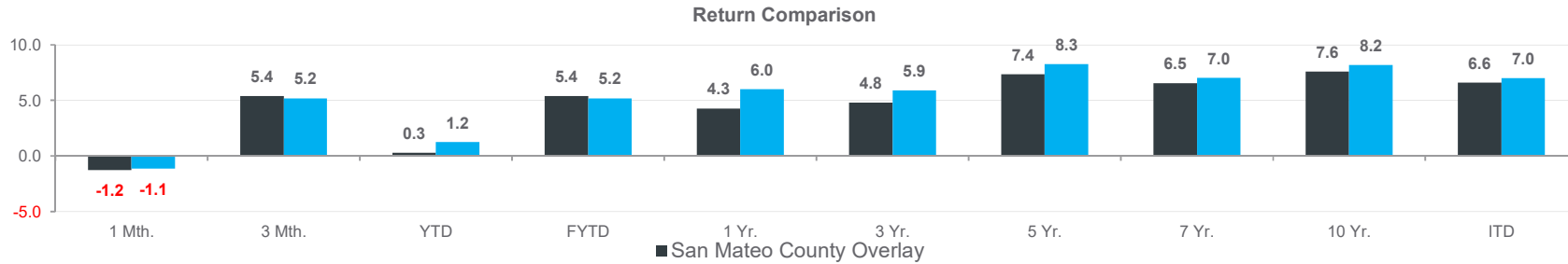


**Rolling Month End Annual Returns**



# San Mateo County Composite Return Summary

September 30, 2020

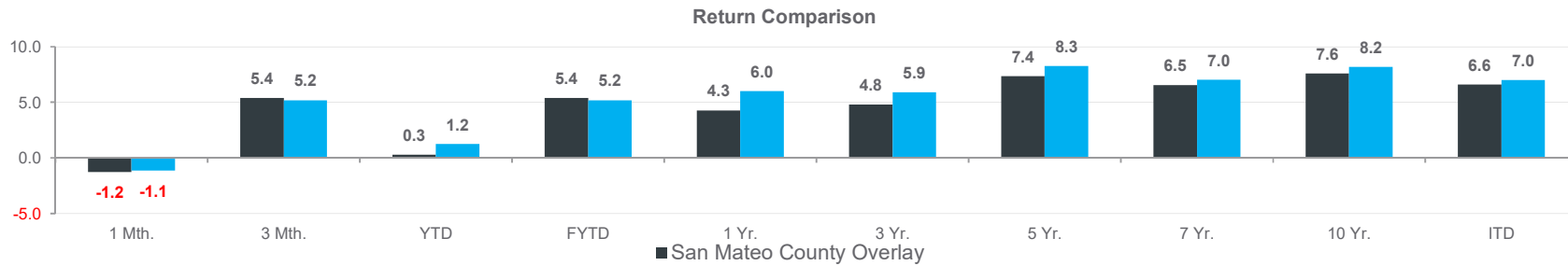


Composite Returns (Net of Manager Fees)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
San Mateo County Overlay	5,002,987,296	-1.2	5.4	0.3	5.4	4.3	4.8	7.4	6.5	7.6	6.6
Samcera Total Plan Benchmark		-1.1	5.2	1.2	5.2	6.0	5.9	8.3	7.0	8.2	7.0
Excess		-0.1	0.2	-1.0	0.2	-1.7	-1.1	-0.9	-0.5	-0.6	-0.4
San Mateo Ex-Clifton Overlay	4,991,488,671	-1.2	5.4	0.3	5.4	4.2	4.7	7.2	6.4	7.6	6.5
Samcera Total Plan Benchmark		-1.1	5.2	1.2	5.2	6.0	5.9	8.3	7.0	8.2	7.0
Excess		-0.1	0.2	-1.0	0.2	-1.8	-1.2	-1.0	-0.6	-0.6	-0.5
Total Equity	2,051,018,260	-2.7	7.0	-0.6	7.0	7.6	6.2	10.0	8.1	9.5	7.7
Samcera Total Equity Benchmark		-2.8	7.5	0.7	7.5	9.4	6.9	11.1	9.3	10.5	8.3
Excess		0.1	-0.5	-1.3	-0.5	-1.8	-0.7	-1.0	-1.1	-1.0	-0.6
Fixed Income	1,538,462,075	0.1	2.3	4.5	2.3	5.7	4.5	5.2	4.5	4.8	5.5
Samcera Fixed Income Benchmark		-0.4	1.6	4.9	1.6	5.9	5.0	4.9	4.1	3.9	5.1
Excess		0.6	0.7	-0.4	0.7	-0.2	-0.6	0.3	0.4	1.0	0.4
Risk Parity	3,634,806	0.0	-0.0	-8.5	-0.0	-6.6	3.0	5.7	5.3	--	5.3
Samcera Risk Parity Benchmark		-2.2	5.9	3.8	5.9	9.3	6.6	8.9	8.2	--	8.4
Excess		2.2	-5.9	-12.3	-5.9	-15.8	-3.6	-3.1	-2.9	--	-3.1



# San Mateo County Composite Return Summary

September 30, 2020



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
Alternatives	566,594,231	-0.4	15.3	11.9	15.3	9.9	7.8	7.4	7.1	-2.8	-0.8
Samcera Alternatives Benchmark		1.4	11.5	6.2	11.5	8.0	9.0	10.0	8.3	9.2	7.9
Excess		-1.8	3.8	5.7	3.8	1.9	-1.2	-2.5	-1.1	-12.0	-8.7
Inflation Hedge	725,534,774	-0.9	1.7	-10.4	1.7	-7.9	-0.8	--	--	--	3.0
SamCERA Inflation Hedge Index		-0.6	2.3	-5.4	2.3	-2.8	2.2	--	--	--	4.4
Excess		-0.3	-0.7	-4.9	-0.7	-5.1	-3.0	--	--	--	-1.4
Cash	137,698,390	-0.0	0.1	0.5	0.1	0.8	0.9	0.8	0.7	0.7	1.8
Samcera Cash Benchmark		0.0	0.0	0.6	0.0	1.1	1.7	1.2	0.9	0.6	1.8
Excess		-0.1	0.1	-0.1	0.1	-0.3	-0.7	-0.4	-0.1	0.1	0.0



# San Mateo County Composite Return Summary

September 30, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Equity	2,051,018,260	-2.7	7.0	-0.6	7.0	7.6	6.2	10.0	8.1	9.5	7.7
Samcera Total Equity Benchmark		-2.8	7.5	0.7	7.5	9.4	6.9	11.1	9.3	10.5	8.3
Excess		0.1	-0.5	-1.3	-0.5	-1.8	-0.7	-1.0	-1.1	-1.0	-0.6
Domestic Equity	1,131,681,408	-3.7	7.3	0.9	7.3	8.6	9.2	12.2	10.6	12.3	8.7
Samcera Dom. Equity Benchmark		-3.6	9.2	5.4	9.2	15.0	11.6	13.7	11.9	13.4	9.3
Excess		-0.0	-1.9	-4.5	-1.9	-6.4	-2.4	-1.5	-1.2	-1.1	-0.6
Large Cap Equity	1,052,303,880	-3.6	7.6	2.6	7.6	10.2	10.5	13.2	11.8	13.0	9.5
Russell 1000		-3.7	9.5	6.4	9.5	16.0	12.4	14.1	12.5	13.8	10.0
Excess		0.0	-1.9	-3.8	-1.9	-5.8	-1.9	-0.9	-0.7	-0.8	-0.5
Blackrock Russell 1000	532,255,322	-3.7	9.5	6.6	9.5	16.2	12.4	--	--	--	13.6
Russell 1000		-3.7	9.5	6.4	9.5	16.0	12.4	--	--	--	13.5
Excess		-0.0	-0.0	0.2	-0.0	0.2	0.0	--	--	--	0.1
DE Shaw Commingled Fund	164,065,224	-5.0	8.2	2.3	8.2	11.4	9.7	13.4	--	--	10.9
Russell 1000		-3.7	9.5	6.4	9.5	16.0	12.4	14.1	--	--	11.1
Excess		-1.3	-1.3	-4.1	-1.3	-4.7	-2.6	-0.7	--	--	-0.2
Acadian US MGD V-SL	174,992,295	-3.5	4.4	-5.9	4.4	-1.0	--	--	--	--	10.9
Russell 1000		-3.7	9.5	6.4	9.5	16.0	--	--	--	--	21.5
Excess		0.2	-5.1	-12.3	-5.1	-17.0	--	--	--	--	-10.6
Panagora Defuseq -SL	180,991,039	-2.5	4.6	-4.4	4.6	-1.2	--	--	--	--	13.9
Russell 1000		-3.7	9.5	6.4	9.5	16.0	--	--	--	--	21.5
Excess		1.1	-4.8	-10.8	-4.8	-17.3	--	--	--	--	-7.6
Domestic Equity Overlay	5,352,620	0.6	2.7	--	2.7	--	--	--	--	--	19.7
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.0	--	--	--	--	--	0.1
Excess		0.6	2.6	--	2.6	--	--	--	--	--	19.7
Small Cap Equity	74,024,907	-4.4	2.2	-19.5	2.2	-12.0	-4.3	2.7	2.0	7.0	5.0
Russell 2000		-3.3	4.9	-8.7	4.9	0.4	1.8	8.0	6.4	9.9	7.2
Excess		-1.0	-2.8	-10.8	-2.8	-12.4	-6.1	-5.3	-4.4	-2.8	-2.2



# San Mateo County

## Composite Return Summary

September 30, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
QMA US Small Cap	0	--	--	--	--	--	--	--	--	--	--
Russell 2000		--	--	--	--	--	--	--	--	--	--
Excess		--	--	--	--	--	--	--	--	--	--
QMA US Small Cap	74,024,907	-4.4	2.2	-19.5	2.2	-12.0	-4.3	--	--	--	2.1
Russell 2000		-3.3	4.9	-8.7	4.9	0.4	1.8	--	--	--	6.4
Excess		-1.0	-2.8	-10.8	-2.8	-12.4	-6.1	--	--	--	-4.3
International Equity	919,336,852	-1.4	6.7	-2.3	6.7	6.4	2.7	7.2	4.3	4.6	5.4
SamCERA Custom Hedge Intl		-1.7	5.5	-4.8	5.5	2.8	1.3	6.4	3.4	4.2	4.8
Excess		0.3	1.3	2.5	1.3	3.6	1.4	0.8	0.9	0.4	0.6
Baillie Gifford	329,635,411	-0.3	13.2	14.2	13.2	28.5	10.0	12.6	8.2	--	9.6
MSCI ACWI ex USA Growth		-0.9	10.2	7.5	10.2	17.9	7.7	10.6	6.9	--	--
Excess		0.5	3.0	6.7	3.0	10.6	2.3	2.1	1.4	--	--
Blackrock MSCI ACWI ex US IMI	311,680,886	-2.3	6.7	--	6.7	--	--	--	--	--	3.2
MS AC WIdxUS IMI Nt		-2.3	6.8	--	6.8	--	--	--	--	--	3.5
Excess		0.0	-0.1	--	-0.1	--	--	--	--	--	-0.3
Mondrian Investment Partners	276,070,216	-3.5	3.6	-16.2	3.6	-7.2	-3.0	3.0	1.5	2.9	4.1
MSCI ACWI xUSA Value		-4.1	2.4	-17.2	2.4	-10.3	-4.5	2.8	0.3	2.1	3.8
Excess		0.6	1.2	1.0	1.2	3.1	1.5	0.2	1.2	0.9	0.3
EV Parametric EM	0	--	--	--	--	--	--	--	--	--	--
MSCI Emerging Markets GD		--	--	--	--	--	--	--	--	--	--
Excess		--	--	--	--	--	--	--	--	--	--
Currency Hedge Futures	318,028,265	-1.7	3.3	--	3.3	--	--	--	--	--	4.7
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.0	--	--	--	--	--	0.1
Excess		-1.8	3.2	--	3.2	--	--	--	--	--	4.6
Currency Hedge Futures Offsets	318,028,265	0.0	0.0	--	0.0	--	--	--	--	--	0.0
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.0	--	--	--	--	--	0.1
Excess		-0.0	-0.0	--	-0.0	--	--	--	--	--	-0.1



# San Mateo County

## Composite Return Summary

September 30, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
International Equity Overlay	1,950,340	-3.8	11.3	--	11.3	--	--	--	--	--	24.9
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.0	--	--	--	--	--	0.1
Excess		-3.8	11.3	--	11.3	--	--	--	--	--	24.8
Fixed Income	1,538,462,075	0.1	2.3	4.5	2.3	5.7	4.5	5.2	4.5	4.8	5.5
Samcera Fixed Income Benchmark		-0.4	1.6	4.9	1.6	5.9	5.0	4.9	4.1	3.9	5.1
Excess		0.6	0.7	-0.4	0.7	-0.2	-0.6	0.3	0.4	1.0	0.4
Core Fixed Income	1,038,627,280	0.1	1.4	6.3	1.4	7.3	4.8	4.7	4.4	4.4	5.4
BBG Barclays US Aggregate		-0.1	0.6	6.8	0.6	7.0	5.2	4.2	4.0	3.6	5.1
Excess		0.1	0.7	-0.5	0.7	0.3	-0.4	0.5	0.5	0.8	0.3
FIAM Core Bond	0	--	--	--	--	--	--	--	--	--	--
BBG Barclays US Aggregate		--	--	--	--	--	--	--	--	--	--
Excess		--	--	--	--	--	--	--	--	--	--
FIAM B Core Bond	268,277,519	-0.0	1.5	8.5	1.5	9.1	6.0	--	--	--	5.4
BBG Barclays US Aggregate		-0.1	0.6	6.8	0.6	7.0	5.2	--	--	--	4.3
Excess		0.0	0.9	1.7	0.9	2.2	0.8	--	--	--	1.1
Western Total Return	181,681,972	-0.4	2.4	2.3	2.4	5.4	3.5	5.0	--	--	4.5
BBG Barclays US Aggregate		-0.1	0.6	6.8	0.6	7.0	5.2	4.2	--	--	4.1
Excess		-0.4	1.8	-4.5	1.8	-1.6	-1.8	0.8	--	--	0.4
Blackrock Inter Gov	140,550,446	0.1	0.3	6.2	0.3	6.2	4.2	--	--	--	3.8
BBG Barclays US Aggregate		-0.1	0.6	6.8	0.6	7.0	5.2	--	--	--	5.1
Excess		0.1	-0.4	-0.6	-0.4	-0.8	-1.0	--	--	--	-1.3
DoubleLine	231,147,600	0.6	1.8	--	1.8	--	--	--	--	--	5.4
BBG Barclays US Aggregate		-0.1	0.6	--	0.6	--	--	--	--	--	2.9
Excess		0.7	1.2	--	1.2	--	--	--	--	--	2.5
NISA Core Bond	204,317,463	-0.0	0.8	--	0.8	--	--	--	--	--	2.3
BBG Barclays US Aggregate		-0.1	0.6	--	0.6	--	--	--	--	--	1.7
Excess		0.0	0.1	--	0.1	--	--	--	--	--	0.6





# San Mateo County Composite Return Summary

September 30, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Core Fixed Income Overlay	12,652,281	0.3	-0.3	--	-0.3	--	--	--	--	--	0.3
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.0	--	--	--	--	--	0.1
Excess		0.2	-0.3	--	-0.3	--	--	--	--	--	0.3
Opportunistic Credit	499,834,795	0.3	4.2	0.9	4.2	2.6	3.8	6.1	5.8	7.9	8.2
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	5.0	5.0	6.5	5.6	6.3	7.1
Excess		1.5	0.6	-1.8	0.6	-2.4	-1.2	-0.4	0.2	1.5	1.1
Pimco Private Income	39,520,101	0.0	7.2	2.6	7.2	5.1	--	--	--	--	3.8
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	5.0	--	--	--	--	6.6
Excess		1.2	3.6	-0.1	3.6	0.1	--	--	--	--	-2.8
AG CREDIT SOL FU LP	11,585,250	0.0	6.6	13.3	6.6	--	--	--	--	--	13.3
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	--	--	--	--	--	2.7
Excess		1.2	3.0	10.6	3.0	--	--	--	--	--	10.6
AG CSF ANX DISLOC FD	17,978,102	0.0	5.9	--	5.9	--	--	--	--	--	6.0
BB Barc BA Intermediate HY Ind		-1.2	3.6	--	3.6	--	--	--	--	--	14.1
Excess		1.2	2.3	--	2.3	--	--	--	--	--	-8.2
AG Opportunistic Whole Loan	2,684,391	9.2	9.2	-15.1	9.2	-12.1	9.8	9.9	--	--	7.5
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	5.0	5.0	6.5	--	--	5.1
Excess		10.5	5.6	-17.8	5.6	-17.1	4.8	3.4	--	--	2.4
Angelo Gordon	588,205	0.0	59.4	36.7	59.4	39.8	31.3	22.5	19.3	--	18.2
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	5.0	5.0	6.5	5.6	--	5.4
Excess		1.2	55.8	34.0	55.8	34.7	26.3	16.0	13.7	--	12.8
Blackrock Direct Lending Feede	4,753,490	5.6	5.6	-2.3	5.6	-2.3	--	--	--	--	-1.7
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	5.0	--	--	--	--	7.2
Excess		6.9	2.0	-4.9	2.0	-7.3	--	--	--	--	-8.9
Beach Point Select Fund	77,889,968	1.2	6.8	3.8	6.8	6.4	5.6	7.5	--	--	7.4
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	5.0	5.0	6.5	--	--	5.4
Excess		2.4	3.1	1.1	3.1	1.4	0.6	0.9	--	--	2.0



# San Mateo County

## Composite Return Summary

September 30, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Brigade Cap Mngmt	89,504,254	-0.1	6.2	-1.2	6.2	-0.5	1.3	5.1	3.6	5.3	5.5
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	5.0	5.0	6.5	5.6	6.3	6.5
Excess		1.2	2.5	-3.9	2.5	-5.6	-3.7	-1.4	-2.1	-1.0	-1.1
White Oak Yield Spec	34,184,024	0.0	2.7	4.1	2.7	5.5	7.6	--	--	--	--
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	5.0	5.0	--	--	--	5.5
Excess		1.2	-1.0	1.4	-1.0	0.5	2.7	--	--	--	--
PIMCO Div. Income Fund	128,548,915	-0.7	2.7	1.8	2.7	3.5	4.6	--	--	--	4.7
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	5.0	5.0	--	--	--	5.0
Excess		0.5	-0.9	-0.9	-0.9	-1.5	-0.4	--	--	--	-0.3
TCP Direct Lending VIII	34,319,681	3.0	3.0	3.4	3.0	5.6	5.6	--	--	--	--
BB Barc BA Intermediate HY Ind		-1.2	3.6	2.7	3.6	5.0	5.0	--	--	--	6.1
Excess		4.2	-0.6	0.7	-0.6	0.6	0.7	--	--	--	--
Franklin Templeton	58,278,414	0.3	-0.5	-8.1	-0.5	-6.2	-2.8	1.2	0.6	--	2.3
BB Barclays Multiverse Index		-0.4	2.7	5.3	2.7	6.0	4.0	4.1	2.6	--	2.7
Excess		0.7	-3.2	-13.4	-3.2	-12.2	-6.8	-2.9	-2.0	--	-0.4
Risk Parity	3,634,806	0.0	-0.0	-8.5	-0.0	-6.6	3.0	5.7	5.3	--	5.3
Samcera Risk Parity Benchmark		-2.2	5.9	3.8	5.9	9.3	6.6	8.9	8.2	--	8.4
Excess		2.2	-5.9	-12.3	-5.9	-15.8	-3.6	-3.1	-2.9	--	-3.1
AQR Global Risk III	0	--	--	--	--	--	--	--	--	--	--
Samcera Risk Parity Benchmark		--	--	--	--	--	--	--	--	--	--
Excess		--	--	--	--	--	--	--	--	--	--
Panagora	3,634,806	0.0	0.0	-5.2	0.0	-5.4	3.7	6.5	--	--	5.2
Samcera Risk Parity Benchmark		-2.2	5.9	3.8	5.9	9.3	6.6	8.9	--	--	7.2
Excess		2.2	-5.9	-9.0	-5.9	-14.7	-2.9	-2.4	--	--	-2.0
Alternatives	566,594,231	-0.4	15.3	11.9	15.3	9.9	7.8	7.4	7.1	-2.8	-0.8
Samcera Alternatives Benchmark		1.4	11.5	6.2	11.5	8.0	9.0	10.0	8.3	9.2	7.9
Excess		-1.8	3.8	5.7	3.8	1.9	-1.2	-2.5	-1.1	-12.0	-8.7



# San Mateo County

## Composite Return Summary

September 30, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Private Equity	338,432,371	-0.2	26.3	32.9	26.3	30.6	23.1	18.9	18.6	--	-10.8
Samcera PE Benchmark		2.5	22.5	7.5	22.5	9.6	11.3	14.8	13.8	--	15.4
Excess		-2.6	3.8	25.4	3.8	21.0	11.9	4.1	4.8	--	-26.2
Absolute Return	228,161,861	-0.8	2.2	-10.3	2.2	-12.0	-8.0	-3.8	0.4	--	0.7
Samcera LIBOR + 4%		0.3	1.0	3.6	1.0	5.1	5.8	5.3	5.0	--	4.8
Excess		-1.2	1.1	-13.9	1.1	-17.0	-13.8	-9.2	-4.6	--	-4.1
AQR Delta XN	5,045,643	0.0	0.2	-26.8	0.2	-29.8	-17.7	-9.7	-4.0	--	-2.6
Samcera LIBOR + 4%		0.3	1.0	3.6	1.0	5.1	5.8	5.3	5.0	--	4.8
Excess		-0.3	-0.8	-30.4	-0.8	-34.9	-23.4	-15.0	-9.0	--	-7.4
Aberdeen Std GARS	78,492,867	-0.4	4.0	4.4	4.0	5.7	3.1	1.7	--	--	1.7
Samcera LIBOR + 4%		0.3	1.0	3.6	1.0	5.1	5.8	5.3	--	--	5.3
Excess		-0.7	3.0	0.8	3.0	0.6	-2.7	-3.6	--	--	-3.6
Graham Global Investment	74,391,329	-3.2	2.7	--	2.7	--	--	--	--	--	-0.8
Samcera LIBOR +4%		0.3	1.0	--	1.0	--	--	--	--	--	3.1
Excess		-3.5	1.6	--	1.6	--	--	--	--	--	-3.9
PIMCO MAARS Fund L.P.	70,232,022	1.1	-0.1	--	-0.1	--	--	--	--	--	1.9
Samcera LIBOR +4%		0.3	1.0	--	1.0	--	--	--	--	--	2.2
Excess		0.8	-1.1	--	-1.1	--	--	--	--	--	-0.3
Inflation Hedge	725,534,774	-0.9	1.7	-10.4	1.7	-7.9	-0.8	--	--	--	3.0
SamCERA Inflation Hedge Index		-0.6	2.3	-5.4	2.3	-2.8	2.2	--	--	--	4.4
Excess		-0.3	-0.7	-4.9	-0.7	-5.1	-3.0	--	--	--	-1.4
Real Estate	426,939,179	0.0	0.2	0.4	0.2	2.3	5.6	--	--	--	6.6
Samcera NCREIF ODCE EW (gross)		0.0	0.0	-0.4	0.0	1.2	5.3	--	--	--	6.3
Excess		0.0	0.2	0.7	0.2	1.2	0.3	--	--	--	0.4
Invesco Core Real Estate	263,266,152	0.0	0.8	-0.9	0.8	1.0	5.2	6.8	8.4	9.8	7.3
Samcera NCREIF ODCE EW (gross)		0.0	0.0	-0.4	0.0	1.2	5.3	6.9	8.8	10.3	7.3
Excess		0.0	0.8	-0.5	0.8	-0.2	-0.2	-0.0	-0.3	-0.5	-0.0



**San Mateo County**  
**Composite Return Summary**  
September 30, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Invesco US Val IV	14,581,505	0.0	-4.5	0.6	-4.5	5.7	9.9	--	--	--	10.4
Samcera NCREIF ODCE EW (gross)		0.0	0.0	-0.4	0.0	1.2	5.3	--	--	--	7.1
Excess		0.0	-4.5	1.0	-4.5	4.5	4.6	--	--	--	3.3
PGIM Real Estate US Debt Fund	83,757,475	0.0	0.0	3.4	0.0	5.1	4.9	--	--	--	4.6
Samcera NCREIF ODCE EW (gross)		0.0	0.0	-0.4	0.0	1.2	5.3	--	--	--	5.5
Excess		0.0	0.0	3.8	0.0	3.9	-0.4	--	--	--	-1.0
Invesco US VAL V	14,928,799	0.0	-3.8	1.6	-3.8	2.3	--	--	--	--	1.8
Samcera NCREIF ODCE EW (gross)		0.0	0.0	-0.4	0.0	1.2	--	--	--	--	--
Excess		0.0	-3.8	2.0	-3.8	1.1	--	--	--	--	--
Harrison Street Core Property	50,405,248	0.0	-0.3	0.8	-0.3	--	--	--	--	--	0.8
Samcera NCREIF ODCE EW (gross)		0.0	0.0	-0.4	0.0	--	--	--	--	--	-0.4
Excess		0.0	-0.3	1.2	-0.3	--	--	--	--	--	1.2
Public Real Assets	203,918,226	-2.9	4.0	-24.5	4.0	-21.3	-7.5	--	--	--	--
SamCera Liquid Real Asset Inde		-2.8	4.1	-14.2	4.1	-9.1	-2.0	--	--	--	3.1
Excess		-0.0	-0.1	-10.3	-0.1	-12.1	-5.5	--	--	--	--
SSGA CST REAL ASSET NL	203,918,226	-2.9	4.0	-14.9	4.0	-9.9	-2.6	--	--	--	--
SamCera Liquid Real Asset Inde		-2.8	4.1	-14.2	4.1	-9.1	-2.0	--	--	--	1.5
Excess		-0.0	-0.1	-0.6	-0.1	-0.8	-0.6	--	--	--	--
Private Real Assets	94,677,369	-0.6	4.2	-1.1	4.2	0.2	-3.9	--	--	--	6.2
SamCERA Private Real Asset Idx		0.4	7.7	-5.8	7.7	-6.8	1.4	--	--	--	4.3
Excess		-1.0	-3.5	4.7	-3.5	7.0	-5.3	--	--	--	1.9
Cash Overlay	11,498,624	0.0	0.1	--	0.1	--	--	--	--	--	0.2
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.0	--	--	--	--	--	0.1
Excess		-0.0	0.1	--	0.1	--	--	--	--	--	0.1
General Account	58,953,519	-0.1	-0.1	0.5	-0.1	0.9	1.7	1.3	1.0	0.8	2.0
Transition Account	5,028	--	--	--	--	--	--	--	--	--	--



**San Mateo County**  
**Composite Return Summary**  
 September 30, 2020



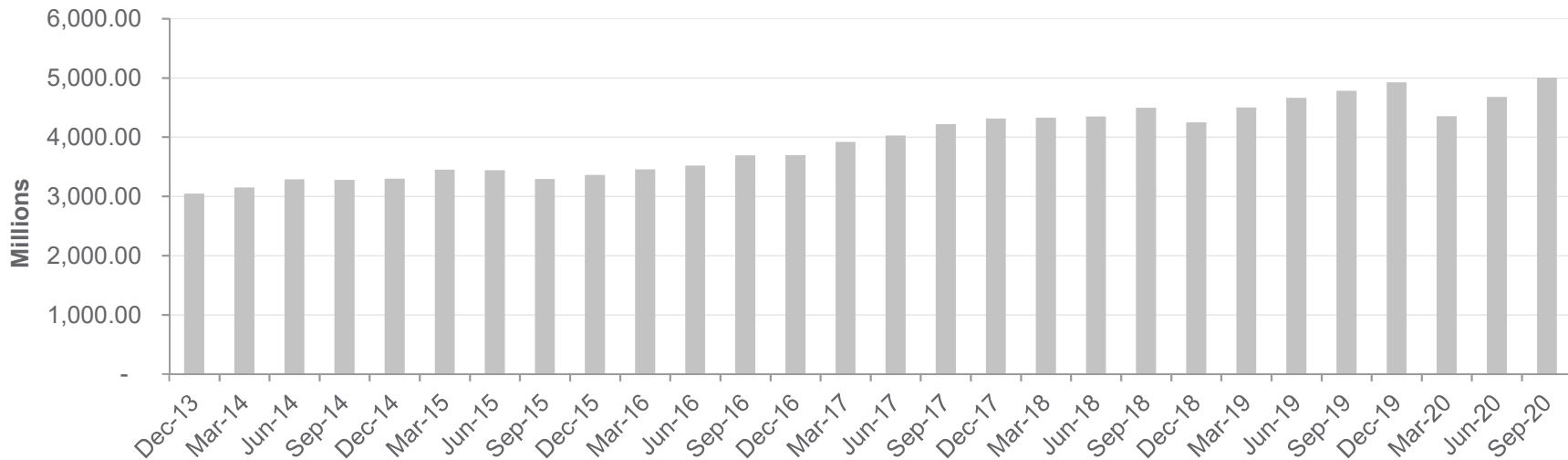
<b>Composite Returns (NET)</b>	<b>Market Value (\$)</b>	<b>1 Mth.</b>	<b>3 Mth.</b>	<b>YTD</b>	<b>FYTD</b>	<b>1 Yr.</b>	<b>3 Yr.</b>	<b>5 Yr.</b>	<b>7 Yr.</b>	<b>10 Yr.</b>	<b>ITD</b>
County Treasury Pool	35,038,023	0.0	0.2	1.0	0.2	1.7	1.8	1.4	1.2	1.1	2.6
Currency Hedge Cash Overlay	32,203,196	0.0	0.0	--	0.0	--	--	--	--	--	0.1
San Mateo County Overlay	5,002,987,296	-1.2	5.4	0.3	5.4	4.3	4.8	7.4	6.5	7.6	6.6
Samcera Total Plan Benchmark		-1.1	5.2	1.2	5.2	6.0	5.9	8.3	7.0	8.2	7.0
Excess		-0.1	0.2	-1.0	0.2	-1.7	-1.1	-0.9	-0.5	-0.6	-0.4



**Record of Asset Growth**

	Three Months	One Year
<b>TOTAL FUND</b>		
Beginning Market Value	4,676,086,096	4,782,295,114
Contributions	298,246,701	710,845,333
Withdrawals	-312,603,294	-776,880,912
Income Received	15,288,916	62,208,555
Gain/Loss	243,823,683	143,349,842
Ending Market Value	5,002,987,296	5,002,987,296

**Net Asset Values Over Time (\$'000)**

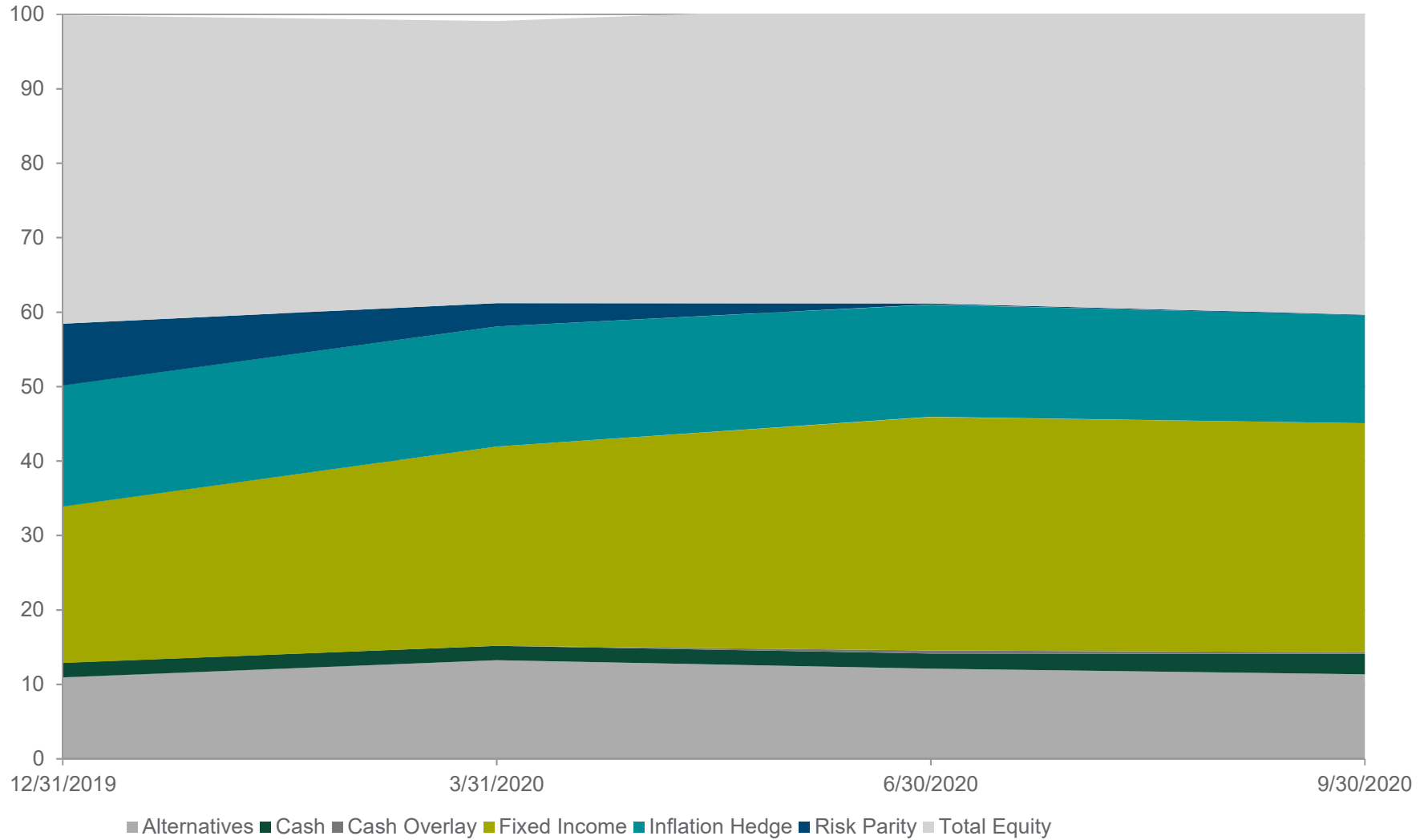


Actual vs Target Weights



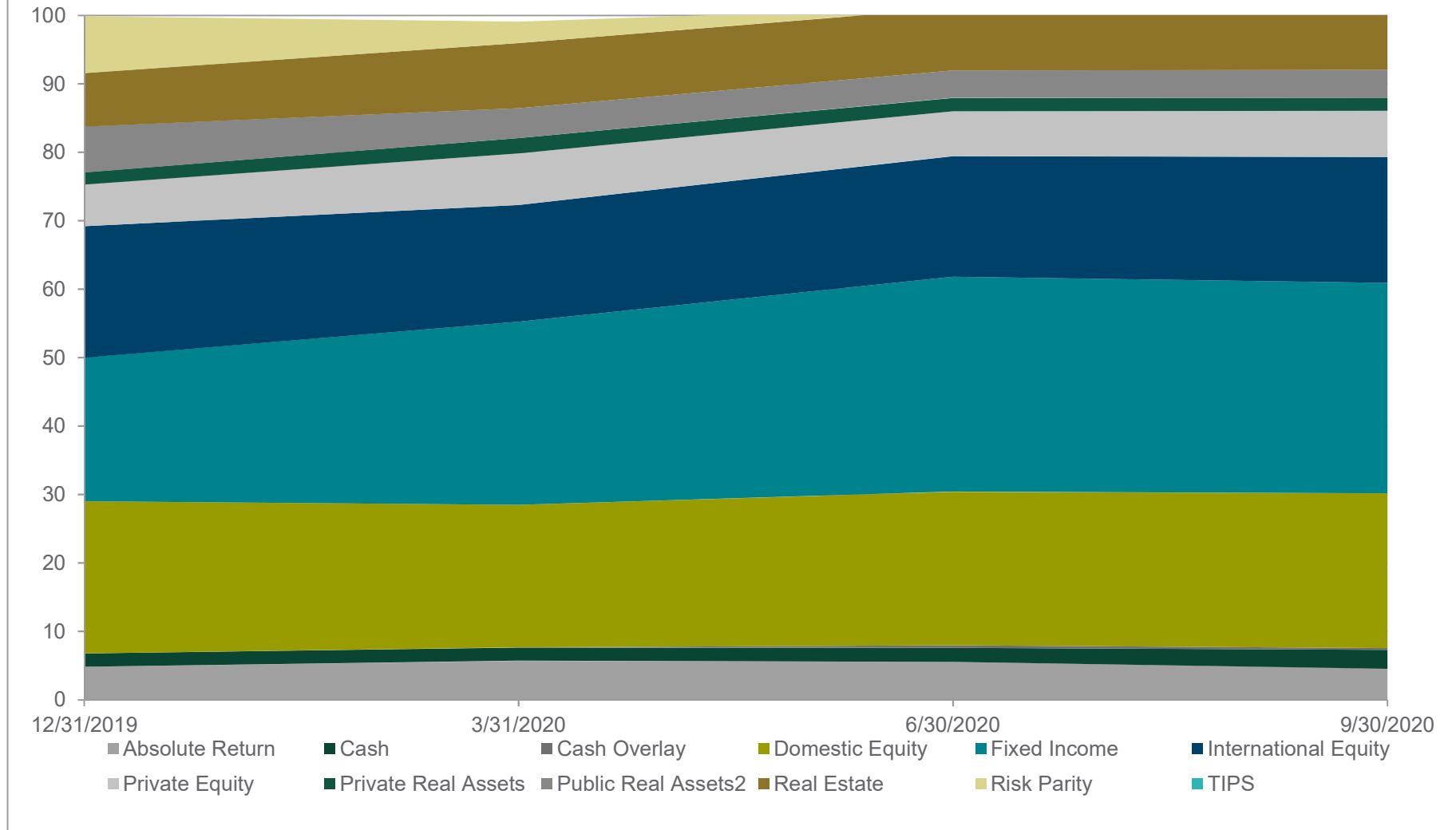
	Min	Actual	Target	Deviation	Max
<b>Domestic Equity</b>	19.0	22.6	21.0	1.6	23.0
<b>International Equity</b>	16.0	18.4	18.0	0.4	20.0
<b>Fixed Income</b>	29.0	30.8	31.0	-0.2	33.0
<b>Private Equity</b>	4.0	6.8	6.0	0.8	8.0
<b>Risk Parity</b>	0.0	0.1	0.0	0.1	0.0
<b>Absolute Return</b>	4.0	4.6	6.0	-1.4	8.0
<b>Liquidity</b>	0.0	2.8	1.0	1.8	2.0
<b>Public Real Assets</b>	2.0	4.1	4.0	0.1	6.0
<b>Real Estate</b>	8.0	8.5	10.0	-1.5	12.0
<b>Private Real Assets</b>	1.0	1.9	3.0	-1.1	5.0

Asset Allocation over Time





### Sub-Asset Class Allocation Over Time



## Disclaimer(s)

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of Morgan Stanley Capital International Inc. ("MSCI") and Standard & Poor's, a division of The McGraw-Hill Companies, Inc. ("S&P") and is licensed for use by The Northern Trust Corporation and its wholly owned subsidiaries. Neither MSCI, S&P, nor any other party involved in making or compiling the GICS or any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability and fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling the GICS or any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

The Dow Jones Wilshire Indexes are calculated, distributed and marketed by Dow Jones & Company, Inc. pursuant to an agreement between Dow Jones and Wilshire and have been licensed for use. All content of the Dow Jones Wilshire Indexes © 2005 Dow Jones & Company, Inc. & Wilshire Associates Incorporated.

Standard and Poor's including its subsidiary corporations ("S&P") is a division of the McGraw-Hill Companies, Inc. Reproduction of S&P Index Alerts in any form is prohibited except with the prior written permission of S&P. Because of the possibility of human or mechanical error by S&P sources, S&P or others, S&P does not guarantee the accuracy, adequacy, completeness or availability of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. S&P gives not express or implied warranties, including, but not limited to, any warranties or merchantability or fitness for a particular purpose or use. In no event shall S&P be liable for any indirect, special or consequential damages in connection with subscriber's or others' use of S&P Index Alerts.

All MSCI equity characteristic results except for Dividend Yield, Price to Book Value, Price to Cash Earnings and Price Earnings Ratio were calculated by The Northern Trust Company. FTSE ® is a trade mark of London Stock Exchange Plc and The Financial Times Limited and is used by FTSE under license. All rights in the FTSE Indices vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE Indices or underlying data.

The Merrill Lynch Indices are used with permission. Copyright 2007, Merrill Lynch, Pierce, Fenner & Smith Incorporated. All rights reserved. The Merrill Lynch Indices may not be copied, used, or distributed without Merrill Lynch's prior written approval.

The Citi Index data is provided to you on an "AS IS" basis and you agree that use of the index data is at your sole risk. Citi Index makes no representations or warranties, express or implied, to you or any other person or entity, including without limitation any warranty of merchantability, originality, suitability or fitness for a particular purpose of the index data or any other matter and no warranty is given that the index data will conform to any description thereof or be free of omissions, errors, interruptions or defects. 4. In no event shall Citi Index be liable to you or any other person or entity for any direct, incidental, indirect, special or consequential damages (including, without limitation,

lost profits or revenues, loss of data, loss of use or claims of third parties), arising out of or in any manner in connection with your use of (or inability to use) the index data, whether or not you have been advised of, or otherwise might have anticipated the possibility of, such damages. Without limitation on the foregoing, you acknowledge that the index data may be incomplete or condensed, is for information purposes only and is not intended as, and shall not be construed to be, an offer or solicitation with respect to the purchase or sale of any security. All opinions and estimates provided constitute judgments as of their respective dates and are subject to change without notice. Such data, information, opinions and estimates are furnished as part of a general service, without regard to your particular circumstances, and Citi Index shall not be liable for any damages in connection therewith. Citi Index is not undertaking to manage money or act as a fiduciary with respect to your accounts or any of your managed or fiduciary accounts and you acknowledge and agree that the index data does not and shall not serve as the primary basis for any investment decisions made with respect to such accounts.

iShares® and BlackRock® are registered trademarks of BlackRock, Inc. and its affiliates ("BlackRock") and are used under license. BlackRock has licensed certain trademarks and trade names of BlackRock to The Northern Trust Company. The Northern Trust Company's products and services are not sponsored, endorsed, sold, or promoted by BlackRock, and BlackRock makes no representations or warranties related to such products or services either to The Northern Trust Company or any other person or entity, including but not limited to the advisability of investing in the products of The Northern Trust Company. BlackRock has no obligation or liability in connection with the operation, marketing, trading or sale of the products or services from The Northern Trust Company.

Please note that this report has been prepared using best available data. This report may also contain information provided by third parties, derived by third parties or derived from third party data and/or data that may have been categorized or otherwise reported based upon client direction - Northern Trust assumes no responsibility for the accuracy, timeliness or completeness of any such information. If you have questions regarding third party data or direction as it relates to this report, please contact your Northern Trust relationship team.

INVESTMENT ADVICE NOTICE: The data and analysis contained in this report is for informational purposes only. In providing the information contained herein, The Northern Trust Company is not undertaking to provide "investment advice" or to give advice in a fiduciary capacity for purposes of the Employee Retirement Income Security Act of 1974, as amended. Nothing in this report is intended as, or should be understood as, a recommendation to hire, retain, or terminate an investment manager or engage in any purchase or sale transaction with such a manager or any fund that it manages. The Northern Trust Company and/or its affiliates may have business relationships with one or more investment managers or funds for included in this report, and may receive compensation for providing custody, administration, banking, brokerage, foreign exchange or other services to such investment managers or funds. The Northern Trust Company and its affiliates shall have no responsibility for the consequences of investment decisions made in reliance on information contained in this report.



**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**

SEPTEMBER 2020  
Capital Markets Update

# Market commentary

## U.S. ECONOMICS

- Recent figures showed the labor market is still recovering from COVID-19 but not as quickly as in prior months. Non-farm payrolls grew by only 661,000 in September, easing from the 1.4 million additions posted in August. Almost half of added jobs came from the leisure and hospitality sector. The U-3 unemployment rate fell by more than forecast, from 8.4% to 7.9% (exp. 8.2%).
- The trade deficit widened from \$63.6 billion in July to \$67.1 billion in August, which was the highest level since August 2006 and greater in magnitude than the median economist estimate (\$66.1 billion).
- U.S. new home sales rose 4.8% in August to an annualized rate of 1.0 million units—the highest level since September 2006.

## U.S. EQUITIES

- The S&P 500 Index fell -3.8% in September. Equities began the month by hitting a record-high but quickly pulled back as technology companies sold off. The index was unable to find direction as the prospects of congressional approval of a new stimulus package came into question.
- Polling data indicated that Joe Biden extended his lead over President Trump during the month, and the VIX futures curve drifted lower as expectations for a period of elevated volatility following a potentially contested election moderated slightly.
- Heading into Q3 earnings season, over 25% of S&P 500 companies have not provided EPS guidance for 2020 or 2021. Lack of guidance has been largely attributed to the economic uncertainty surrounding the future impact of COVID-19 and could result in more volatile price action following upcoming earnings releases.

## U.S. FIXED INCOME

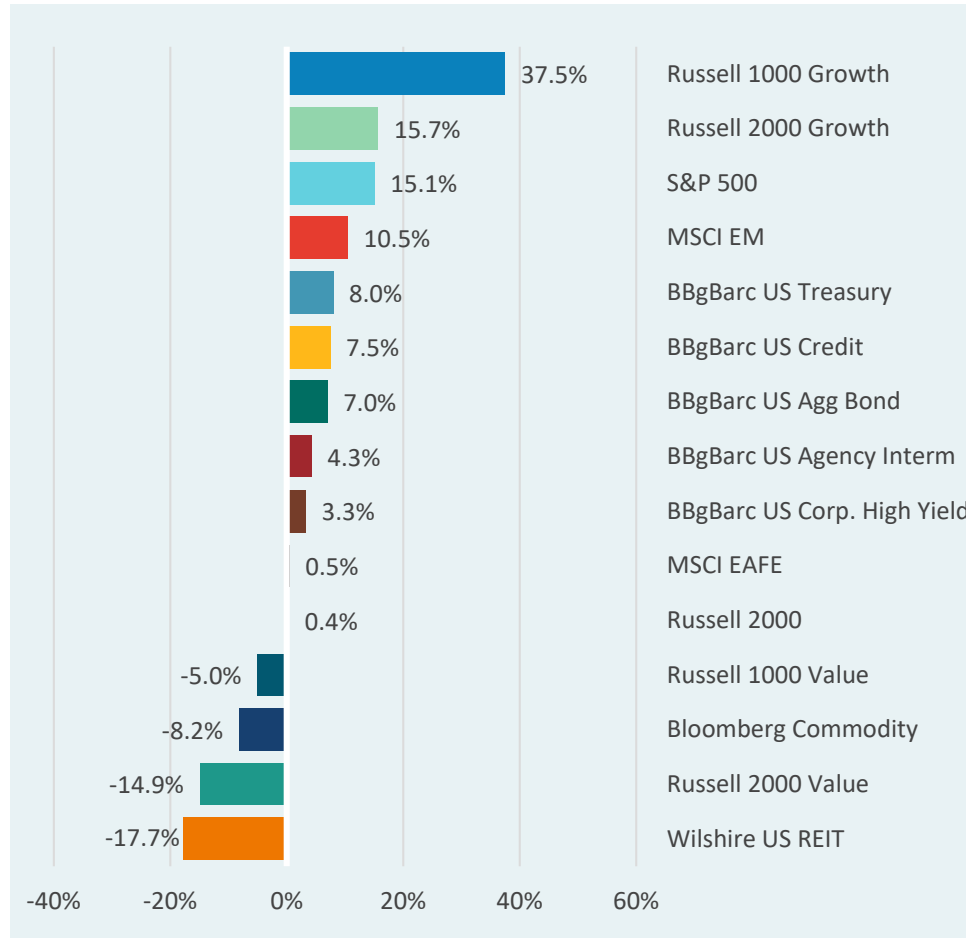
- In its September meeting, the Federal Reserve formalized its new average inflation targeting approach, which will allow for inflation to run higher than the 2% target for some time. Most members believe that short rates are likely to stay near zero through 2023.
- Core PCE – the Fed’s preferred inflation measure – rose to 1.6% year-over-year, 20 basis points higher than where the figure was a month before. Prices for used cars and trucks rose 5.4%, the most in 51 years, and accounted for 40% of the increase in PCE.
- The ten-year breakeven inflation rate fell from 1.80% to 1.63%, indicating that market participants became moderately less optimistic about the ten-year growth and inflation outlooks.

## INTERNATIONAL MARKETS

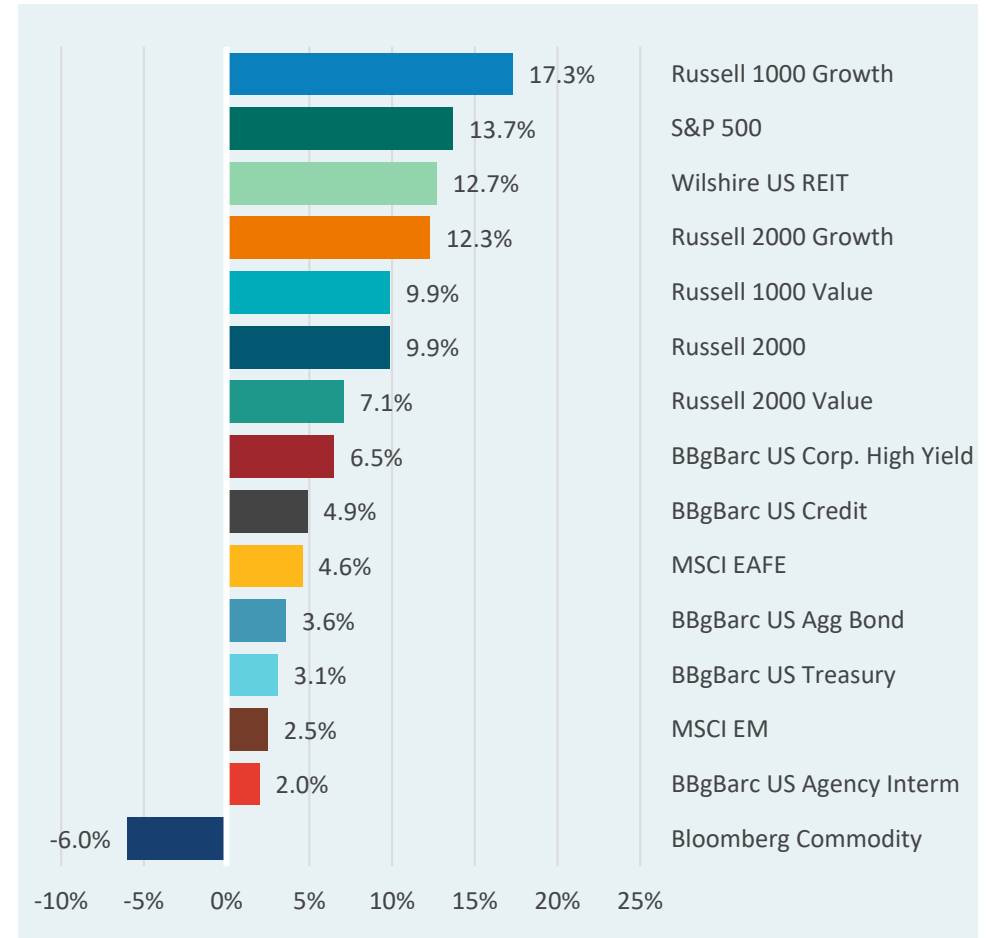
- In September, the Eurozone Consumer Price Index contracted -0.2% year-over-year. Within the Eurozone’s CPI basket, energy prices dragged the overall index lower, but prices for food, alcohol, and tobacco helped to mute the deflationary pressures.
- The Eurozone seasonally-adjusted unemployment rate rose slightly to 8.1% in August. Europe is recovering faster than expected, given their use of short-time work schemes as opposed to mass layoffs. The schemes work by subsidizing employers to keep employees on payrolls for set periods of time.
- IHS Markit’s Eurozone Services PMI fell to 47.6 from 51.9 placing the index back into contractionary territory. The French Services PMI fell below 50.0 for the first time in four months. In Germany, the pace of services sector expansion slowed for the second consecutive month but remained positive.

# Major asset class returns

ONE YEAR ENDING SEPTEMBER



TEN YEARS ENDING SEPTEMBER



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

Source: Morningstar, as of 9/30/20

Source: Morningstar, as of 9/30/20

# U.S. large cap equities

- The S&P 500 Index fell -3.8% in September as the index pulled back from its rally through July and August. The price index hit an intra-month low of 3237 on September 23<sup>rd</sup> but by the end of the month had recovered to 3363, just 6.1% from its prior peak.
- Industrial-sector stocks are expected to report a -61.0% year-over-year decline in earnings in Q3. Airlines—one of the largest components of the sector—are expected to see earnings contract into deeply negative territory. Lawmakers in Washington are considering building explicit support for airlines into the next stimulus package, should one be passed.
- Nine of the eleven major sectors delivered negative returns in the month of September. The energy sector (-14.5%) led the decline of the overall index, while utilities (+1.3%) and materials (+1.1%) were the only positive contributors.
- The CBOE VIX Index of implied volatility surged 7.2 points in the first couple of days of September. The level of the index subsequently receded, and closed the month at 26.4. The implied volatility index remained elevated above historical averages, but well below levels reached during the equity market sell-off back in February and March of this year.

**S&P 500 PRICE INDEX**



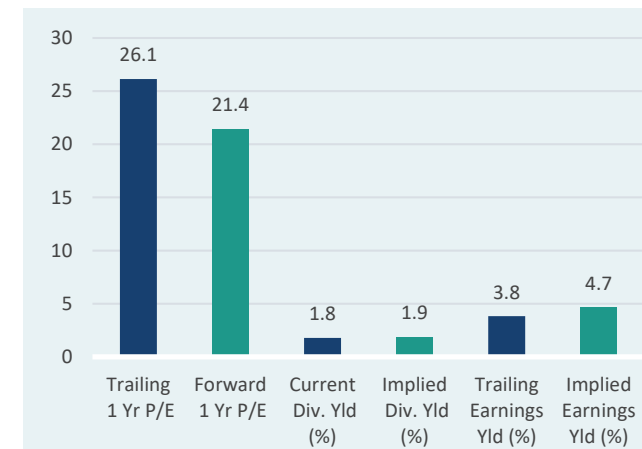
Source: Bloomberg, as of 9/30/20

**IMPLIED VOLATILITY (VIX INDEX)**



Source: CBOE, as of 9/30/20

**S&P 500 VALUATION SNAPSHOT**

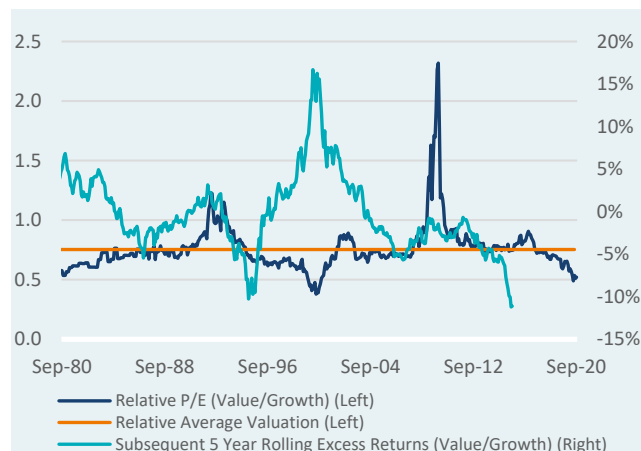


Source: Bloomberg, as of 9/30/20

# Domestic equity size and style

- Though both indices declined over the month, the Russell 3000 Value Index (-2.6%) outperformed the Russell 3000 Growth Index (-4.6%). Until this September, the Russell 3000 Value Index had underperformed every month since June 2019.
- The MSCI USA Cyclical minus Defensives Total Return Spread Index fell -1.6% in September, although the measure is up 23.4% since its March lows. The outperformance of defensive stocks was likely aided by strong returns in utilities and losses in information technology companies.
- Small-cap equities (Russell 2000 Index -3.3%) outperformed large-cap equities (Russell 1000 Index -3.7%) in September. The smaller exposure of the small-cap index to the poorly-performing companies in the information technology sector contributed to the outperformance of the Russell 2000 Index.
- The Russell 1000 Growth Index underperformed the Russell 1000 Value Index by -2.2%, but has outperformed by a staggering +43.5% over the past 12 months.

**VALUE VS. GROWTH RELATIVE VALUATIONS**



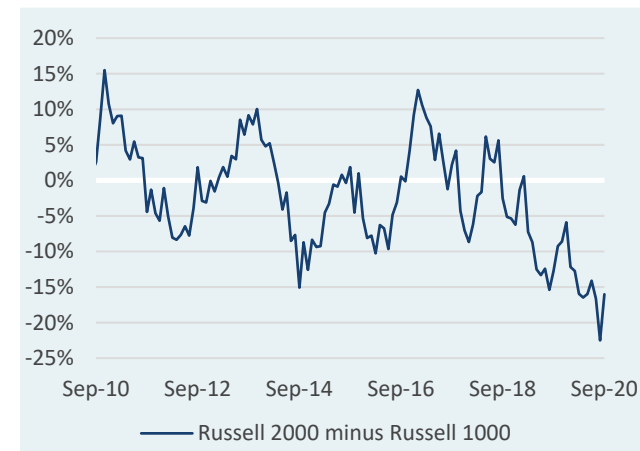
Source: Russell, Bloomberg, as of 9/30/20

**VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE**



Source: FTSE, Bloomberg, as of 9/30/20

**SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE**

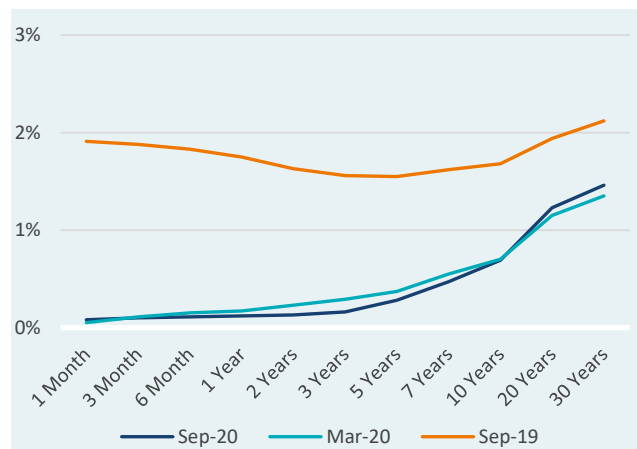


Source: FTSE, Bloomberg, as of 9/30/20

# Fixed income

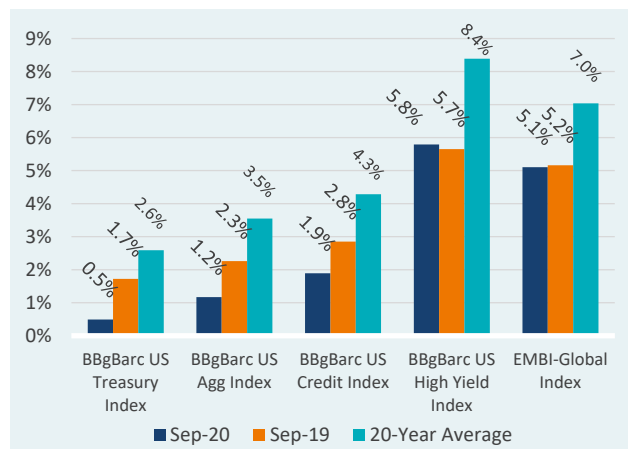
- The European Union M3 money supply grew 9.5% year-over-year in August, but the rate of growth slowed for the first time this year. The European Central Bank relaxed banking required leverage ratios in September, allowing for more loans and money supplied to economies.
- The Chinese yuan rallied to its strongest point in a year (6.73 ¥/\$) following the release of better-than-expected economic data and messaging from the People’s Bank of China that its priority moving forward will be more related to managing financial excesses and less focused on providing aggressive monetary accommodation.
- The pound declined -3.4% relative to the U.S. dollar as the Bank of England reportedly discussed the potential implementation of a negative interest rate policy at some point in the future. Markets are pricing in negative interest rates in the U.K. by mid-2021.
- The ten-year breakeven inflation rate – a measure of priced inflation expectations – fell from 1.8% to 1.6% over the month. The failure of Congress to deliver a new fiscal package by month-end likely weighed on market participants’ views on the inflation outlook.

**U.S. TREASURY YIELD CURVE**



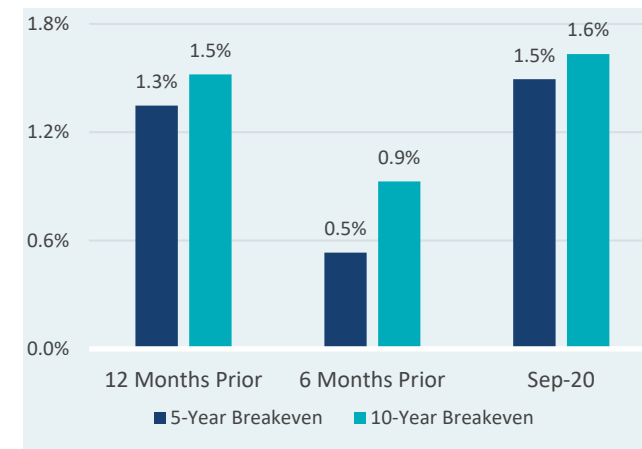
Source: Bloomberg, as of 9/30/20

**NOMINAL YIELDS**



Source: Morningstar, as of 9/30/20

**BREAKEVEN INFLATION RATES**



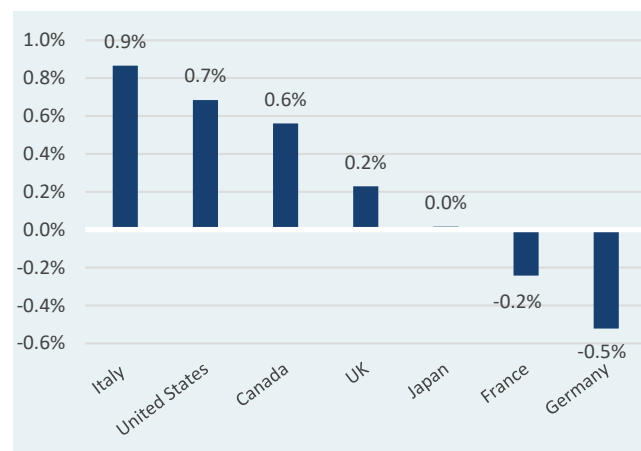
Source: Bloomberg, as of 9/30/20



# Global markets

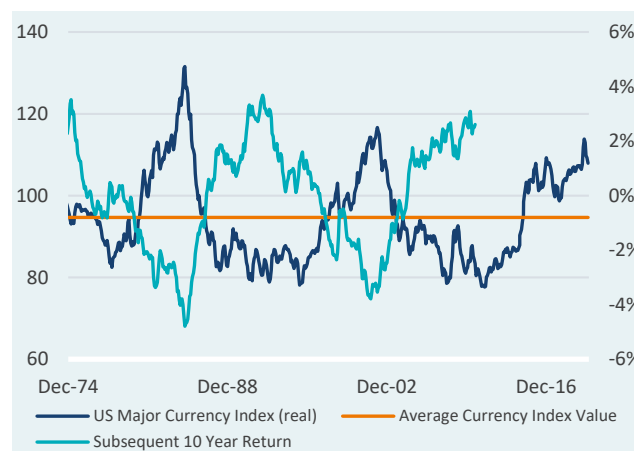
- Emerging market equities (MSCI EM Index -1.6%) outperformed international developed (MSCI EAFE -2.6%) and U.S. (S&P 500 Index -3.8%) equities over the month in U.S. dollar terms. The Bloomberg Dollar Spot Index returned 1.4%, indicating that the stabilization of the dollar dampened U.S. equity underperformance.
- The French Prime Minister announced a two-year, €100 billion (\$118 billion) plan to help stimulate the economy. The jobs program focuses on green technologies and health care, and equates to 4% of France's total GDP, which will bring the total amount of stimulus provided to about 10% of French GDP.
- U.K. equities slid (MSCI UK -5.0%) as negotiations with the European Union over the terms of the Withdrawal Agreement failed to yield a compromise. Prime Minister Boris Johnson set an October 15<sup>th</sup> deadline for securing an agreement on trade, and the distribution of fishing rights outside of U.K. and E.U. waters continues to be a major sticking point in the talks.
- Within the international developed equity space, Japanese equities (MSCI Japan +1.0%) materially outperformed European equities (MSCI Euro -3.8%). The yen (+0.5%) attracted haven bids as equities sold off and boosted Japan's outperformance in USD terms.

**GLOBAL SOVEREIGN 10-YEAR YIELDS**



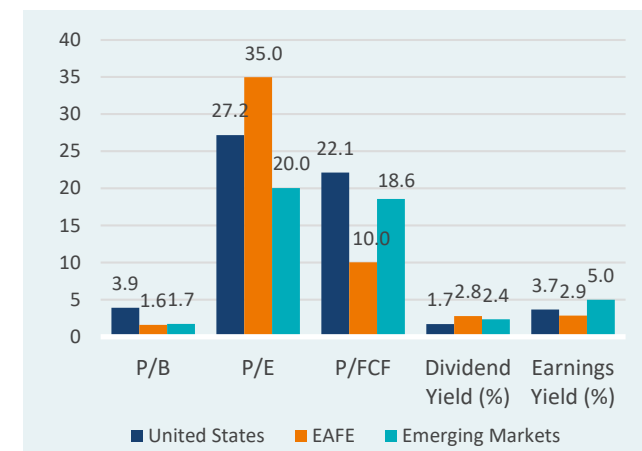
Source: Bloomberg, as of 9/30/20

**U.S. DOLLAR MAJOR CURRENCY INDEX**



Source: Federal Reserve, as of 9/30/20

**MSCI VALUATION METRICS (3-MONTH AVG)**



Source: Bloomberg, as of 9/30/20

# Commodities

- The Bloomberg Commodity Index closed the month down -3.4% and was driven lower by the poor performance of the energy (-9.6%) and precious metals (-7.7%) sectors. Only the livestock (+7.4%) and agriculture (+3.4%) sectors managed to deliver positive returns in September.
- The energy sector (-9.6%) struggled over the month as oil prices faded. In Q3 2020, the average price of oil was \$40.92, about 27% lower than the average price in Q3 2019 of \$56.44. Saudi Aramco was pressured to cut its oil prices, illuminating weaker demand for oil exacerbated by far less air traffic.
- Precious metals (-7.7%) sold off as real interest rates stabilized, and the Federal Reserve reiterated that it had no intention of moving nominal short rates into negative territory. Spot silver prices fell -15.8% in September, and spot gold prices slumped -3.8% to end the month at \$1886 per ounce.
- The Bloomberg Livestock Index (+7.4%) advanced on the back of lean hog and cattle futures contracts, which climbed +14.5% and +3.1% respectively. Grains, which represent roughly 22% of the overall index, returned +6.3%, supported by the strong performance of soybeans (+7.3%) and corn (+5.9%).

## INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	(3.4)	9.1	(12.1)	(8.2)	(4.2)	(3.1)	(6.0)
Bloomberg Agriculture	3.4	11.9	(4.0)	2.8	(5.1)	(5.0)	(5.3)
Bloomberg Energy	(9.6)	4.3	(44.0)	(40.7)	(15.9)	(14.0)	(15.0)
Bloomberg Grains	6.3	12.3	(2.3)	1.2	(4.6)	(6.8)	(5.5)
Bloomberg Industrial Metals	(2.8)	11.2	1.8	1.6	(1.0)	4.5	(3.7)
Bloomberg Livestock	7.4	13.8	(25.2)	(25.1)	(10.6)	(7.7)	(5.3)
Bloomberg Petroleum	(6.8)	(0.9)	(50.3)	(43.6)	(14.5)	(11.9)	(11.7)
Bloomberg Precious Metals	(7.7)	7.8	22.6	27.2	11.8	9.6	2.2
Bloomberg Softs	(4.9)	7.7	(9.9)	2.6	(8.4)	(4.8)	(8.0)

Source: Morningstar, as of 9/30/20

## COMMODITY PERFORMANCE



Source: Bloomberg, as of 9/30/20

# Appendix

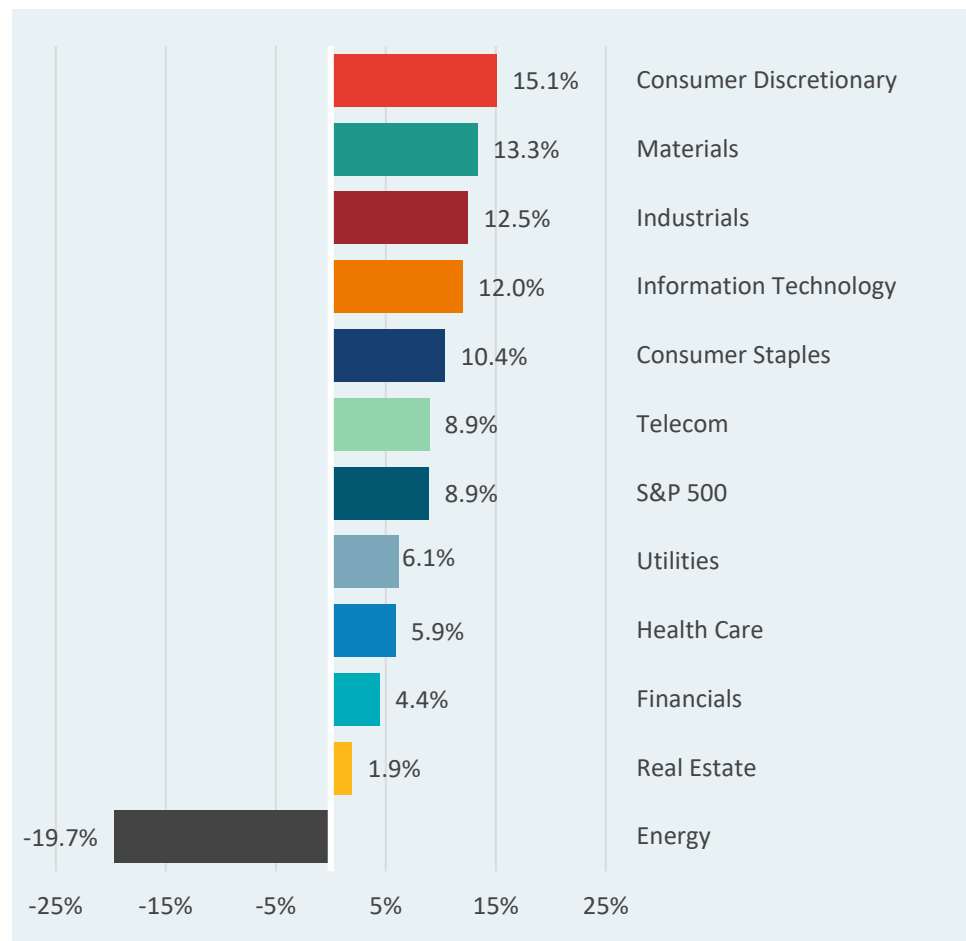
# Periodic table of returns



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, BBgBarc US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BBgBarc Global Bond. NCREIF Property Index performance data as of 6/30/20.

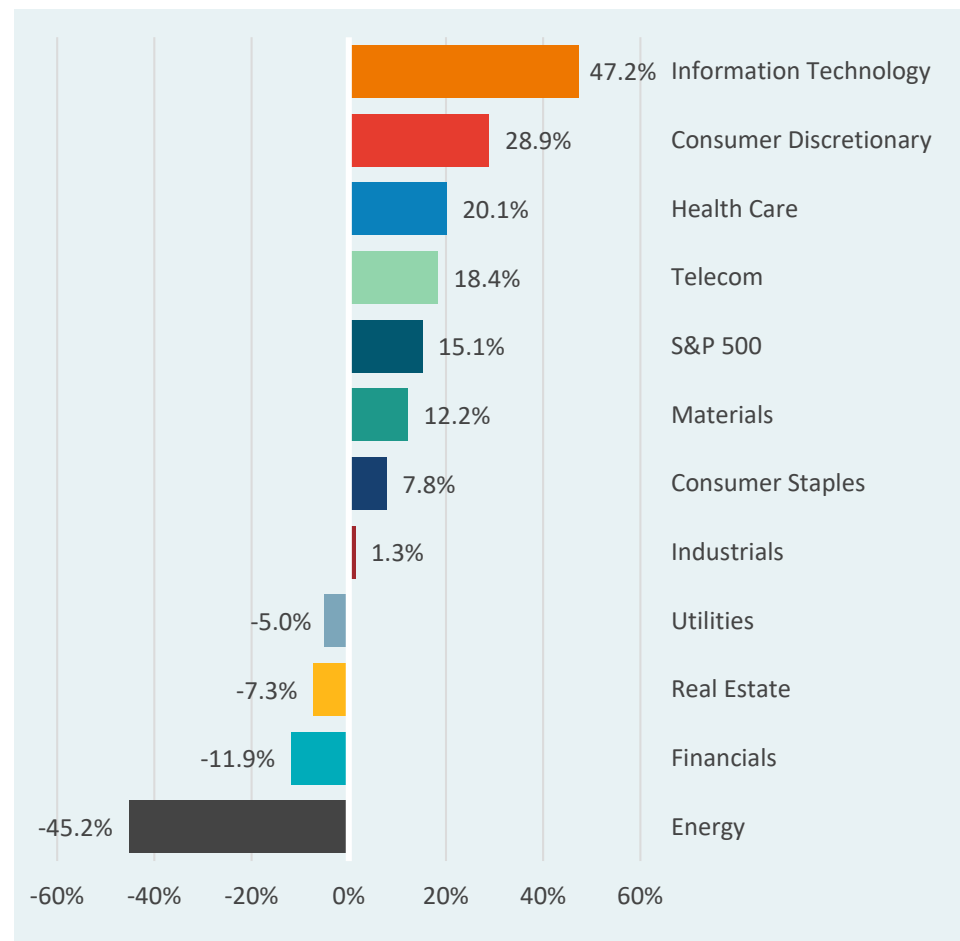
# S&P 500 sector returns

Q3 2020



Source: Morningstar, as of 9/30/20

ONE YEAR ENDING SEPTEMBER



Source: Morningstar, as of 9/30/20

# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	(3.8)	8.9	5.6	15.1	12.3	14.1	13.7
S&P 500 Equal Weighted	(2.5)	6.7	(4.7)	2.5	6.5	10.3	12.0
DJ Industrial Average	(2.2)	8.2	(0.9)	5.7	10.0	14.0	12.7
Russell Top 200	(4.2)	10.2	9.6	20.3	14.3	15.6	14.5
Russell 1000	(3.7)	9.5	6.4	16.0	12.4	14.1	13.8
Russell 2000	(3.3)	4.9	(8.7)	0.4	1.8	8.0	9.9
Russell 3000	(3.6)	9.2	5.4	15.0	11.6	13.7	13.5
Russell Mid Cap	(1.9)	7.5	(2.3)	4.6	7.1	10.1	11.8
<b>Style Index</b>							
Russell 1000 Growth	(4.7)	13.2	24.3	37.5	21.7	20.1	17.3
Russell 1000 Value	(2.5)	5.6	(11.6)	(5.0)	2.6	7.7	9.9
Russell 2000 Growth	(2.1)	7.2	3.9	15.7	8.2	11.4	12.3
Russell 2000 Value	(4.7)	2.6	(21.5)	(14.9)	(5.1)	4.1	7.1

## INTERNATIONAL EQUITY

<b>Broad Index</b>							
MSCI ACWI	(3.2)	8.1	1.4	10.4	7.1	10.3	8.5
MSCI ACWI ex US	(2.5)	6.3	(5.4)	3.0	1.2	6.2	4.0
MSCI EAFE	(2.6)	4.8	(7.1)	0.5	0.6	5.3	4.6
MSCI EM	(1.6)	9.6	(1.2)	10.5	2.4	9.0	2.5
MSCI EAFE Small Cap	(0.7)	10.3	(4.2)	6.8	1.4	7.4	7.3
<b>Style Index</b>							
MSCI EAFE Growth	(0.7)	8.4	4.6	13.4	7.1	9.2	7.0
MSCI EAFE Value	(4.6)	1.2	(18.3)	(11.9)	(5.9)	1.1	2.1
<b>Regional Index</b>							
MSCI UK	(5.0)	(0.2)	(23.4)	(15.8)	(5.6)	(0.4)	2.0
MSCI Japan	1.0	6.9	(0.7)	6.9	3.9	7.5	6.2
MSCI Euro	(3.8)	4.2	(9.1)	(1.9)	(2.1)	4.4	3.5
MSCI EM Asia	(1.1)	11.9	8.0	21.5	5.7	11.3	5.5
MSCI EM Latin American	(5.1)	(1.3)	(36.1)	(29.4)	(11.8)	2.1	(5.7)

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
BBgBarc US TIPS	(0.4)	3.0	9.2	10.1	5.8	4.6	3.6
BBgBarc US Treasury Bills	0.0	0.0	0.7	1.2	1.7	1.2	0.7
BBgBarc US Agg Bond	(0.1)	0.6	6.8	7.0	5.2	4.2	3.6
<b>Duration</b>							
BBgBarc US Treasury 1-3 Yr	0.0	0.1	3.1	3.6	2.7	1.8	1.3
BBgBarc US Treasury Long	0.4	0.1	21.3	16.3	11.9	8.2	7.2
BBgBarc US Treasury	0.1	0.2	8.9	8.0	5.5	3.7	3.1
<b>Issuer</b>							
BBgBarc US MBS	(0.1)	0.1	3.6	4.4	3.7	3.0	3.0
BBgBarc US Corp. High Yield	(1.0)	4.6	0.6	3.3	4.2	6.8	6.5
BBgBarc US Agency Interim	0.1	0.3	4.0	4.3	3.3	2.4	2.0
BBgBarc US Credit	(0.3)	1.5	6.4	7.5	6.2	5.7	4.9

## OTHER

<b>Index</b>							
Bloomberg Commodity	(3.4)	9.1	(12.1)	(8.2)	(4.2)	(3.1)	(6.0)
Wilshire US REIT	(3.4)	1.3	(16.7)	(17.7)	0.4	5.7	12.7
CS Leveraged Loans	0.7	4.1	(0.8)	0.8	3.2	4.6	5.0
Alerian MLP	(13.6)	(16.3)	(48.3)	(50.7)	(21.9)	(12.4)	(4.0)
<b>Regional Index</b>							
JPM EMBI Global Div	(1.9)	2.3	(0.5)	1.3	3.5	6.1	5.4
JPM GBI-EM Global Div	(2.0)	0.6	(6.3)	(1.4)	0.2	4.8	0.5
<b>Hedge Funds</b>							
HFRI Composite	(1.2)	4.1	0.5	4.0	2.7	4.0	3.6
HFRI FOF Composite	(0.4)	4.2	2.5	5.6	2.9	3.1	2.9
<b>Currency (Spot)</b>							
Euro	(1.9)	4.4	4.5	7.6	(0.3)	1.0	(1.5)
Pound	(3.4)	4.6	(2.4)	4.9	(1.2)	(3.1)	(2.0)
Yen	0.5	2.2	3.0	2.4	2.2	2.6	(2.3)

Source: Morningstar, HFR, as of 9/30/20

# Detailed private market returns

## Comparison to public market index returns

Private Equity Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Private Equity FoFs & Secondary Funds	4.9	10.8	9.3	11.6
Global Private Equity Direct Funds *	3.6	12.2	11.4	13.5
U.S. Private Equity Direct Funds *	4.7	12.7	11.5	14.7
Europe Private Equity Direct Funds *	3.6	14.9	14.8	12.1
Asia Private Equity Direct Funds *	2.3	9.7	9.5	12.0

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
MSCI World	(10.4)	1.9	3.2	6.6
S&P 500	(7.0)	5.1	6.7	10.5
MSCI Europe	(15.5)	(2.3)	(1.3)	2.5
MSCI AC Asia Pacific	(12.1)	0.1	1.1	3.4

Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	0.1	6.7	8.6	12.6

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
FTSE NAREIT Equity REIT	(21.3)	(3.1)	(0.3)	7.4

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt **	(5.9)	4.0	5.5	9.4

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
S&P / LSTA U.S. Leveraged Loan 100 Index	(5.1)	0.5	1.6	3.2

Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Nature Resources ***	(28.3)	(8.7)	(5.2)	(0.1)
Global Infrastructure	2.4	8.7	10.6	9.3

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
S&P Global Natural Resources	(30.0)	(6.4)	(2.7)	(2.2)
S&P Global Infrastructure	(21.1)	(3.2)	(0.4)	4.2

Source: Pooled IRRs are from Thompson Reuters C/A and Time-weighted Returns are from Investment Metrics, as of March 31<sup>st</sup>, 2020. All returns in U.S. dollars.

\* Includes Buyout, Growth Equity and Venture Capital.

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

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

# Notices & disclosures

**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 advice, or a recommendation to buy, sell or hold a security or pursue a particular 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. (“Verus”) file a single form ADV under the United States Investment Advisors Act of 1940, as amended. Additional information about Verus Advisory, Inc. available on the SEC’s website at [www.adviserinfo.sec.gov](http://www.adviserinfo.sec.gov).

Verus – also known as Verus Advisory™.




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

October 27, 2020

Agenda Item 6.2

**TO:** Board of Retirement

**FROM:** Doris Ng, Investment Analyst 

**SUBJECT:** Report on Inflation Hedge Manager Annual Review

**Recommendation**

Review the report on the annual review of SamCERA's public real assets manager, State Street Global Advisors (SSgA), which is part of the inflation hedge risk bucket.

**Background**

SSgA's annual review occurred on October 1, 2020. The meeting lasted approximately 1 hour and consisted of a firm/organizational update, an investment process review, and a review of performance and attribution. Current positioning and market outlook were also discussed.

**Discussion**

The SSgA custom real asset strategy, which is a passive account for SamCERA that seeks to replicate exposure to four underlying indices in approximately equal weights (1/4 S&P Global LargeMidCap Commodity and Resources Index, 1/4 S&P Global Infrastructure Index, 1/4 Bloomberg Roll Select Commodity Index and 1/4 U.S. Barclays TIPS), was reviewed. The 25% allocation to U.S. Barclays TIPS was added recently in May 2020.

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**

SSgA Annual Review Meeting Notes

# Research Meeting Notes

<b>Investment Organization</b>	State Street Global Advisors (SSGA)
<b>Business Type</b>	Publicly Traded
<b>Firm Inception Date</b>	1935
<b>Firm \$AUM</b>	\$3.0T
<b>Investment Org Attendees</b>	Kimberly Cook, Rob Guiliano, Sonya Park
<b>Verus Attendees</b>	John Nicolini, Margaret Jadallah
<b>SamCERA Attendees</b>	Doris Ng
<b>Interview Date(s)</b>	10/1/20
<b>Meeting Type</b>	Phone Call
<b>Meeting Purpose</b>	Update
<b>Strategy Name</b>	SSgA Custom Real Assets
<b>Strategy Inception Date</b>	2016
<b>Asset Class (Style)</b>	Real Assets
<b>If other, please name</b>	
<b>Sub-Style</b>	Equity, Commodities & TIPS
<b>Strategy \$AUM</b>	\$4.7B
<b>SamCERA \$AUM (8/31/2020)</b>	\$209.9M
<b>IC Approved (Yes or No)</b>	No

## Notes and Analysis

### Firm:

SSgA is a wholly-owned subsidiary of State Street Bank and Trust Company, which is a wholly-owned subsidiary of State Street Corporation, a publicly traded company. SSgA manages over \$3.0 trillion in assets, making it the third largest asset manager globally. SSgA manages capital across the risk spectrum in equity, fixed income, multi-asset and alternatives.

### Team/People:

The Investment Solutions Group (ISG), which oversees the SamCERA liquid real assets portfolio manages \$159 billion in AUM across a number of strategies. Dan Farley serves as CIO for the ISG team and heads all investment-related decisions. There are two portfolio managers overseeing the SamCERA portfolio, Rob Guiliano and Mike Narkiewicz. Rob was one of the lead researchers in developing the SSgA Real Asset strategy and has managed the portfolio since inception (2005). Mike has been managing the Real Asset strategy alongside Rob since 2010. The portfolio that SSgA runs for SamCERA is a custom allocation of three products that Rob and Mike also manage within their more diversified SSgA Real Asset product.

There was one recent departure on the team, John Guliano, who worked with Rob and Mike managing real asset portfolios. John was not directly involved with the SamCERA portfolio.

## Process/Philosophy

The SamCERA liquid real asset portfolio is a customized account managed by SSgA that includes the following allocation.

- 1/4<sup>th</sup> Bloomberg Roll Select Commodities
- 1/4<sup>th</sup> S&P Global LargeMid Commodity and Resources Index
- 1/4<sup>th</sup> S&P Global Infrastructure Index
- 1/4<sup>th</sup> U.S. TIPS

The four strategies are passive investments meant to replicate their respective indices. SSgA's Global Beta Solutions team manages the four individual products in daily-valued institutional commingled funds. The four index products have a targeted tracking error of 30bps or less. The Bloomberg Roll Select product seeks to replicate the Bloomberg Roll Select index which will optimize the futures contract trading process by maximizing backwardation impact and minimizing contango, subject to risk constraints. The Roll Select product is meant to enhance returns above the standard Bloomberg Commodity Index. The S&P Global LargeMid Commodity & Resources Index is a global stock portfolio of companies that derive revenue from natural resource commodities. The index equally allocates to three natural resource buckets, energy, materials and agriculture. The country exposures are split roughly by 1/3<sup>rd</sup> US and 2/3<sup>rd</sup> non-US domiciled. S&P Global Infrastructure is a global stock index comprised of three primary sectors, energy, transportation and utilities. On a country-weighted basis, the US comprises around 40% of the index with the remainder in non-US companies. Lastly, the US TIPS product is meant to replicate the performance of the Barclays US TIPS Index. The TIPS product was added to the SSgA mandate in 2020.

The ISG team will handle allocating, rebalancing and trading the four index products with a goal of minimizing tracking error to the policy index. SSgA will rebalance the portfolio semi-annually back to target. SSgA manages the portfolio for an all-in fee of 19bps.

## Performance

The inception date for the SSgA custom liquid real assets portfolio was October 2016. As of August 2020, the strategy has returned +1.68% vs a return of + 1.41% for the benchmark, since inception (net of fees). The largest contributor to returns has been the S&P Global LargeMid Natural Resources product which is up 4.37%, since inception. The largest detractor to returns is the Bloomberg Roll Select strategy which has returned -1.35% over the same time period. Over the last 12 months, the portfolio returned -5.24% (net of fees), mostly impacted by the Global Infrastructure strategy which was down 9.57%. The largest positive contributor over the last 12 months was the Bloomberg Roll Select strategy which was up 0.75%.


TIPS was added to the portfolio in May 2020 in order to decrease portfolio volatility and bring additional diversification to the product. TIPS are up 4.8% since being added to the SamCERA portfolio.

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

October 27, 2020

Agenda Item 6.3

**TO:** Board of Retirement

**FROM:** Doris Ng, Investment Analyst 

**SUBJECT:** Report on Opportunistic Credit Manager Annual Review

**Recommendation**

Accept and review the report on the annual review of SamCERA's opportunistic credit manager, Angelo Gordon.

**Background**

On October 6<sup>th</sup>, SamCERA staff and consultant held annual review meeting for our opportunistic credit manager, Angelo Gordon. The meeting lasted approximately 1.5 hours, and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook.

**Discussion**

The Angelo Gordon Credit Solutions Fund (CSF) and Credit Solutions Annex Dislocation Fund (CS ADF) were both reviewed. Both investment strategies seek to invest in distressed and special situation opportunities during a late-cycle credit market and the initial stages of market dislocation with a focus on senior securities of high-quality companies. The Credit Solutions Annex Dislocation Fund came to market in March 2020, subsequent to the Credit Solutions Fund. The firm noted one firm leadership change that is expected later this year.

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**


Angelo Gordon CSF and CSF ADF Annual Review Meeting Notes (confidential)

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

October 27, 2020

Agenda Item 6.4

**TO:** Board of Retirement

**FROM:** Doris Ng, Investment Analyst 

**SUBJECT:** Report on Absolute Return Manager Annual Review

**Recommendation**

Accept and review the report on the annual review of SamCERA's absolute return manager, Aberdeen Standard.

**Background**

On October 8<sup>th</sup>, SamCERA staff and consultant held annual review meeting for our absolute return manager, Aberdeen Standard. The meeting lasted approximately 1.5 hours, and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook.

**Discussion**

The Aberdeen Standard Global Absolute Return Strategies (GARS) product was reviewed. GARS is a multi-strategy, fundamentally-driven approach that targets absolute returns with significantly less volatility than equity investments. The firm noted some leadership and team changes.

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

**Attachment**

Aberdeen Standard GARS Annual Review Meeting Notes (confidential)

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

October 27, 2020

Agenda Item 6.5

**TO:** Board of Retirement

**FROM:** Doris Ng, Investment Analyst



**SUBJECT:** Report on Trading Cost Analysis for Public Equity and Fixed Income Managers

**Recommendation**

Accept Zeno AN Solutions' Trading Cost Analysis Presentation for SamCERA.

**Background**

SamCERA initially hired Zeno Consulting Group to provide trade cost analysis oversight of the fund's public equity and fixed income managers in June 2012 and then in July 2013, each for a 1-year term where Zeno would monitor trade costs and provide reports on an on-going, quarterly basis. Subsequently, the Board directed Staff to reduce the frequency of the trade cost analysis review from a quarterly to triennial basis (every 3 years).

In 2018, Zeno Consulting Group merged with Abel Noser Holdings, and a new division called Zeno AN Solutions was formed under the combined entity's transaction cost analysis business, Abel Noser Solutions.

**Discussion**

Chris Phillips, SVP and Senior Consultant, and Brian Greene, SVP, Sales & Client Services, of Zeno AN Solutions, will present an analysis of SamCERA's trading costs for the 2019 calendar year. The presentation will begin with a refresher on equity, fixed income and foreign exchange transaction costs, how Zeno AN Solutions puts these costs into context and the details of their manager oversight program. They will then report on the analysis of SamCERA's trading costs and observations for the year in addition to information gathered from follow-up calls with SamCERA's investment managers.

**Attachment**

Zeno AN Solutions 2019 Annual Assessment



# **Transaction Cost Management** ***2019 Annual Assessment***

**San Mateo County Employees' Retirement  
Association**

***Board Meeting***  
***October 27, 2020***

<u>Page#</u>	<u>Topic</u>
1.	About Us
6.	TCA Primer – Approach and Methodology <ol style="list-style-type: none"><li>1. Equity TCA</li><li>2. Fixed Income TCA</li><li>3. Foreign Exchange (FX) TCA</li></ol>
19.	Zeno AN Solutions Trading Activity Oversight – SamCERA
20.	2019 Aggregate Trade Review <ol style="list-style-type: none"><li>1. Aggregate Plan – Separately Managed Equity Portfolios</li><li>2. Aggregate Plan – Separately Managed Equity Portfolios- FX</li><li>3. Aggregate Commingled Accounts – Fixed Income</li></ol>
25.	2019 Trade Review - Asset Managers Warranting Follow-up <ol style="list-style-type: none"><li>1. 2019 Trade Review - Aggregate Plan</li><li>2. Follow-up Due Diligence Evaluation/Findings</li></ol>
29.	2019 Trade Review - Asset Managers Not Warranting Follow-up





## Zeno AN Solutions

Over 30 Years of Industry Leading Analytics

Zeno AN Solutions offers the industry's most comprehensive TCA analytics and monitoring solutions for all asset owners including pension funds, mutual funds, insurance companies and endowments.

Our leading TCA and compliance analytics can provide you with the critical transparency, substantive due diligence, and insight into how your managers are handling fund assets. Not only do we provide you with customized metrics so you can control excessive trade costs, we give you the reporting and archiving necessary to mitigate investment and fiduciary risk.

## Our Team

Dedicated, Thorough, Experienced

Our unparalleled team will work as an extension of your staff. Along with market leading product solutions, Zeno AN Solutions continues to be the ultimate client advocate, leveraging our expertise and custom services to help you achieve measurably superior executions, compliance peace-of-mind, and game-changing analytics data. We also offer bespoke data and reporting solutions that can be tailored to your specific set-up, fiduciary make-up or business model.





## Who is Zeno AN Solutions?

**Our recent merger assembled the most comprehensive suite of TCM products available exclusively to asset owners and consultants and takes trade cost management to the next level**

- Servicing over 300 institutional asset owner clients
- Multi-asset class analysis across equity, fixed income, foreign exchange, futures and derivative asset classes
- Stock-specific peer group trade universe comprised of over \$7.5 trillion in principal traded annually
- Investment mandate peer group rankings of over 2,000 global institutional investment mandates
- Industry-leading web-based drill-down and technology platform, Trade Zoom
- Independent, conflict-free consulting as a Registered Investment Advisor under the Investment Company Act of 1940
- Team has over 242 years of asset-owner industry experience

# The Value of Transaction Cost Management

## *Four Reasons Why Funds Come to Us*

### Meaningful Trade Cost Analysis & Audits:

- Satisfies legal obligation, as fiduciaries, to monitor your managers' (and their brokers') *Equity, FX and Fixed Income* trading processes for Best Execution.
- Provides critical transparency, substantive due diligence, and insight into how your managers are handling Fund assets ("*What you don't know, can hurt you!*")
- Helps control excessive trade costs (often the single largest expense of the Fund!)
- Mitigates investment and fiduciary risk



## Current Tools Utilized by our Clients

### EQUITY SPONSOR/FUND MONITOR TCA

Goes beyond basic due diligence and provides asset owners greater transparency into their managers' internal trading processes, enables constructive dialogue with managers, and provides consultative follow-up to reduce excessive transaction costs.

### TRADEZOOM TM – Equity TCA (online)

Assists asset owners and general consultants in meeting legal and fiduciary obligations to ensure managers receive Best Execution and pay reasonable commission rates.

### FIXED INCOME SPONSOR MONITOR - TCA

Provides Fund fiduciaries with an accurate quantitative assessment of their managers' fixed income transactions, and consulting to help conduct follow-up on cost outliers and address potential trading abuses.

### FX SPONSOR MONITOR – TCA

Provides Fund fiduciaries with an accurate assessment of their managers' foreign currency transactions, and consulting to help conduct follow-up on cost outliers and address potential trading abuses.



## Current Tools Utilized by our Clients cont....

### TRANSITION MANAGEMENT & REPORTING SERVICES

Assists asset owners in navigating the complex marketplace known as Transition Management. As a Registered Investment Advisor, we offer several levels of service that range from pre-trade and post-trade analytics to strategic planning and transition manager selection. Additional services include Broker Universe Subscriptions.

### SOFT-DOLLAR & RESEARCH BUDGET AUDIT

Helps asset owners appraise the soft-dollar and research budgets of their managers. The service provides the critical qualitative and quantitative tools necessary for assessing the reasonableness of those costs, in addition to the oversight necessary to address your new fiduciary responsibility. The Audit encourages managers to use a bottom-up approach (which to date has been eschewed by the industry) for determining their research needs and to ensure compliance with the new MiFID II Directives in Europe.

### CAPACITY ANALYSIS & MANAGER RESEARCH/SEARCH SUPPLEMENT

Supplemental tools to assist in the annual due diligence research on manager line-ups, or in the context of reviewing finalists in a manager search. This service acts as an early warning system, flagging the risks associated with a manager's ability to take on additional assets, trading process, commission levels, broker/dealer counterparties and systematic impact on overall performance.

### DIRECTED BROKERAGE AND COMMISSION RECAPTURE

Offers asset owners an independent assessment of their underlying managers' and funds' execution efficiency, with particular emphasis on whether directed trades achieved Best Execution or incurred unnecessary hidden costs.



## **TCA Service: *Equities*** ***(Also applies to Forex and Fixed Income)***

### **DOL Release 86-1**

Since 1986, plan sponsors and other asset owners have had an explicit fiduciary responsibility to monitor their managers to ensure the Fund was paying reasonable commissions and receiving “Best Execution.”

As prudent fiduciaries, more than ever before, asset owners should understand their managers’ trading process, what they pay to execute trades, whether they obtained best execution, and its impact on performance.

**Zeno’s** consulting service was designed to assist asset owners in achieving two goals:

1. Meet their fiduciary obligations to monitor for “Best Execution” (and reasonable commissions)
2. Provide greater transparency in how investment managers handle their assets when trading, and thereby better understand the impact trading has on fund performance.

***Sponsor Monitor, FX Monitor and Fixed Income Monitor*** enable funds to monitor and evaluate their managers’ trading process in meaningful ways by answering the following questions:

What were your trading costs at the: fund, manager, broker, and commission levels?

Were those costs reasonable relative to each trades’ “difficulty,” and the managers’ Peers?

What were the reasons behind those costs?

What potential follow-up is required with your managers?

## What are “trading costs?”

*If there's a reason for asset owners to monitor trading costs (other than as a legal CYA), its to understand the impact those costs have on the returns of their Funds.*

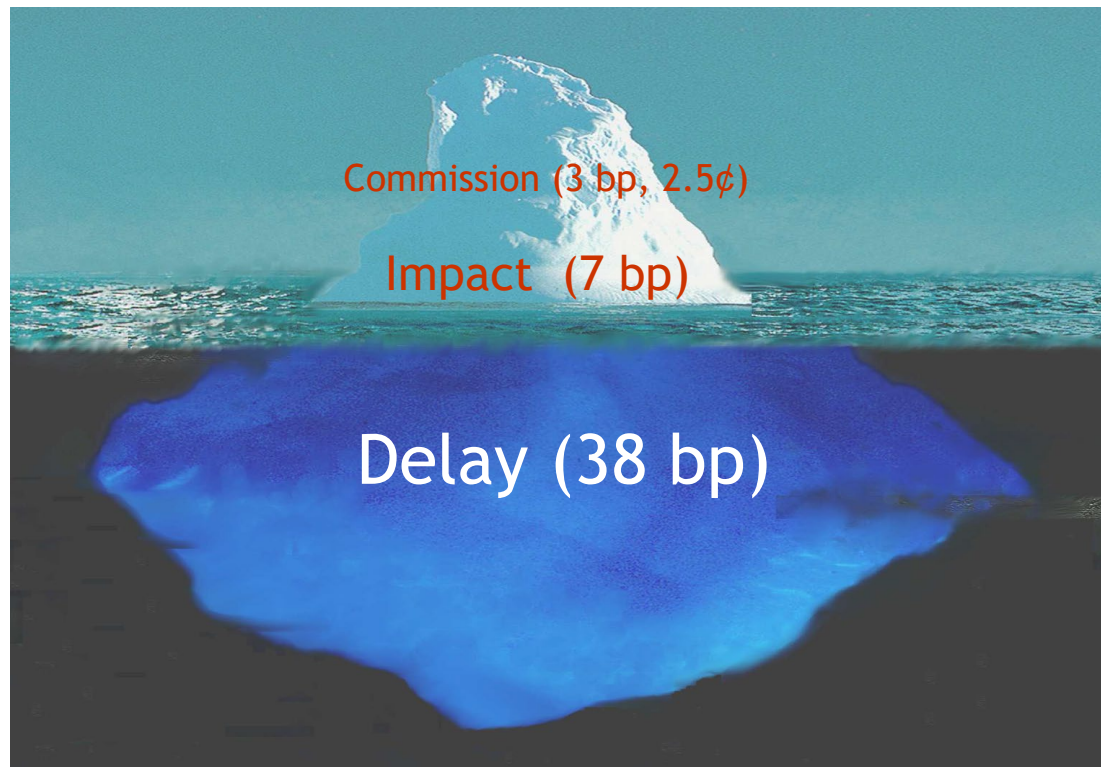
### **Common Sense Definition of “Trading Costs”:**

***The loss of asset value, incurred by your Fund, as a result of a manager building or unwinding a position in their portfolio.***

- Whether it takes 1, 3, or 10 days for a manager to sell a certain number of shares, if the shares were selling for \$X when trading began, and the manager ultimately sold all the shares at an average price of \$Y per share, then the Fund paid \$X-Y. This is called “Implementation Shortfall”.
- Defining costs as “Implementation Shortfall” on the total decision size, is consistent with how we calculate overall Fund performance, and helps Fund fiduciaries better understand the true impact trading has on their Fund.

## Do you know what you really paid to buy and sell your securities?

For Asset Owners, trading costs can average over -48 bp each way (-96 bp round trip)!





## Transaction Costs: More than just commissions

- Commission:
- The fee charged by a broker for their services
- Market Impact:
- The cost incurred by a broker executing a manager's order on any given day
  - The cost incurred when a manager "works" an order over several days  
*(i.e. if a manager sells a security over five days, the shares sold on Day 5 will incur Market Impact costs based on the broker's execution efficiency. The shares sold on Day 5 will also incur Delay Costs equal to the gain/loss of asset value that occurred on Days 1-4)*
- Delay Costs:

**Key Point:**

- A tension exists between Market Impact and Delay Costs such that trying to minimize one ends up increasing the other.
- Consequently, the challenge for each manager is to develop a sound rational trading strategy that balances both Market Impact and Delay Costs so as to minimize the aggregate amount.

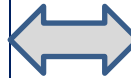


## Fixed Income TCA-Methodology Summary

- Zeno AN Solutions (“Zeno”) uses the generally accepted Implementation Shortfall methodology.
  - Implementation Shortfall calculates the total loss of asset value, paid from Fund assets, as a result of selling Fixed Income securities and replacing them in portfolios.
  - Costs are inclusive of fees, bid-ask spread, market-impact, and multi-day timing costs (if any).
- Loss in asset value is calculated by comparing each respective security’s execution price to its closing evaluated price on the day prior to when trading began.
  - The use of the prior day’s closing evaluated price as the starting point in calculating costs is an industry-standard practice.
  - Zeno’s platform unbundles the aggregate costs into its component parts – to facilitate deeper understanding of how/why costs accrued.
- Limitations associated with available market data and liquidity for fixed income instruments, can often constrain the ability to quantify and benchmark trading costs.
  - Unlike the equity markets, there is no comprehensive global centralized tape,
  - Unlike the FX markets, many bonds are not traded on a daily, weekly or even monthly basis.
- Zeno uses pricing services from IHS Markit
  - Prices over 86,000 corporate (global) and sovereign bonds,
  - Prices 1.2 million Municipal bonds, and 1.3 million Securitized (global) fixed income instruments on a daily basis. (Most of these securities are actually priced multiple times throughout the day, thereby adjusting for any intra-day news and/or market volatility.

## Instrument Coverage

- ❖ Global Corporates
    - High Grade
    - High Yield
    - Convertibles
  - ❖ Global Sovereign
  - ❖ Emerging Markets
  - ❖ Global Securitized
    - Mortgages
      - Agency - GSE, TBAs, FNMA, GNMA, FHLB,
      - Non Agency RMBS, Private Label
      - Commercial backed CMBS
    - Asset Backed Securities (Non-mortgage)
      - GSE, Auto Loan, Credit Card
      - Corporate Asset Backed Securities
      - Collateralized Debt & Loan Obligations CDO/CLO
  - ❖ US Treasury
    - Bills, Notes, Bonds & TIPS
  - ❖ Municipals
    - General Obligation (GO) & Revenue Bonds
- Coverage – Add-ons**
- ❖ Bank Loans
  - ❖ Credit Default Swaps (CDS)
  - ❖ Money Market



## Pricing Sources

### Quotes

- ✓ Parsed real-time market quotes from Sell-side and Buy-side quotes. Broad coverage - 3.5 million daily dealer levels across the Fixed Income universe, supplemented by an algorithmic test for outliers.

### IBOXX

- ✓ Real time (EUR/GBP only), executable, composite based, multi-currency, multi-bond type price feed.

### Composite Pricing

- ✓ Composite values generated from contributor banks EOD book of records pricing. Statistical cleansing (T-test and stale data test).

### iTraxx

- ✓ Prices supplied by multi contributors, which are validated and processed to provide an average bid price.

### TRACE and MSRB

- ✓ Corporate and Municipal bonds - investment grade, high yield, convertible and Municipal debt and agency debt. Institutional sized trades only.

### INTEX

- ✓ Deal flows for global RMS, ABS, CMBS, CLO, CDO, CLN securities.

## Measurement & Analytics Overview

1. **Market Data** : Coverage, Breadth of Pricing Sources, & Validation - \$340.5 billion in annual fixed income trading volume
- **Instrument specific reference prices**
  - Spreads : Bid/Mid/Ask & Size (timestamp based & hourly intervals).
  - Evaluated Pricing Model providing instrument specific regular intra-day reference prices - Layered pricing evaluation model powered by a comprehensive combination of real-time and daily prices across dealer quotes, trades, IBOXX, ITRAXX, INTEX EOD books and records. The model is underpinned by a price validation algorithm to cleanse the multiple sources for reliability.
  - Range of daily Close and TWAP measures: Close T-30 to T+30 over intervals, TWAPs -10 to +10 Days.
- **Confidence level (reliability and therefore actionability) on the reference prices.**
  - Due to price discovery and price disparity challenges in relation to quotes and trades in this market, all measurements from the evaluated pricing model are supplemented with an instrument specific confidence-level coefficient. The 1-5 ranged confidence score indicates observable price breadth and implied liquidity for each bond's cost calculations to support analytical takeaways and actionability. This score is calculated systematically across the following 4 categories Market depth, Bid/ Offer, Maturity & Shadow Liquidity.
  - Prices with low confidence levels are a byproduct of industry price-discovery challenges, and are supplemented throughout the analytics, as well as broken out to support comparability.

## Measurement & Analytics Overview

### 2. Absolute Measurement Methodology: Implementation Shortfall

- **Meaningful TCA measures:**

- Quantifying Total Costs on an absolute Bps and \$/Local Currency, broken down by it's respective cost components: Multi Day Delay Costs (if any), Overnight Gap (from T-1 Close), Impact costs (spread based), Explicit costs (if any).
- Uses relevant timestamps (if available) depending upon the objective of the analyses
- Overlaying confidence score to assist ease of review and interpretation of analytics
- Adjusting for difficulty of trading e.g. Size (please see Peer Benchmarking below)

### 3. Relative Measurement Methodology

- Peer Universe Benchmarking by using empirical universe data for greater cost comparability.
  - Helps meet general requirements of “Best Execution”
  - *Zeno AN Solutions’ Peer Benchmark methodology includes: Sector, Size, Maturity, Ratings, Region/Country, and additional attributes.* Input parameters referred to above will be further enhanced/bucketed into as statistical significance grows, while reflecting market structure changes.



## Foreign Exchange TCA Service: *FX Monitor*

While foreign exchange trading costs have ostensibly warranted oversight for “best execution” as long as equities have, in reality the vast majority of the asset owner community (and their investment consultants) only began taking notice, in the early-2000s. The genesis of this interest were law suits alleging excessive FX pricing filed against State Street Custody (2009), BNY Mellon Custody (2011), and then other large custodial banks.

Subsequent FX-related scandals followed. These included: traders at multiple banks (e.g. Barclays, ContiGroup, JPMorgan, RBS, and UBS) colluding to rig the WM Reuter’s Closing Benchmark Prices in various currencies; and Barclays using a “last look” provision to inappropriately take advantage of client trades.

Asset Owners consequently began to recognize that, as prudent fiduciaries, it was important to monitor their foreign exchange transaction to ensure they received best execution.

The *FX Monitor* service therefore was designed to assist Asset Owners in achieving three goals:

1. Meet their fiduciary obligations to monitor for “Best Execution;”
2. Identify and reduce excessive FX-related trading costs; and
3. Deter trading abuses through improved transparency of manager/custodian trading processes and costs.

## Implications of a Principal marketplace

Generally speaking, there are two ways to execute trades: Agency or Principal.

**Agency trade** - the Broker/Dealer acts as a “middleman” for which they’re paid a commission.

**Principal trade** - the Broker/Dealer buys/sells from their own inventory. Their compensation is the “mark-up” of the price they buy/sell the security.

**Key point:** with Principal trades, the Broker/Dealer’s interests, by definition, are adverse to the asset manager/owner’s!

The Broker/Dealer wants to “sell high,” and “buy low,” to/from the client.

***And that’s OK – as long as everyone understands the nature of this relationship.***

## So what are the mechanics of FX transactions?

- Two methods of currency execution:
  - Negotiated (“Direct”)
  - Non-negotiated (“Indirect”)
- Negotiated trades are done by managers who have the willingness and ability to trade FX themselves.
- When managers actively trade FX, they often do so via competitive bid (unless the manager has a sound reason for not doing so).
- Non-negotiated trades are generally done by the Custodians (on behalf of managers who do not wish to execute FX themselves) pursuant to “Standing Instructions.”
- In many if not most instances, Standing Instruction arrangements are established to handle smaller sized transactions (e.g. dividend reinvestments, tax reclaims, and/or small trades).



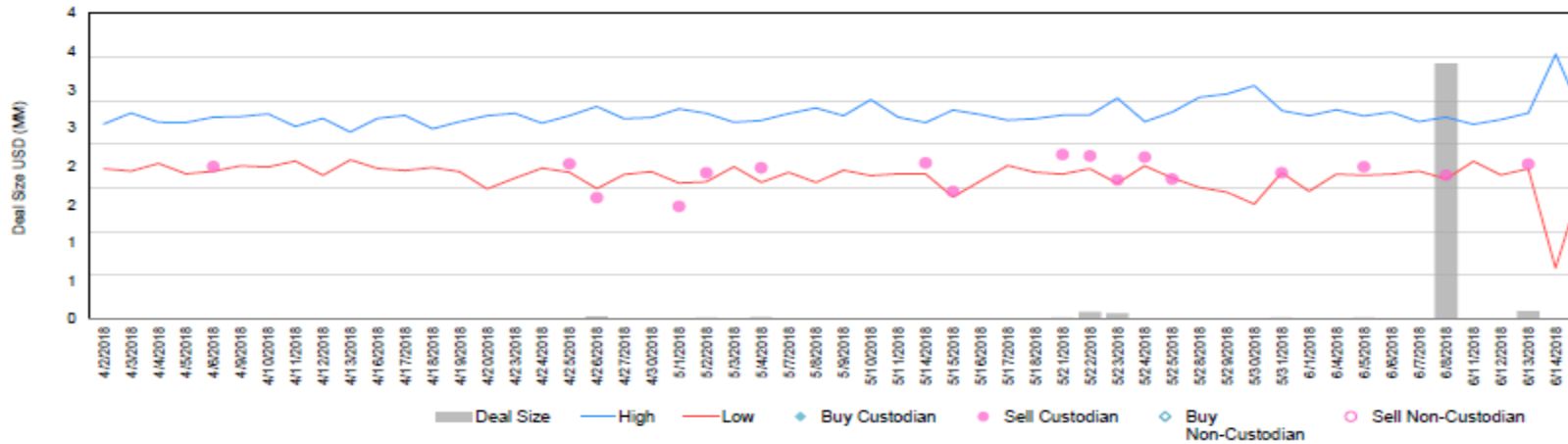
## Does this present risks to an Asset Owner's Fund?

- If broker-dealers are typically not viewed as fiduciaries when executing the Fund's FX transactions, who is the fiduciary???
- Answer: the fiduciary responsibility (to ensure Best Execution is achieved on those FX transactions) may revert back to the Fund!
- In LAMPERS v. JPMorgan Chase, the Court specifically stated that, since the Fund's custodial agreement did not specifically establish a fiduciary obligation or best execution standard when trading FX, the agreement:
  - *“did not impose upon [JPMorgan Chase] an obligation to perform trades at the best execution rates when executing Indirect FX transactions with [LAMPERS.]”*
  - *“[JPMorgan Chase] was free to sell or buy a currency at any rate.”*
  - *There was, “no requirement that the rate be the best available market rate...or any other particular [rate].”*

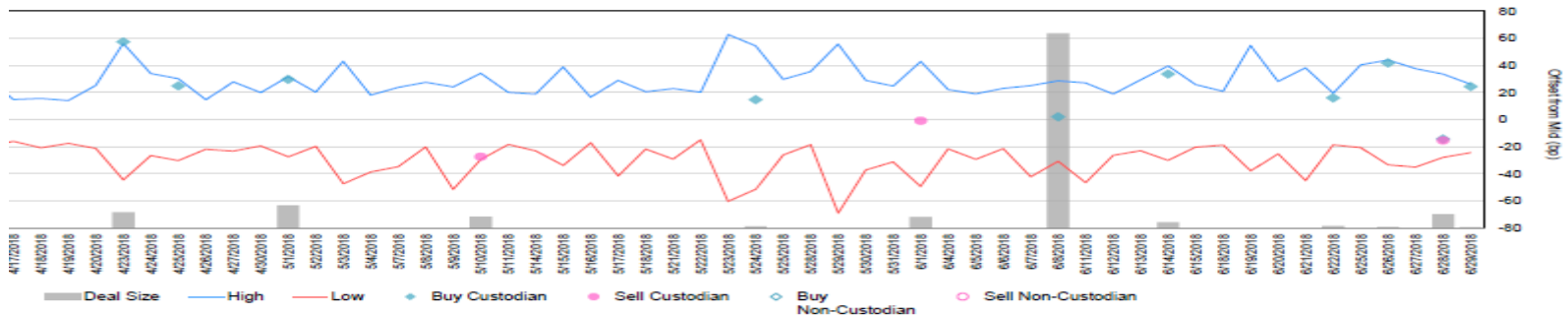
***But would Custodian banks take advantage of these circumstances?***

# Case Study: What's wrong with this picture?

Trades against High and Low of the Day - EURUSD



Trades against High and Low of the Day - USDJPY



Quarterly Analysis of FX executions relative to Daily mid-points: For these developed market transactions, it appears the client is typically buying high and selling low.

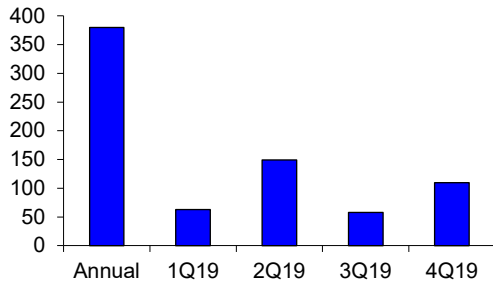


## Zeno AN Solutions Trading Activity Oversight – SamCERA

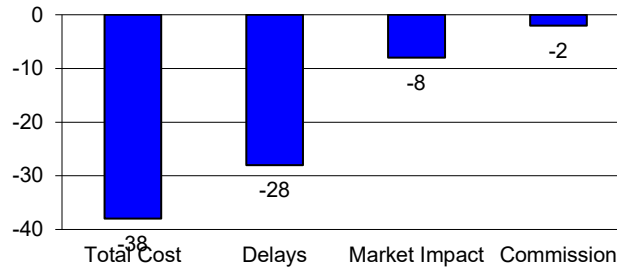
- Zeno AN Solutions was hired by San Mateo County Employees' Retirement Association in December 2016 to evaluate and monitor the Equity, Fixed Income and Foreign Exchange trading activity of its separately managed accounts and select commingled investment accounts. An annual assessment of trading activity is conducted every 3 years commencing with calendar year 2016.
- The Zeno oversight process is designed to help plan fiduciaries assess overall execution quality and identify where, when and how portfolio managers, traders and brokers execute trades. In this respect, it is a measurement of trading efficiencies in multi-asset global markets.
- Two 2 types of issues are flagged in Zeno's reports:
  - Compliance/Fiduciary due diligence related issues
  - Issues that when addressed appropriately can result in cost savings.
- Included in the 2019 annual assessment, Zeno's reports flagged 12 issues, consisting of the following:
  - 4 Compliance/Fiduciary due diligence-related issues – Fixed Income (2) and FX (2)
  - 8 Trading Cost-related issues – Equity (3), Fixed Income (2) and FX (3)
- Follow up is conducted up with each manager regarding the flagged issues, including conference calls with managers warranting a closer review, which results in the following:
  - SamCERA will meet its Compliance/Fiduciary obligations with respect to the due-diligence issues.
  - The revelation that ongoing monitoring of those managers flagged for the cost-related issues has the potential for general overall execution efficiency improvement and cost savings. **Anticipated savings are estimated to range between \$385,000 and \$795,000 annually through execution efficiency improvements.**

# Aggregate Plan – Separately Managed Equity Portfolios

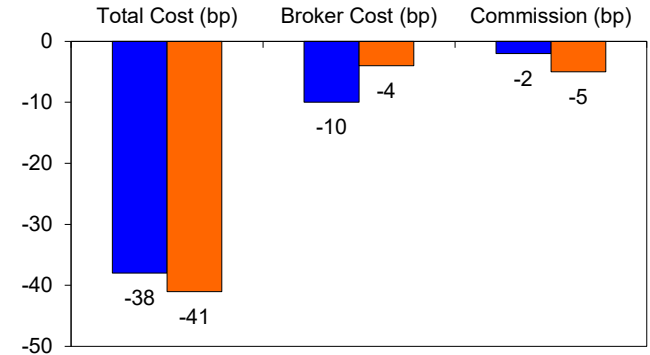
Volume Trend \$MM



Cost Attribution (bp)



Fund Benchmark

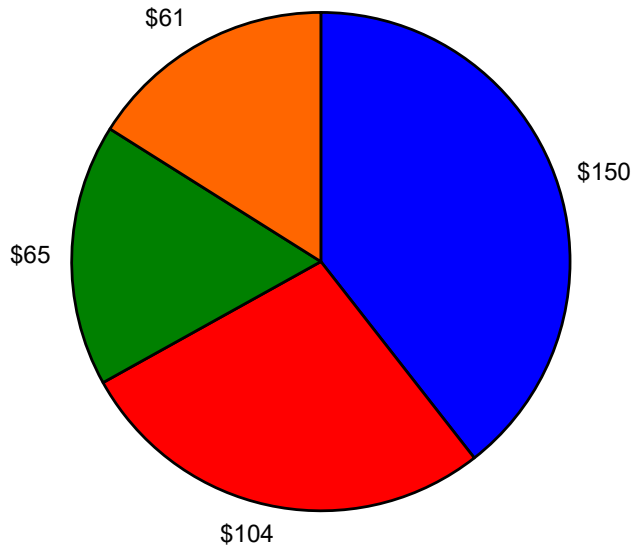


## Observations

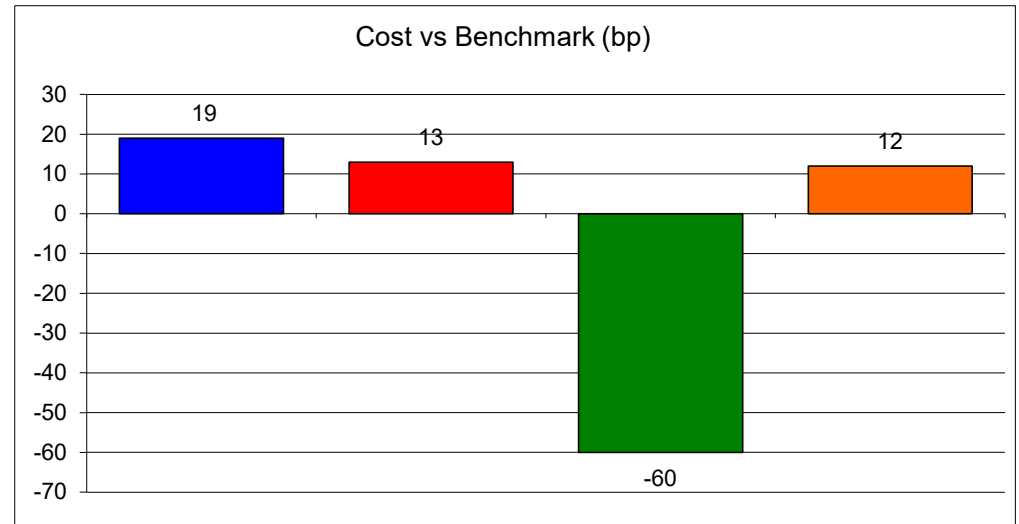
- Trading activity (\$380 mm) was heavier when compared with the prior annual review period (\$114 mm), although activity was lighter in the 2<sup>nd</sup> half of 2019. Turnover rates ranged between 24% and 36% on an annual basis. Buying activity matched selling activity during the review period.
- Total costs were in line with the benchmark and when compared with the prior annual review period (-31 bp) and were improved in the 2<sup>nd</sup> half of 2019. Overall costs were driven by non-US portfolios, particularly among stocks in Asia and Europe.
- Brokerage costs (-10 bp) were in line with the brokerage benchmark of -4 bp and compared to the prior annual review period (-10 bp). Goldman Sachs received the largest allocation of trade volume (21%). Commissions were lower than the Zeno Client Universe average (-5 bp).
- Short term traded returns were negative (-18 bp) after accounting for costs due primarily to the timing of the sell decisions as stocks increased subsequent to their removal from the portfolios, particularly at the beginning and end of 2019.

# Aggregate Plan – Separately Managed Equity Portfolios

Trade Value (\$380 mm)



Cost vs Benchmark (bp)



- ACADIAN ASSET MGMT
- LOW VOLATILITY EQUITY STRATEGY
- BAILLIE GIFFORD
- MONDRIAN INVESTMENT PARTNERS

# Aggregate Plan – Separately Managed Equity Portfolios- FX

## Summary

*Total FX Dollars Traded:* US\$ 96.0 MM

### *Total Costs/Savings*

vs. Avg Daily Mid: -2 bp

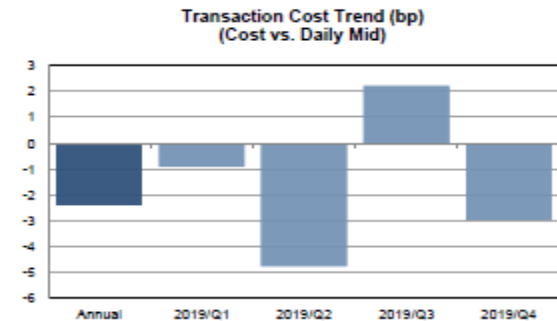
vs. London 4:00 pm Close: -4 bp

*FX Dollars Traded through Custodian:* US\$ 48.9 MM

### *Total Costs/Savings*

vs. Avg Daily Mid: -2 bp

vs. London 4:00 pm Close : -2 bp



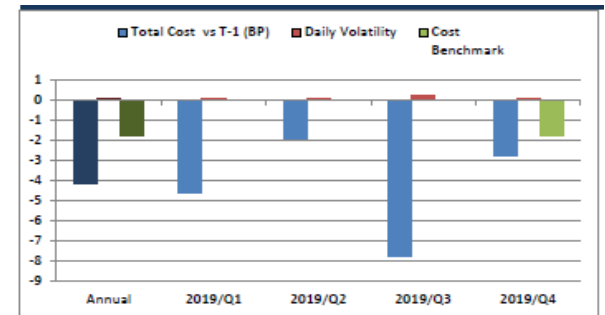
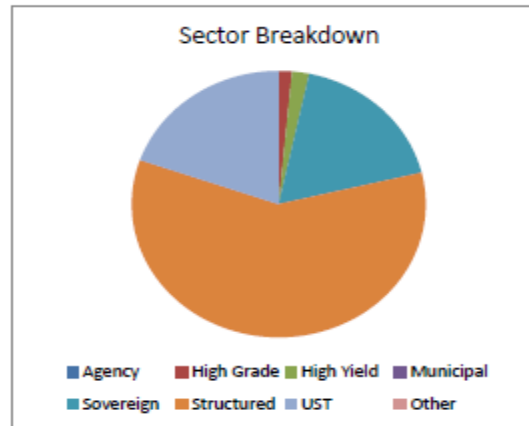
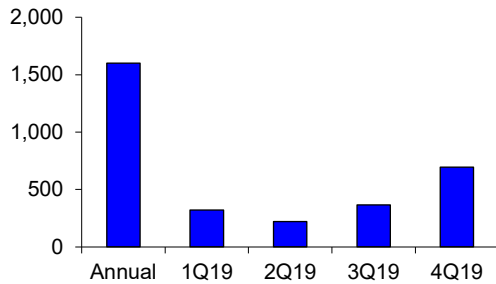
	bp	P/L(USD)
Annual	-2.4	-22,882
2019/Q1	-0.9	-1,123
2019/Q2	-4.8	-18,048
2019/Q3	2.2	4,225
2019/Q4	-3.0	-7,935

## Observations

- The Plan’s non-US portfolios traded \$96 mm of FX to settle \$126 mm of trading in non-US stocks during the review period, which was slightly more when compared with the prior annual review period (\$83 mm). The custodian share of the FX trades increased to 59% of overall activity in 2019 from 51% of overall activity in the prior annual review period.
- FX Execution Rates were in line with industry benchmarks during the review period and when compared to the prior annual review period (-3 bp). Trades executed by the custodian were in line with those executed through other counterparties. In aggregate, Buys and Sells were randomly distributed, and within their respective daily range.
- Other than trades through the custodian, Brown Brothers Harriman (13%), Bank of New York (12%), and National Australian Bank (10%) were allocated the largest amount of overall volume during the review period.
- Top 5 Currency Pairs (USDJPY, EURUSD, GPUSD, USDHKD and USDDKK) represented 72% of total volume during the review period. Overall, 7% of FX activity occurred in restricted markets.

# Aggregate Commingled Accounts – Fixed Income

Volume Trend \$MM

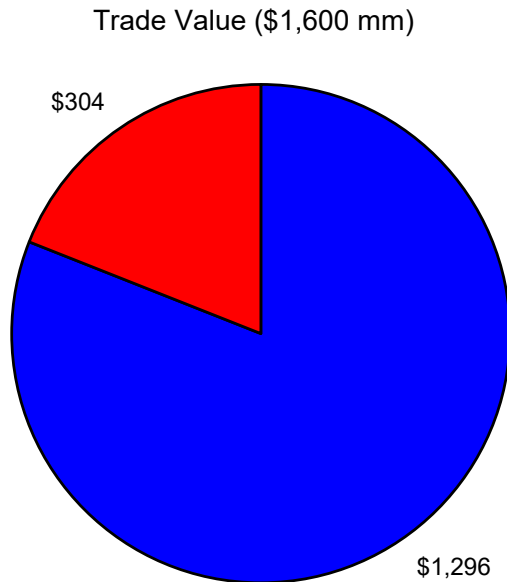


Period	Total Cost vs T-1 (BP)
Annual	-4
2019/Q1	-5
2019/Q2	-2
2019/Q3	-8
2019/Q4	-3

## Observations

- Evaluated trading activity (\$1,600 mm) was lighter when compared with the prior annual review period (\$2,915 mm), although activity trended higher over the last 6 months of the review period. Managers were net buyers during the review period.
- Fixed income securities were traded at prices in line with T-1 Evaluated Price (-4 bp) and when compared the prior annual review period (-2 bp). Overall costs from evaluated trades were driven by selling in US Treasuries and activity in High Yield securities.
- During the review period, Bank of New York (19%), Citigroup Global Markets (19%) and Credit Suisse (13%) received the largest allocations by Broker/Dealer.
- Structured debt (45%), US Treasury securities (30%), and Sovereign debt (18%) were the most active sectors by volume.

## Aggregate Commingled Accounts – Fixed Income



Western Asset Mgmt

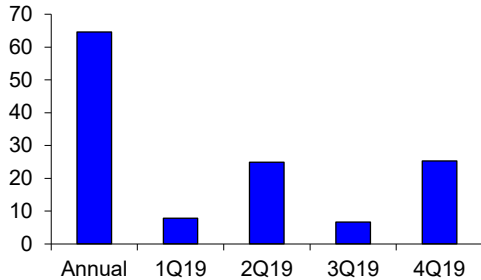


Franklin Templeton Institutional

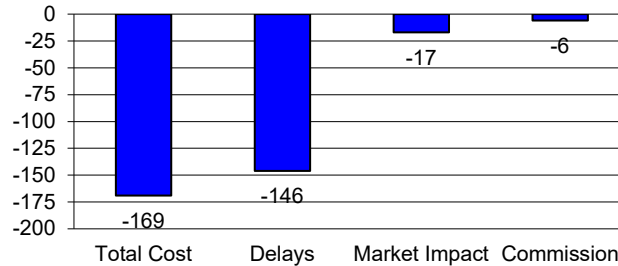


# Baillie Gifford-Equity Separate Account

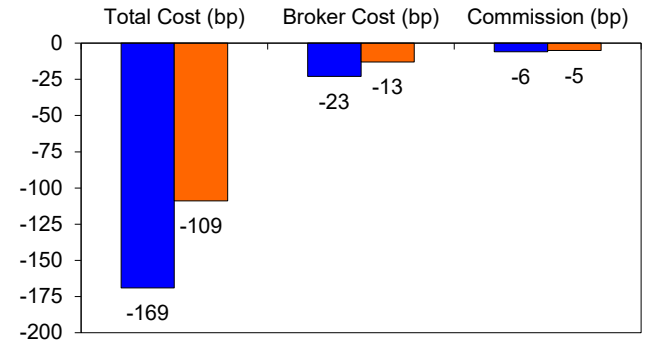
Volume Trend \$MM



Cost Attribution (bp)



Fund Benchmark



## Review

- Trading activity (\$65 mm) was heavier when compared to the prior annual review period (\$51 mm), and spiked higher in the mid-2019 and the end of the year. Turnover rates were consistently at or below 20% on an annual basis, which is on the low end of the NonUS All Country peer group universe.
- Total costs underperformed the benchmark and were considerably higher when compared to the prior annual review period (-71 bp) due primarily to increasing delay costs. However, costs did improve over the last 6 months of the review period. Additionally, the manager's strong stock picks during the year provided enough alpha to overcome the higher overall trading costs. FX trading in the account was in line with the average daily mid level and when compared to the prior annual review period. Although when allocating FX to the custodian, costs were higher overall and trended higher when compared to the prior annual review period.
- Brokerage costs (-23 bp) were in line with the brokerage benchmark of -13 bp and when compared to the prior annual review period (-23 bp). UBS Securities received the largest allocation of trade volume (18%). Commissions were in line with the peer group median (-5 bp) and execution only rates.

## Follow-up Due Diligence Evaluation/Findings

- Conducted follow-up conference call with manager in late Sep to review issues noted in Zeno reports.
- Topics covered in response to inquiry are summarized on the following page.



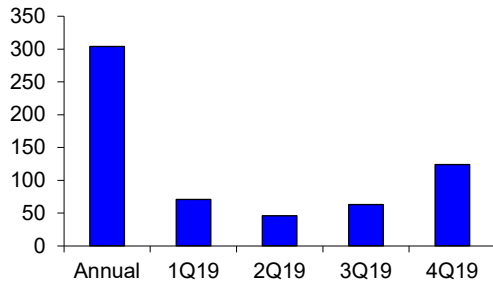
## Baillie Gifford-Equity Separate Account

### Follow-up Due Diligence Evaluation/Findings

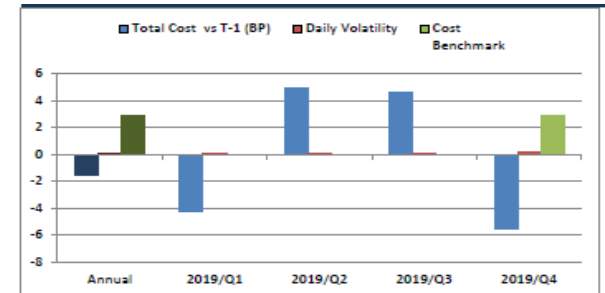
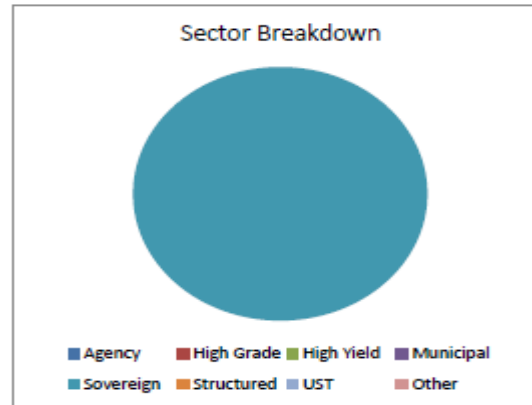
- Manager described trade process and noted any changes from prior review.
- Manager discussed growth in assets under management for the strategy and explained how it is monitoring capacity level.
- Manager explained its research acquisition policies and how it addressed new regulations.
- Manager provided its own assessment of equity and FX trading using internal time stamps through external 3<sup>rd</sup> party service providers.
- Manager described its approach to trading FX on behalf of SamCERA, although there did appear to be a discrepancy between the data utilized in Zeno's assessment and the manager's own internal assessment. Additional follow-up regarding the manager's FX activity is ongoing at this time.

# Franklin Templeton Institutional- Fixed Inc Commingled Fund

Volume Trend \$MM



Sector Breakdown



Period	Total Cost vs T-1 (BP)
Annual	-2
2019/Q1	-4
2019/Q2	5
2019/Q3	5
2019/Q4	-6

## Review

- Evaluated trading activity (\$304 mm) was lighter when compared with the prior annual review period (\$498 mm), although activity did trend higher over the last 6 months of the review period. Manager was a net buyer in 2019. During the review period 93% of the manager’s activity was in fixed income securities that had not traded recently and/or were difficult to price utilizing Zeno’s pricing model, suggesting potential liquidity concerns for the portfolio.
- Fixed income securities were traded at prices that were in line with the T-1 Evaluated Price (-2 bp) and were considerably improved when compared the prior annual review period (-27 bp). Costs did tick higher at the end of the review period. Overall costs were driven by buy side activity. FX trading costs in the account were in line with the average daily mid level and when compared to the prior annual review period, although FX costs did spike higher in 3Q19.
- During the review period, Bank of New York was utilized exclusively for all fixed income activity, which was a departure from the prior annual review period.

## Follow-up Due Diligence Evaluation/Findings

- Conducted follow-up conference call with manager in late Sep to review issues noted in Zeno reports.
- Topics covered in response to inquiry are summarized on the following page.



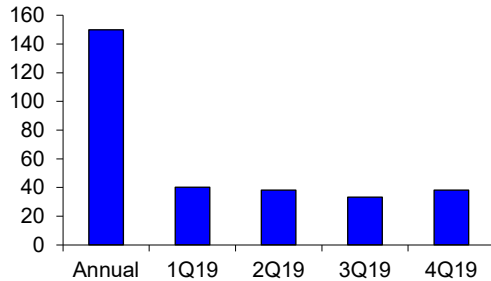
# Franklin Templeton Institutional-Fixed Inc Commingled Fund

## Follow-up Due Diligence Evaluation/Findings

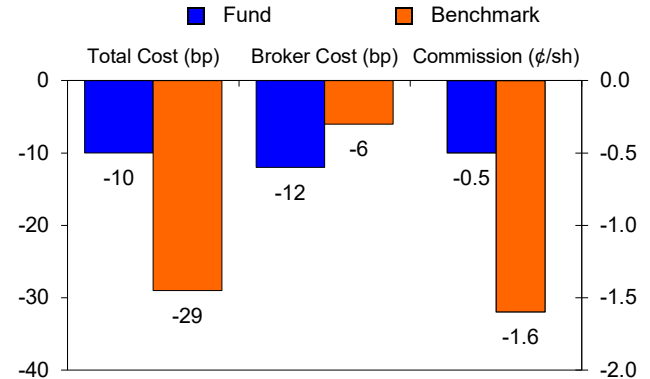
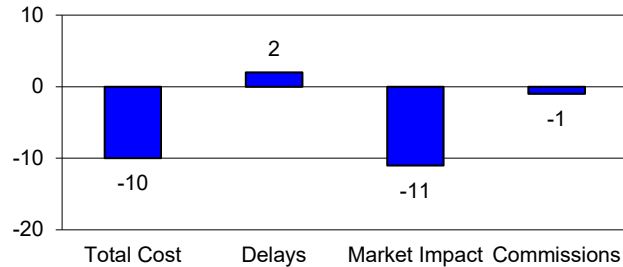
- Manager described trade process and noted any changes from prior review.
- Manager evaluated Zeno's assessment that a significant portion of the manager's portfolio had not been traded recently and/or were difficult to price utilizing Zeno's pricing model, suggesting potential liquidity concerns for the portfolio. Manager explained that most of the securities were in overnight T-bills and short-dated Japanese bonds (which are very big, liquid markets).
- Manager explained that there was a systems issues with respect to the trade file submitted by the manager for this analysis, which resulted in just one counterparty being noted for the strategy. Additional follow-up regarding the manager's executing counterparties is ongoing at this time.
- The manager stated that it has an internal approach to evaluating fixed income trading. However, the manager did not submit any internally generated reports for comparison with the Zeno analysis.
- Manager described its approach to trading FX and how it differs from other approaches utilized within the firm.

# Acadian Asset Mgmt-Equity Separate Account

Volume Trend \$MM



Cost Attribution (bp)



## Review

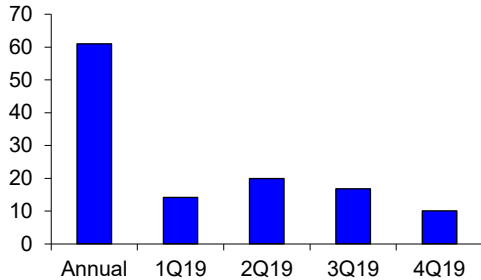
- Trading activity (\$150 mm) was consistent through the review period. Manager was a net buyer in 2019. Turnover rates ranged between 44% and 60% on an annual basis during the review period. Overall, turnover rates are in line with the average US large cap core peer group manager.
- Total costs outperformed the benchmark and were improved during the review period. Overall costs were driven by daily market impact costs.
- Brokerage costs (-12 bp) were in line with the brokerage benchmark of -6 bp. Instinet received the largest allocation of trade volume (18%). Commissions were considerably lower than the peer group median (-1.6 ¢/share) and execution only rates.

## Follow-up Due Diligence Evaluation/Findings

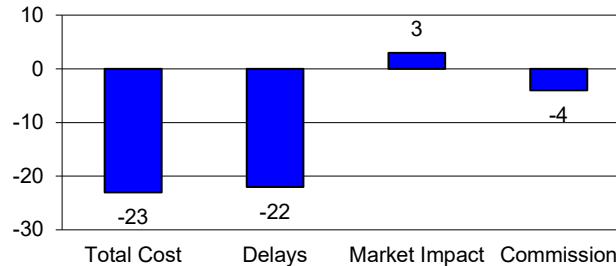
- None warranted at this time.

# Mondrian Investment Partners-Equity Separate Account

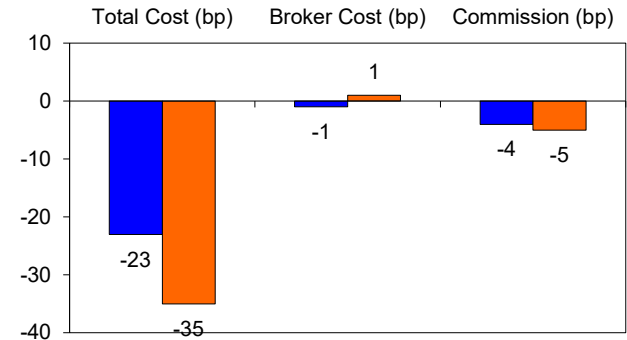
Volume Trend \$MM



Cost Attribution (bp)



Fund Benchmark



## Review

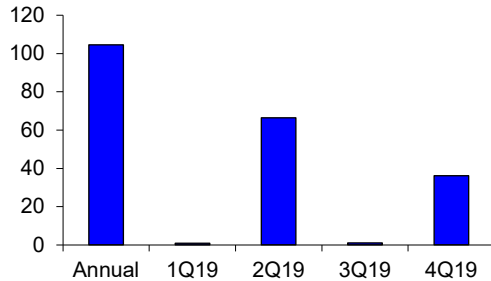
- Trading activity (\$65 mm) was heavier when compared to the prior annual review period (\$49 mm) but did trend lower in the 2<sup>nd</sup> half of the year. Manager was a net buyer in 2019. Turnover rates were consistently below 20% on an annual basis, which is on the low end of the NonUS All Country peer group universe.
- Total costs outperformed the benchmark but were higher when compared to the prior annual review period (+11 bp) due primarily to increasing delay costs. Costs spiked higher at year end. FX trading in the account was in line with the average daily mid level and when compared to the prior annual review period. Although allocation of FX to the custodian increased to 98% from just 74% in the prior annual review period.
- Brokerage costs (-1 bp) were in line with the brokerage benchmark of +1 bp and when compared to the prior annual review period (+4 bp). Sanford Bernstein received the largest allocation of trade volume (29%). Commissions were in line with the peer group median (-5 bp) and execution only rates.

## Follow-up Due Diligence Evaluation/Findings

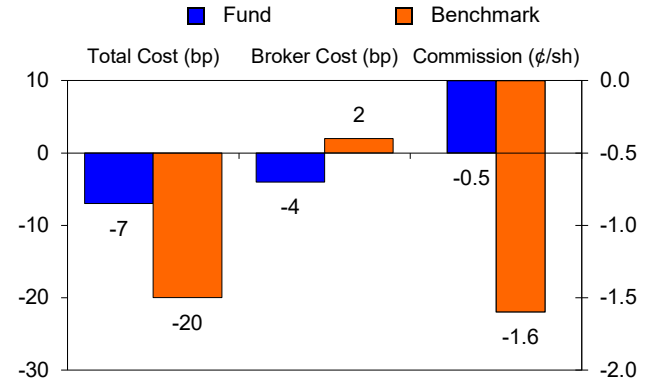
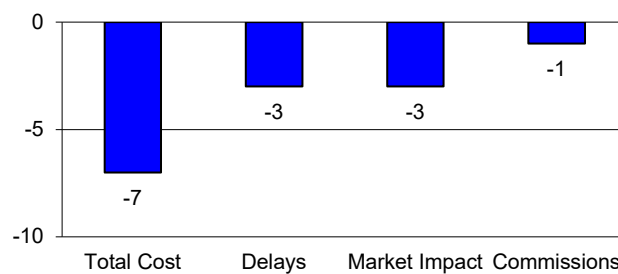
- None warranted at this time.

# Low Volatility Equity Strategy-Equity Separate Account

Volume Trend \$MM



Cost Attribution (bp)



## Review

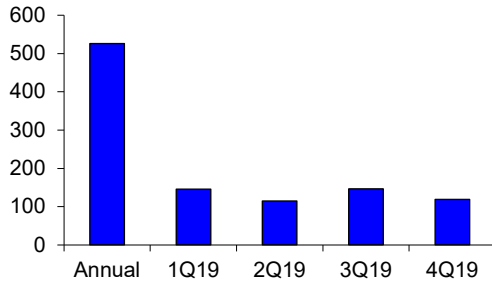
- Trading activity (\$104 mm) in mid-2019 and at the end of the year. Manager was a net buyer in 2019. Turnover rates ranged between 0% and 92% on an annual basis during the review period. Overall, turnover rates are lower than the average US large cap core peer group manager.
- Total costs outperformed the benchmark and were improved during the review period. Overall costs were driven by slightly more expensive sell side costs.
- Brokerage costs (-4 bp) were in line with the brokerage benchmark of +2 bp. Goldman Sachs received the largest allocation of trade volume (66%). Commissions were considerably lower than the peer group median (-1.6 ¢/share) and execution only rates.

## Follow-up Due Diligence Evaluation/Findings

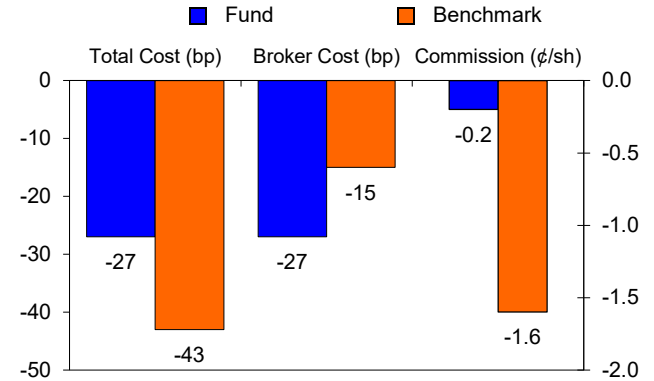
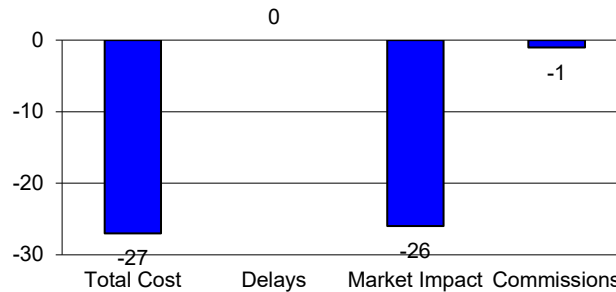
- None warranted at this time.

# QMA-Equity Commingled Fund

Volume Trend \$MM



Cost Attribution (bp)



## Review

- Trading activity (\$526 mm) was heavier than when compared to the prior year period (\$72 mm) but was consistent during the review period. Buying activity matched selling activity during the review period. Turnover rates were consistently higher than 250% on an annual basis during the review period, which is on the high end of the US small cap core peer group universe.
- Total costs outperformed the benchmark and were in line when compared with the prior year period (-32 bp). Costs improved over the last 6 months. Costs were driven by daily market impact costs during the review period.
- Brokerage costs (-27 bp) underperformed the brokerage benchmark of -15 bp but were in line when compared the prior year period (-30 bp). Scotia Securities received the largest allocation of trade volume (34%). Commissions were considerably lower than than the peer group median (-1.6 ¢/share) and execution only rates.

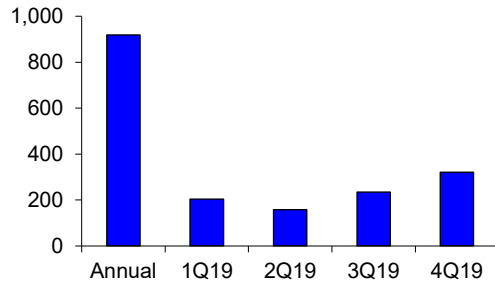
## Follow-up Due Diligence Evaluation/Findings

- None warranted at this time.

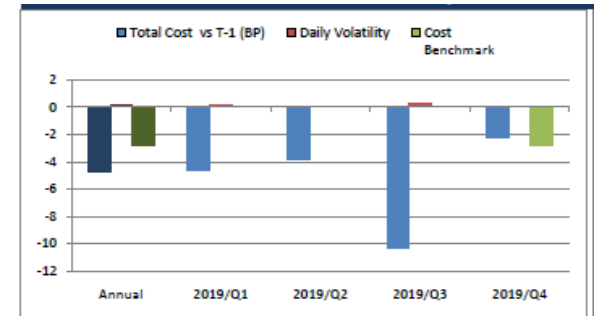
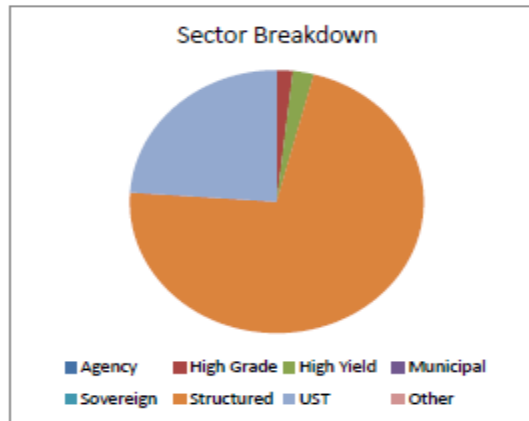


# Western Asset Mgmt-Fixed Inc Commingled Fund

Volume Trend \$MM



Sector Breakdown



Period	Total Cost vs T-1 (BP)
Annual	-5
2019/Q1	-5
2019/Q2	-4
2019/Q3	-10
2019/Q4	-2

## Review

- Evaluated trading activity (\$1,296 mm) was lighter when compared with the prior annual review period (\$2,464 mm), although activity did trend higher over the last 6 months of the review period. Manager was a net seller in 2019. Based on an evaluation of the holdings in the portfolio there did not appear to be any liquidity concerns.
- Fixed income securities were traded at prices that were in line with the T-1 Evaluated Price (-5 bp) and when compared the prior annual review period (+3 bp). Overall costs were driven by driven by selling in US Treasuries and activity in High Yield securities.
- During the review period, Citigroup Global Markets (23%) received the largest allocation by Broker/Dealer. Allocations to Bank of America appeared expensive during the review period.

## Follow-up Due Diligence Evaluation/Findings

- None warranted at this time.



## For further information please contact:

Chris Phillips, CFA  
SVP, Senior Consultant

301.312.6247

[cphillips@abelnoser.com](mailto:cphillips@abelnoser.com)

Brian Greene  
SVP, Sales & Client Services

646.432.4026

[bgreene@abelnoser.com](mailto:bgreene@abelnoser.com)

The information contained herein has been taken from trade and statistical services and other sources we deem reliable but we do not represent that such information is accurate or complete and it should not be relied upon as such. No guarantee or warranty is made as to the reasonableness of the assumptions or the accuracy of the models or market data used by Abel Noser Holdings, LLC or the actual results that may be achieved.

The screen shots provided in this presentation represent hypothetical examples of certain products available from Abel Noser Holdings, LLC. They contain sampled data and are provided for informational purposes only. None of these materials is intended to be used for trading or investment purposes or as an offer to sell or the solicitation of an offer to buy any security or financial product. These materials do not provide any form of advice (investment, tax or legal).

All trademarks, service marks, and trade names not owned by Abel Noser Holdings, LLC are owned by their respective owners. All functionality described herein is subject to change without notice.

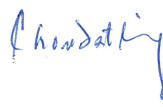
These materials are not to be copied, displayed or transmitted in any form without the prior written permission of Abel Noser Holdings, LLC.

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

October 27, 2020

Agenda Item 7.1

**TO:** Board of Retirement

**FROM:** Tat-Ling Chow, Finance Officer 

**SUBJECT:** Approval of Financial Audit Reports for the Fiscal Year Ended June 30, 2020

**Recommendation**

Approve Financial Audit Reports from Brown Armstrong Accountancy Corporation (Brown Armstrong) for the fiscal year ended June 30, 2020.

**Discussion**

Brown Armstrong has issued three audit reports in connection with the basic financial statements and other information presented in the Comprehensive Annual Financial Report of SamCERA for the fiscal year ended June 30, 2020. Ashley Casey from Brown Armstrong will discuss these three audit reports in details:

- 1) *Independent Auditor's Report.* This report contains a "clean" opinion from our auditor that SamCERA's basic financial statements and other information are fairly presented, in all material aspects, in accordance with accounting principles generally accepted in the United States of America. This report is presented in the Comprehensive Annual Financial Report of SamCERA for the fiscal year ended June 30, 2020.
- 2) *Required Communication to the Board of Retirement and Audit Committee in Accordance with Professional Standards.* This report explains the auditor's responsibility under the generally accepted auditing standards in the United States of America and includes required communications related to 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.* This report discloses that our auditor (1) did not identify any material weaknesses in our internal controls and (2) did not identify any instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

**Attachments**

Required Communication to the Board of Retirement and Audit Committee in Accordance with Professional Standards

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

**SAN MATEO COUNTY EMPLOYEES'  
RETIREMENT ASSOCIATION**

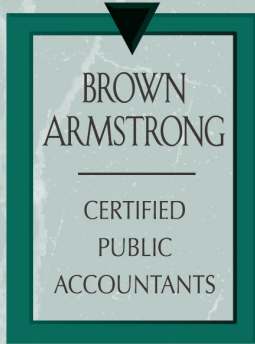
**REPORT TO THE BOARD OF RETIREMENT  
AND AUDIT COMMITTEE**

**FOR THE FISCAL YEAR ENDED JUNE 30, 2020**

**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 (SAS 114) .....	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> .....	5



# BROWN ARMSTRONG

*Certified Public Accountants*

## **REQUIRED COMMUNICATION TO THE MEMBERS OF THE BOARD OF RETIREMENT AND AUDIT COMMITTEE IN ACCORDANCE WITH PROFESSIONAL STANDARDS (SAS 114)**

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

We have audited the basic financial statements and other information (financial statements) of the San Mateo County Employees' Retirement Association (SamCERA), a pension trust fund of the County of San Mateo, as of and for the fiscal year ended June 30, 2020, and have issued our report dated October 19, 2020. 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 June 22, 2020. Professional standards also require that we communicate to you the following information related to our audit.

### **Significant Audit Matters**

#### *Qualitative Aspects of Accounting Practices*

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by SamCERA are described in Note 2, Summary of Significant Accounting Policies, to the financial statements. As described in Note 2, SamCERA adopted Governmental Accounting Standards Board (GASB) Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance*, during the fiscal year ended June 30, 2020. 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 as well as 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 the notes to the financial statements. We evaluated the key factors and assumptions used to develop the estimate of the fair value of investments in determining that it is reasonable in relation to the financial statements taken as a whole.
- The contribution amounts and net pension liability as detailed in the notes to the financial statements are based on the actuarially-presumed interest rate and assumptions. We evaluated the key factors and assumptions used to develop the estimates of the contribution amounts and net pension liability in determining that they are reasonable in relation to the financial statements taken as a whole.

#### **BAKERSFIELD OFFICE (MAIN OFFICE)**

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

#### **FRESNO OFFICE**

10 RIVER PARK PLACE EAST  
SUITE 208  
FRESNO, CA 93720  
TEL 559.476.3592

#### **STOCKTON OFFICE**

1919 GRAND CANAL BLVD  
SUITE C6  
STOCKTON, CA 95207  
TEL 888.565.1040

WWW.BACPAS.COM

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 6 to the financial statements, Summary of Significant Accounting Policies and Deposits and Investments, 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 to the financial statements.
- Additionally, the disclosures related to the funding policies, net pension liability, and actuarial methods and assumptions in Note 1, Plan Description; Note 3, Funding Policy; Note 4, Member Contributions; Note 5, Employer Contributions; and Note 7, Pension Disclosures, 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. The attached schedule summarizes an uncorrected journal entry due to SamCERA's cutoff procedures for financial reporting and lag in receiving the June 30 quarterly statements from investment managers. Management has determined and we agree that the effect is immaterial, both individually and 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 19, 2020.

#### *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 Management's Discussion and Analysis, Schedule of Changes in Net Pension Liability and Related Ratios of Participating Employers, Schedule of Employer Contributions, Schedule of Investment Returns, and Notes to the Required Supplementary Information, which are Required Supplementary Information (RSI) that supplement the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during the audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

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

We were not engaged to report on the introductory, investment, actuarial, statistical, and compliance sections, which accompany the financial statements but are not RSI. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

**Restriction on Use**

This information is intended solely for the use of the 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 19, 2020



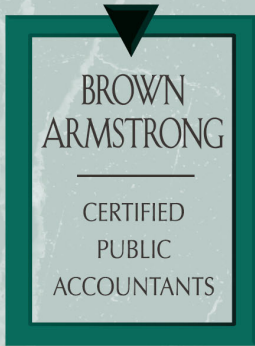
**SamCERA**  
**Uncorrected Journal Entry**  
**6/30/2020**

The uncorrected journal entry is a result of SamCERA's cut off procedures for financial reporting and timing of the actuarial valuation for Governmental Accounting Standards Board Statements No. 67 and No. 68. Rollforwards from March 31st balances were utilized as estimates since June 30th statements from investment managers were not available by the cutoff date for financial reporting.

<b>Account</b>	<b>Debit</b>	<b>Credit</b>
BlackRock Intermediate - Unrealized Gain/Loss	\$ 13,450,489	
Fixed Income - BlackRock Intermediate		\$ 13,450,489
BlackRock Russell 1000 - Unrealized Gain/Loss	10,287,851	
Public Equity - BlackRock Russell 1000		10,287,851
Inflation Hedge - Blue Road Capital	1,040,635	
Blue Road Capital - Unrealized Gain/Loss		1,040,635
Inflation Hedge - EQT Infrastructure	1,682,027	
EQT Infrastructure - Unrealized Gain/Loss		1,682,027
Alternatives - Great Hills VI	1,395,081	
Great Hills VI - Unrealized Gain/Loss		1,395,081
Alternatives - Great Hills V	4,027,216	
Great Hills V - Unrealized Gain/Loss		4,027,216
Alternatives - Warburg Pincus XI	1,306,938	
Warburg Pincus XI - Unrealized Gain/Loss		1,306,938

The result of the above uncorrected journal entry is as follows, representing a 0.3% decrease in the net position of SamCERA.

Net Adjustment to Investments		14,286,443
Net Adjustment to Unrealized Gain/Loss	14,286,443	



# 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 and Audit Committee of  
San Mateo County Employees' Retirement Association  
Redwood City, California

### **BAKERSFIELD OFFICE (MAIN OFFICE)**

4200 TRUXTUN AVENUE  
SUITE 300  
BAKERSFIELD, CA 93309  
TEL 661.324.4971  
FAX 661.324.4997  
EMAIL [info@bacpas.com](mailto:info@bacpas.com)

### **FRESNO OFFICE**

10 RIVER PARK PLACE EAST  
SUITE 208  
FRESNO, CA 93720  
TEL 559.476.3592

### **STOCKTON OFFICE**

1919 GRAND CANAL BLVD  
SUITE C6  
STOCKTON, CA 95207  
TEL 888.565.1040

[WWW.BACPAS.COM](http://WWW.BACPAS.COM)

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 basic financial statements and other information (financial statements) of the San Mateo County Employees' Retirement Association (SamCERA) as of and for the fiscal year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise SamCERA's basic financial statements, and have issued our report thereon dated October 19, 2020.

### **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) as a basis for designing 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 financial statements. 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*

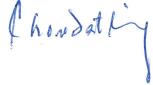
Bakersfield, California  
October 19, 2020

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

October 27, 2020

Agenda Item 7.2

**TO:** Board of Retirement

**FROM:** Tat-Ling Chow, Finance Officer 

**SUBJECT:** Approval of SamCERA's 2020 Comprehensive Annual Financial Report

**Recommendation**

Approve SamCERA's Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2020.

**Discussion**

The CAFR consists of six sections, which include the following:

1. Introductory Section - includes a letter of transmittal from SamCERA's Chief Executive Officer.
2. Financial Section - includes the independent auditor's report, management's discussion and analysis, basic financial statements, notes to the basic financial statements, and other financial information.
3. Investment Section - includes the Chief Investment Officer's report, Investment Consultant's report, asset allocation, portfolio returns, and other investment-related information.
4. Actuarial Section - includes the Actuary's Certification Letter, results of the most recent annual actuarial valuation, an overview of the plan funding status, and other actuarial-related information.
5. Statistical Section - covers financial and operational information for the past ten fiscal years.
6. Compliance Section - includes the auditor's report on internal control over financial reporting and on compliance and other matters.

Over the fiscal year, the financial position of SamCERA improved slightly over by 1%. Below are the key indicators of SamCERA's overall performance this fiscal year as opposed to last fiscal year.

- SamCERA's net position (total assets minus total liabilities) reached \$4.8 billion at fiscal year-end, an increase of \$57 million. This amount is exclusively restricted for meeting ongoing benefit obligations to retirees and their eligible beneficiaries.

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

- Total additions to the pension plan were \$312 million, a decrease of 47% from last fiscal year. The decrease was driven by two key factors:
  - SamCERA received supplemental contributions of \$51 million from the County in fiscal year 2019 but none in fiscal year 2020.
  - The net return on investment declined to -0.2% for fiscal year 2020 from 5.4% for fiscal year 2019, causing a \$229 million decrease in investment income. This unfavorable outcome was partly due to disruptions caused by the pandemic and partly due to underperformance in certain investments.
- Total deductions from the pension plan were \$254 million, an increase of \$18 million, or 8%, from last fiscal year. The increase was expected, mainly from the annual cost of living adjustment and the increase in the number of retirees receiving benefits.

During the fiscal year, Milliman Incorporated conducted a triennial Experience Study to look at the actual experience of the pension plan for the past three fiscal years. The objective was to determine if modifications to the existing assumptions were necessary to better reflect the actual experience. Based on the results from this study, several changes to the demographic assumptions were adopted for the 2020 actuarial valuation of the pension plan's assets and liabilities.

- The funded ratio of the pension plan increased slightly by 0.6% over the year to 86.4% as of June 30, 2020, due primarily to employer contributions to amortize the unfunded liabilities.
- As of June 30, 2020, the actuarial value of plan assets was \$5.0 billion, and the actuarial accrued liability was \$5.8 billion. The difference between these two figures represents the unfunded actuarial accrued liability of \$0.8 billion.
- If all the existing economic and demographic assumptions are being met, the pension plan is expected to be fully funded by fiscal year 2034.

**Attachment**

2020 Comprehensive Annual Financial Report



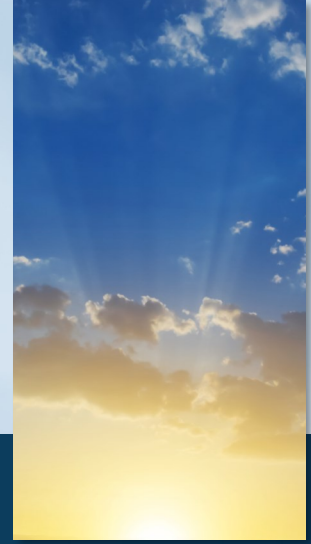
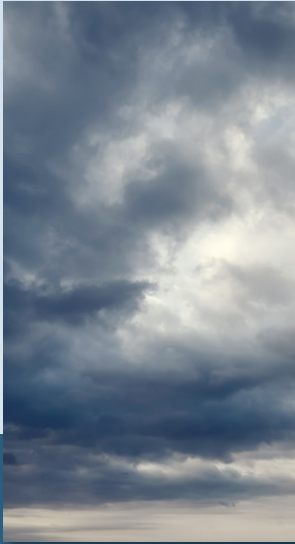
2020

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2020

San Mateo County Employees' Retirement Association  
Redwood City, State of California  
A Pension Trust Fund of the County of San Mateo and Participating Employers

---



# LIGHTING THE WAY FORWARD

Visible in all weather conditions, the lighthouse provides stability and direction. Just as it can guide us through storms, it still glows when all is well, consistently leading the way forward.

Over recent months, terms like “social distancing” have found their way into the common vernacular and will no doubt remain in our memories long after the pandemic comes to an end. The world is working through a global health crisis, and locally, we have also seen members, neighbors, family and friends impacted by wildfires. We are all experiencing a range of emotions from pain associated with the loss of life to the inspiration we feel seeing people rise to overcome the challenges in front of them.

Like many others, SamCERA has had to make urgent and necessary decisions on how to respond to the pandemic while in a very fluid environment. Our main goal has been to keep the safety and health of our members, the public and staff a priority, while limiting the impact to the services that we provide. In order to do this, management and staff worked together to evaluate our business processes and identify where adjustments were feasible.

Since March, our office has been closed to walk-in members and the public, and we have successfully conducted business remotely. During our office closure, staff has remained dedicated to providing the same level of service to our membership as when our doors were open. Document submission, one-on-one counseling, new retirement processing, and more were, and continue to be managed electronically and virtually. While we enjoy seeing and interacting with our members in person, this was the best decision in consideration of everyone’s well-being.

As we navigate through this crisis, we are staying focused on our financial strength, and we are confident in the consistent financial framework that has been established by the Board of Retirement and our Investment Team. While the fund is not immune to short-term volatility and market events, our long-term strategic course provides retirement security to our members and eligible beneficiaries now and well into the future.

We are inspired by the dedication of our membership, who have stepped up to provide pandemic assistance and fire relief, and as we move forward, we will continue to think and work ahead to achieve our strategic initiatives to ensure the fund remains strong for our members and eligible beneficiaries.

We all look forward to the day we can return to the office and see our members in person again.

*SamCERA Staff*

*“One who gains strength by overcoming obstacles possesses the only strength which can overcome adversity.” - Albert Schweitzer*



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

# **COMPREHENSIVE ANNUAL FINANCIAL REPORT**

**Fiscal Year Ended June 30, 2020**

Scott Hood

Chief Executive Officer

Michael Coultrip

Chief Investment Officer

Tat-Ling Chow

Finance Officer

SamCERA

100 Marine Parkway, Suite 125

Redwood City, California 94065

This page is intentionally left blank.

# TABLE OF CONTENTS

## INTRODUCTORY SECTION

---

Administrator’s Letter of Transmittal .....	12
GFOA Certificate of Achievement.....	19
PPCC Public Pension Standards Award .....	20
SamCERA’s Mission and Goals.....	21
Members of the Board of Retirement .....	22
Organizational Chart .....	24
List of Professional Consultants (Other Than Investment Professionals) .....	25

## FINANCIAL SECTION

---

Independent Auditor’s Report.....	30
Management’s Discussion and Analysis .....	33
Basic Financial Statements	
Statement of Fiduciary Net Position.....	42
Statement of Changes in Fiduciary Net Position .....	43
Notes to the Basic Financial Statements	
Note 1: Plan Description .....	44
Note 2: Summary of Significant Accounting Policies.....	48
Note 3: Funding Policy .....	52
Note 4: Member Contributions .....	53
Note 5: Employer Contributions.....	54
Note 6: Deposits and Investments .....	55
Note 7: Pension Disclosures .....	66
Note 8: Plan Reserves .....	69
Note 9: Administrative Expenses.....	72
Note 10: Information Technology Expenses.....	74
Note 11: Risk Management .....	75
Note 12: Related Party Transactions .....	75
Note 13: Commitments .....	75
Note 14: Contingent Liability .....	75

## FINANCIAL SECTION (CONTINUED)

---

Required Supplementary Information	
Schedule of Changes in Net Pension Liability and Related Ratios of Participating Employers.....	76
Schedule of Employer Contributions.....	78
Schedule of Investment Returns .....	79
Notes to the Required Supplementary Information .....	79
Supplementary Information	
Schedule of Administrative Expenses.....	82
Schedule of Information Technology Expenses .....	82
Schedule of Investment Expenses .....	83
Schedule of Payments to Consultants (Other Than Investment Advisors) .....	83
Notes to the Supplementary Information .....	84
Other Information	
Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan (GASB Statement No. 68) .....	85
Schedule of Cost Sharing Employer Allocations (GASB Statement No. 68) .....	86
Notes to the Other Information .....	86

## INVESTMENT SECTION

---

Chief Investment Officer’s Report .....	90
Investment Consultant’s Report on Investment Activities.....	97
Investment Philosophy, Objectives, Policy, and Allocation.....	102
Investment Summary .....	104
Asset Allocation .....	105
Asset Allocation (Target Policy vs. Actual).....	106
Benchmarks .....	107
Schedule of Portfolio Returns.....	108
Schedule of Top Ten Equities and Fixed Income Securities .....	109
List of Investment Managers .....	110
Schedule of Professional Services and Fees .....	111
Top 10 Broker Commissions .....	111

## ACTUARIAL SECTION

---

Actuary's Certification .....	114
Actuarial Valuation .....	117
Actuarial Methods and Assumptions (For Funding Purposes) .....	122
Rate of Separation from Active Service - All Plans .....	123
Summary of Significant Actuarial Statistics and Measures .....	125
Valuation Assets .....	126
Actuarial Valuation - SamCERA's Resources .....	127
Actuarial Valuation - SamCERA's Liabilities .....	127
Schedule of Active Member Valuation Data .....	128
Funded Liabilities by Type .....	129
Schedule of Retirees and Beneficiaries Added to and Removed from the Rolls .....	129
Actuarial Analysis of Financial Experience.....	130
Schedule of Funding Progress .....	130

## STATISTICAL SECTION

---

Changes in Fiduciary Net Position .....	134
Schedule of Additions to Fiduciary Net Position by Source .....	136
Schedule of Deductions from Fiduciary Net Position by Type .....	136
Total Fiduciary Net Position.....	137
Changes in Fiduciary Net Position .....	137
Summary of Retired Benefits, Refunds, and Inactive Members .....	138
Schedule of Average Pension Benefit Payments.....	140
Distribution of Retired Members by Age and Retirement Year-	
All Plans Combined.....	142
Number of Retirees and Beneficiaries Receiving Benefits .....	143
Average Monthly Benefit to Retirees and Beneficiaries .....	143
Schedule of Average Monthly Salary of Active Members .....	144
Schedule of Active Members and Participating Employers .....	146
Employer and Member Contribution Rates .....	147
Employer Contribution Rates for All Plans Combined as a Percentage of Covered Payroll .....	147
History of Employer Statutory Contribution Rates.....	148

## COMPLIANCE SECTION

---

SamCERA's Funded Ratio .....	152
Additions To and Deductions From SamCERA's Net Position .....	152
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> .....	153

# INTRODUCTORY SECTION







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, 2020. This report is intended to provide an overview of SamCERA's financial, investment, and actuarial status as of that date.



Under Government Code 31593, SamCERA is required to conduct an audit every 12 months and report upon its financial condition. The financial audit performed by Brown Armstrong Accountancy Corporation states that SamCERA's financial statements are presented fairly, in all material respects, in conformity with Generally Accepted Accounting Principles (GAAP) in the United States of America. The auditor's report is located on pages 30-32.

Management acknowledges its responsibility for the entire contents of the CAFR, and also its responsibility for maintaining an adequate internal control framework to provide reasonable, rather than absolute, assurance that the financial statements are free of any material errors. Management's Discussion and Analysis (MD&A) is presented on pages 33-41, providing a narrative analysis of the basic financial statements. MD&A complements this letter of transmittal and should be read in conjunction with it.

### **Authority, Responsibilities & Duties**

The San Mateo County (the County) Board of Supervisors established retirement benefits 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). SamCERA is responsible for providing retirement, disability, and death benefits to 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 SamCERA Board of Retirement (the Board), serving as fiduciary for all of SamCERA's members and their beneficiaries under the California Constitution, Article XVI, Section 17 and the CERL, is responsible for administering the system. The duties of the Board, its officers, and its employees are to prudently manage plan assets and to ensure the ability to pay all earned benefits while minimizing employer contributions and defraying reasonable expenses of administering the system.

The Board consists of nine Trustees and two alternates. 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 the 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 2019-20 were: Kurt Hoefler, Chair; Al David, Vice Chair; and Robert Raw, Secretary. Other members of the Board were: Sandie Arnott, Katherine O'Malley, Eric Tashman, Benedict J. Bowler, Mark Battey, and Paul Hackleman. Alternate Trustees were Susan Lee and Alma Salas.

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 30. A breakdown of the budget allotment versus actual expenses is presented on pages 72-74. In addition, the Board has authorized the execution of contracts for the professional services of an actuary, an investment consultant, investment managers, a global custodian, a financial auditor, and a medical advisor delegated by the County Health Officer to help the Board fulfill its duties. The Board's primary professional consultants are highlighted in the organizational chart on page 24.

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 retirement system. 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 the governing law and SamCERA's regulations and policies.

Employers participating in the retirement system include the County, the Superior Court of the County of San Mateo (the Court), and the San Mateo County Mosquito and Vector

Control District (the District). SamCERA's members include all active permanent employees of the participating employers, inactive members, retirees, and beneficiaries. About 86% of SamCERA's active members are classified as General Members while the remaining are public safety employees classified as Safety or Probation Members.

### **Financial**

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 GAAP and are free of material misstatements. Internal controls are reviewed to ensure that SamCERA has sufficient controls in place to ensure reliable financial reporting and to safeguard its assets. SamCERA's financial statements 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.

### **Investments**

This fiscal year's returns of -0.2%, net of investment manager fees, underperformed the policy benchmark return by 1.6%, for the one-year period ended in June 30, 2020. For fiscal year 2019-20, three of four asset class composites (Public Equity, Fixed Income, and Alternatives) had positive returns. Fixed income was the best performing composite, while Inflation Hedge was the lowest performing asset class composite. This fiscal-year performance resulted in below median performance, relative to SamCERA's peers, as defined by large (greater than \$1 billion in assets) public plans.

SamCERA completed the transition to the new asset allocation policy portfolio during the first half of 2020. As indicated in the Investment section of this report, the new policy (effective July 1, 2020) eliminates the 8% allocation to Risk Parity, reduces Inflation Hedge by 3%, and increases Diversifying assets by 8% and Growth assets by 3%.

As anticipated this year, the plan now has more retirees and beneficiaries receiving benefits than active members contributing into the plan. A major focus of the Board for the next few years is to continue planning strategically to effectively position the portfolio to handle the changing demographics of the plan. Likewise, the plan is also anticipated to become cash-flow negative in the next few years, and the Board will consider strategic options that will enable appropriate cash flow to provide promised benefits while minimizing risk.

## Actuarial

SamCERA continues to be a statewide leader in funding assumptions and was pleased to be ranked the 4th most actuarially conservative among California retirement systems in an April 2020 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 continued high ranking was due mainly to its relatively low assumed rate of return of 6.50% and its current funding method, where the June 30, 2008 Unfunded Actuarial Accrued Liability (UAAL) is amortized over a 15-year fixed period ending June 30, 2023. Subsequent changes in the UAAL in years following June 30, 2008, are being amortized separately over new 15-year periods. At its June 2020 Board meeting, the Board retained the same assumed investment earnings rate of 6.50%.

SamCERA engages an independent actuarial consulting firm, Milliman, Inc. (Milliman), to conduct an annual actuarial valuation of its 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 assets and liabilities. SamCERA strives to provide the most recent financial and actuarial data in its annual report.

## Plan Funding Status

SamCERA maintains a funding goal that will fully fund the system's liabilities while maintaining employer contributions, as a percentage of payroll, as level as possible for the plan sponsors. Milliman acts as the plan's actuary and performs actuarial valuations, which are presented to the Board annually. The purpose of the valuation is to determine the financial health of the plan at a given point in time and to recommend the employer and member contribution rates for the upcoming fiscal year. Triennially, Milliman conducts an experience study of SamCERA members and makes recommendations to the Board on key economic and noneconomic assumptions. The most recent triennial experience study was recently completed for the period ended April 30, 2020.

Milliman's actuarial valuation as of June 30, 2020, determined that the funding ratio increased from 85.8% to 86.4%. This increase was due primarily to employer contributions to amortize the Unfunded Actuarial Accrued Liability (UAAL). The Employer Normal Cost Rate decreased to 10.90% for fiscal year 2021-22 from 11.27% of covered payroll for fiscal year 2020-21 for all plans combined. Additionally, the portion of the employer's contribution rate that finances the UAAL increased from 26.59% of pay to 28.01%.

### **Supplemental Contributions**

In 2013, a Memorandum of Understanding (MOU) was established between the County and SamCERA in which the County was committed to accelerate the pay down of its UAAL by making supplemental contributions. The contributions paid above the statutorily required contribution rate, along with the earnings in the County's Supplemental Contribution Account (CSCA), overall have grown to approximately \$174.5 million as of June 30, 2020. Furthermore, the County is committed to continue making supplemental contributions over the next three 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 contributions and earnings in the District's Supplemental Contribution Account is approximately \$1.5 million as of June 30, 2020.

### **Cost of Living Adjustment**

The annual Consumer Price Index for the Bay Area reflected higher inflation than the rest of the Country. Due to inflation, most SamCERA retirees and beneficiaries received a Cost of Living Adjustment (COLA) between 2.0% and 3.5%, depending on the COLA limit of their plan. The COLA for General and Safety Plan 1 was 3.5% and Probation Plan 1 was 3% with a 0.5% COLA bank. All Plan 2 members received 3.0%, while the COLA for Plans 4, 5, 6 and 7 was 2.0%. Plan 3 does not provide a COLA.

### **Information Technology**

SamCERA completed a number of technology improvement projects during the fiscal year. These projects include installing electronic displays for member communications in the office, creating internal SharePoint sites, implementing electronic signatures to streamline document signing and approval processes, and continuing improvements to the pension administration system that was implemented in 2017.

Staff also began to redevelop the MySamCERA mobile application. The improved application will offer more features and make it easier for members to access their retirement account information.

In addition, due to the global pandemic, SamCERA closed its office to walk-in members and the public on March 16, 2020. Most staff were already well-equipped with appropriate computers, equipment and software to work remotely, and any gaps were promptly addressed to ensure that all staff had remote access without interruptions to regular business services.

### **Strategic Planning**

SamCERA has been making conscientious efforts to implement the strategic plan that was updated in 2019. The strategic plan will continue to evolve as our organizational needs

change, giving the opportunity to employ a more thoughtful, intentional planning approach that is aimed at achieving the newly adopted goals and objectives. 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:

#### **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.*

As previously mentioned, a major focus of the Board in the next few fiscal years is to plan strategically for the ongoing maturation of SamCERA's pension plan, and the potential impact on such things as the plan's asset allocation, liquidity management, and risk tolerance.

#### **CUSTOMER SERVICES GOAL**

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

Staff continues to strive in providing its members the highest level of customer service through one-on-one counseling sessions, seminars, member guides, self-service portal and a robust member education program. Furthermore, staff is working to ensure the pension administration system is performing as expected through monitoring, and regular testing.

#### **OPERATIONS GOAL**

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

Operationally, SamCERA will continue to focus on strengthening its internal control procedures with a focus on cybersecurity, enhancing features and ensuring consistent connectivity to our pension administration system, undertaking a succession planning strategy, and improving our business continuity plan.

### **Certificate of Achievement and Acknowledgements**

For the twenty-third 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, 2019. The certificate is reproduced on page 19. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

SamCERA is also the recipient of the GFOA Award for Outstanding Achievement in Popular Annual Financial Reporting (PAFR) for the seventeenth year running and has received this honor for the PAFR for the fiscal year ended June 30, 2019.

Additionally, the Public Pension Coordinating Council (the Council) presented SamCERA with its Public Pension Standards Award for 2019. 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 20.

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.

### **Acknowledgments**

I am sincerely grateful to the Board, SamCERA staff and consultants who, as always, perform diligently to ensure the successful operation and financial soundness of SamCERA while persistently maintaining the highest financial reporting standards. I am also appreciative of the continuing cooperation and open communication from all participating employers.

Over the past several months, we have seen our members stepping up to serve the local community and inspiring us every day with their selflessness and dedication. All of us at SamCERA are proud to work on behalf of these members to ensure that SamCERA remains strong. We stay committed to achieving our goals of prudently managing the fund and providing the highest level of service to our members, employers and stakeholders.

Respectfully submitted,



Scott Hood  
Chief Executive Officer

October 19, 2020

**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, 2019

*Christopher P. Morrill*

Executive Director/CEO



## PPCC PUBLIC PENSION STANDARDS AWARD

---



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2019***

Presented to

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

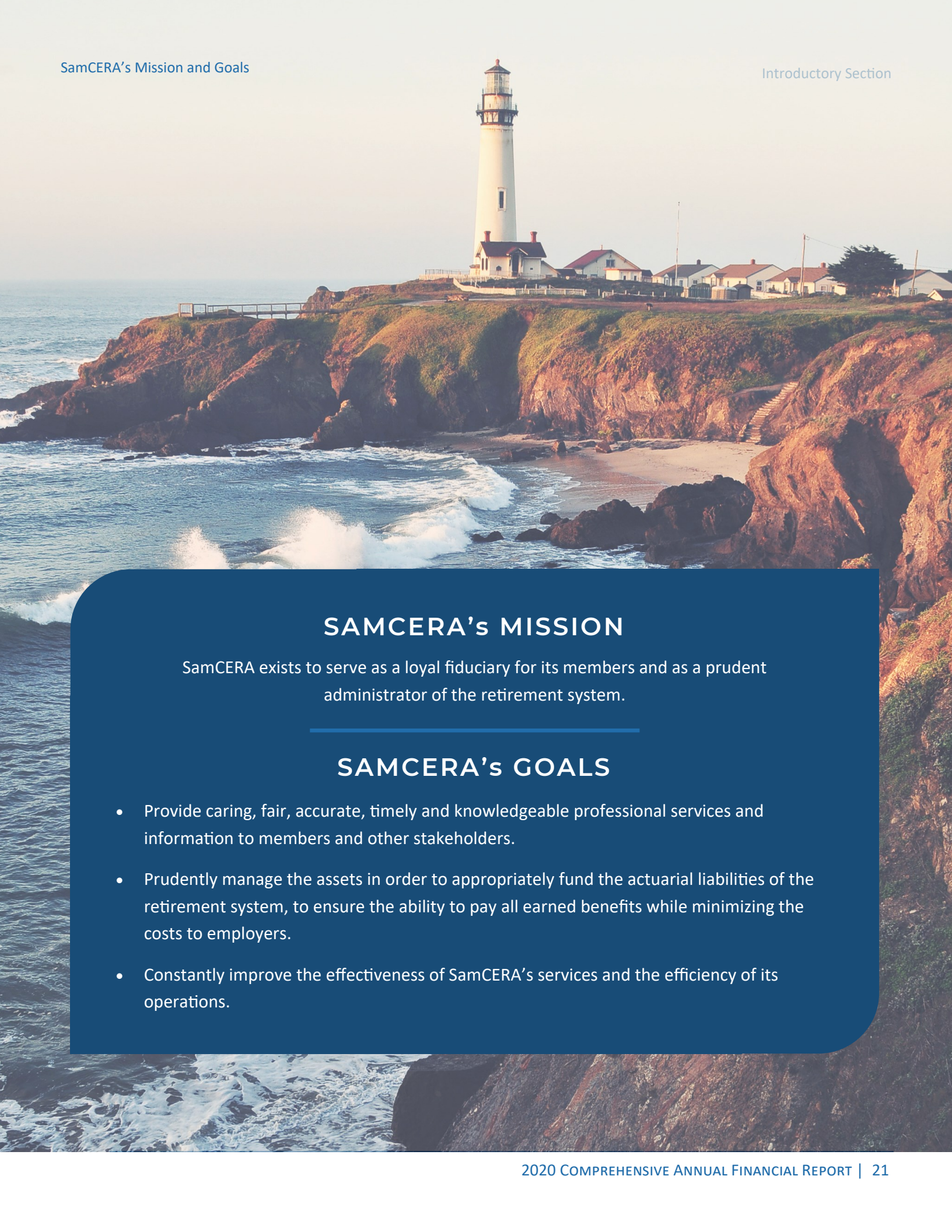
In recognition of meeting professional standards for  
plan funding and administration as  
set forth in the Public Pension Standards.

*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



## SAMCERA's MISSION

SamCERA exists to serve as a loyal fiduciary for its members and as a 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.

# BOARD OF RETIREMENT

---

The Board manages the employees' Retirement Fund which is administered in accordance with the law solely for the benefit of the members and retired members of the system and their eligible beneficiaries.

The Board's responsibilities include: (1) setting and acting upon investment objectives and strategies to fund the benefits; and (2) approving the budget, regulations, policies and strategies for administering the system to ensure the prompt delivery of the benefits.



KURT HOEFER

**Board Chair**

Appointed by the Board  
of Supervisors  
Ninth Member



AL DAVID

**Vice Chair**

Elected by the General Members  
Third Member



ROBERT RAW

**Secretary**

Elected by the Safety Members  
Seventh Member



SANDIE ARNOTT

**Board Member**

Ex Officio per the 1937 Act  
First Member



KATHERINE O'MALLEY

**Board Member**

Elected by the General Members  
Second Member



ERIC TASHMAN

**Board Member**

Appointed by the Board of  
Supervisors  
Fourth Member



BENEDICT J. BOWLER

**Board Member**

Appointed by the Board of  
Supervisors  
Fifth Member



MARK BATTEY

**Board Member**

Appointed by the Board of  
Supervisors  
Sixth Member



PAUL HACKLEMAN

**Board Member**

Elected by the Retired  
Members  
Eighth Member



ALMA SALAS

**Board Member**

Elected by the Retired  
Members  
Retiree Alternate

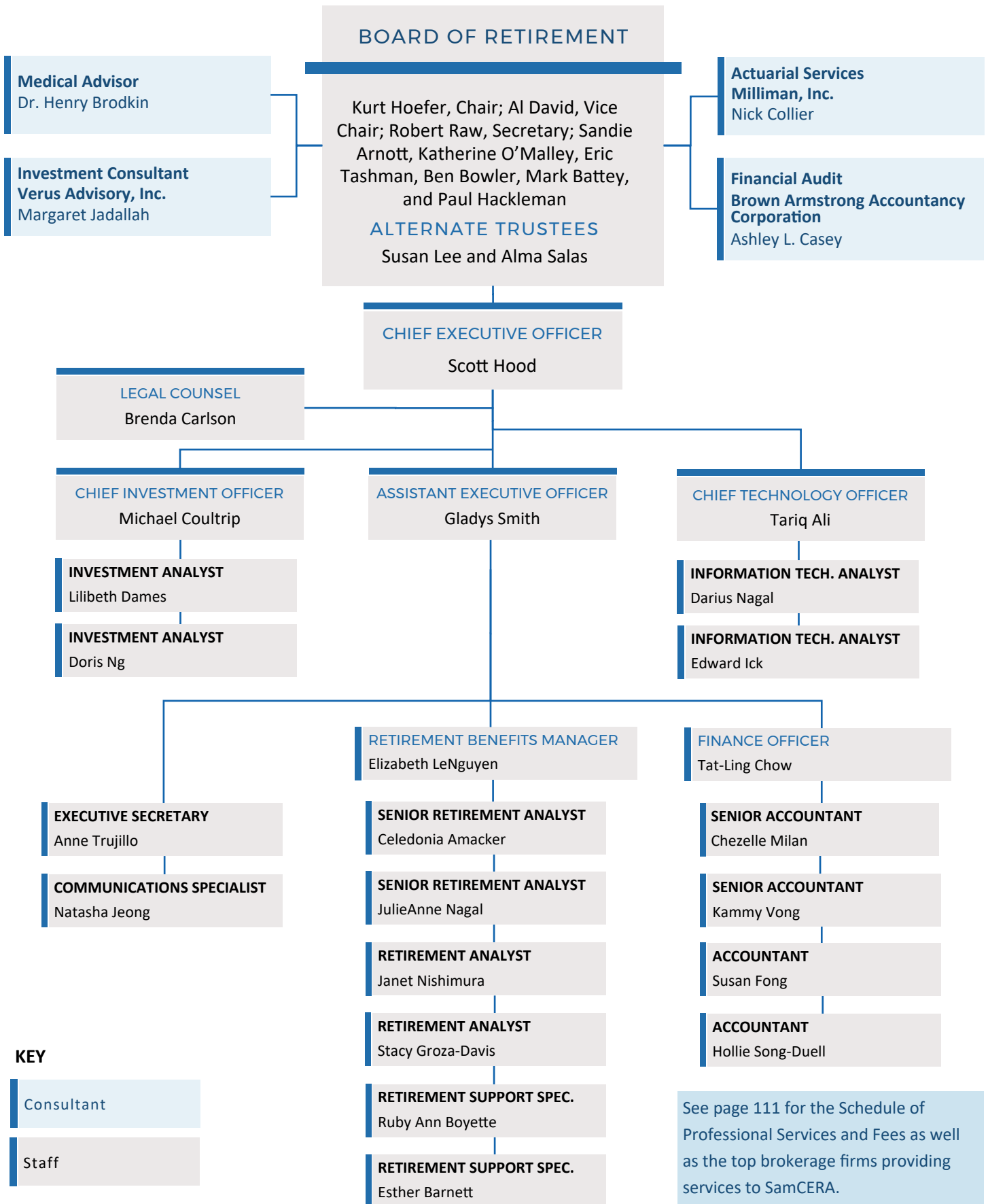


SUSAN LEE

**Board Member**

Elected by the Safety  
Members  
Safety Alternate

Organizational Chart



**KEY**

- Consultant
- Staff

See page 111 for the Schedule of Professional Services and Fees as well as the top brokerage firms providing services to SamCERA.

**LIST OF PROFESSIONAL CONSULTANTS**

(Other Than Investment Professionals)

<b>Professional Service</b>	<b>Consultant</b>
Auditors	Brown Armstrong Accounting Corporation
Actuary Auditor	Cheiron, Inc.
Consulting Actuary	Milliman, Inc.
Commercial Banking	Union Bank
Custodian	Northern Trust Corporation
Disability Counsel	Byers/Richardson
India Tax Agent	BSR & Co. LLP
Investment Consultant	Verus Advisory, Inc.
Investment Software	eVestment Alliance, LLC
Litigation Securities Class Action Services	ISS Governance
Pension Administration Software System	Vitech
Security Monitoring Counsel	Berman Tabacco Bernstein Litowitz Berger and Grossman LLP Grant and Elsenhofer LLP
Stock Distribution Broker	Merrill Lynch, Pierce, Fenner & Smith Inc.
Taiwan Tax Agent	Faith Global Company, Limited
Tax Counsel	Reed Smith LLP
Trade Cost Analysis Consultant	Zeno AN Solutions



This page is intentionally left blank.



# FINANCIAL SECTION







**BAKERSFIELD OFFICE  
(MAIN OFFICE)**

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

**FRESNO OFFICE**

10 RIVER PARK PLACE EAST  
SUITE 208  
FRESNO, CA 93720  
TEL 559.476.3592

**STOCKTON OFFICE**

1919 GRAND CANAL BLVD  
SUITE C6  
STOCKTON, CA 95207  
TEL 888.565.1040

WWW.BACPAS.COM

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

## BROWN ARMSTRONG

*Certified Public Accountants*

### INDEPENDENT AUDITOR'S REPORT

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

#### Report on the Basic Financial Statements and Other Information

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, 2020; the Statement of Changes in Fiduciary Net Position for the fiscal year then ended; and the related notes to the basic financial statements, which collectively comprise SamCERA's basic financial statements as listed in the table of contents. We have also audited the Schedule of Cost Sharing Employer Allocations and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan totals 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 fiscal year ended June 30, 2020, listed as other information in the table of contents.

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

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

#### Auditor's Responsibility

Our responsibility is to express opinions on these basic 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 basic 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 basic financial statements and other information. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the basic financial statements and other information, 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 basic 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 the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the basic financial statements and other information.

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

#### **Opinions**

In our opinion, the basic financial statements and the other information referred to above present fairly, in all material respects, the fiduciary net position of SamCERA as of June 30, 2020; its changes in fiduciary net position for the fiscal year then ended; the Schedule of Cost Sharing Employer Allocations; and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan totals 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 fiscal year ended June 30, 2020, in accordance with accounting principles generally accepted in the United States of America.

#### **Other Matters**

##### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and 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 management's discussion and analysis and 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 and other information. 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.

##### *Supplementary Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise SamCERA's basic financial statements and the other information. The 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 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 other information 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 supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

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 other information 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 19, 2020, 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 agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of SamCERA's 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, 2019, financial statements, and our report dated October 21, 2019, 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, 2019, 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

Handwritten signature in blue ink that reads "Brown Armstrong Accountancy Corporation".

Bakersfield, California  
October 19, 2020

## **MANAGEMENT'S DISCUSSION AND ANALYSIS FOR FISCAL YEAR 2019-20**

---

This section of the San Mateo County Employees' Retirement Association's (SamCERA) Comprehensive Annual Financial Report (CAFR) provides a narrative overview and analysis of SamCERA's financial activities for the fiscal year ended June 30, 2020.

We encourage readers to read the information presented here, in conjunction with the Notes to the Basic Financial Statements beginning on page 44.

### **Financial Highlights**

- SamCERA's prime objective is to meet long-term benefit obligations through investment income and contributions. The fiscal soundness of the Retirement Fund continues to improve, though slightly, during the unprecedented times amid the pandemic.
- As of June 30, 2020, SamCERA's net position held in trust for pension benefits (total assets minus total liabilities) reached \$4.8 billion, an increase of \$57 million, or 1%, compared to last fiscal year-end. This amount is exclusively restricted for meeting ongoing benefit obligations to plan participants and their beneficiaries.
- Total additions to the Retirement Fund were \$312 million, a decrease of 47% from the prior fiscal year. The decrease was triggered by the decline in investment income and the absence of supplemental contributions from the primary plan sponsor, the County of San Mateo.
- The net return on investment from the entire portfolio slipped from 5.4% to -0.2% over the fiscal year, causing a \$229 million decline in investment income. The decrease was mainly affected by the negative financial impacts from the pandemic COVID-19 and underperformance in certain investments.
- Statutory required contributions from employers and members showed a marginal increase of \$4 million and \$3 million, respectively. The increase was due primarily to increases in covered payroll for active members.
- Total deductions from the Retirement Fund were \$254 million, an increase of \$18 million, or 8%, from the prior fiscal year. The increase was expected, mainly due to the anticipated growth in pension benefit payments from the annual cost of living adjustment and the continued growth in retired members receiving benefits.
- The Retirement Fund was 86.4% funded as of June 30, 2020, reflecting a marginal increase of 0.6% from the prior fiscal year. The increase was mainly caused by employer contributions to amortize the Unfunded Actuarial Accrued Liability (UAAL).

### **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 the Governmental Accounting Standards Board (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 eligible beneficiaries as well as outstanding liabilities as of June 30, 2020. 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 42 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. 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. This statement can be found on page 43 of this report.

### **Notes to the Basic Financial Statements**

*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. Notes to the Basic Financial Statements can be found on pages 44-75 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 76-81.

- Schedule of Changes in Net Pension Liability and Related Ratios 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 actuarially determined contributions over a period of time.
- Schedule of Investment Returns – shows the annual “time-weighted rate of return” and the annual “money-weighted rate of return” of the investment portfolio.
- Notes to the Required Supplementary Information – disclose additional details in relation to the required supplementary information presented.

### Supplementary Information

*Supplementary Information* includes several schedules detailing administrative, information technology and investment expenses, as well as payments to consultants (for fees paid to outside professionals other than investment advisors). Supplementary Information and the accompanying notes can be found on pages 82-84 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 operating statements as pension expenses, deferred inflows of resources, and deferred outflows of resources. Other Information can be found on pages 85-87 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 be considered simultaneously in measuring SamCERA's overall financial position.

### Analysis of Fiduciary Net Position

The following table compares SamCERA's net position as of June 30 for the current and prior fiscal years. SamCERA's net position as of June 30, 2020, was approximately \$4.8 billion, an increase of \$57 million, or 1%, over the reporting period.



**STATEMENT OF FIDUCIARY NET POSITION**

As of June 30 (Dollars In Thousands)

	2020	2019	Increase (Decrease)	
			Amount	Percentage
<b>Assets</b>				
Cash and cash equivalents	\$ 107,990	\$ 33,102	\$ 74,888	226%
Cash management overlay	54,095	48,012	6,083	13%
Securities lending cash collateral	2,424	403	2,021	501%
Receivables	95,960	23,341	72,619	311%
Prepaid expense	-	12	(12)	-100%
Investments at fair value	4,598,816	4,625,276	(26,460)	-1%
Capital assets, net	5,209	5,979	(770)	-13%
<b>Total assets</b>	<b>4,864,494</b>	<b>4,736,125</b>	<b>128,369</b>	<b>3%</b>
<b>Liabilities</b>				
Investment management fees payable	2,035	2,213	(178)	-8%
Due to broker for investments purchased	78,242	9,061	69,181	764%
Collateral payable for securities lending	2,424	406	2,018	497%
Other	1,291	1,335	(44)	-3%
<b>Total liabilities</b>	<b>83,992</b>	<b>13,015</b>	<b>70,977</b>	<b>545%</b>
<b>Net position restricted for pensions</b>	<b>\$ 4,780,502</b>	<b>\$ 4,723,110</b>	<b>\$ 57,392</b>	<b>1%</b>

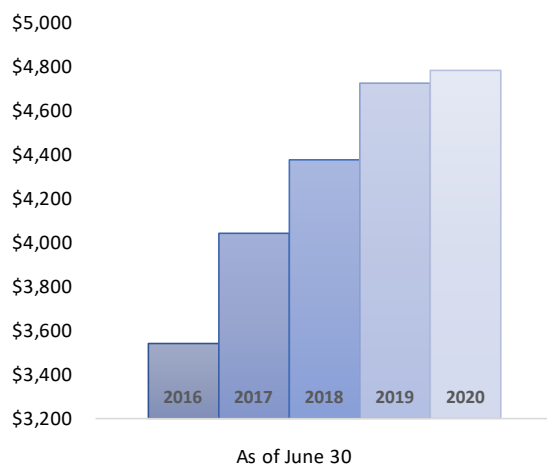
**Assets.** SamCERA's total assets increased by \$128 million, or 3%. Significant changes over the year include the following:

- Cash and cash equivalents increased by \$75 million. Before the fiscal year-end, \$33 million was received from the sale of stocks; \$20 million was held by investment managers in two separate fixed income accounts; and \$4 million was held in a terminated risk parity account which will be released upon the performance of a contractual obligation. The remaining increase was from operation and investment and will be used to meet ongoing needs.
- Cash management overlay increased by \$6 million. In fiscal year 2018-19, SamCERA started ramping up its currency hedge program, a financial trading strategy designed to mitigate the financial impact from exchange rate fluctuations or volatility for investments in international assets. Approximately \$7 million was added to the program this year as variation margin to complete the implementation. This amount was partially offset by a decrease of \$1 million in the cash overlay account.
- Securities lending cash collateral increased by \$2 million. Two new fixed income investment managers were hired during the fiscal year. The securities on loan for these two separate fixed income accounts required cash collateral from borrowers as opposed to non-cash collateral.

- Receivables overall increased by \$73 million. Outstanding receivables were considerably higher than last year due to the timing difference between the trade and settlement date.
- Investments overall decreased by \$26 million. Significant changes included the following:
  - a) Investments in fixed income increased by \$435 million whereas investments in risk parity decreased by \$389 million. After the latest Asset Liability Study was completed in September 2019, the Board adopted a new target allocation policy to remove risk parity from its portfolio and reallocate the assets to fixed income. The intent was to achieve a desired balance between risk and investment return. The change caused a significant increase in fixed income investments and a complete elimination of risk parity accounts in the investment portfolio.
  - b) Investments in inflation hedge decreased by \$105 million. SamCERA terminated its investment in the Cushing master limited partnership strategy, which resulted in an about \$75 million change year over year. The Board also decreased its target policy allocation to public real assets from 6% to 4% by making a partial redemption from the State Street Global Advisors Public Real Asset strategy. The overall decrease was partially offset by increased investments in real estate and private real asset funds.
- **Liabilities.** SamCERA’s total liabilities increased by \$71 million, or 545%. Significant changes are discussed below.
  - a) The total amount payable to investment brokers increased by \$69 million, due primarily to the timing difference between the trade and settlement date.
  - b) Securities Lending Cash Collateral Due to Borrowers increased by \$2 million. This increase in liability was triggered by and in parallel with the increase in securities lending cash collateral discussed earlier.

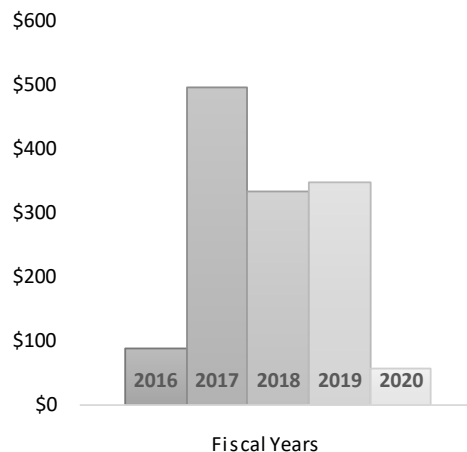
**SAMCERA’S FIDUCIARY NET POSITION**

As of June 30 (Dollars In Millions)



**CHANGES IN SAMCERA’S FIDUCIARY NET POSITION**

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



The changes in fiduciary net position are determined by total additions less total deductions. The table below shows condensed information about total additions to, and total deductions from, the fiduciary net position. SamCERA's fiduciary net position increased by \$57 million, or 1%, for the fiscal year ended June 30, 2020.

**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION**

For the Fiscal Year Ended June 30 (Dollars In Thousands)

	2020	2019	Increase (Decrease)	
			Amount	Percentage
<b>Additions</b>				
Employer contributions	\$ 198,583	\$ 194,830	\$ 3,753	2%
Employer supplemental contributions	-	50,668	(50,668)	-100%
Member contributions	70,631	67,696	2,935	4%
Net investment income	42,355	271,625	(229,270)	-84%
Net securities lending income	37	66	(29)	-44%
<b>Total additions</b>	<b>311,606</b>	<b>584,885</b>	<b>(273,279)</b>	<b>-47%</b>
<b>Deductions</b>				
Service retirement benefits	212,633	196,874	15,759	8%
Disability retirement benefits	27,602	25,212	2,390	9%
Survivor, death and other benefits	1,790	1,528	262	17%
Member refunds	3,796	3,571	225	6%
Administrative expenses	6,372	6,057	315	5%
Information technology expenses	2,021	2,495	(474)	-19%
<b>Total deductions</b>	<b>254,214</b>	<b>235,737</b>	<b>18,477</b>	<b>8%</b>
<b>Changes in net position</b>	<b>57,392</b>	<b>349,148</b>	<b>(291,756)</b>	<b>-84%</b>
<b>Net position restricted for pensions</b>				
Beginning of year	4,723,110	4,373,962	349,148	8%
<b>End of year</b>	<b>\$ 4,780,502</b>	<b>\$ 4,723,110</b>	<b>\$ 57,392</b>	<b>1%</b>

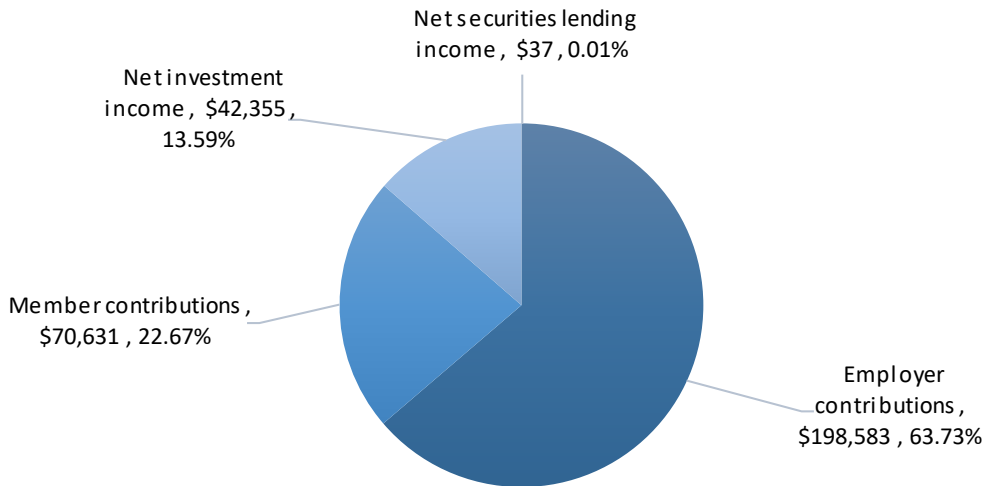
**Additions.** Total additions to the Retirement Fund for the fiscal year were \$312 million, which was \$273 million, or 47%, lower than last fiscal year. Significant changes are discussed below.

- Supplemental contribution was \$51 million lower than last fiscal year. According to the Memorandum of Understanding between the County and SamCERA, the County can make supplemental contributions to accelerate the payoff of its unfunded liability at its discretion. There were no supplemental contributions received from the County this year.
- Net investment income overall decreased by \$229 million. The net appreciation in fair value of investments was \$237 million lower than last fiscal year. This unfavorable outcome was mainly due to the precipitous decline in market conditions from COVID-19 and general manager underperformance in certain investments. The decrease was partially offset by a \$5 million increase in interest and dividends and a \$3 million decrease in investment expenses.

**Deductions.** Total deductions from the Retirement Fund during the fiscal year increased by \$18 million, or 8%, compared to last fiscal year. The increase was due primarily to the annual cost of living adjustment and the increase in the number of retirees receiving pension benefits.

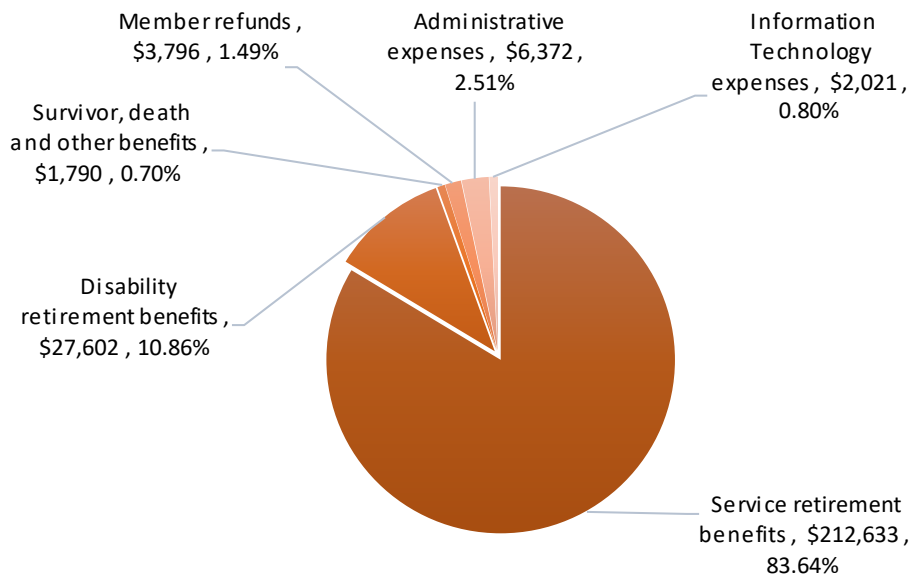
**ADDITIONS TO FIDUCIARY NET POSITION**

For the Fiscal Year Ended June 30, 2020 (Dollars In Thousands)



**DEDUCTIONS FROM FIDUCIARY NET POSITION**

For the Fiscal Year Ended June 30, 2020 (Dollars In Thousands)



### **Actuarial Valuation**

SamCERA engages an independent actuarial firm, Milliman, Inc., 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 economic and demographic assumptions selected are used to project, as closely as 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 to maintain equity among generations of members.

In June 2020, the Board adopted the actuary's recommendation to keep the economic assumptions for 2019's valuation, with investment return at 6.5%, inflation at 2.50%, and general wage increase at 3.00%. The Board also set the COLA assumption for Plans 1 and 2 in accordance with the inflation assumption. In July 2020, the Board also accepted the actuary's recommendations to modify several demographic assumptions based on the triennial Investigation of Experience Study discussed below.

### **Triennial Experience Study**

In July 2020, the Board adopted several changes to the demographic assumptions developed from the 2020 Experience Study. These changes include increasing the rates of assumed merit salary increases for Safety and Probation members; updating mortality tables to the public plan specific tables published in 2019 by the Society of Actuaries Retirement Plans Experience Committee; and adjusting the assumed rates at which active members decrement from active employment. These changes caused a slight increase in the employer contribution rate, small decreases in member contribution rates for Plan 7 and small increases for all other plans. The assumptions will next be thoroughly reviewed in 2023 as part of the triennial experience study.

### **Plan Assets, Liabilities, and Funded Ratio**

The Funded Ratio measures the funding adequacy of a retirement system. According to the latest actuarial valuation as of June 30, 2020, the plan's funded ratio (actuarial value of assets to actuarial accrued liabilities) increased to 86.4% as of June 30, 2020, from 85.8% as of June 30, 2019. The increase was due primarily to employer contributions to amortize the UAAL.

As of June 30, 2020, the actuarial value of plan assets was \$5.0 billion, and the actuarial accrued liability was \$5.8 billion. The difference between these two amounts represents the

unfunded actuarial accrued liability (the gap between promised benefits and the funding available to meet those obligations), which amounted to \$0.8 billion (or 133% of the collective covered payroll of participating employers, totaling \$593 million for the fiscal year). The assets used in the calculation of the funded ratio include the values of the County's and the San Mateo County Mosquito and Vector Control District's Supplemental Contribution Accounts.

### **Requests for Information**

This financial report is designed to provide SamCERA's Board of Retirement, employers, members, investment managers, and any 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](http://www.samcera.org). Questions concerning any 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

**STATEMENT OF FIDUCIARY NET POSITION**

As of June 30, 2020 (with comparative amounts as of June 30, 2019)

	<u>2020</u>	<u>2019</u>
<b>ASSETS</b>		
Cash and short-term investments:		
Cash and cash equivalents	\$ 107,989,686	\$ 33,102,412
Cash management overlay	54,095,321	48,011,505
Securities lending cash collateral	2,423,778	403,093
Total cash and short-term investments	<u>164,508,785</u>	<u>81,517,010</u>
Receivables:		
Contributions	12,376,867	10,300,002
Due from brokers for investment sold	78,103,219	6,640,025
Investment income	5,390,580	6,292,641
Securities lending income	2,752	12,614
Other	86,859	95,566
Total receivables	<u>95,960,277</u>	<u>23,340,848</u>
Prepaid expense	-	11,669
Investments at fair value:		
Public equity	1,866,264,297	1,847,846,613
Fixed income	1,434,811,710	999,477,347
Alternatives	593,379,227	579,774,460
Risk parity	-	389,039,081
Inflation hedge	704,360,824	809,138,278
Total investments at fair value	<u>4,598,816,058</u>	<u>4,625,275,779</u>
Capital assets	8,108,286	8,040,088
Less: accumulated depreciation	<u>(2,898,888)</u>	<u>(2,060,891)</u>
Capital assets, net of accumulated depreciation	<u>5,209,398</u>	<u>5,979,197</u>
<b>Total assets</b>	<b><u>4,864,494,518</u></b>	<b><u>4,736,124,503</u></b>
<b>LIABILITIES</b>		
Investment management fees payable	2,035,363	2,213,009
Due to brokers for investments purchased	78,241,899	9,060,929
Securities lending collateral due to borrowers	2,423,778	405,367
Other	1,291,165	1,335,263
<b>Total liabilities</b>	<b><u>83,992,205</u></b>	<b><u>13,014,568</u></b>
<b>NET POSITION RESTRICTED FOR PENSIONS</b>	<b><u>\$ 4,780,502,313</u></b>	<b><u>\$ 4,723,109,935</u></b>

The accompanying notes to the financial statements are an integral part of these financial statements.

**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION**

For the Fiscal Year Ended June 30, 2020 (with comparative amounts for the fiscal year ended June 30, 2019)

	<u>2020</u>	<u>2019</u>
<b>ADDITIONS</b>		
Contributions:		
Employer	\$ 198,582,998	\$ 194,830,054
Employer Supplemental Member	-	50,668,357
Total contributions	<u>70,630,765</u>	<u>67,695,627</u>
Total contributions	<u>269,213,763</u>	<u>313,194,038</u>
Investment income:		
Interest and dividends	76,762,516	71,833,683
Net appreciation in fair value of investments	5,173,433	242,168,364
Total investment income	<u>81,935,949</u>	<u>314,002,047</u>
Less: investment expenses	<u>(39,581,080)</u>	<u>(42,376,557)</u>
Net investment income	<u>42,354,869</u>	<u>271,625,490</u>
Securities lending income:		
Earnings	35,620	88,955
Rebates	16,474	13,108
Fees	<u>(14,741)</u>	<u>(36,070)</u>
Net securities lending income	<u>37,353</u>	<u>65,993</u>
<b>Total additions</b>	<b><u>311,605,985</u></b>	<b><u>584,885,521</u></b>
<b>DEDUCTIONS</b>		
Benefits:		
Service retirement benefits	212,632,929	196,874,097
Disability retirement benefits	27,601,908	25,211,881
Survivor, death and other benefits	<u>1,790,029</u>	<u>1,528,066</u>
Total benefits	<u>242,024,866</u>	<u>223,614,044</u>
Member Refunds	3,796,276	3,571,079
Administrative expenses	6,371,363	6,056,713
Information technology expenses	<u>2,021,102</u>	<u>2,495,264</u>
<b>Total deductions</b>	<b><u>254,213,607</u></b>	<b><u>235,737,100</u></b>
Net increase	57,392,378	349,148,421
<b>NET POSITION RESTRICTED FOR PENSIONS</b>		
Beginning of year	<u>4,723,109,935</u>	<u>4,373,961,514</u>
<b>End of year</b>	<b><u>\$4,780,502,313</u></b>	<b><u>\$4,723,109,935</u></b>

The accompanying notes to the 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 an independent public employee retirement system with its own governing board. Therefore, it is not subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

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). The Board is responsible for governing the retirement system. SamCERA's management is responsible for overseeing daily operations and other crucial functions such as maintaining adequate internal controls and preparing financial statements.

#### General

SamCERA is a cost-sharing multiple-employer, defined benefit pension plan established to provide pension benefits for all permanent employees of the County of San Mateo (the County), the Superior Court of California, County of San Mateo (the Court), and the San Mateo County Mosquito and Vector Control District (the District). Because of its close financial relationship with the County (the primary plan sponsor), SamCERA is classified as a blended component unit of the County and reported as a pension trust fund in the County's financial statements.

Under the CERL, the governing 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 are 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 12 defined benefit plans based on a member's date of entry into SamCERA. These plans cover members classified as general, safety, and probation including six plans for General members: 1, 2, 3, 4, 5, and 7; and six plans for Safety/Probation members: 1, 2, 4, 5, 6 and 7. The tables on the following two pages provide details for each of these plans.

### Pension Plan Membership

Plan membership as of June 30, 2020, is displayed in the table below.

Plan	One	Two	Three	Four	Five	Six	Seven	Total
<b>Retirees and beneficiaries currently receiving benefits</b>								
General	1,299	2,113	144	970	12	-	12	4,550
Safety	266	242	-	119	3	-	2	632
Probation	95	117	-	59	-	-	1	272
Subtotal	1,660	2,472	144	1,148	15	-	15	5,454
<b>Inactive employees entitled to but not currently receiving benefits (Deferred)</b>								
General	6	249	70	775	97	-	531	1,728
Safety	1	15	-	45	9	-	20	90
Probation	-	16	-	39	1	-	8	64
Subtotal	7	280	70	859	107	-	559	1,882
<b>Current employees, vested</b>								
General	5	408	52	1,730	177	-	495	2,867
Safety	-	30	-	197	44	-	62	333
Probation	-	12	-	149	8	-	17	186
Subtotal	5	450	52	2,076	229	-	574	3,386
<b>Current employees, non-vested</b>								
General	-	1	4	9	106	-	1,668	1,788
Safety	-	-	-	1	19	-	169	189
Probation	-	-	-	-	-	-	37	37
Subtotal	-	1	4	10	125	-	1,874	2,014
<b>Total Members</b>	<b>1,672</b>	<b>3,203</b>	<b>270</b>	<b>4,093</b>	<b>476</b>	<b>-</b>	<b>3,022</b>	<b>12,736</b>

Note: Plans 1, 2, 3, and 4 are closed to new entrants. However, eligible general members of the San Mateo County Mosquito and Vector Control District with reciprocity may participate in Plan 4.

### Benefit Provisions

SamCERA provides basic service retirement, disability, survivor, and death benefits based on defined benefit formulas, which use final average compensation (FAC), years of service, and age factors to calculate benefits payable. In addition, SamCERA provides an annual Cost of Living Adjustment (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 limited adjustments for their member benefits.

**BENEFIT PLANS**

As of June 30, 2020

		<u>General Member</u>	<u>Probation Member</u>	<u>Safety Member</u>
<b>Plan 1</b>	<b>Hire Date</b>	On or before 7/5/80	On or before 7/5/80	On or before 7/5/80
	<b>Benefit factor</b>	2%@55.5	3%@50	3%@50
	<b>Maximum COLA</b>	5%	3%	5%
	<b>FAC Period</b>	Highest 1 year	Highest 1 year	Highest 1 year
	<b>Eligibility for Service Retirement</b>	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.	Age 50 with 10 years of service; any age with 20 years of service.
<b>Plan 2</b>	<b>Hire Date</b>	7/6/80 - 7/12/97	7/6/80 - 7/12/97	7/6/80 - 7/12/97
	<b>Benefit factor</b>	2%@55.5	3%@50	3%@50
	<b>Maximum COLA</b>	3%	3%	3%
	<b>FAC Period</b>	Highest 1 year	Highest 1 year	Highest 1 year
	<b>Eligibility for Service Retirement</b>	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.	Age 50 with 10 years of service; any age with 20 years of service.
<b>Plan 3</b>	<b>Hire Date</b>	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 open 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 effective December 23, 2012.)		
		(If retirement occurs prior to age 65, benefit amount will be adjusted by an actuarial equivalent factor.)		
	<b>Maximum COLA</b>	No COLA	Not applicable	Not applicable
	<b>FAC Period</b>	Highest 3 years (non-consecutive)	Not applicable	Not applicable
<b>Eligibility for Service Retirement</b>	Age 65 with 10 years of service; reduced benefit at age 55 with 10 years of service.	Not applicable	Not applicable	

Note 1: Plans 1, 2, 3, and 4 are closed to new entrants. However, eligible general members of the San Mateo County Mosquito and Vector Control District with reciprocity may participate in Plan 4.

Note 2: FAC Period stands for "Final Average Compensation" Period.

**BENEFIT PLANS (CONTINUED)**

As of June 30, 2020

	<b>General Member</b>	<b>Probation Member</b>	<b>Safety Member</b>
<b>Plan 4</b>			
<b>Hire Date</b>	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
<b>Benefit factor</b>	2%@55.5	3%@50	3%@50
<b>Maximum COLA</b>	2%	2%	2%
<b>FAC Period</b>	Highest 3 years (non-consecutive)	Highest 3 years (non-consecutive)	Highest 3 years (non-consecutive)
<b>Eligibility for Service Retirement</b>	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.	Age 50 with 10 years of service; any age with 20 years of service.
<b>Plan 5</b>			
<b>Hire Date</b>	8/7/11 - 12/13/12  (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.)	7/10/11 - 12/31/12	1/8/12 - 12/31/12 <sup>(1)</sup>
<b>Benefit factor</b>	2% @61.25	3%@55	3%@55
<b>Maximum COLA</b>	2%	2%	2%
<b>FAC Period</b>	Highest 3 years (non-consecutive)	Highest 3 years (non-consecutive)	Highest 3 years (non-consecutive)
<b>Eligibility for Service Retirement</b>	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.	Age 50 with 10 years of service; any age with 20 years of service.
<b>Plan 6</b>			
<b>Hire Date</b>	Not applicable	7/10/11 - 12/31/12	7/10/11 - 12/31/12 <sup>(2)</sup>
<b>Benefit factor</b>	Not applicable	2%@50	2%@50
<b>Maximum COLA</b>	Not applicable	2%	2%
<b>FAC Period</b>	Not applicable	Highest 3 years (non-consecutive)	Highest 3 years (non-consecutive)
<b>Eligibility for Service Retirement</b>	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.
<b>Plan 7</b>			
<b>Hire Date</b>	On or after 1/1/13	On or after 1/1/13	On or after 1/1/13
<b>Benefit factor</b>	2%@62	2.7%@57	2.7%@57
<b>Maximum COLA</b>	2%	2%	2%
<b>FAC Period</b>	Highest 36 consecutive months	Highest 36 consecutive months	Highest 36 consecutive months
<b>Eligibility for Service Retirement</b>	Age 52 with 5 years of service.	Age 50 with 5 years of service.	Age 50 with 5 years of service.

<sup>(1)</sup> For safety members, Plan 5 was only available for those with the Deputy Sheriff Association.<sup>(2)</sup> For safety members, Plan 6 was only available for those with the Organization of Sheriff's Sergeants.

**Service Retirement Benefits.** Members are entitled to receive lifetime benefits based on their plan membership and benefit option selected.

**Disability Benefits.** Disability retirement may be non-service connected or service connected. Members who apply for non-service connected disability must have at least five years of eligible service credits. Service credit requirements do not apply to members who apply for service-connected disability benefits. If members are 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.

**Active Member Survivor Benefits.** Lifetime survivor benefits are available for eligible beneficiaries of active members if: (1) the member's death is service connected or (2) the member has at least five years of service credits. The beneficiary may instead opt for a one-time death benefit. All other active member death benefits are limited to a lump sum benefit.

**Post-Retirement Survivor Benefits.** Lifetime survivor benefits are available for certain eligible beneficiaries of a deceased retiree. The amount of benefits received is determined by the benefit option selected by the retiree.

**Deferred Member Benefits.** A member may withdraw member contributions plus accumulated interest upon termination of employment and forfeit the right to future benefits. If the member enters a reciprocal retirement system within 180 days, the member can elect to leave the accumulated contributions with SamCERA and receive a deferred retirement benefit when eligible. Eligible contributory plan members with five years of service (either permanent or part-time employees with the equivalent of five years of full-time service) or non-contributory plan members in Plan 3 with ten years of service may elect a deferred retirement.

**Cost of Living Adjustments (COLA).** COLA increases are applied to all eligible retirement and death benefits, effective April 1. As of April 1 of each year, the Board will adjust the retirement benefits in accordance with changes in the Consumer Price Index (CPI) from the previous January 1 to the current January 1, to the nearest one-half of one percent. The COLA is based on information from 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.

### Recognition of Contributions, Benefits, and Refunds

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 a decrease) to investment income, which includes both realized and unrealized gains and losses on investments, based upon investment valuations.

### 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. The Board periodically reviews the asset allocation in response to changing market conditions that may affect forward-looking expected returns of asset classes.

SamCERA completed its asset liability study in the fourth quarter of 2019 and, as part of this process, the Board approved a new asset allocation policy. The biggest change in the new policy is the elimination of the 8% allocation to Risk Parity.

In the first half of 2020, SamCERA began implementing the new policy in multiple phases and expects to complete the transition to the new policy by the end of 2020. The target asset allocation detailed in the Investment Section of this report only reflects an "interim" policy allocation, the portion of the newly adopted allocation that has already been implemented. SamCERA also completed the last phase of its currency hedge program for developed international equity during the fiscal year.

SamCERA records investment transactions on the trade date. Investments are reported at fair value, which represents 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. Governmental Accounting Standards Board (GASB) establishes a fair value hierarchy based on the following 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.

The valuation technique for each type of investment 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. In addition to the pooled cash with the County and custodians, all highly liquid investments with maturities of three months or less when purchased 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.

**Public equity and fixed income securities.** 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 values 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 private real assets.** Private equity and private 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 public real assets pool.** These investments are reported based on the fair value provided by a third party administrator, who performs this service for the fund manager.

### **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 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.

**Income from Investments**

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

**Receivables**

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

**Capital Assets**

Capital assets, including intangible assets, are items with an initial unit cost greater than \$5,000 and an estimated useful life in excess of three years. Capital assets are reported at acquisition value, net of accumulated depreciation. Acquisition value is the price that would be paid to acquire an asset with equivalent service capacity in an orderly market transaction at the acquisition date. Depreciation is determined 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 estimated useful life for hardware is determined to be five years, and for software is ten years. The routine upgrade of information technology systems, hardware, software, and maintenance are deemed appropriate as expenses for the current fiscal year. As of June 30, 2020, SamCERA's total capital assets, net of accumulated depreciation, approximated to \$5 million.

**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.

**Reclassifications**

Other additions reported in fiscal year 2019 were combined with investment income to conform with the fiscal year 2020 presentation.



### **Subsequent Events**

Subsequent events are those events or transactions that occur subsequent to the year-end date of the financial statements, but prior to the issuance of the comprehensive annual financial report, that may have a material effect on the financial statements or disclosures contained therein. After fiscal year-end, the Board approved a \$30 million commitment to a real estate partnership on August 25, 2020. The Board also approved an additional four commitments on September 29, 2020, including a \$30 million commitment to a private equity partnership, a \$35 million commitment to an opportunistic credit partnership, a \$30 million commitment to an absolute return strategy, and a \$45 million commitment to a second absolute return strategy. In addition, the COVID-19 pandemic outbreak in the United States has caused business disruption through mandated closings of businesses. While the disruption is expected to be temporary, the durations of the closings and the related financial impacts on SamCERA remain uncertain and cannot be estimated at this time.

### **New GASB Statement Implementation**

Governmental Accounting Standards Board (GASB) Statement No. 95, *Postponement of Effective Dates of Certain Authoritative Guidance*, was implemented during the fiscal year ended June 30, 2020. The primary objective of this Statement is to provide temporary relief to governments and other stakeholders in light of the COVID-19 pandemic by postponing the effective dates of certain provisions in Statements and Implementation Guides. These provisions are either first became effective or are scheduled to become effective for periods beginning after June 15, 2018, and later. Providing governments with sufficient time to apply authoritative guidance addressed in this Statement will help safeguard the reliability of their financial statements, which in turn will benefit the users of those financial statements.

### **Note 3: Funding Policy**

The funding objective of the pension plan is to establish employer and member contribution rates which, over time, will be sufficient to pay all expected future benefits not funded by the current assets. Participating employers are required by statute to contribute amounts necessary to fund the estimated benefits accruing to members not otherwise funded by expected investment earnings or member contributions.

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. 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. These 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). Under the current funding method, the June 30, 2008 UAAL is amortized over a fixed period ending June 30, 2023. Changes in the UAAL in

subsequent years are being amortized separately over new 15-year periods from the valuation date at which the difference is calculated.

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 and the Actuarial Sections. 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, 2020, are subject to “one year” deferral. Thus, the new contribution rates from the June 2020 valuation are effective on July 1, 2021. Based on the 2020 valuation, assuming all assumptions are being met, the Retirement Fund is expected to be fully funded by fiscal year 2034.

#### Note 4: Member Contributions

Member contributions vary by entry age (except Plan 7) as described in the CERL. In general, the member contribution rate is determined by the present value of the future benefit payable at retirement age, divided by the present value of all future salaries payable between entry age and retirement age. Active members in all plans (except Plan 3) are required to make contributions as described below. Plan 3 is non-contributory, which was open only for General members, but was closed to new members after December 22, 2012.

- **Basic contributions** are required for all members based on the entry age (except members in Plan 3 and Plan 7) and the class of each member. Section 7522.30 of the Government Code defined contributions for Plan 7 members. All members of Plan 7 are required to contribute 50% of the total normal cost rate specific to each individual class (i.e., General, Safety, and Probation). Basic contributions cease when general members hit 30 years of service in a contributory plan provided these members were with SamCERA or a reciprocal system on March 7, 1973, and continuously thereafter. For safety members (except Plan 7), basic contributions cease after 30 years of service.
- **Cost sharing contributions** apply to General members in Plans 1, 2, and 4 (except the District) and Safety and Probation members in Plans 1, 2, 4, and 5. The cost sharing contributions are fixed and not impacted by changes in assumptions. Cost share contribution rates are as follows: 3% for General Plans 1, 2, and 4 members and 3% to 5% for Safety and Probation Plans 1, 2, 4, and 5 members, varying among bargaining units.
- **COLA cost sharing contributions** apply to all members of Plans 1, 2, 4, 5, and 6 (except the District). All members in these plans are required to contribute 50% of the cost of COLA.

The member contribution rate for all plans combined decreased from 12.40% in fiscal year 2019 to 12.11% in fiscal year 2020. This slight decrease was triggered by adjusting member contribution rates for Plan 7 to 50% of the gross normal cost rate determined in the valuation. Member contribution rates for the remaining plans stayed the same as fiscal year 2019.

**Note 5: Employer Contributions**

Contributions from employers (County, Courts, and District) consist of two components: the Normal Cost, which covers the value of benefits earned by active members during the year less member contributions; and the Unfunded Actuarial Accrued Liability (UAAL), which reflects the excess of actuarial accrued liability over the actuarial value of the plan assets.

**EMPLOYER STATUTORY CONTRIBUTION RATES AS A PERCENTAGE OF COVERED PAYROLL**

	<u>2020</u>	<u>2019</u>	<u>Change</u>
Normal Cost	10.57%	10.95%	-0.38%
UAAL Amortization	23.10%	24.36%	-1.26%
<b>Total Employer Rate</b>	<b>33.67%</b>	<b>35.31%</b>	<b>-1.64%</b>

The employer normal cost rate decreased from 10.95% of covered payroll for fiscal year 2019 to 10.57% for fiscal year 2020. The decrease is generally due to the normal experience of SamCERA such as the continued growth in membership in Plan 7. The employer UAAL rate, reflecting a layered amortization over 15 years, decreased from 24.36% of covered payroll for fiscal year 2019 to 23.10% for fiscal year 2020, due primarily to recognition of investment gains from prior years and additional supplemental contributions from the County. Below is the Schedule of Employer Contributions covering the past ten fiscal years.

**SCHEDULE OF EMPLOYER CONTRIBUTIONS**

Fiscal Year Ended June 30	(a) Actual Employer Contributions	(b) Actuarially Determined Contributions	(a) - (b) Supplemental Contributions	Percentage of Actuarially Determined Contributions Received
2011	\$150,475	\$150,475	\$0	100%
2012	150,950	139,407	11,543	100%
2013	144,308	131,294	13,014	100%
2014	202,877	152,877	50,000 <sup>(1)</sup>	100%
2015	180,704	169,814	10,890 <sup>(2)</sup>	100%
2016	191,094	170,046	21,048 <sup>(3)</sup>	100%
2017	198,727	164,877	33,850 <sup>(4)</sup>	100%
2018	207,257	179,627	27,630 <sup>(5)</sup>	100%
2019	245,498	194,830	50,668 <sup>(6)</sup>	100%
2020	198,583	198,583	0	100%

(1) The County made a supplemental contribution of \$50 million to accelerate the pay down of its UAAL.

(2) The County made a supplemental contribution of \$10.9 million to accelerate the pay down of its UAAL.

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

(4) The County and the District contributed additional funding of \$33.6 million and \$0.25 million, respectively, to accelerate the pay down of their UAAL.

(5) The County made a supplemental contribution of \$27.6 million to accelerate the pay down of its UAAL.

(6) The County made a supplemental contribution of \$50.7 million to accelerate the pay down of its UAAL.

**Note 6: 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 at its discretion may 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, which is custodied at Bank of New York Mellon. Deposits with the Northern Trust Corporation are swept into a pooled short-term investment 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, 2020, \$18.0 million of cash was held in a pooled short-term investment fund with the Northern Trust Corporation, \$24.2 million in the investment pool with the County Treasurer, and \$32.6 million with SamCERA's stock distribution broker, Merrill Lynch. Cash held by investment managers at year-end amounted to \$33.2 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 \$1,661,680 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 County investment pool. Pool participants can withdraw no more than 12.5% of their deposits per month, based on the month-end balance of the prior month. All requests for withdrawal must be made in writing to the County Treasurer at least 24 hours in advance.

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 with annual contributions of \$10 million for the next 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 will receive interest at the actual market investment return rate, net of fees and costs. In fiscal year 2020, the County did not make any supplemental contributions to the CSCA. At fiscal year-end, the CSCA had an aggregate reserve account balance of \$174.5 million. The resources in the CSCA are systematically recognized to provide an offset to the County's Statutory Contribution Rate. Without the recognition of the CSCA, the County's statutory contribution rate would be higher.

The County paid its annual required contributions for fiscal year 2020 via two semi-annual prepayments (one in July 2019 and another in January 2020). The prepayments were based on the adopted actuarially determined contribution rate and the projected covered payroll by plan, discounted by the assumed investment rate of return. Throughout the year, the prepayments were periodically reduced by actual contributions as determined by the adopted contribution rate and the actual covered payroll by plan. Near fiscal year-end, SamCERA performed a "true-up" calculation to ensure that the County's annual statutory contribution to SamCERA was fully settled. Any excess balance in the prepayment account will be applied towards the County's contribution for the upcoming fiscal year.

#### **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 interest crediting dates of June 30 or December 31 will receive interest at the actual market investment return rate, net of fees and costs. Deposits for more than six months prior to the crediting date will receive interest at the actuarially calculated return on the actuarial value of the DSCA's asset. In 2017, the District made its second supplemental contribution of \$0.25 million.

As of June 30, 2020, the DSCA had an aggregate reserve account balance of \$1.5 million. Based on the latest amendment to the Memorandum of Understanding between SamCERA and the District, the resources in the DSCA will be recognized in five years starting from June 30, 2019, to provide an offset to the District's statutory contribution rate. Without the recognition of the DSCA, the District's statutory contribution rate would be higher.

## 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 Chief Executive Officer on the Board's behalf. 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. The Board undertakes an in-depth asset-liability study every three to five years. In October 2019, the Board completed its most recent asset-liability study. The Board approved a new target asset allocation, which will be implemented in multiple phases and is expected to be completed by the end of 2020.

**Target Asset Allocation.** As of June 30, 2020, SamCERA's target asset allocation consists of 40% in public equity, 26% in fixed income, 12% in alternatives, 17% in the inflation hedge, 4% in risk parity, and 1% in the liquidity asset class. The actual asset allocation at fiscal year-end consisted of 40.0% in public equity, 31.6% in fixed income, 12.0% in alternatives, 15.0% in inflation hedge, and 1.4% in the liquidity asset class. See the Investment section for further details.

**Money-Weighted Rate of Return.** The money-weighted rate of return expresses investment performance, net of pension plan investment expenses, adjusted for the timing of cash flows and the changing amounts actually invested. For the fiscal year ended June 30, 2020, the annual money-weighted rate of return was -0.26% on SamCERA's investments, net of investment manager fees.

**Long-Term Expected Real Rate of Return.** The long-term expected real rate of return on pension plan investments was determined using a building-block method. Under this method, expected future real rate of returns (expected returns, net of inflation) are developed for each major asset class.

The table on the right shows the target allocation approved by the Board and projected geometric real rates of return for each major asset class (after deducting inflation, but before deducting investment expenses) that were used to derive the long-term expected investment rate of return assumption.

### LONG-TERM EXPECTED REAL RATE OF RETURN

As of June 30, 2020

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Rate of Return</u>
Public Equity	40%	4.7%
Fixed Income	26%	0.6%
Alternatives	12%	5.0%
Risk Parity <sup>(1)</sup>	4%	4.9%
Inflation Hedge	17%	4.6%
Liquidity	1%	-0.1%
<b>Total</b>	<b>100%</b>	

<sup>(1)</sup> Investment in Risk Parity was completely removed before June 30, 2020, in accordance with the lately adopted Asset Allocation Policy in October 2019.

### Investment Risk

SamCERA manages investment risks under GASB Statements No. 40 and No. 53 by contractually requiring each investment manager to follow specific investment guidelines that are specifically tailored to the investment manager. For separately managed accounts, managers' responsibilities are detailed in the investment management agreements between SamCERA and each investment manager. For commingled fund investments, managers' responsibilities are detailed and dictated by the related fund documents. The investment guidelines in most cases stipulate the investment style, performance objective, performance benchmarks, and portfolio characteristics.

Each investment manager, whom we hold a separately managed account with, is required to follow the "manager standard of care" to act prudently and solely in the best interest of SamCERA. Each investment manager, whom we hold a commingled fund investment with, is required to follow its fiduciary duties with respect to the Fund. 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.

**Interest Rate Risk.** Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. 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. The longer the duration of the portfolio, the greater its price sensitivity to changes in interest rates. SamCERA has investments in twelve external investment pools and two fixed income portfolios containing debt securities. 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. Interest rate risk for the fixed income portfolios is displayed in the table below.

### INTEREST RATE RISK ANALYSIS

As of June 30, 2020

Commingled Fixed Income Portfolio	Fair Value	Weighted Average Maturity (Years)	Effective Duration (Years)
Opportunistic Credit Funds <sup>(1)</sup>	\$ 460,656,716	6.83	3.02
BlackRock Intermediate Government Bond	153,638,396	4.05	3.83
Fidelity Institutional Asset Management	254,181,629	8.33	5.64
Western Asset Management	167,628,873	7.37	3.26
<b>Total</b>	<b>\$ 1,036,105,614</b>		

<sup>(1)</sup> This category consists of twelve opportunistic Credit Funds managed by Angelo Gordon (four funds), Beach Point, Brigade Capital Management, Franklin Templeton, Tennenbaum Capital Partners, Blackrock, PIMCO (two funds) and White Oak.

**INTEREST RATE RISK ANALYSIS (CONTINUED)**

As of June 30, 2020

Separate Account Fixed Income Portfolio <sup>(1)</sup>	Fair Value	Weighted Average Maturity (Years)	Effective Duration (Years)
Asset Backed Securities	\$ 65,656,523	18.29	1.57
Commercial Mortgage Backed	30,326,894	26.77	1.028
Corporate Bonds	64,862,036	10.98	7.76
Government Agencies	2,514,657	11.59	8.72
Government Bonds	104,545,000	15.15	12.19
Government Mortgage Backed Securities	119,394,927	20.86	5.11
Government Commercial Mortgage Backed	2,138,150	7.10	3.25
Municipal Bonds	1,179,482	13.43	8.92
Non-government Backed CMOs	8,088,427	33.51	5.51
<b>Total</b>	<b>\$ 398,706,096</b>		

<sup>(1)</sup> This category consists of two fixed income separate account managers: NISA and DoubleLine.

**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, 2020, is summarized in the table on the right.

**Custodial Credit Risk – Investment.** 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 investments 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, 2020, SamCERA had no investments that were exposed to custodial credit risk.

**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 commingled investments are excluded from the concentration of credit risk analysis. As of June 30, 2020, SamCERA does not have investments in a single issuer with five percent or more of SamCERA's fiduciary net position.

**S&P QUALITY BREAKDOWN FOR  
SAMCERA'S INVESTMENT IN BONDS**

As of June 30, 2020

Credit Risk	Active Management	Commingled Management
AAA	0.5%	19.7%
AA	8.4%	16.7%
A	27.5%	8.8%
BBB	20.9%	8.8%
Less than BBB	-	26.6%
NR	42.7%	19.4%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>



**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. The table below indicates the magnitude of risk for each foreign currency denominated in U.S. dollars. Foreign investments held within commingled fund vehicles are excluded from analysis below.

#### FOREIGN CURRENCY RISK ANALYSIS

As of June 30, 2020

Trade Country Name	Common Stock	Foreign Currency	Total
Australia	\$ 14,671,301	\$ -	\$ 14,671,301
Brazil	3,275,809	-	3,275,809
Canada	2,935,463	462,660	3,398,123
Switzerland	14,226,025	28,335	14,254,360
Denmark	2,514,228	-	2,514,228
Europe	116,101,760	(93,219)	116,008,541
United Kingdom	69,562,605	-	69,562,605
Hong Kong	26,204,603	1,164,381	27,368,984
India	11,435,528	-	11,435,528
Japan	109,500,445	85,010	109,585,455
South Korea	2,562,010	-	2,562,010
Mexico	1,357,966	-	1,357,966
Sweden	21,046,966	-	21,046,966
Singapore	12,166,907	74,935	12,241,842
South Africa	5,309,656	-	5,309,656
<b>Total</b>	<b>\$ 412,871,272</b>	<b>\$ 1,722,102</b>	<b>\$ 414,593,374</b>

#### 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 currently employs external investment managers to manage its assets as permitted by the California Government Code and SamCERA's Investment Policy. Specific managers hold investments in swaps, options, futures, forward settlement contracts, and warrants and enter into forward foreign currency exchange security contracts within fixed income financial instruments.

- The fair value of options, futures, and warrants is determined based upon quoted market prices. The fair value of derivative investments that are not exchange traded, such as swaps and TBAs (To Be Announced), is determined by an external pricing service using various proprietary methods based upon the type of derivative instrument.
- Futures contracts are marked to market at the end of each trading day. The settlement of gains or losses occur on the following business day through variation margins.
- The fair value of international currency forwards represents the unrealized gain or loss on the related contracts, which is calculated as the difference between the specified contract exchange rate and the exchange rate at the end of the reporting period.

The derivative instruments held by SamCERA are considered investments and not hedges for accounting purposes. As of June 30, 2020, the derivatives held an aggregate notional amount of -\$80.7 million. The fair value of derivatives totaling \$1,290,887 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 2020 are reported in the Statement of Changes in Fiduciary Net Position as a component of investment income. The derivatives that SamCERA held at fiscal year -end are shown below. Compared to SamCERA's total investments at fair value, the fair value of SamCERA's derivatives as of June 30, 2020, is not material.

### INVESTMENT DERIVATIVES

As of June 30, 2020

Type of Derivatives	Notional Value	Fair Value
Interest Rate Contract - Long	\$ (29,206,922)	\$ 25,406
Foreign Exchange Contracts - Short	(54,480,360)	1,047,855
Equity Contracts -Long	3,027,241	217,626
<b>Total</b>	<b>\$ (80,660,041)</b>	<b>\$ 1,290,887</b>

**Interest Rate Risk – Derivatives.** SamCERA's investments in interest rate derivatives are highly sensitive to changes in interest rates. The investment maturities for the majority of the investments in the table above are 3 months or less. The investment maturity for \$16.2 million of investments in derivatives is 3-6 months.

**Foreign Currency Risk – Derivatives.** 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 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.

**Custodial Credit Risk – Derivatives.** As of June 30, 2020, 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 does not have a general policy with respect to netting arrangements or collateral requirements. In the event of bankruptcy or default by the counterparty, netting arrangements legally provide SamCERA with a right of offset.

### **Securities Lending Activity**

SamCERA is authorized by its 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, 2020, on behalf of SamCERA, the securities lending agent lent SamCERA's securities to borrowers under the securities lending agreement. In return, SamCERA received cash and obligations issued or guaranteed by the U.S. government, or its agencies or instrumentalities. 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 imposes the following restrictions on the loans that the securities lending agent makes on SamCERA's behalf:

- Borrower must have a long-term credit rating of either "A" from Standard and Poor's (S&P) or "A2" from Moody's Investors Service (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.
- The maximum allowable amount of assets on loan to any single borrower shall not be greater than \$3 million.
- The maximum total amount of program assets on loan shall not be greater than \$10 million.

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, 2020, the fair value of securities on loan reported and the total collateral held amounted to \$9.9 million and \$10.1 million (with \$2.4 million in cash collateral and \$7.7 million in non-cash collateral), respectively. The amount of collateral exceeded the amount of securities on loan by \$219,812. The securities on loan include U.S. equities and international equities. 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 43 days as of June 30, 2020. SamCERA does not have the ability to pledge or sell non-cash collateral delivered absent a borrower default. Therefore, such non-cash collateral is not reported on the Statement of Fiduciary Net Position. There were no violations of legal or contractual provisions, and no borrower or lending agent default losses known to the securities lending agent.

**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 complying 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, 2020, the Fund had an interest rate sensitivity of 38 days.

### **Fair Value Measurement**

GASB Statement No. 72, *Fair Value Measurement and Application*, establishes a fair value hierarchy based on the following three types of input to develop the fair value measurements for investment.

- Level 1 - Investments reflect prices quoted in active markets.
- Level 2 - Investments reflect 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 - Investments reflect prices based upon unobservable sources.

**FAIR VALUE MEASUREMENT**

As of June 30, 2020

<b>Investments by Fair Value Level</b>	<b>June 30, 2020</b>	<b>Fair Value Measurements Using</b>	
		<b>Quoted Prices in Active Markets for Identical Assets (Level 1)</b>	<b>Significant Other Observable Inputs (Level 2)</b>
<b>DEBT SECURITIES</b>			
Corporate Bonds	\$ 169,739,589		\$ 169,739,589
Foreign Government Securities	1,354,045		1,354,045
Municipal Bonds	948,500		948,500
US Government Securities	226,663,961		226,663,961
<b>Total Debt Securities</b>	<b>398,706,095</b>		<b>398,706,095</b>
<b>EQUITY SECURITIES</b>			
Foreign Stocks	464,505,323	\$ 464,505,323	
US Common & Preferred Stock	310,899,998	310,899,998	
<b>Total Equity Securities</b>	<b>775,405,321</b>	<b>775,405,321</b>	
<b>COMMINGLED FUNDS</b>			
Domestic Bond Funds	700,603,232		700,603,232
Domestic Equity Funds	591,154,238		591,154,238
International Equity Funds	282,258,931		282,258,931
Liquid Pool Funds	186,589,156		186,589,156
<b>Total Commingled Funds</b>	<b>1,760,605,557</b>		<b>1,760,605,557</b>
<b>COLLATERAL FROM SECURITIES LENDING</b>	<b>2,423,778</b>	<b>2,423,778</b>	
<b>Total Investments by Fair Value Level</b>	<b>2,937,140,751</b>	<b>\$ 777,829,099</b>	<b>\$ 2,159,311,652</b>
<b>Investments Measured at the Net Asset Value (NAV)</b>			
Domestic Bond Funds	286,955,693		
Global Bond Funds	48,546,690		
Domestic Equity Funds	151,663,100		
International Equity Funds	65,782,707		
Real Estate Funds	425,695,419		
Hedge Funds/Absolute Return	259,097,778		
Private Equity Funds	334,281,448		
Private Real Asset Funds	92,076,250		
<b>Total Investments Measured at NAV</b>	<b>1,664,099,085</b>		
<b>Total Investments</b>	<b>\$ 4,601,239,836</b>		
<b>Derivatives</b>			
Interest Rate Contracts - Long	\$ 25,406	\$ -	\$ 25,406
Foreign Exchange Contracts - Short	1,047,855	-	1,047,855
Equity Contracts - Long	217,626	217,626	-
<b>Total Derivatives</b>	<b>\$ 1,290,887</b>	<b>\$ 217,626</b>	<b>\$ 1,073,261</b>

Note 1: The values of foreign stocks and securities reported above are denominated by both foreign and U.S. currency whereas those reported under the Foreign Currency Risk Analysis on page 59 are denominated by foreign currency only.

Note 2: Derivatives are reported under cash management overlay on the Statement of Fiduciary Net Position.

**INVESTMENTS MEASURED AT NET ASSET VALUE (NAV)**

As of June 30, 2020

<b>Investments Measured at NAV</b>	<b>6/30/2020</b>	<b>Unfunded Commitments</b>	<b>Redemption Frequency (if currently eligible)</b>	<b>Redemption Notice Period</b>
Domestic Bond Funds <sup>(1)</sup>	\$ 286,955,693	\$ 49,165,505	Daily, Monthly, Not Eligible	15 days, Not applicable
Global Bond Funds <sup>(1)</sup>	48,546,690	-	Monthly	15 days
Domestic Equity Funds <sup>(1)</sup>	151,663,100	-	Daily	1-5 days
International Equity Funds <sup>(1)</sup>	65,782,707	-	Daily	1-10 days
Real Estate Funds <sup>(2)</sup>	425,695,419	20,882,752	Quarterly, Not Eligible	45 days, Not applicable
Hedge Funds/Absolute Return <sup>(3)</sup>	259,097,778	-	Semi-Monthly, Monthly	5-75 days
Private Equity Funds <sup>(4)</sup>	334,281,448	152,982,992	Not Eligible	Not applicable
Private Real Asset Funds <sup>(4)</sup>	\$ 92,076,250	111,187,331	Not Eligible	Not applicable
<b>Total</b>	<b>\$ 1,664,099,085</b>	<b>\$ 334,218,580</b>		

(1) **Bond and Equity Funds.** This type includes eight domestic bond funds, one global bond fund, one domestic equity fund, and one international equity fund that is considered to be commingled in nature. Each is valued at the net asset value 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 three real estate funds that invest primarily in a diversified portfolio of institutional quality multi-family, industrial, retail and office assets in the U.S. This type also includes one real estate debt fund that originates loans primarily across a diversified portfolio of institutional quality multi-family, industrial, retail, office and specialty assets. The fair values of the investments in these types have been determined using the NAV (or its equivalent) of the plan's ownership interest in partners' capital. One investment has quarterly liquidity, one is subject to an initial 2 year lock-up with quarterly liquidity thereafter while the other two are ineligible for redemption.

(3) **Hedge Funds/Absolute Return.** This strategy consists of two multi-strategy hedge funds/absolute return. 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.

(4) **Private Equity and Real Asset Funds.** This type includes twenty-four private equity funds, investing primarily in Buyout Funds, Venture Capital, and Debt/Special Situations. This type also includes ten Private Real Asset funds, investing in infrastructure, mining finance, solar, energy, and farmland. The fair values of these funds have been determined using net asset 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.

The categorization of investments within the fair value hierarchy (see pages 64-65) is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk.

As of June 30, 2020, SamCERA did not hold any investments classified in Level 3. Debt and equity securities classified in Level 1 are valued using prices quoted in active markets for those securities. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using the following approaches:

- U.S. Treasuries, U.S. Agencies, and Commercial Paper: use quoted prices for identical securities in markets that are not active;
- Corporate and Municipal Bonds: use quoted prices for similar securities in active markets;
- Repurchase Agreements, Negotiable Certificates of Deposit, and Collateralized Debt Obligations: use matrix pricing based on the securities' relationship to benchmark quoted prices;
- Money Market, Bond, and Equity Mutual Funds: use published fair value per share (unit) for each fund; and
- Commingled and high-yield equity investments: use matrix pricing techniques or quoted prices for similar securities in active markets.

## **Note 7: Pension Disclosures**

### **Employer 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, 2020.

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 6.67% discussed later) to be provided through the pension plan to active, inactive, and retired members (or their beneficiaries) based on those members' past periods of services.

### **Actuarial Methods and Assumptions**

Each year SamCERA engages an independent actuarial consulting 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 plan 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. The 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 used to measure the total pension liability as of June 30, 2020 was 6.67%. 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.

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 below presents the net pension liability of all participating employers at year-end, using the current discount rate of 6.67%, and what the net pension liability would be using a discount rate that is one percent lower or one percent higher than the current discount rate.

#### SCHEDULE OF SENSITIVITY ANALYSIS

As of June 30, 2020

	<b>1% Decrease</b>	<b>Discount Rate</b>	<b>1% Increase</b>
	<b>5.67%</b>	<b>6.67%</b>	<b>7.67%</b>
Total pension liability	\$ 6,468,750,080	\$ 5,660,296,905	\$ 5,002,002,571
Less: Fiduciary net position	(4,780,502,313)	(4,780,502,313)	(4,780,502,313)
<b>Net pension liability</b>	<b>\$ 1,688,247,767</b>	<b>\$ 879,794,592</b>	<b>\$ 221,500,258</b>



**SCHEDULE OF EMPLOYER NET PENSION LIABILITY**

As of June 30, 2020

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.

<b>Net Pension Liability</b>	<b>June 30, 2020</b>
Total pension liability	\$ 5,660,296,905
Less: Plan fiduciary net position	<u>(4,780,502,313)</u>
<b>Employers' net pension liability</b>	<b><u>\$ 879,794,592</u></b>
Plan fiduciary net position as a % of total pension liability	84.46%
Covered payroll	\$ 593,295,084
Employers' net pension liability as a % of covered payroll	148.29%

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.

<b>Discount rate</b>	<b>6.67%</b>
<b>Long-term expected rate of return, net of expenses</b>	<b>6.50%</b>

The plan's 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.

<b>Valuation date</b>	June 30, 2020
<b>Measurement date</b>	June 30, 2020
<b>Key assumptions</b>	
Investment rate of return <sup>(1)</sup>	6.67%
General wage increases	3.00%
Local CPI Inflation	2.50%
National CPI-U Inflation	2.25%
Mortality	Various rates based on mortality tables described in the June 30, 2020, actuarial valuation.
<b>Actuarial experience study</b>	July 1, 2017 to April 30, 2020
<b>Actuarial cost method</b>	Individual Entry Age Normal
<b>Asset Valuation Method</b>	Fair value
Smoothing period	5 years
Recognition method	Non-asymptotic
Corridor	80% to 120% of fair value

**Amortization of Unfunded Actuarial Accrued Liability (UAAL) <sup>(2)</sup>** 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).

<sup>(1)</sup> Differs from actuarial valuation for funding purposes due to addition of administrative load of 0.17%.

<sup>(2)</sup> Contribution "credits" are applied to the County of San Mateo (the County) and San Mateo County Mosquito & Vector Control District (the District) contribution rates. These rates reflect supplemental contributions by the County and the District that 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.

**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 and other benefits when they become due.

SamCERA uses three different types of accounts to record the plan reserves: the valuation reserves, the non-valuation reserves, and the market stabilization account. The plan reserves as of June 30, 2020, are presented in the following table.

**RESERVES REQUIRED BY THE CERL FOR REPORTING PURPOSES**

As of June 30, 2020

**Valuation Reserves**

Member Reserve	\$ 858,905,893
Employer Advance Reserve	1,213,276,549
Retiree Reserve	1,292,402,035
Cost of Living Adjustment Reserve	1,552,804,970
County Supplemental Contribution Account Reserve	174,529,290
District Supplemental Contribution Account Reserve	1,519,451
Total Valuation Reserves	<u>5,093,438,188</u>

**Non-Valuation Reserves**

Contingency Reserve	50,488,044
Undistributed Earnings/Losses Reserve	<u>(105,349,205)</u>
Total Non-Valuation Reserves	<u>(54,861,161)</u>

**Market Stabilization Account**(258,074,714)**Total Reserves (Fair Value of Assets)**\$ 4,780,502,313**Valuation Reserves**

The valuation reserves are made up of the following:

**Member 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 the Retiree Reserve when a member retires.

**Employer Advance Reserve** represents funding provided by employers for future retirement payments to active and inactive 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 Retiree Reserve when a member retires. If 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 takes into account the expected termination rate for members.

**Retiree Reserve** represents funding set aside for retirement benefits. Additions include transfers from the Member Reserve and the Employer Advance Reserve (both made at the time a member retires) as well as interest credited. Deductions include benefit payments to retired members and their beneficiaries.

**Cost of Living Adjustment Reserve** represents employer contributions 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 and their beneficiaries.

**County Supplemental Contribution Account (CSCA) Reserve** captures all supplemental contributions made by the County in excess of the statutory contributions plus interest credited since fiscal year 2014.

**District Supplemental Contribution Account (DSCA) Reserve** captures all supplemental contributions made by the District in excess of the statutory contributions plus interest credited since fiscal year 2016.

### **Non-Valuation Reserves**

The Board established the Contingency Reserve of which the value is not used to determine 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.

**Undistributed Earnings/Losses Reserve** is established to account for cumulative undistributed actuarial earnings or losses.

### **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  $\pm 20\%$  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 (or 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. The balance in the Market Stabilization Account was negative \$258 million as of June 30, 2020.

### Interest Crediting

SamCERA semi-annually updates its reserve balances on December 31 and on June 30 to incorporate interest credits as specified in Article 5 of the CERL (Semi-Annual Interest Crediting). The Board adopted an *Interest Crediting Policy* stipulating how earnings should be allocated among valuation reserves.

The Board also adopted a *Five-year Actuarial Smoothing Policy*, which will be used to calculate the actuarial value of assets as well as the net available earnings for interest crediting purposes. The calculation incorporates the “smoothing” strategy to spread the difference between actual and expected market return over five years (or ten successive semi-annual periods).

The CSCA and the DSCA Reserves are credited semi-annually in accordance with provisions of the “Memorandum of Understanding” between SamCERA and the respective employer.

The Member Reserve is credited semi-annually in an amount equal to the lesser of one half of the assumed investment earnings rate, or the actuarial earnings rate for the prior six-month period immediately preceding the period in which interest is being credited. The “assumed investment earning rate” is the rate used to determine employer rates for the fiscal year in which the allocation is taking place. The rate credited to the Member Reserve shall not be less than zero.

To the extent of the net available earnings, interest is credited to all components of valuation reserves (except the Member Reserve, the CSCA Reserve, the DSCA Reserve, and the Undistributed Earnings/Losses Reserve) at a rate of one-half of the assumed investment earnings rate.

When allocable earnings are insufficient to cover interest credits to the reserves specified discussed earlier, 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 below one percent of the actuarial value of assets.

Under the CERL, excess earnings over one percent of SamCERA’s total assets may be transferred from the Contingency Reserve into the Employers’ Advance Reserve for payment of benefits. Whenever possible, SamCERA strives to keep the Contingency Reserve at 3% of the actuarial value of assets as described in its Interest Crediting Policy.

**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. SamCERA has a policy in place to monitor compliance with the Government Code.

SamCERA’s actual administrative expenses for the reporting period amounted to 0.13% of the accrued actuarial liability at June 30, 2018 (the latest information available when preparing the administrative budget for fiscal year 2020). Information technology expenses are excluded from this limit. The tables below show allowable administrative expenses and budget-to-actual analysis of administrative expenses for the fiscal year ended June 30, 2020

**ADMINISTRATIVE EXPENSES FOR THE FISCAL YEAR ENDED JUNE 30, 2020, COMPARED TO ACTUARIAL ACCRUED LIABILITY AS OF JUNE 30, 2018**

(Dollars in Thousands)

Actuarial Accrued Liability (AAL) as of June 30, 2018	\$ 4,970,535	(a)
Maximum Allowed for Administrative Expenses (AAL*0.21%)	\$ 10,438	(b)
Operating Budget for Administrative Expenses	\$ 7,016	(c)
Actual Administrative Expenses	\$ 6,371	(d)
Excess of Allowed over Actual Administrative Expenses	\$ 4,067	=(b) - (d)
Excess of Budgeted over Actual Administrative Expenses	\$ 645	=(c) - (d)

**Actual Administrative Expenses as a Percentage of**

**Actuarial Accrued Liability as of June 30, 2018** **0.13% = (d)/(a)**

**SAMCERA’S ADMINISTRATIVE EXPENSES, BUDGET VS. ACTUAL**

For the Fiscal Year Ended June 30, 2020

	<u>Budget</u>	<u>Actual</u>	<u>Under Budget</u>	<u>% of Budget Remaining</u>
Salaries and benefits	\$ 5,271,507	\$ 5,091,622	\$ 179,885	3%
Services and supplies	1,744,511	1,279,741	464,770	27%
<b>Total expenses</b>	<b>\$ 7,016,018</b>	<b>\$ 6,371,363</b>	<b>\$ 644,655</b>	<b>9%</b>

The overall salaries and benefits for the fiscal year 2020 were 3% below the budget, which was closely in line with expectations.

The overall expenses for services and supplies were 27% below the budget. Major reasons include the following:

- *Medical Record and Hearing Services.* Throughout the year, only a handful of members applying for disability were sent for an independent medical evaluation based on medical advisor's recommendation. In addition, only one formal hearing was held for a disability case.
- *Member Education.* Members are offered an array of training classes to enhance their financial knowledge in retirement planning from Financial Knowledge Network, a provider specializing in financial education. The payments from "no show" registrants slightly offset the actual expenses.
- *Education and Conference and Transportation and Lodging.* Because of the COVID-19 pandemic, all off-site training and conferences were either canceled or conducted online since the Shelter-in-Place order took effect. This switch significantly reduced the spending on training, conferences, and related traveling expenses.
- *Property and Equipment.* Besides planned purchases, budgets are appropriated each year to meet unforeseen needs for acquiring or replacing office furniture and equipment. The actual needs turned out to be far below anticipated.
- *General Office Supplies.* Staff has been working remotely from home since the Shelter-in-Place order was initiated in late March to mitigate exposure to COVID-19. This measure reduced the usage of general office supplies to nearly zero in the 4th quarter of the fiscal year.
- *Leased Facilities.* SamCERA entered into a new lease agreement with Shores Center Owner LLC in 2019 for a term of eight years. As part of the exchange, SamCERA received a monthly rent credit for the first three months of year 2020.
- *County Services.* To support its operation, SamCERA employs services from various County departments such as Election, Human Resources, Health Services, and Information Services. This year's budget allocated for election stayed intact in the absence of election activities, the budget appropriated for disability medical examination fell short of projections, and the budget designated for unforeseen needs remained untouched.
- *Audit Services.* Under the contract with Brown Armstrong Accountancy Corporation, SamCERA agrees to reimburse traveling and lodging expenses incurred by auditors while conducting fieldwork on-site. In response to the pandemic COVID-19, this year's interim audit was conducted remotely reducing the overall billable amount.
- *Other Administration.* A budget of \$100,000 under Other Administration was intended to cover legal services from an outside tax attorney whenever applicable. There was no need for such services this fiscal year.

**Note 10: Information Technology Expenses**

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 starting with fiscal year 2012 when this code was enacted. The table below presents the budget-to-actual analysis of technology expenses for the fiscal year ended June 30, 2020.

**SAMCERA'S INFORMATION TECHNOLOGY EXPENSES, BUDGET VS. ACTUAL**

For the Fiscal Year Ended June 30, 2020

	<u>Budget</u>	<u>Actual</u>	<u>Under Budget</u>	<u>% of Budget Remaining</u>
Property and equipment	\$ 100,000	\$ 71,734	\$ 28,266	28%
Software license maintenance - IT infrastructure	1,307,340	1,013,678	293,662	22%
Server - IT infrastructure	100,000	66,511	33,489	33%
Contract IT services - IT infrastructure	405,500	31,183	374,317	92%
Technology research and development	50,000	-	50,000	100%
<b>Total expenses</b>	<b><u>\$1,962,840</u></b>	<b><u>\$1,183,106</u></b>	<b><u>\$779,734</u></b>	<b>40%</b>

Note: In fiscal year 2020, SamCERA reported a total depreciation expense of \$837,996 on its basic financial statements. Since depreciation is a non-cash expense and not included in the adopted budget, it was excluded from the actual expense column for comparison purposes.

The overall Information Technology (IT) expenses were significantly below the budget, due primarily to the following:

- *Property and Equipment and Server for IT Infrastructure.* Spending on these areas was below budget as the need for acquisition or replacement of computer equipment fell short of expectations.
- *Software License Maintenance for IT Infrastructure.* Majority of the budget for this item were for the pre-purchase of 2,500 service hours from Vitech (vendor of the Pension Administration Software System) to support post-implementation services in years to come. The bulk pre-purchase allowed SamCERA to complete the purchase at a discount. As a result, the actual spending was far less than anticipated.
- *Contract IT Services for IT Infrastructure.* Certain projects which required consulting services were put on hold due to COVID-19 closure. In addition, the consulting contract amount for the new mobile app development was moderately lower than anticipated.
- *Technology Research and Development (R&D).* The R&D budget was setup to explore new technologies that may help improve operations and member services. Staff did not exploit the resources allocated for R&D as priorities were given to increasing needs for IT support since teleworking became a norm amid the pandemic.

**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-insurance program and commercial insurance policies. SamCERA is covered by the County's self-insurance program for general liability and workers' compensation. 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 employee count.

The Retirement Board members and senior staff purchase separate fiduciary liability insurance for the actual or alleged breach of fiduciary duties through a policy provided by RLI Insurance Company of Peoria, Illinois. The coverage is limited to \$10 million in the aggregate for all loss combined including defense costs.

**Note 12: Related Party Transactions**

SamCERA has ongoing business transactions with various County offices: County Counsel, Treasurer, Controller, Procurement, Human Resources, Information Services, Health System, Sheriff, and Elections. Payments for the services provided are on a cost-reimbursement basis.

**Note 13: Commitments**

At June 30, 2020, SamCERA had a total "uncalled capital" of \$334.2 million, consisting of \$153.0 million in private equity investments, \$111.1 million in private real asset investments, and \$20.9 million in real estate investments, and \$49.2 in private credit investments. Due to the nature of these investments, some of these commitments will gradually be funded over the next 1-5 years, depending on the partnership's vintage year.

**Note 14: Contingent Liability**

SamCERA is subject to legal proceedings and claims arising from the normal course of its business. Currently, no pending or threatened litigation are adjudicated or reported. As for unasserted claims, future writs of mandates could be filed to reverse Board decisions on disability matters.



## REQUIRED SUPPLEMENTARY INFORMATION

### SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS OF PARTICIPATING EMPLOYERS

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 Governmental Accounting Standards Board (GASB) Statement No. 67. This schedule will ultimately show information for ten years.

For the Fiscal Years Ended June 30	2020	2019	2018	2017
<b>Total Pension Liability</b>				
Service cost	\$ 119,882,786	\$ 108,644,383	\$ 107,738,142	\$ 96,411,681
Interest on total pension liability	356,056,094	336,260,838	319,776,913	306,404,154
Effect of assumption changes or inputs	12,726,983	167,870,889	-	147,541,839
Effect of economic/demographic gains (losses)	78,235,977	91,316,336	27,753,956	4,834,605
Benefit payments and refund of contributions	(245,821,142)	(227,185,123)	(209,054,603)	(193,240,280)
Net change in total pension liability	321,080,698	476,907,323	246,214,408	361,951,999
Total pension liability, beginning	5,339,216,207	4,862,308,884	4,616,094,476	4,254,142,477
<b>Total pension liability, ending (a)</b>	<b>\$5,660,296,905</b>	<b>\$5,339,216,207</b>	<b>\$4,862,308,884</b>	<b>\$4,616,094,476</b>
<b>Fiduciary Net Position</b>				
Employer contributions	\$ 198,582,998	\$ 245,498,411	\$ 207,256,713	\$ 198,727,135
Member contributions	70,630,765	67,695,627	64,204,278	62,160,101
Investment income net of investment expenses	42,392,222	271,691,483	280,146,398	436,675,706
Benefit payments and refund of contributions	(245,821,142)	(227,185,123)	(209,054,603)	(193,240,280)
Administrative and technology expenses	(8,392,465)	(8,551,977)	(7,293,262)	(7,009,169)
Net change in plan fiduciary net position	57,392,378	349,148,421	335,259,524	497,313,493
Fiduciary net position, beginning	4,723,109,935	4,373,961,514	4,038,701,990	3,541,388,497
<b>Fiduciary net position, ending (b)</b>	<b>\$4,780,502,313</b>	<b>\$4,723,109,935</b>	<b>\$4,373,961,514</b>	<b>\$4,038,701,990</b>
<b>Net pension liability, ending = (a) - (b)</b>	<b>\$ 879,794,592</b>	<b>\$ 616,106,272</b>	<b>\$ 488,347,370</b>	<b>\$ 577,392,486</b>
<b>Fiduciary net position as a % of total pension liability</b>	<b>84.46%</b>	<b>88.46%</b>	<b>89.96%</b>	<b>87.49%</b>
<b>Covered payroll</b>	<b>\$ 593,295,084</b>	<b>\$ 554,734,196</b>	<b>\$ 535,937,622</b>	<b>\$ 510,132,014</b>
<b>Net pension liability as a % of covered payroll</b>	<b>148.29%</b>	<b>111.06%</b>	<b>91.12%</b>	<b>113.18%</b>

Note: *Changes of assumptions.*

In 2017, amounts reported as changes of assumptions resulted primarily from adjusting the assumed investment return, price inflation, and general wage increase downward, modifying the mortality assumption, and adding a projection scale to reflect gradual year-to-year increase in mortality that is expected to occur in the future.

In 2019, amounts reported resulted mainly from downward adjustments to the assumed investment rate, price inflation, and general wage increases.

In 2020, amounts reported resulted mainly from changes in demographic assumptions based on results from the latest Triennial Experience Study.

### SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS OF PARTICIPATING EMPLOYERS (CONTINUED)

For the Fiscal Years Ended June 30	2016	2015	2014
<b>Total Pension Liability</b>			
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
<b>Total pension liability, ending (a)</b>	<b>\$4,254,142,477</b>	<b>\$3,946,439,845</b>	<b>\$3,703,341,222</b>
<b>Fiduciary Net Position</b>			
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 technology 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
<b>Fiduciary net position, ending (b)</b>	<b>\$3,541,388,497</b>	<b>\$3,454,476,328</b>	<b>\$3,291,693,954</b>
<b>Net pension liability, ending = (a) - (b)</b>	<b>\$ 712,753,980</b>	<b>\$ 491,963,517</b>	<b>\$ 411,647,268</b>
<b>Fiduciary net position as a % of total pension liability</b>	<b>83.25%</b>	<b>87.53%</b>	<b>88.88%</b>
<b>Covered payroll</b>	<b>\$ 472,384,955</b>	<b>\$ 439,017,764</b>	<b>\$ 416,273,731</b>
<b>Net pension liability as a % of covered payroll</b>	<b>150.88%</b>	<b>112.06%</b>	<b>98.89%</b>

Note: *Change of assumptions.*

In 2014, amounts reported as changes of assumptions resulted primarily from downward adjustments to the assumed investment return, price inflation, and general wage increase; and several changes in demographic assumptions including a slight reduction in between member and survivor for female numbers.

In 2016, amounts reported as changes of assumption retirement rate, a slight update to the probability of eligible survivors, and an adjustment of the expected age difference s resulted mainly from downward adjustments to the assumed investment return, price inflation, and general wage increase with intent to strengthen the financial position and the stability of the Retirement Fund by mitigating any impacts if future returns were lower than current expectations.

**SCHEDULE OF EMPLOYER CONTRIBUTIONS**

Last Ten Fiscal Years

This schedule provides information about the statutory and actual contributions of all participating employers.

Fiscal Year Ended June 30	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll <sup>1</sup>	As a % of Covered Payroll	
					Actuarially Determined Contribution	Actual Employer Contribution
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% <sup>2</sup>
2013	131,293,846	144,308,171	(13,014,325)	404,360,891	32.47%	35.69% <sup>2</sup>
2014	152,877,362	202,877,362	(50,000,000)	416,273,731	36.73%	48.74% <sup>3</sup>
2015	169,814,170	180,704,280	(10,890,110)	439,017,764	38.68%	41.16% <sup>3</sup>
2016	170,046,059	191,094,488	(21,048,429)	472,384,955	36.00%	40.45% <sup>3,4</sup>
2017	164,877,135	198,727,135	(33,850,000)	510,132,014	32.32%	38.96% <sup>3,4</sup>
2018	179,626,584	207,256,713	(27,630,129)	535,937,622	33.52%	38.67% <sup>3</sup>
2019	194,830,054	245,498,411	(50,668,357)	554,734,196	35.12%	44.26% <sup>3,5</sup>
2020	198,582,998	198,582,998	-	593,295,084	33.47%	33.47%

<sup>1</sup> In accordance with GASB Statement No. 82, covered payroll is the payroll on which contributions are based.

<sup>2</sup> Employers contributed at a higher rate than the Actuarially Determined Contribution rate in order to maintain more stable contributions.

<sup>3</sup> In 2014, the County of San Mateo (the County) Board of Supervisors implemented a policy to eliminate the County's unfunded actuarial accrued liabilities (UAAL) by 2023. Contributions in excess of the Actuarially Determined Contributions are related to that policy unless noted otherwise.

<sup>4</sup> In fiscal years 2015-16 and 2016-17, the San Mateo County Mosquito & Vector Control District contributed \$1.5 million and \$0.25 million more than actuarially determined contributions, respectively.

<sup>5</sup> In 2019, the County increased its supplemental contributions to accelerate the payoff of its UAAL.

## SCHEDULE OF INVESTMENT RETURNS

For the Fiscal Years Ended June 30

The time-weighted rate of return measures a fund's compounded rate of growth over a specific time period, whereas the money-weighted rate of return measures investment performance, net of investment manager expenses, adjusted for the changing amounts actually invested. This schedule will ultimately show information for the past ten fiscal years. Additional years will be displayed as they become available prospectively.

	2020 <sup>3</sup>	2019	2018	2017	2016	2015	2014
Annual time-weighted rate of return, net of investment manager expenses <sup>1</sup>	-0.20%	5.40%	6.70%	12.58%	0.74%	3.53%	17.29%
Annual money-weighted rate of return, net of investment manager expenses <sup>1,2</sup>	-0.26%	5.26%	6.53%	12.48%	0.49%	3.37%	17.22%

<sup>1</sup> The rates of return were independently determined by SamCERA's investment consultant, Verus Advisory, Inc.

<sup>2</sup> The annual time-weighted rate of return is calculated by SamCERA's investment consultant. This calculation is based on fiscal year end investment performance except for Private Equity and Private Real Assets. The quarterly statements for Private Equity and Private Real Assets are usually released 2-4 months after quarter-end and, for this reason, the investment consultant reports SamCERA's Private Equity and Private Real Assets' returns on a one-quarter lagged basis. The June 30 return for these two sub-asset classes are based on the "rolling" performance from the 4th quarter of last fiscal year to the 3rd quarter of this fiscal year. The resulting investment performance return from this calculation method generally does not deviate significantly from the return computed by SamCERA's actuary, which is directly derived from the audited financial statements of the reporting period. During the 4th quarter of fiscal year 2020, SamCERA received \$32 million in stock distributions from Private Equity that, because of the reporting lag discussed earlier, are not reflected in the time-weighted rate of return for fiscal year 2020. As a result, the annual time-weighted rate of return reported by the investment consultant is -0.2% as opposed to the market return of 0.9% reported by the actuary.

<sup>3</sup> Due to underperformance in public equities, alternatives (absolute return), and inflation hedge (public real assets), the overall investment return declined from 5.40% for 2019 to -0.20% for 2020.

## NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION

### Actuarial Valuation Methods and Assumptions

The employer statutory contribution rates for the fiscal year ended June 30, 2020, are determined by the actuarial valuation as of June 30, 2018. Details of actuarial methods and assumptions selected for the 2018 valuation are summarized on the next page.

### Changes in Assumptions

In June 2014, the Board of Retirement (the Board) approved its actuary's recommendations changing certain key economic assumptions for the 2014 valuation. These changes include lowering the assumed investment return from 7.50% to 7.25%, the price inflation from 3.25%

to 3.00%, and the general wage increase from 3.75% to 3.50%. A month later in July 2014, the Board also approved several changes in demographic assumptions based on the 2014 Triennial Experience Study. The key changes include a slight reduction in retirement rate, a slight update to the probability of eligible survivors, and an adjustment of the expected age difference between member and survivor for female numbers. These changes increased the expected contribution rates and decreased the funded ratio of the Retirement Fund.

In June 2016, the Board reduced the assumed investment return from 7.25% to 7.00%, the price inflation from 3.00% to 2.75%, and the general wage increase from 3.50% to 3.25% for the 2016 valuation. These changes were specifically tailored to strengthen the financial position and the stability of the Retirement Fund by mitigating any impacts if future returns were lower than current expectations.

In July 2017, the Board adopted several recommendations from the 2017 Triennial Experience Study, which included lowering the assumed investment return, modifying the mortality assumption, and adding a projection scale to reflect gradual year-to-year increase in mortality that is expected to occur in the future. The assumed investment return was changed from 7.00% to 6.75%, the price inflation from 2.75% to 2.50%, and the general wage increase from 3.25% to 3.00% for the 2017 valuation. The new mortality assumption resulted in an increase in assumed life expectancy compared to the prior assumption.

In July 2019, the Board adjusted the assumed investment return from 6.75% to 6.50%, the price inflation from 2.75% to 2.50%, and the general wage increase from 3.25% to 3.00% for the 2019 valuation. These changes increased the contribution rates effective July 1, 2020, and decreased the funded ratio of the Retirement Fund by 1.70% to 85.80% as of June 30, 2019.

In June 2020, the Board adopted the actuary's recommendation to keep the economic assumptions for 2019's valuation, with investment return at 6.5%, inflation at 2.50%, and general wage increase at 3.00%. The Board also set the COLA assumption for Plans 1 and 2 in accordance with the inflation assumption.

In July 2020, the Board adopted several changes to the demographic assumptions developed from the 2020 Investigation of Experience Study. These changes include: increasing the rates of assumed merit salary increases for Safety and Probation members; updating mortality tables to the public plan specific tables published in 2019 by the Society of Actuaries Retirement Plans Experience Committee; and adjusting the assumed rates at which active members decrement from active employment. These changes caused a slight increase in the employer contribution rate, small decreases in member contribution rates for Plan 7 and small increases for all other plans. The assumptions will next be thoroughly reviewed in 2023 as part of the triennial experience study.

Below is a summary of methodologies and assumptions employed for the 2018's valuation.

### **ACTUARIAL VALUATION AS OF JUNE 30, 2018 (FOR FUNDING PURPOSES)**

---

<b>Valuation Date</b>	June 30, 2018
<b>Actuarial Cost Method</b>	Entry Age Normal
<b>Amortization Method</b>	Level Percent of Payroll
<b>Amortization Period</b>	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.
<b>Asset Valuation Method</b>	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.
<b>Actuarial Assumptions</b>	
Investment rate of return	6.75%, net of pension plan investment and administrative expenses
Inflation rate (CPI)	2.50%
General wage increase	3.00%
<b>Demographic Assumptions</b>	
Salary increases due to service	See June 30, 2018 actuarial valuation report for details.
Retirement	See June 30, 2018 actuarial valuation report for details.
Disablement	See June 30, 2018 actuarial valuation report for details.
Mortality	See June 30, 2018 actuarial valuation report for details.

## SUPPLEMENTARY INFORMATION

---

### SCHEDULE OF ADMINISTRATIVE EXPENSES

---

For the Fiscal Year Ended June 30, 2020

The schedule below depicts the administrative expenses incurred by San Mateo County Employees' Retirement Association (SamCERA) in the normal course of business.

#### Salaries & Benefits

Salaries	\$ 3,396,187
Benefits	1,695,435
<b>Total Salaries &amp; Benefits</b>	<b><u>5,091,622</u></b>

#### Services & Supplies

Board Expenses	5,200
Insurance	72,100
Medical Evaluation	15,170
Member Education	52,716
Education & Conference	84,243
Transportation & Lodging	69,989
Property & Equipment	19,801
General Office Supplies	22,626
Postage, Printing & Copying	20,808
Leased Facilities	442,918
County Services	295,095
Audit Services	45,628
Other Administration	133,447
<b>Total Services &amp; Supplies</b>	<b><u>1,279,741</u></b>

<b>Total Administrative Expenses</b>	<b><u>\$ 6,371,363</u></b>
--------------------------------------	----------------------------

### SCHEDULE OF INFORMATION TECHNOLOGY EXPENSES

---

The schedule below depicts the information technology expenses incurred by SamCERA in the normal course of business.

Property and Equipment	\$ 71,734
Software license maintenance - IT infrastructure	1,013,678
Server - IT infrastructure	66,511
Contract IT services - IT infrastructure	31,183
Depreciation Expense	837,996
<b>Total Information Technology Expenses</b>	<b><u>\$ 2,021,102</u></b>

## SCHEDULE OF INVESTMENT EXPENSES

For the Fiscal Year Ended June 30, 2020

The schedule below summarizes the investment expenses incurred by SamCERA during the reporting period.

<b>Investment Management Fees (by Asset Class)</b>	
Public Equity	\$ 3,970,230
Fixed Income	5,109,760
Alternatives	3,344,410
Risk Parity <sup>(1)</sup>	1,057,423
Inflation Hedge	4,137,511
Cash	276,020
Total Investment Management Fees	<u>17,895,354</u>
<b>Other Investment Expenses</b>	
Investment Consultant	494,241
Actuarial Consulting	178,108
Master Custodian	352,364
Other Professional Services	65,072
Total Other Investment Expenses	<u>1,089,785</u>
<b>Other Investment Related Expense</b>	17,493,143
<b>Interest Paid on Prepaid Contribution</b>	<u>3,102,798</u>
<b>Total Investment Expenses</b>	<u><b>\$ 39,581,080</b></u>

<sup>(1)</sup> Investment in risk parity was completely removed from the portfolio before June 30, 2020, in accordance with the Asset Allocation Policy adopted in October 2019.

## SCHEDULE OF PAYMENTS TO CONSULTANTS (OTHER THAN INVESTMENT ADVISORS)

For the Fiscal Year Ended June 30, 2020

The schedule of payments to consultants provides information on fees paid to outside professionals other than investment advisors. Fees paid to investment professionals can be found in the Investment Section of this report.

<b>Custodian Services</b>	
Northern Trust Corporation	\$ 352,364
<b>Actuarial Consulting Services</b>	
Milliman, Inc.	142,790
Cheiron, Inc.	35,318
<b>Audit Services <sup>(1)</sup></b>	
Brown Armstrong Accountancy Corporation	45,628
<b>Other Professional Services</b>	65,072
<b>Total Payments to Consultants</b>	<u><b>\$ 641,172</b></u>

<sup>(1)</sup> Audit fees were included in administrative expenses whereas remaining items were reported under investment expenses.



## NOTES TO THE 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. Thus, SamCERA's information technology expenses have been 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 the following:

"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)**

As of June 30, 2020

	Deferred Outflows of Resources				Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions			
	Differences Between Expected and Actual Economic Experience	Net Differences Between Projected and Actual Pension Plan Investments	Changes of Assumptions	Share of Contributions	Differences Between Employer Contributions and Proportionate Share of Contributions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Deferred Inflows of Resources	Proportionate Share of Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		
Employer Liability	\$ 846,875,167	\$ 195,645,723	\$ 135,158,648	\$ 1,886,499	\$ 457,294,414	\$ -	\$ -	\$ -	\$ 177,076	\$ 285,531,931	\$ 686,027	\$ 286,217,958
County of San Mateo												
San Mateo County Superior Court	31,712,430	7,326,229	5,061,205	430,922	17,484,311	-	-	-	1,663,383	10,692,144	(854,361)	9,837,783
San Mateo County Mosquito & Vector Control	1,206,995	278,841	192,633	52,315	701,378	-	-	-	529,277	406,950	168,334	575,284
<b>Total</b>	<b>\$ 879,794,592</b>	<b>\$ 203,250,793</b>	<b>\$ 140,412,486</b>	<b>\$ 2,369,736</b>	<b>\$ 475,480,103</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,369,736</b>	<b>\$ 296,631,025</b>	<b>\$ -</b>	<b>\$ 296,631,025</b>

**SCHEDULE OF COST SHARING EMPLOYER ALLOCATIONS (GASB STATEMENT NO. 68)**

Employer	Fiscal Year Ended June 30, 2020		Employer Allocation Percentage	Net Pension Liability
	Actual Employer Contributions	Actuarially Determined Contributions		
	County of San Mateo	\$ 191,152,584		
San Mateo County Superior Court	7,157,977	7,157,977	3.6045%	31,712,430
San Mateo County Mosquito & Vector Control District	272,437	272,437	0.1372%	1,206,995
<b>Total</b>	<b>\$ 198,582,998</b>	<b>\$ 198,582,998</b>	<b>100.0000%</b>	<b>\$ 879,794,592</b>

Note: Employer allocation percentage (or proportionate share) is based on 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*.

SamCERA's actuary prepared the following documents: (1) the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan, (2) the Schedule of Cost Sharing Employer Allocations, (3) the GASB Statement No. 67 Actuarial Valuation as of June 30, 2020, and (4) the GASB Statement No. 68 Actuarial Valuation based on a June 30, 2020 Measurement Date for Employer Reporting as of June 30, 2021; in accordance with generally accepted accounting principles (GAAP) in the United States of America as applicable to governmental organizations based on information provided by SamCERA. These documents provide the required information for financial reporting related to SamCERA that employers may use in their financial statements.

**Use of Estimates in the Preparation of the Documents**

The preparation of the above documents, in conformity with GAAP, requires management to make estimates and assumptions that affect certain amounts and disclosures. However, 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 five years on a straight-line basis. One-fifth was recognized in

pension expense during the measurement period. The remaining difference between projected and actual investment earnings on pension plan investments at June 30, 2020 is to be amortized over the remaining periods.

Changes of assumptions or other inputs and differences between expected and actual experience are recognized over the average of the expected remaining service lives of all employees, both active and deferred, that are provided with pensions through SamCERA as of June 30, 2019 (the beginning of the measurement period ended June 30, 2020).

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.

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 recognized over the average expected remaining service lives of all employees that are provided with pensions through the pension plan determined as of the beginning of the measurement period.

The difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ended on June 30, 2020, is recognized over the average expected remaining service lives of all employees that are provided with pensions through the pension plan determined as of the beginning of the measurement period.

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





Board of Retirement  
San Mateo County Employees' Retirement Association

Dear Trustees:

On behalf of SamCERA's investment team, I am pleased to report on the pension fund's investments and portfolio performance for the period ended June 30, 2020. This data was compiled by SamCERA's investment staff, its investment consultant, Verus Advisory, and its custodian bank, Northern Trust. All return figures are presented net of investment manager fees, are time-weighted, and are calculated by SamCERA's investment consultant, Verus Advisory.



Before I continue, I would like to acknowledge the extraordinary events that have taken place since the start of the year, and to offer my deepest sympathy for those impacted by the COVID-19 pandemic. I hope you and your loved ones are in good health. Also, I would like to offer my gratitude to all the healthcare front line workers and first responders working to keep us healthy and safe.

### **Portfolio Performance**

SamCERA's portfolio fair value increased slightly to \$4.781 billion as of June 30, 2020, as the net combination of portfolio appreciation and contributions, less total deductions (i.e. benefits paid, administrative expense, etc.), added approximately \$57 million to the fund.

SamCERA's portfolio returned -0.2% net of investment management fees for the fiscal year ended June 30, 2020, underperforming SamCERA's policy benchmark return by 1.8%. This fiscal-year performance resulted in below median performance relative to SamCERA's peers, as defined by large (greater than \$1 billion in assets) public plans. Table One below shows net performance characteristics for the total fund over 1, 3, 5, and 10- year trailing periods ending June 30, 2020. Underperformance in the past three fiscal years, along with elevated risk over the past year, has resulted in a lower risk-adjusted return relative to the benchmark over all trailing periods.

### Return/Risk Measure

As described in the Investment Objectives section of SamCERA's Investment Policy Statement, SamCERA focuses on “risk-adjusted” returns to compare how much return was generated given the risk (measured by standard deviation of returns) taken to achieve that return. This is typically measured as the Sharpe Ratio. The higher the ratio, the better, as it measures the return provided per unit of risk taken. For example, if a fund has a lower return than the benchmark but also a much lower risk level (as measured by standard deviation of returns), it may result in a higher risk-adjusted outcome. Conversely, if a fund has a higher return but also takes higher than commensurate risk than the benchmark, then its risk-adjusted return may be lower than that of the benchmark.

Table One: SamCERA Total Fund Net Performance Characteristics Ended June 30th, 2020

	1 Year	3 Years	5 Years	10 Years
SamCERA Return	-0.2%	3.9%	4.9%	8.0%
Benchmark Return	1.6%	5.3%	5.9%	8.6%
Excess Return	(1.80)%	(1.40)%	(1.00)%	(0.60)%
Peer Rank Return (Percentile)	79th	87th	72nd	38th
SamCERA Risk (Standard Deviation)	12.1	8.8	8.0	8.2
Benchmark Risk (Standard Deviation)	11.5	8.6	8.0	8.5
SamCERA Sharpe Ratio	-0.1	0.3	0.5	0.9
Benchmark Sharpe Ratio	0.0	0.4	0.6	1.0

Table Two below shows the current allocation and the primary composite relative returns for the year ended June 30, 2020.

Table Two: SamCERA Composite Net Performance for Trailing Year Ended June 30th, 2020

Composite	Allocation (%)*	Composite Return	Benchmark Return	Excess Return
Public Equity	40.0	0.5%	2.1%	-1.6%
Fixed Income	31.6	4.4%	6.4%	-2.0%
Alternatives	12.0	2.5%	0.0%	2.5%
Inflation Hedge	15.0	-10.5%	-6.7%	-3.8%

\* Liquidity balance was 1.4% as of June 30, 2020.

Three of four SamCERA asset class composites had positive returns for the fiscal year. Fixed Income was the best performing composite and returned 4.4%, while Inflation Hedge returned -10.5% and was the lowest returning asset class composite. Alternatives returned 2.5% while Public Equity returned 0.5%.



Inflation Hedge, in addition to being the worst-performing asset class composite, was also the worst performer relative to its benchmark return. Conversely, while providing the highest positive *absolute* return, Fixed Income detracted in terms of *relative* performance versus the benchmark. Alternatives outperformed during the year.

Portfolio underperformance during the fiscal year came from three main positions:

- 1) A tactical position in public midstream energy equity within the Inflation Hedge category. Given the changed risk/return dynamics brought on by the COVID pandemic, SamCERA exited this position during the first quarter 2020 and repositioned the proceeds into US Equity.
- 2) Alternatives is comprised of both Private Equity and Absolute Return. Private Equity had substantial outperformance during the year, while Absolute Return had substantial underperformance (due to one investment). On the whole Alternatives had slight outperformance, although it would have been significantly higher without the impact from the Absolute Return investment which has experienced a multi-year drawdown. During the past year SamCERA downsized this position, and fully exited it effective July 2020. SamCERA is currently seeking a suitable replacement strategy.
- 3) Low volatility stocks with U.S. Equity. Low volatility stocks fully participated in the equity drawdown in March 2020 (which was not expected), and failed to participate fully in the market rebound during the second quarter (which was expected). SamCERA is maintaining this position going forward.

The two exited positions accounted for the majority of the fund's underperformance during the current fiscal year. SamCERA believes the fund is in better position to provide attractive risk-adjusted returns going forward.

### Market Review

It was truly a chaotic and unprecedented fiscal year to say the least. During the first six months of the fiscal year (July – December 2019), the economic backdrop was generally positive, although trade uncertainty between the U.S. and China, along with other geopolitical tensions, weighed on sentiment. The U.S. Federal Reserve cut rates three times during this period (in 25 basis point increments) to support economic conditions caused by the trade uncertainty. In January, the Standard & Poor's 500 Index (S&P 500), an index of large-capitalization stocks domiciled in the U.S., hit an all-time high during the month as a "Phase One" agreement on trade between the U.S. and China helped market sentiment. However, fears of the impact of COVID-19 on global growth began to weigh on some international markets. The developed international equity market, as measured by the MSCI EAFE (Morgan Stanley Capital Investment Europe, Australasia, and Far East Index), was down 2.1%, while economic-sensitive commodities were also lower (energy was down 15% while industrial metals were down 7%).

The positive momentum in the U.S. equity markets continued into February, with the S&P 500 hitting an all-time high on February 19<sup>th</sup>. The index then proceeded to fall 12.8% by month-end, ending with a -8.2% loss on the month, as uncertainty regarding the impact of COVID-19 on the economy and markets came to the fore. International equity markets also fell in lockstep, with the MSCI EAFE Index falling 9.0%. The U.S. Federal Reserve cut its Federal Funds rate 50 basis points on an out-of-cycle emergency move, the first of its kind since the Global Financial Crisis.

The massive global risk-off environment culminated in March as the global spread of the COVID-19 virus impacted global economic growth. The S&P 500 Index was down just under 25% in mid-March before rallying to end the month down 12.4%. International markets were also down on the month, with the MSCI EAFE Index down 13.3%. There was an unprecedented monetary and fiscal policy response in the U.S. (and globally). The Federal Reserve cut short-term rates to effectively 0%, and instituted a number of backstop provisions, many of which were implemented in the Global Financial Crisis in 2008-2009, to ensure fixed income market liquidity. The speed and severity of both the market downturn and the resulting policy response were unprecedented.

In April global markets rebounded from the massive March sell-off as extraordinary monetary and fiscal policies, along with optimism regarding a gradual reopening of global economies, helped fuel a risk-on rally. The U.S. equity market (measured by the S&P 500 Index) was up 12.8% on the month, making it the largest monthly increase since 1974 (although the index was still down just over 9% year-to-date). International markets were also higher on the month, with the MSCI EAFE up 6.5%. Economic data started reflecting the impacts from the COVID-19 lockdown.

In June, global markets sustained their risk-on rally on the back of continued monetary and fiscal stimulus, while economic data continued to slowly improve, resulting in some green-shoots and reflecting potential recovery from the COVID-19 lockdown. All-told, the global fiscal and monetary response supported asset prices, causing a potential disconnect between asset price levels and economic activity. This is one of the risks we will be monitoring as we move into the new fiscal year.

After the end of the fiscal year, the advance estimate for second quarter U.S. real GDP showed a -32.9% decline. To put this historical decline in context, the worst annualized quarterly decline during the Global Financial Crisis was -8.4% in the 4<sup>th</sup> quarter of 2008. With this, the U.S. officially entered into a recession. The expectation is for this recession to be one of the

most severe, but also potentially one of the shortest, as the hope that economic activity picks up to near pre-pandemic levels as the economy gradually reopens.

So to summarize fiscal-year performance, even with all of the gyrations previously mentioned, the broad U.S. equity market, as measured by the Russell 3000 Index, a broad basket of U.S. stocks, was still able to return a positive 6.5% during the year. Large-capitalization stocks in the U.S. (as measured by the Russell 1000 Index) were higher by 7.5%, while smaller-capitalization stocks (as measured by the Russell 2000 Index) were negative, returning -6.6% for the year. In terms of sector performance, there was a huge gap between winners and losers. Technology (up 35.9%) provided the highest return, followed by consumer discretionary, telecom, and healthcare. Energy (down -36.1%) performed the worst, followed by financials and industrials. Six of the sectors were positive, while six were negative during the year.

The broad international equity market had negative returns during the fiscal year. The developed international market, as measured by the MSCI EAFE, was down -5.1%, while emerging market equity, as measured by the MSCI Emerging Markets Index, returned -3.4%. As previously mentioned, the U.S. Federal Reserve lowered short-term interest rates five times during the fiscal year, initially to help offset the uncertainty created from the trade war with China, and then later due to the impacts from the COVID-19 pandemic. The target Fed Funds Rate range is now between 0.00 to 0.25%, down from 2.25 to 2.50% at the beginning of the fiscal year. Longer-term interest rates also precipitously decreased during the year. The 10-year U.S. Treasury yield decreased 1.34% during the fiscal year, ending at 0.66%, down from the 2.0% rate at the beginning of the year. These lower interest rates helped high quality fixed income have strong fiscal-year returns.

The broad U.S. bond market (as measured by the Bloomberg Barclays Aggregate Index) returned 8.7% on the year, while long-duration Treasuries returned 25.4%. High yield bonds ended flat on the year, as wider high yield spreads offset the positive impact of lower interest rates.

### **Portfolio Activities / Changes**

For the year, SamCERA made no new commitments to private equity partnerships. SamCERA has \$457.5 million in total commitments in its private equity program across venture capital, buyouts, and special situations.

SamCERA made a commitment worth \$30 million to one new partnership in its private real asset category, bringing the total commitments to \$234.8 million.

SamCERA completed its asset liability study in the fourth quarter of 2019 and, as part of this process, the Board approved a new asset allocation policy. In the first half of 2020, SamCERA began implementing the new policy in multiple phases and expects to complete the transition to the new policy by the end of 2020. The new policy eliminated the 8% allocation to Risk Parity and reduced Inflation Hedge by 3%, while Diversifying assets increased by 8% and Growth assets increased by 3%. The table below compares the new policy to the old policy. The new policy will be in effect from July 1, 2020.

The largest change in the new policy is the removal of risk parity and a resulting increase in the allocation to core fixed income from 14% to 21%. SamCERA added two new strategies to implement this increased core fixed income exposure. First, DoubleLine Securitized Income was added. This is a securitized core strategy that is expected to provide a higher yield with a slightly lower interest rate sensitivity compared to the Bloomberg Barclays Aggregate Index, along with diversification to SamCERA's existing core fixed income managers. The second strategy added was NISA Core Bond. This is a risk-controlled, high quality core fixed income strategy that exhibits a duration profile in-line with the benchmark and has a low correlation to our current core fixed income managers.

#### Asset Allocation Policy (Old vs. New)

	Old Policy	New Policy
<b>Growth</b>	<b>52%</b>	<b>55%</b>
Public Equity	37%	39%
Private Equity	6%	6%
Opportunistic Cred	9%	10%
<b>Diversifying</b>	<b>20%</b>	<b>28%</b>
Core Fixed Income	14%	21%
Absolute Return	6%	6%
Liquidity	0%	1%
<b>Inflation Hedge</b>	<b>20%</b>	<b>17%</b>
Real Estate	10%	10%
Private Real Assets	4%	3%
Public Real Assets	6%	4%
<b>Risk Parity</b>	<b>8%</b>	<b>0%</b>

The allocation to absolute return is unchanged in the new policy, but SamCERA further diversified the manager risk within the absolute return program by adding two additional strategies. Graham Quantitative Global Macro, a directional long/short strategy across multiple asset classes, and PIMCO MAARS, an alternative risk premia strategy, were added during the fiscal year.

SamCERA also added U.S. TIPS to its public real assets portfolio, and now has equal allocation to U.S. TIPS, commodities, global listed natural resources equities, and global listed infrastructure equities. SamCERA's risk parity allocation contained TIPS as part of its inflation allocation. With the removal of risk parity from SamCERA's policy mix as part of the latest asset liability study, adding TIPS to public real assets will reduce the equity sensitivity of the

public real assets portfolio while providing better diversification within the broader inflation hedge program and a more direct hedge against potential inflation for the plan.

Lastly, SamCERA simplified its international equity manager structure by 1) Removing the dedicated emerging markets manager, 2) Changing the current passive MSCI EAFE mandate to one that includes both developed and emerging markets exposure (MSCI ACWI ex-US IMI), and 3) Repositioning the proceeds from the dedicated emerging markets allocation so that the allocation across Baillie Gifford, Mondrian, and Blackrock ACWI ex-US IMI are similar. These changes reduced the number of international equity managers from four to three, while better aligning the portfolio to the international equity policy benchmark, which is the MSCI ACWI ex-US IMI index.

### Conclusion

Given the immense uncertainty caused by the COVID-19 pandemic, the Investment Team's goal remains steadfast: To provide an attractive risk-adjusted return stream on the investment portfolio to support the financial retirement of the County's employees and retirees. Given the plethora of potential risks, from policy mistakes, the pandemic itself, the increased Fed balance sheet, larger fiscal deficits/debt, higher potential inflationary pressures, asset price bubbles, and of course election year uncertainty, "balance" will be key to successfully navigating the future. SamCERA continues to keep a balanced risk posture without relying too much on any single asset, strategy, or return stream.

We will also strive to balance our long-term investment time horizon with thoughtful assessment of more shorter-term opportunities. We will balance seeking return (offense) with lowering risk/capital preservation (defense). We will balance portfolio income and portfolio capital appreciation. And as always, we will use our long-term investment policy to guide us through these dynamic times.

Respectfully Submitted,



Michael Coultrip  
Chief Investment Officer  
September 13, 2020

## INVESTMENT CONSULTANT'S REPORT ON INVESTMENT ACTIVITIES

---



September 17, 2020

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

Dear Board Members:

### Market Environment

During the latter half of calendar year 2019, global economies generally exhibited moderate and positive economic growth, inflation remained mild, central bank policies were accommodative to further growth, labor markets had fully recovered from the Global Financial Crisis, and economic surprises were few. Risk assets delivered robust performance during the second half of the year.

Investors' main concerns in the market appeared to be around troubled U.S.-Chinese relations, the resulting trade conflict which could interrupt economic progress and corporate profits, and even the potential for military conflict. However, the relationship between the two superpowers was seemingly on a more conciliatory track. A series of meetings between the U.S. and Chinese officials culminated in a "phase one" deal addressing agricultural trade, intellectual property protections, and some loose agreements on how China would manage its currency.

In early 2020, the calm and relatively stable environment began to shift. A novel coronavirus, and the disease it causes (COVID-19), began spreading through Wuhan, the capital of China's Hubei province. Containment efforts were ineffective, and the virus continued to spread. The sudden impact of this global pandemic on economic activity and markets was unprecedented. One of the most immediate effects of the forced closure of businesses around the world was an unparalleled shock to the global labor market. In the United States, approximately 10 million workers applied for unemployment benefits in the last two weeks of March alone. The unemployment rate rose from a 50-year low of 3.5% in February to 14.7% in April—the worst level since the Great Depression.

Investor sentiment, which had been strong in the second half of 2019, fell severely in March and April as equity markets sold-off and workers (most prominently within the leisure and hospitality sectors) were told not to come to work. Consumers exercised a notable degree of fiscal conservatism, paying down their credit card bills and paring back their spending. Retail sales generally plunged and then recovered. Household savings rates jumped as high as 33% as spending slowed and government support replaced lost income.

U.S. real GDP contracted sharply during the second quarter, falling at a 32.9% annualized rate, and was down 9.5% over the twelve-month period ended on June 30<sup>th</sup>. The slowdown consisted of decreased consumer spending, exports, inventory investment, fixed investment, as well as state and local government expenditures. Federal government spending partly offset the deceleration. While significant, this shock to the economy was in line with revised forecasts.

The size and pace of the shutdowns resulted in central bank intervention on a massive scale. The U.S. Federal Reserve Bank cut its target range for overnight loans between banks to near-zero and dusted off a variety of liquidity facilities left over from the Global Financial Crisis to help calm markets. The

SEATTLE | LOS ANGELES | SAN FRANCISCO | PITTSBURGH | [VERUSINVESTMENTS.COM](http://VERUSINVESTMENTS.COM)

Federal Reserve's balance sheet swelled from around \$4.7 trillion to \$7.2 trillion between the end of March and the beginning of June as the New York Fed's trading desk purchased massive amounts of U.S. Treasuries and mortgage-backed securities. Additionally, the Fed opened facilities allowing it to buy corporate debt through exchange traded funds.

The European Central Bank elected not to push rates further into negative territory as the pandemic hit. Instead, the ECB put together a €750 billion asset purchase program, which was eventually boosted in June to €1.35 trillion. The package will allow the ECB to keep borrowing costs low by buying bonds across jurisdictions until June 2021, or until it believes the crisis is over.

#### U.S. Equity

U.S. stocks led risk assets higher during the first half of the fiscal year, with the S&P 500 Index returning 10.9% over the six months ending in December. As COVID-19 began to course through the U.S. in the first quarter of calendar-year 2020, the index plunged 33.8% between February 19<sup>th</sup> and March 23<sup>rd</sup> before rebounding strongly in the second quarter. Due to the nature of the crisis, investors piled into mega-cap technology stocks, which powered the rise in both the S&P 500 and NASDAQ 100 indices. By the end of the fiscal year on June 30<sup>th</sup> the S&P 500 had reached 3,100—placing the index within 10% of the February high water mark of 3,386.

After this roller-coaster ride of historical proportions, the S&P 500 Index finished the fiscal year with a respectable 7.5% full-period return, outperforming both developed and emerging market equities (in USD terms).

#### International Equity

By contrast, international developed market equities lagged behind US stocks during the first half of the fiscal year, with the MSCI World ex US Index posting a 6.9% return. The index then fell further than did the S&P 500 during the first quarter of 2020, and rebounded less strongly in the second quarter, thus finishing the fiscal year in negative territory (-5.4%, in USD terms).

Similarly, the MSCI Emerging Markets Index returned -3.4% over the full fiscal year. China (MSCI China Index +13.1%) supported emerging market equity performance substantially, likely due to having moved into the recovery phase relatively quickly. Additionally, massive intervention from the People's Bank of China and the tech-concentration of the Chinese equity universe provided further support. More broadly, the Asian segment of the emerging markets complex (MSCI EM Asia +4.9%) diverged materially from the Latin American component (MSCI EM Latin America -32.5%). While some of the divergence was driven by differences in sector composition, Latin American emerging markets faced much more significant currency depreciation relative to the dollar—an important story during the first half of the year. The J.P. Morgan Emerging Market Currency Index, a basket of ten emerging market currencies, depreciated roughly -14% relative to the dollar, presenting material headwinds for U.S. investors in emerging market equities.

#### Fixed Income

Bonds rallied for much of the fiscal year, and ten-year Treasury yields fell from 2.01% to 0.66%, establishing fresh all-time closing lows of 0.54% along the way. Holding duration in portfolios provided a significant downside ballast during the crisis. The Bloomberg Barclays Long Duration Treasury Index returned 25.4%, topping the fixed income performance table over the one-year period. The rally in European sovereign bonds was more muted, as yields had less room to fall and the ECB preferred not to push their main deposit rate below -0.50%. Japanese government bonds largely moved sideways as the Bank of Japan left its yield curve control policy unchanged and

continued to manage 10-year Japanese government bond yields within 20 basis points of its 0.00% target.

Credit spreads jumped considerably in the first quarter of 2020, leading to poor performance in credit over the quarter. On March 23rd, the option-adjusted spreads of the Bloomberg Barclays Aggregate Corporate and Corporate High Yield indices topped out at 3.73% and 11.00%, respectively. From a sector perspective, stress in the energy market exacerbated the blowout in spreads as concerns over the crude oil outlook worked their way into debt pricing. In the second quarter, however, as corporate credit facilities announced by the Fed in March became operational, spreads fell—back down to 6.26% for high yield credit and 1.50% for investment grade credit—resulting in a performance comeback. Over the fiscal year, investment-grade credit posted performance of 9.5% while high-yield credit underperformed, returning 0.0%.

Local-currency denominated emerging market debt (J.P. Morgan GBI-EM Global Diversified Index - 2.8%) underperformed risky U.S. credit, while dollar-denominated emerging market debt (J.P. Morgan EMBI Global Diversified Index +0.8%) fared slightly better.

#### PLAN INVESTMENT RESULTS

The San Mateo County Employees' Retirement Association (the Association) total Plan returned -0.2% net of fees for the fiscal year ended 6/30/20. The total Plan underperformed its policy index which returned 1.6% for this time period. For the fiscal year, the total Plan ranked in the 79th percentile for Public Fund Defined Benefit Plans greater than \$1 billion. SamCERA has positioned itself as a more conservative Plan than most of the peer group, most notably by having lower equity exposure in the portfolio. The biggest positive drivers of fiscal year performance for the Plan on an absolute basis came from Private Equity followed by Core Fixed Income. Public Real Assets and Absolute Return investments were the notable detractors for the fiscal year.

The U.S. Equity portfolio underperformed its U.S. equity policy benchmark on a net of fee basis during the fiscal year (2.3% versus 6.5% for the composite benchmark, respectively), which placed it in the 65<sup>th</sup> percentile of the peer universe. Within U.S. Equity, SamCERA's low volatility large cap managers and quantitative, factor-based small cap manager underperformed their respective benchmarks and detracted the most within the asset class. During a year where the value factor continued to underperform significantly, the quantitative small cap manager experienced ongoing stylistic headwinds. Similarly, during a fiscal year where sector performance diverged tremendously with information technology outpacing all other sectors at 35.9% for the fiscal year return, the low volatility approach which underweights technology in its portfolio underperformed the broad benchmark. On the positive side, SamCERA's passive Russell 1000 manager matched the benchmark and ranked in the top quartile during the fiscal year.

During the fiscal year, the International Equity Composite outperformed its composite benchmark on a relative basis, returning -1.6% net of fees compared to -3.1% for the MSCI ACWI ex-US IMI Index (50% hedged). This result ranked in the 28<sup>th</sup> percentile of the peer group. There was a large divergence between absolute performance for the Plan's active international growth manager and international value manager (12.3% vs. -12.9% for the fiscal year, respectively) due to the ongoing dispersion between growth and value returns, but both managers exceeded their benchmarks over this time period. The Plan's emerging markets portfolio underperformed its benchmark significantly for the fiscal year (-12.8% vs. -3.0% for the MSCI Emerging Markets Index) because of the manager's structural underweight to China which hurt returns as the Chinese market rebounded more quickly than most countries post-COVID. Following the fiscal year, the Plan terminated its dedicated emerging markets



manager and instead added emerging markets as a component of its passive international mandate (MSCI ACWI ex-US IMI Index) and across its active managers.

For the fiscal year, the Plan's Total Fixed Income Composite net return of 4.4% lagged the Blended Fixed Income benchmark return of 6.4% during a period where higher quality fixed income outperformed lower quality fixed income on an absolute basis (fiscal year returns of 7.7% for core fixed income, -2.0% for opportunistic fixed income and 1.3% for private credit). On a relative basis, SamCERA's managers in the core fixed income composite outperformed their respective benchmarks. But the composite underperformed the Bloomberg Barclays Aggregate Index (BB Agg) due to more defensive positioning compared to the BB Agg. The Plan added to core fixed income as a result of its asset-liability study, and SamCERA hired a securitized manager and an additional core bond manager during the fiscal year. Within opportunistic fixed income, its securitized and flexible credit managers were positive contributors, whereas its global fixed income and high yield corporate focused managers detracted. During the second half of the fiscal year, SamCERA added an opportunistic fixed income manager that invests in dislocation opportunities. Private credit was ahead of its benchmark for the fiscal year (1.3% vs. -6.1% for the Cliffwater Direct Lending Index). SamCERA continued to add to its private credit portfolio during the fiscal year.

SamCERA's Risk Parity component of the portfolio underperformed its benchmark during the fiscal year (-5.0% net of fees versus 4.6% for the 60% MSCI World/40% Bloomberg Barclays Global Aggregate blended benchmark). Following SamCERA's asset-liability study, the Plan decided to eliminate risk parity from the portfolio with the transition completed around the end of the fiscal year.

SamCERA's Alternatives portfolio, comprised of Private Equity and Absolute Return strategies, outperformed for the year ended June 30, 2020 (2.5% versus 0.0% for the composite benchmark). The Private Equity portfolio outperformed on a time-weighted basis (16.0%) versus the Russell 3000 + 3% 1 quarter lagged index (-6.1%). The Absolute Return composite returned -12.7% compared to 5.4% for London Interbank Offered Rate (LIBOR) + 4%. Over the fiscal year, SamCERA terminated an alternative beta manager that had been underperforming significantly and added two absolute return managers with the goal of improving performance and diversifying the manager structure. In the coming fiscal year, the Plan will continue to incrementally add to this part of the portfolio.

Over the fiscal year, SamCERA's Inflation Hedge portfolio, comprised of real estate, private real assets, a liquid real asset pool (publicly listed infrastructure, commodities, natural resources, and now TIPS) returned -10.5% compared to -6.7% for the blended Inflation Hedge index. The Real Estate component provided a positive return of 2.4% for the fiscal year which was ahead of the National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity (NCREIF ODCE) Index (2.2%). The Plan continues to diversify its real estate exposure. The liquid real asset pool, a liquid proxy used as a funding vehicle for private real assets declined significantly during the fiscal year (-25.4% vs. -15.3% for the blended benchmark). SamCERA's midstream energy manager was a significant detractor that was ultimately terminated over the fiscal year. During the fiscal year, the Plan eliminated its discreet TIPS portfolio and added it as a component of the liquid pool. Over the period, private real assets declined -8.1% which was ahead of its benchmark on a relative basis (-24.8%).

#### ASSET ALLOCATION AND MANAGER STRUCTURE

Over the fiscal year ended 6/30/20, the Plan reaffirmed its actuarial rate of return to 6.5%. SamCERA completed an asset-liability study during the period with the goal of continuing to reduce equity volatility while maintaining a portfolio structure designed to provide long-term sustainability. The

resulting asset allocation eliminated Risk Parity and reduced Inflation Hedge by 3%. Diversifying assets increased by 8% and Growth assets increased by 3%.

In summary, SamCERA continues to follow an investment strategy focused on balance and the importance of risk-adjusted returns. By design, the portfolio has return-seeking and capital preservation elements to ensure Plan sustainability and meet its future obligations. The Plan is preparing for its maturing demographics and, for that reason, is increasingly cognizant about volatility reduction and cash flow improvement. We remain confident in the direction of the portfolio given SamCERA's unique objectives, fiscal strength and well-designed investment strategy.

Sincerely,



Margaret S. Jadallah

## **INVESTMENT PHILOSOPHY, OBJECTIVES, POLICY, AND ALLOCATION**

---

San Mateo County Employees' Retirement Association's (SamCERA) 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](http://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 or 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. Achieve a fund return that meets or exceeds the long-term forecast of capital market returns for the asset allocation portfolio benchmark over multiple economic cycles (e.g., 15-20 years).

- C. Provide a more consistent return stream than a traditional 60% Equity/40% Fixed Income portfolio as measured by lower portfolio drawdowns over a full market cycle.

### **Investment Policy**

The Investment Policy of the Board 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.
- 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.

## INVESTMENT SUMMARY

The investment summary reports the fair value and the percentage of the portfolio’s total fair value for each major type of investment.

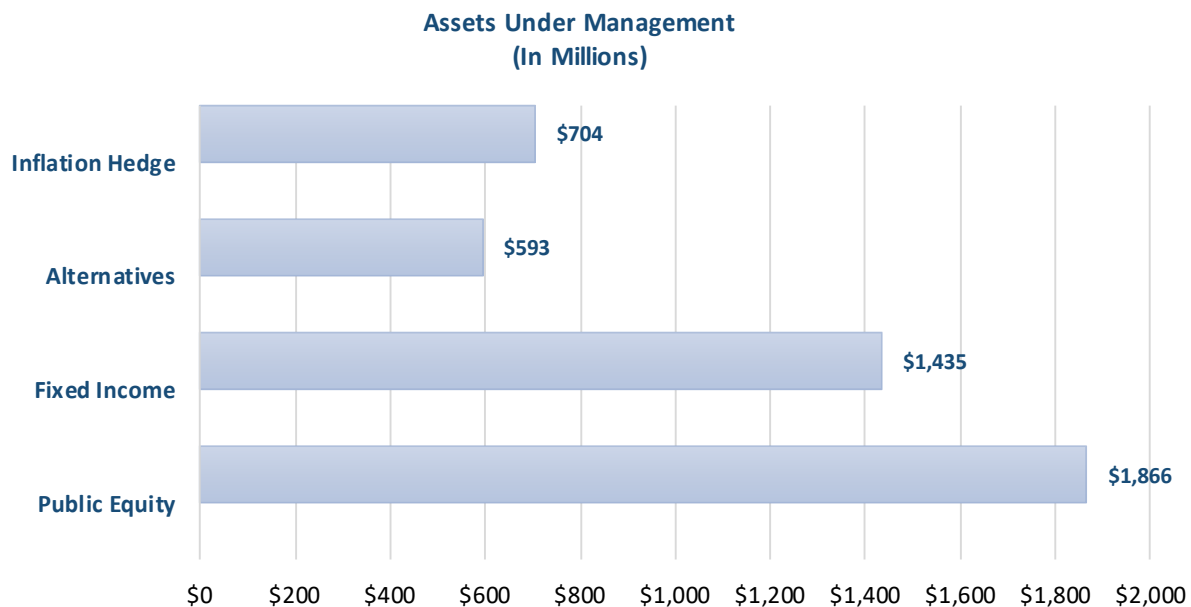
### INVESTMENT SUMMARY

As of June 30, 2020

<b>ASSET CLASS</b>	<b>Assets Under Management</b>
Public Equity	\$ 1,866,264,297
Fixed Income	1,434,811,710
Alternatives	593,379,227
Inflation Hedge	704,360,824
<b>Total Net Portfolio Value</b>	<b><u>\$ 4,598,816,058</u></b>

### **RECONCILIATION TO STATEMENT OF FIDUCIARY NET POSITION**

Total Net Portfolio Value	\$ 4,598,816,058
Cash Equivalents	164,508,785
Receivables	95,960,277
Capital Assets, Net of Depreciation	5,209,398
Payables	(83,992,205)
<b>Fiduciary Net Position as of June 30, 2020</b>	<b><u>\$ 4,780,502,313</u></b>



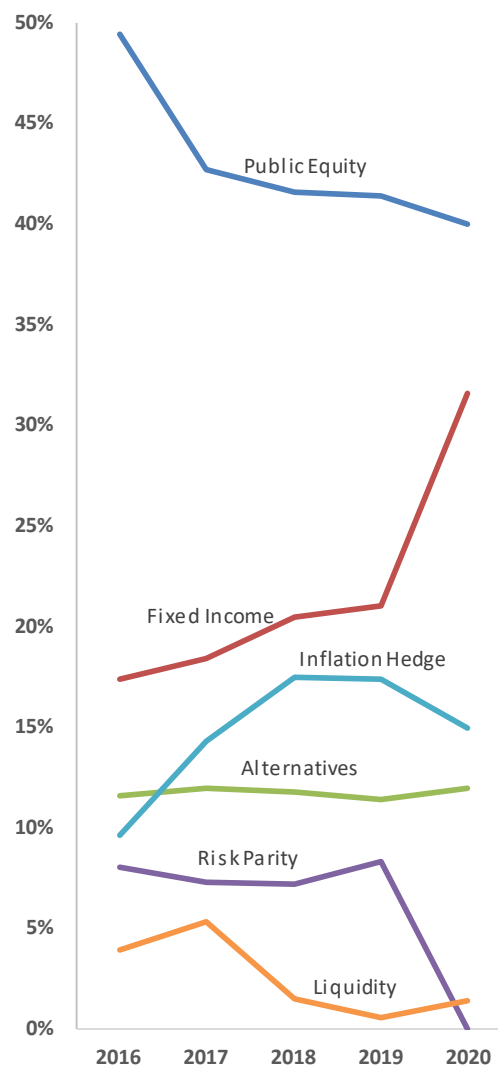
## ASSET ALLOCATION

### ASSETS ALLOCATION AS A PERCENTAGE OF FAIR VALUE

As of June 30, 2020

Asset Class	Target Policy as of June 30, 2020	New Policy Effective July 1,	Actual as of June 30, 2020
Public Equity	40%	39%	40.0%
Fixed Income	26%	31%	31.6%
Alternatives	12%	12%	12.0%
Inflation Hedge	17%	17%	15.0%
Liquidity	1%	1%	1.4%
Risk Parity	4%	0%	0.0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

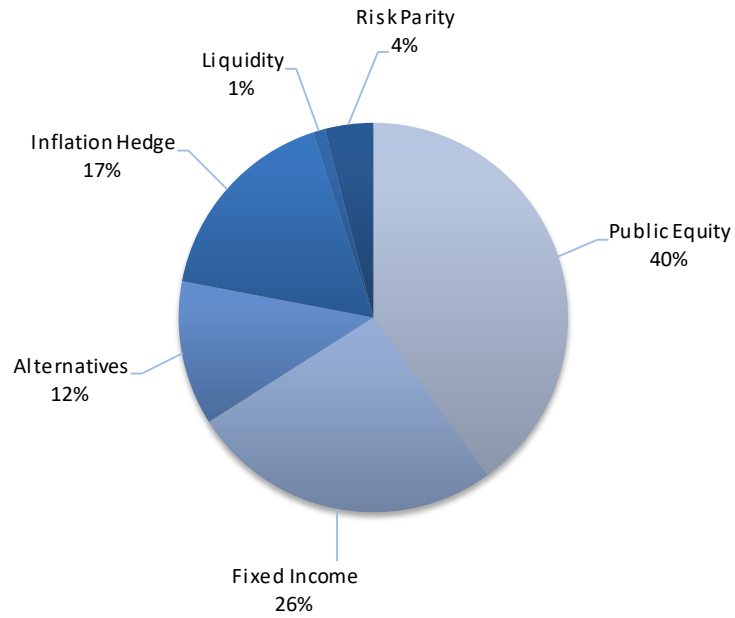
Investment	Target Policy as of June 30, 2020	New Policy Effective July 1, 2020	Actual as of June 30, 2020
<b>Growth</b>	<b>54%</b>	<b>55%</b>	<b>57.2%</b>
Public Equity	40%	39%	40.0%
Private Equity	6%	6%	6.4%
Opportunistic Credit	8%	10%	10.8%
<b>Diversifying</b>	<b>25%</b>	<b>28%</b>	<b>27.8%</b>
Core Fixed Income	18%	21%	20.8%
Absolute Return	6%	6%	5.6%
Liquidity	1%	1%	1.4%
<b>Inflation Hedge</b>	<b>17%</b>	<b>17%</b>	<b>15.0%</b>
Real Estate	9%	10%	9.1%
Private Real Assets	2%	3%	1.9%
Public Real Assets	6%	4%	4.0%
<b>Risk Parity</b>	<b>4%</b>	<b>0%</b>	<b>0.0%</b>
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>



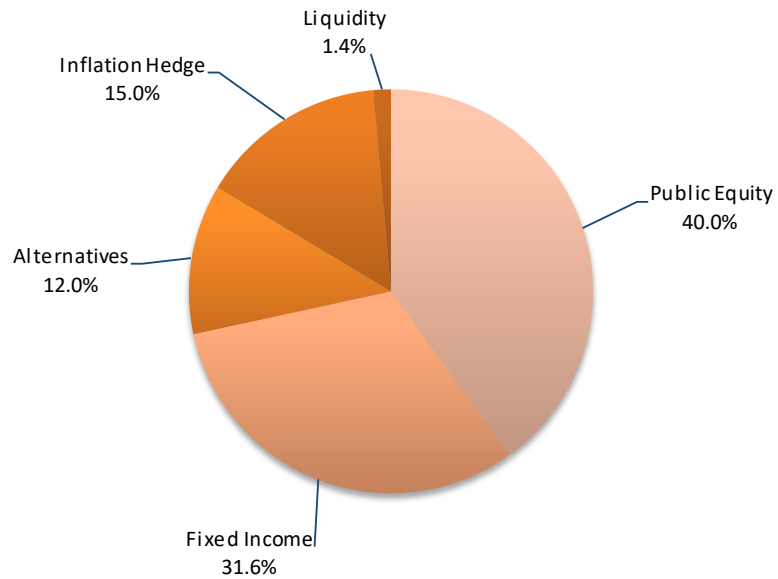
Note 1: The target allocation as of June 30, 2020, reflects an “interim” policy allocation, the portion of the newly adopted allocation that has already been implemented.

Note 2: The actual asset allocation figures presented in this section reflect the fair value and economic exposure of the plan as of fiscal year-end, and include the allocation effects of the cash overlay and currency hedge programs. There may be differences between these figures and the fair values presented in the Statement of Net Fiduciary Position due to timing and the allocation effects of the cash overlay and currency hedge programs.

**Asset Allocation (Target Policy)**  
As of June 30, 2020

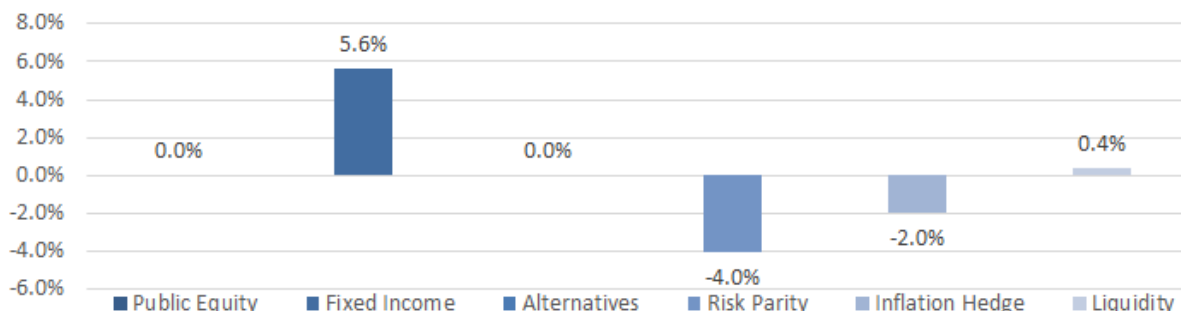


**Actual Asset Allocation**  
As of June 30, 2020



**PERCENT OF DEVIATION FROM ASSET ALLOCATION**

As of June 30, 2020



**BENCHMARKS**

As of June 30, 2020

Asset Class	Policy Benchmark
<b>Public Equity</b>	
Domestic Equity	55% Russell 3000
International Equity	22.5% Morgan Stanley Capital International ex-United States Investable Market Indexes (MSCI ex-US IMI)
	22.5% Morgan Stanley Capital International ex-United States Investable Market Indexes (MSCI ex-US IMI) 100% Hedged
<b>Fixed Income</b>	
Domestic Fixed Income	69.2% Bloomberg Barclays Aggregate (BBgBarc)
Opportunistic Credit	30.8% BBgBarc Intermediate High Yield (HY)
<b>Alternatives</b>	
Private Equity	50% Russell 3000 + 3% (1-quarter lag)
Hedge Funds/Absolute Return	50% London Interbank Offered Rate (LIBOR) + 4%
<b>Risk Parity <sup>(1)</sup></b>	
	60% Morgan Stanley Capital International World
	40% BBgBarc Global Aggregate
<b>Inflation Hedge</b>	
Real Estate	52.94% National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity (NCREIF ODCE)
Private Real Asset	11.77% Blend: 50% Standard & Poor (S&P) Global Large-MidCap Commodity and Resource + 50% S&P Global Infrastructure + 2% (1-quarter lag)
Public Real Asset	8.83% Bloomberg Roll Select Commodity
	8.82% Standard & Poor (S&P) Global Large-MidCap Commodity and Resource
	8.82% S&P Global Infrastructure
	8.82% Barclays Treasury Inflation Protected Securities (TIPS)
<b>Cash Equivalents</b>	
	91-day Treasury-Bills

<sup>(1)</sup> Investment in Risk Parity was completely removed before June 30, 2020, in accordance with the newly adopted Asset Allocation Policy in October 2019.



**SCHEDULE OF PORTFOLIO RETURNS**

Performance as of June 30, Net of Fees

Asset Class	Total Time-Weighted Rate of Return <sup>(7)</sup>		
	One Year	Three Years	Five Years
<b>Public Equity</b>	<b>0.5%</b>	<b>5.3%</b>	<b>6.3%</b>
Public Equity Benchmark	2.1%	6.2%	6.8%
Domestic Equity	2.3%	8.1%	8.5%
Domestic Equity Benchmark	6.5%	10.0%	9.9%
International Equity	-1.6%	2.1%	3.3%
International Equity Benchmark	-3.1%	1.6%	2.9%
<b>Fixed Income</b>	<b>4.4%</b>	<b>4.0%</b>	<b>4.3%</b>
Fixed Income Benchmark	6.4%	4.9%	4.5%
Core Fixed Income	7.7%	4.7%	4.4%
Core Fixed Income Benchmark	8.7%	5.3%	4.3%
Opportunistic Credit	-2.0%	2.8%	4.6%
Opportunistic Credit Benchmark	3.2%	4.3%	5.1%
<b>Alternatives</b>	<b>2.5%</b>	<b>3.3%</b>	<b>5.1%</b>
Alternatives Benchmark	0.0%	6.4%	6.5%
Private Equity <sup>(1)</sup>	16.9%	13.7%	14.4%
Private Equity Benchmark	-6.1%	6.0%	8.8%
Hedge Funds/Absolute Return	-12.7%	-7.5%	-2.4%
Hedge Funds/Absolute Return Benchmark	5.4%	5.8%	5.3%
<b>Risk Parity <sup>(2)</sup></b>	<b>-5.0%</b>	<b>3.9%</b>	<b>4.3%</b>
Risk Parity Benchmark	4.6%	6.4%	6.9%
<b>Inflation Hedge <sup>(3)</sup></b>	<b>-10.5%</b>	<b>-0.7%</b>	<b>*</b>
Inflation Hedge Benchmark	-6.7%	1.6%	*
Real Estate <sup>(4)</sup>	2.4%	5.7%	7.3%
Real Estate Benchmark	2.2%	5.7%	7.3%
Private Real Asset <sup>(5)</sup>	-8.1%	-6.7%	2.9%
Private Real Asset Benchmark	-24.8%	-6.2%	-1.6%
Public Real Assets <sup>(6)</sup>	-25.4%	-6.6%	*
Public Real Assets Benchmark	-15.3%	-2.0%	*
<b>Cash Equivalents</b>	<b>0.9%</b>	<b>1.1%</b>	<b>1.1%</b>
Cash Equivalents Benchmark	1.3%	1.7%	1.1%
<b>Total</b>	<b>-0.2%</b>	<b>3.9%</b>	<b>4.9%</b>
Policy Benchmark	1.6%	5.3%	5.9%

(1) The 1-year Private Equity return does not include \$32 million in stock distributions received towards the end of the fiscal year.

(2) The Board of Retirement approved the removal of the target allocation to Risk Parity at its October 29, 2019 board meeting.

(3) The creation of a dedicated Inflation Hedge asset class was effective April 1, 2016.

(4) Prior to April 1, 2016, Real Estate assets were allocated to SamCERA's allocation to a dedicated Real Estate asset class.

(5) Prior to April 1, 2016, Private Real Assets were allocated as part of SamCERA's allocation to Alternatives.

(6) The dedicated Public Real Assets were funded October 2016.

(7) Return calculations were prepared using a time-weighted rate of return, net of fees, in accordance with the Global Investment Performance Standards.

\* Return information is not available.

**SCHEDULE OF TOP TEN EQUITIES <sup>(1)</sup>**

As of June 30, 2020

<b>Shares</b>	<b>Company Name</b>	<b>Fair Value</b>
179,394	Microsoft Corp	\$ 26,805,074
97,975	Apple Inc	26,241,733
10,157	Amazon	20,573,300
57,524	Facebook Inc	9,590,324
7,189	Alphabet Inc Class A	7,485,320
7,099	Alphabet Inc Class C	7,368,540
63,159	Johnson & Johnson	6,521,308
46,691	Berkshire Hathaway Inc	6,119,520
40,447	Visa Inc	5,736,664
58,368	Procter & Gamble	5,124,179
	<b>Total Top 10 Equities</b>	<b><u>\$ 121,565,962</u></b>

<sup>(1)</sup> Securities owned in active commingled vehicles are not included in this schedule. A complete list of portfolio holdings in SamCERA separately held accounts is available upon request.

**SCHEDULE OF TOP TEN FIXED INCOME SECURITIES <sup>(1)</sup>**

As of June 30, 2020

<b>Security</b>	<b>Coupon</b>	<b>Maturity</b>	<b>Fair Value</b>
US Treasury	1.250	5/15/2050	\$ 22,247,794
US Treasury	2.000	2/15/2050	9,018,720
Federal Home Ln Mtg Corp Pool	3.000	12/1/2046	5,750,879
FNMA Pool	2.440	3/1/2032	5,649,619
FNMA REMIC TR 2018-64	3.000	9/25/2048	4,849,190
US Treasury	2.250	4/15/2022	4,552,739
Nationstar Home FL TG RT	0.455	9/25/2036	4,431,689
FNMA Pool	2.510	11/1/2034	4,357,831
FNMA Pool	2.450	10/1/2029	4,295,891
FNMA Pool	2.500	5/1/2040	4,135,768
	<b>Total Top 10 Fixed Income</b>		<b><u>\$ 69,290,120</u></b>

<sup>(1)</sup> Securities owned in active commingled vehicles are not included in this schedule. A complete list of portfolio holdings in SamCERA separately held accounts is available upon request.

## LIST OF INVESTMENT MANAGERS

---

As of June 30, 2020

### GROWTH

---

#### Domestic Equity

BlackRock  
DE Shaw  
Quantitative Management Associates  
Acadian Asset Management  
PanAgora Asset Management

#### International Equity

Baillie Gifford  
BlackRock  
Mondrian Investment Partners

#### Private Equity

ABRY Partners  
Altas Partners  
Angeles Equity Partners  
Bernhard Capital Partners  
CapVest Equity Partners  
Catalyst Fund  
Cevian Capital  
Emergence Capital Partners  
General Catalyst Partners  
Great Hill Partners  
JLL Partners  
New Enterprise Associates  
Oak Hill Advisors  
Sycamore Partners  
TCW  
Third Rock Ventures  
Warburg Pincus

#### Opportunistic Credit

Angelo Gordon  
Beach Point Capital Management  
BlackRock  
Brigade Capital Management  
Franklin Templeton  
PIMCO  
Tennenbaum Capital Partners  
White Oak

### DIVERSIFYING

---

#### Fixed Income

BlackRock  
DoubleLine Capital  
Fidelity Institutional Asset Management  
NISA Investment Advisors  
Western Asset Management

#### Absolute Return

Aberdeen Standard Investments  
Graham Capital Management  
PIMCO

### INFLATION HEDGE

---

#### Public Real Assets

State Street Global Advisors

#### Real Estate

Harrison Street  
Invesco  
PGIM

#### Private Real Assets

Blue Road Capital  
Brookfield  
CIM Group  
EnCap Investments  
EQT Fund Management  
EverStream Energy Capital Management  
LS Power  
Quantum Energy Partners  
Taurus Funds Management

### CASH OVERLAY AND CURRENCY HEDGE

---

Parametric Portfolio Associates

**SCHEDULE OF PROFESSIONAL SERVICES AND FEES**

For the Fiscal Year Ended June 30, 2020

	<b>Management Fees</b>	<b>Fair Value</b>
<b>ASSETS UNDER MANAGEMENT</b>		
Public Equity	\$ 3,970,230	\$ 1,866,264,297
Fixed Income	5,109,760	1,434,811,710
Alternatives	3,344,410	593,379,226
Risk Parity	1,057,423	-
Inflation Hedge	4,137,511	704,360,824
Cash Overlay and Currency Hedge	276,020	54,095,321
<b>Total</b>	<b>\$ 17,895,354</b>	<b>\$ 4,652,911,378</b>
<b>OTHER INVESTMENT EXPENSES</b>		
Investment Consultant	\$ 494,241	
Actuarial Consulting	178,108	
Master Custodian	352,364	
Other Professional Services	65,072	
<b>Total</b>	<b>\$ 1,089,785</b>	

**TOP 10 BROKER COMMISSIONS**

Commission per Share Traded, For the Fiscal Year Ended June 30, 2020

<b>Brokerage Firm</b>	<b>Amount of Commission</b>	<b>Number of Shares Traded</b>	<b>Commission per share</b>
Morgan Stanley	\$ 44,983	1,126,176	0.04
BOFA Securities, Inc	41,094	1,097,613	0.04
Raymond James & Associates, Inc	26,726	668,163	0.04
JP Morgan Securities LLC/JPMC	22,613	4,318,494	0.01
RBC Capital Markets, LLC	14,726	30,491,820	0.00
Cantor Fitzgerald	12,410	310,264	0.04
Goldman Sachs & Co	10,479	680,226	0.02
Stifel, Nicolaus & Co	7,280	182,009	0.04
Merrill Lynch International	6,490	1,850,383	0.00
UBS AG London	4,957	642,379	0.01
All Other Brokerage Firms	91,527	2,525,575,137	0.00
<b>Total</b>	<b>\$ 283,285</b>	<b>2,566,942,664</b>	0.00

# ACTUARIAL SECTION





## ACTUARY'S CERTIFICATION

---



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

October 7, 2020

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 relatively 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 funding valuations is shown below:

Valuation Date	Funded Ratio
June 30, 2018	87.5%
June 30, 2019	85.8%
June 30, 2020	86.4%

The funded ratio increased in the last year due primarily to employer contributions to amortize the Unfunded Actuarial Accrued Liability (UAAL). This increase was partially offset by demographic experience different than assumed, the recognition of deferred investment losses, and salary and payroll increases greater than assumed.

It is our opinion that SamCERA continues in sound financial condition as of June 30, 2020 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. Under SamCERA's funding policy, the statutory employer's contributions are set equal to the employer normal cost rate plus the amortization payment of any 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 subsequent changes in the UAAL is funded over separate closed 15-year layers that are determined annually. This funding policy is projected to result in the funded ratio continuing to increase towards 100% over the next several years.

The June 30, 2020 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 that were reviewed and adopted by the Board. The economic and demographic assumptions were last reviewed in detail in the triennial investigation of experience study as of April 30, 2020 and adopted by the Board at its meeting on July 28, 2020.

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.



The assumptions and methods used for financial reporting under GASB 67 are the same as the funding assumptions and methods with the following exceptions:

1. The discount rate and investment return assumption of 6.67% differs from the funding valuation due to the addition of an administrative expense load of 0.17%.
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 using the entry age normal funding method. The actuarial value of assets used in the funding valuation is equal to the market value of assets with a five-year (10 six-month periods) recognition of the difference between expected and actual investment returns. Effective June 30, 2018 all deferred gains and losses were combined into a single amount and recognized over a five-year (10 six-month) period. Beginning with the six-month period immediately following June 30, 2018, offsetting of current period gains or losses against prior period gains or losses occur. The actuarial value of assets is restricted to vary no more than 20% from the market value. We believe the actuarial assumptions and methods are internally consistent and reasonable for their intended purpose. We further believe they meet the parameters of Governmental Accounting Standards Board Statement No. 67 and No. 68 for fulfilling financial accounting requirements. Nevertheless, the emerging costs, and future actuarial measurements, will vary from those presented in our valuation and GASB report due to many factors, including experience differing from that anticipated by the actuarial assumptions. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Our funding valuation report, GASB 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 notes to the financial statements, required supplementary information, other information, actuarial, and statistical sections.

1. Rate of separation from 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. Schedule of employer net pension liability
13. Schedule of changes in net pension liability and related ratios of participating employers
14. Schedule of employer pension amounts allocated by cost sharing plan
15. Schedule of cost sharing employer allocations

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.





The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel. The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

We certify that the assumptions and methods used for funding and financial reporting purposes in the June 30, 2020 funding and GASB valuations meet the parameters set by Actuarial Standards of Practice promulgated by the Actuarial Standards Board (ASB). We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Sincerely,

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

Nick J. Collier, ASA, EA, MAAA  
Consulting Actuary

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

Craig J. Glyde, ASA, EA, MAAA  
Consulting Actuary

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.

## ACTUARIAL VALUATION

---

### Introduction

San Mateo County Employees' Retirement Association (SamCERA) is a cost-sharing multiple-employer, defined benefit plan providing basic service retirement, disability, and survivor benefits to participating members. Details of the pension plan provisions are provided in the Financial Section under the Notes to the Basic Financial Statements (Note 1). Pension benefits are basically determined by a defined formula using final average compensation, years of service, and age of the member.

### Funding Policy

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 through the annual valuation of SamCERA's assets and liabilities. The contribution rates adopted by the Board are subsequently transmitted, in the form of a recommendation, to the San Mateo County's Board of Supervisors for adoption.

The participating employers and members are responsible for contributing to the cost of benefits each year (commonly known as normal cost). The portion of the normal cost 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 service arising from changes in the economic and demographic assumptions. The employers' contribution towards the funding shortfalls is commonly known as the Unfunded Actuarial Accrued Liability (UAAL) contribution.

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 rates from the County General Group.

### Valuation Objective

The purpose of the annual valuation is to determine employer and member contribution rates (as a level percentage of payroll) that are needed to pay all expected future benefits not funded by the current assets. Details for the ten year schedule of actuarially determined and actual contributions can be found in the Financial Section under the Required Supplementary Information.

### **Valuation Policy**

SamCERA engages an independent actuary consulting firm to perform an annual valuation of the retirement fund as of June 30. The actuarial valuation calculates the value of future benefits, assesses the funded status, and establishes contribution rates for participating employers and members. The actuary applies specific actuarial methods and assumptions to project as closely as possible present contributions to meet future benefit obligations in accordance with prevailing Actuarial Standard of Practice. The recommended contribution rates, after adoption, will be subject to a “one year” deferral. Thus, the new contribution rates determined in the June 30, 2020 valuation will become effective on July 1, 2021.

In addition to the annual valuation, SamCERA’s actuary reviews the reasonableness of the demographic and economic actuarial assumptions every three years (commonly referred to as an Experience Study). This review compares the actual experience during the preceding three years to the assumed experience according to the actuarial assumptions. Based on this review, the actuary recommends changes in the assumptions or methods that will better project benefits and liabilities.

### **Actuarial Cost Method**

The entry age normal cost method is used by the actuary 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. For funding purposes, this method was selected 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. For financial reporting purposes, Governmental Accounting Standards Board (GASB) Statement No. 67 requires that this method be used.

Between the funding and financial reporting valuations, the only difference in assumptions is the investment return assumption. The assumed investment return for funding is 6.50%, net of both investment and administrative expenses; whereas the assumed investment return for financial reporting is 6.67%, 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. Excess contributions are applied toward the UAAL if the fund is not fully funded. 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 dates.

### **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 (or 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.

All deferred gains and losses are combined into a single amount to be recognized over a 5-year (10 six-month) period. Gains or losses of the current period will be used to offset any unrecognized gains or losses from prior periods, to the extent possible, in the order of oldest to most recent. Any remaining gain or loss for the period is recognized over a 5-year (10 six-month) period.

Assets used to calculate the preliminary UAAL contribution rates exclude the values of the County Supplemental Contribution Account (CSCA) and the District Supplemental Contribution Account (DSCA). Balances in these two accounts are separately tracked and systematically recognized to reduce the statutory contribution rates. The balance in the CSCA is amortized using a similar closed amortization method described above to determine the offset amounts towards the County’s UAAL rate. The balance in the DSDA is amortized over five years effective June 30, 2018, with the offset amounts towards the District’s UAAL rate. Any future layers are amortized over new five-year periods, and the total DSCA offset amount in a given year is limited to the District’s UAAL rate.

### **Actuarial Assumptions**

The annual valuation uses two sets of assumptions: economic and demographic. The assumptions selected are used to estimate the actuarial cost of the pension plan and to determine the present contributions necessary to meet the pension benefits in the future.

- Economic assumptions are generally evaluated and revised annually based on the latest information available.
- Demographic assumptions utilize the information from the latest “Investigation of Experience” study conducted by an independent auditing actuary every three years (Triennial Experience Study). This study reviews both economic and demographic data with in-depth examination of the experience of the membership for the past three years.

The actuary also uses these assumptions 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 earnings. Any variations in future experience from these assumptions will result in corresponding changes in the estimated costs of SamCERA's benefits.

In July 2019, the Board accepted the actuary's recommendation reducing the investment return assumption to 6.50% for the June 30, 2019 valuation, compared to the 6.75% used in the June 30, 2018 valuation.

In June 2020, the Board adopted the actuary's recommendation using the same economic assumptions previously adopted in July 2019 for the June 30, 2020 valuation. The assumptions include: general wage increase, investment return, and price inflation.

### **Key Economic Assumptions**

**General Wage Growth.** The assumed rate of annual wage increase is 3.00%.

**Investment Return.** The future investment earnings of SamCERA's assets are accrued at an annual rate of 6.50% compounded annually (3.25% per six-month period), net of both investment and administrative expenses.

**Consumer Price Index Inflation.** The assumed rate of inflation is 2.50%.

**General Wage Increase.** The projected payroll increase is 3.00%.

### **Key Demographic Assumptions**

**Salary Increases due to Service.** The projected annual increase in the salary assumption is due to promotion and longevity, which varies depending on a member's years of service, adjusted for the assumed 3.00% annual increase in the general wage.

**Retirement.** The retirement rates vary by age. All General members at age 75 and all Safety members at 65 are assumed to retire immediately. Additionally, when a member's benefit is equal to or greater than the 100% of compensation limit, the member is also assumed to retire immediately.

### **Mortality for Active and Service Retired Members**

- Mortality rates for all active members are projected using the MP-2014 Ultimate Projection Scale and mortality improvement scale developed for this specific group.
- Mortality rates for all retired members, except for those retired on disability are projected using the MP-2014 Ultimate Projection Scale and mortality improvement scale developed for this specific group.

#### Mortality for Retired Disabled Members

- Mortality rates for all retired, disabled members are projected using the MP-2014 Ultimate Projection Scale and mortality improvement scale developed for this specific group.

#### Mortality for Deferred Member

- Mortality rates for all deferred members are projected using the same method as the retired members other than disabled members.

**Separation from Active Status.** The probabilities of termination of employment due to the causes stated below are presented on pages 123-124. Each rate shown on these pages represents the probability that a member will separate from service at each age due to a 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.

Separation from active status can be due to one of the following reasons:

- **Service Retirement:** Member retires after meeting age and service requirements for reasons other than disability.
- **Withdrawal:** Member terminates employment 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.

**ACTUARIAL METHODS AND ASSUMPTIONS (FOR FUNDING PURPOSES)**

---

<b>VALUATION DATE</b>	June 30, 2020
<b>ACTUARIAL COST METHOD</b>	Entry Age Normal Cost
<b>ACTUARIAL EXPERIENCE STUDY</b>	July 1, 2017 to April 30, 2020
<b>AMORTIZATION METHOD</b>	Level percentage of projected payroll
<b>AMORTIZATION PERIOD</b>	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.
<b>ASSET VALUATION METHOD</b>	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.
<b>ACTUARIAL ASSUMPTIONS</b>	
<b>Economic assumptions:</b>	
General wage increases	3.00%
Investment rate of return	6.50%
Growth in Active membership	0.00%
CPI-U inflation	2.25%
CPI inflation	2.50%
<b>Demographic assumptions:</b>	
Salary increases due to service	See 2020 actuarial valuation report for details
Retirement from active service	See 2020 actuarial valuation report for details
Disability from active service	See 2020 actuarial valuation report for details
Mortality for active members prior to termination	See 2020 actuarial valuation report for details
Other terminations of employment	See 2020 actuarial valuation report for details
Probability of refund of contributions upon vested information	See 2020 actuarial valuation report for details
Mortality for active members after termination and service retired members	See 2020 actuarial valuation report for details
Mortality for members retired for disability	See 2020 actuarial valuation report for details
Mortality for beneficiaries	See 2020 actuarial valuation report for details

Note: The actuarial methods and assumptions were selected by the Retirement Board with the recommendation of the actuary.

**RATE OF SEPARATION FROM ACTIVE SERVICE - ALL PLANS**

Years of Service	Other Terminations		Age	Disability		Death while Active		Service Retirement
	Ordinary <sup>1</sup>	Vested		Ordinary	Service	Ordinary	Service	
<b>General Plan 1, 2, &amp; 4 Male Members</b>								
0	0.15000	0.00000	20	0.00020	0.00036	0.00037	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00036	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00066	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00149	0.00000	0.03000
20	0.00285	0.01615	60	0.00169	0.00313	0.00319	0.00000	0.15000
30 & Above	0.00000	0.00000	75	N/A	N/A	N/A	N/A	1.00000
<b>General Plan 1, 2, &amp; 4 Female Members</b>								
0	0.15000	0.00000	20	0.00020	0.00036	0.00013	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00015	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00036	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00083	0.00000	0.03000
20	0.00285	0.01615	60	0.00169	0.00313	0.00186	0.00000	0.15000
30 & Above	0.00000	0.00000	75	N/A	N/A	N/A	N/A	1.00000
<b>General Plan 3 Male Members</b>								
0	0.15000	0.00000	20	0.00000	0.00000	0.00037	0.00000	0.00000
5	0.06700	0.00000	30	0.00000	0.00000	0.00036	0.00000	0.00000
10	0.00000	0.04100	40	0.00000	0.00000	0.00066	0.00000	0.00000
15	0.00000	0.02900	50	0.00000	0.00000	0.00149	0.00000	0.00000
20	0.00000	0.01900	60	0.00000	0.00000	0.00319	0.00000	0.03000
30 & Above	0.00000	0.01000	75	N/A	N/A	N/A	N/A	1.00000
<b>General Plan 3 Female Members</b>								
0	0.15000	0.00000	20	0.00000	0.00000	0.00013	0.00000	0.00000
5	0.06700	0.00000	30	0.00000	0.00000	0.00015	0.00000	0.00000
10	0.00000	0.04100	40	0.00000	0.00000	0.00036	0.00000	0.00000
15	0.00000	0.02900	50	0.00000	0.00000	0.00083	0.00000	0.00000
20	0.00000	0.01900	60	0.00000	0.00000	0.00186	0.00000	0.04000
30 & Above	0.00000	0.01000	75	N/A	N/A	N/A	N/A	1.00000
<b>General Plan 5 Male Members</b>								
0	0.15000	0.00000	20	0.00020	0.00036	0.00037	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00036	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00066	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00149	0.00000	0.02400
20	0.00285	0.01615	60	0.00169	0.00313	0.00319	0.00000	0.12000
30 & Above	0.00000	0.00000	75	N/A	N/A	N/A	N/A	1.00000
<b>General Plan 5 Female Members</b>								
0	0.15000	0.00000	20	0.00020	0.00036	0.00013	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00015	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00036	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00083	0.00000	0.02400
20	0.00285	0.01615	60	0.00169	0.00313	0.00186	0.00000	0.12000
30 & Above	0.00000	0.00000	75	N/A	N/A	N/A	N/A	1.00000
<b>General Plan 7 Male Members</b>								
0	0.15000	0.00000	20	0.00020	0.00036	0.00037	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00036	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00066	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00149	0.00000	0.02400
20	0.00285	0.01615	60	0.00169	0.00313	0.00319	0.00000	0.12000
30 & Above	0.00000	0.01000	75	N/A	N/A	N/A	N/A	1.00000

<sup>1</sup> Non-vested and/or refund of contributions.



**RATE OF SEPARATION FROM ACTIVE SERVICE - ALL PLANS (CONTINUED)**

Years of Service	Other Terminations		Age	Disability		Death while Active		Service Retirement
	Ordinary <sup>1</sup>	Vested		Ordinary	Service	Ordinary	Service	
<b>General Plan 7 Female Members</b>								
0	0.15000	0.00000	20	0.00020	0.00036	0.00013	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00015	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00036	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00083	0.00000	0.02400
20	0.00285	0.01615	60	0.00169	0.00313	0.00186	0.00000	0.12000
30 & Above	0.00000	0.01000	75	N/A	N/A	N/A	N/A	1.00000
<b>Safety and Probation Plan 1, 2 &amp; 4 Male Members</b>								
0	0.10000	0.00000	20	0.00000	0.00150	0.00041	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00041	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00059	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00120	0.00010	0.22500
20 & Above	0.00000	0.00000	65	N/A	N/A	N/A	N/A	1.00000
<b>Safety and Probation Plan 1, 2 &amp; 4 Female Members</b>								
0	0.10000	0.00000	20	0.00000	0.00150	0.00016	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00027	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00049	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00091	0.00010	0.22500
20 & Above	0.00000	0.00000	65	N/A	N/A	N/A	N/A	1.00000
<b>Safety and Probation Plan 5 &amp; 6 Male Members</b>								
0	0.10000	0.00000	20	0.00000	0.00150	0.00041	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00041	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00059	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00120	0.00010	0.18000
20 & Above	0.00000	0.00000	65	N/A	N/A	N/A	N/A	1.00000
<b>Safety and Probation Plan 5 &amp; 6 Female Members</b>								
0	0.10000	0.00000	20	0.00000	0.00150	0.00016	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00027	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00049	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00091	0.00010	0.18000
20 & Above	0.00000	0.00000	65	N/A	N/A	N/A	N/A	1.00000
<b>Safety and Probation Plan 7 Male Members</b>								
0	0.10000	0.00000	20	0.00000	0.00150	0.00041	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00041	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00059	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00120	0.00010	0.18000
20 & Above	0.00000	0.00500	65	N/A	N/A	N/A	N/A	1.00000
<b>Safety and Probation Plan 7 Female Members</b>								
0	0.10000	0.00000	20	0.00000	0.00150	0.00016	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00027	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00049	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00091	0.00010	0.18000
20 & Above	0.00000	0.00500	65	N/A	N/A	N/A	N/A	1.00000

<sup>1</sup> Non-vested and/or refund of contributions.

## SUMMARY OF SIGNIFICANT ACTUARIAL STATISTICS AND MEASURES

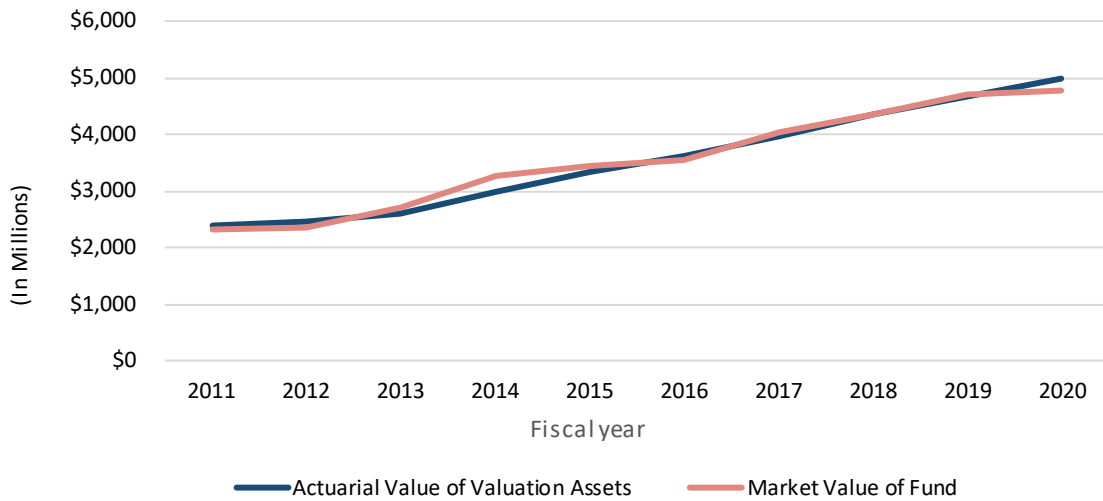
	June 30, 2020	June 30, 2019	Relative Change
<b>Active Members</b>			
Number of Members	5,400	5,377	0.4%
Average Age	45.0	45.1	(0.2)%
Average Credited Service	10.3	10.4	(1.0)%
Total Active Covered Payroll (\$ in Thousands)	\$593,295	\$554,734	7.0%
Average Monthly Salary	\$9,176	\$8,873	3.4%
<b>Retired Members</b>			
Number of Members			
Service Retirement	4,292	4,133	3.8%
Disability Retirement	506	487	3.9%
Beneficiaries	656	605	8.4%
Average Age	71.3	71.2	0.1%
Actual Retiree Benefits Paid (\$ in Thousands)	\$242,025	\$223,614	8.2%
Average Monthly Pension	\$3,865	\$3,731	3.6%
<b>Number of Inactive Members</b>	1,882	1,767	6.5%
<b>Assets</b>			
Market Value of Fund (\$ in Thousands)	\$4,780,502	\$4,723,110	1.2%
Return on Market Value	0.9%	6.2%	
Valuation Assets (\$ in Thousands)	\$4,998,316	\$4,685,502	6.7%
Return on Valuation Assets	6.2%	5.6%	
<b>Liability Values (\$ in Thousands)</b>			
Actuarial Accrued Liability	\$5,786,054	\$5,459,978	6.0%
Unfunded Actuarial Accrued Liability	\$787,738	\$774,476	1.7%
Deferred Asset (Gains) / Losses	\$268,302	\$9,720	
<b>Funded Ratio</b>			
Based on valuation assets	86.4%	85.8%	0.6%

### 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.

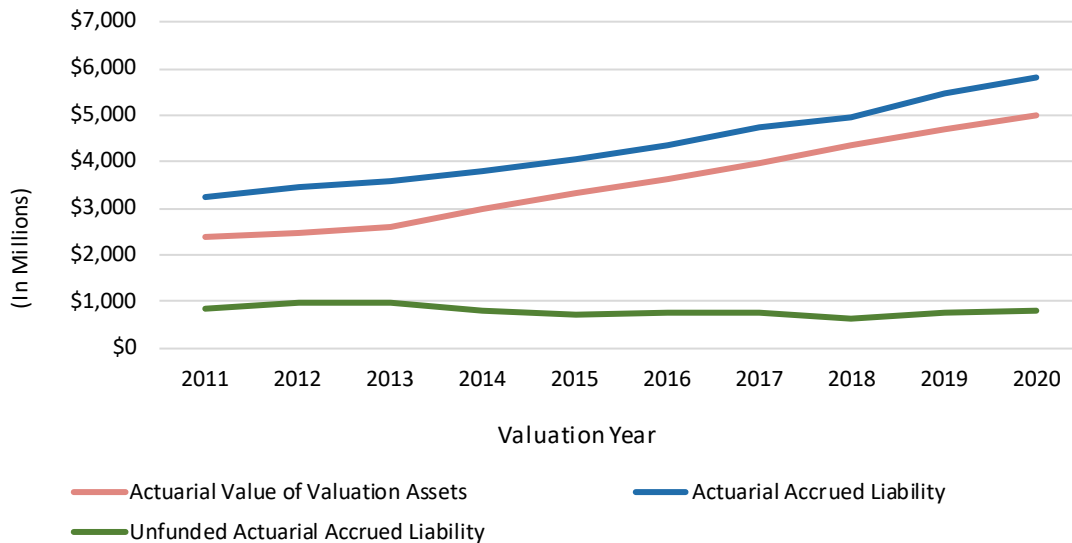
#### APPLICABLE VALUATION ASSETS

As of June 30



#### ACTUARIAL VALUATION

As of June 30

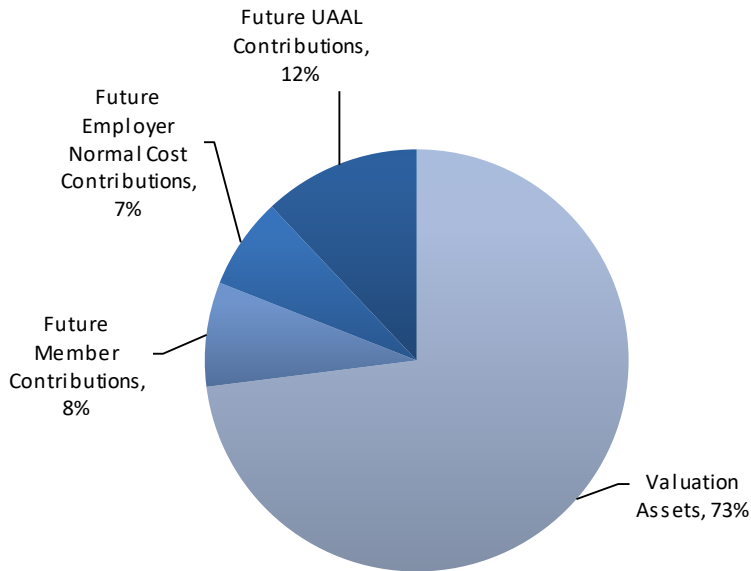


**ACTUARIAL VALUATION—SAMCERA'S RESOURCES**

---

As of June 30, 2020

SamCERA's resources equal the actuarial assets plus the expected future contributions by both the employers and members.

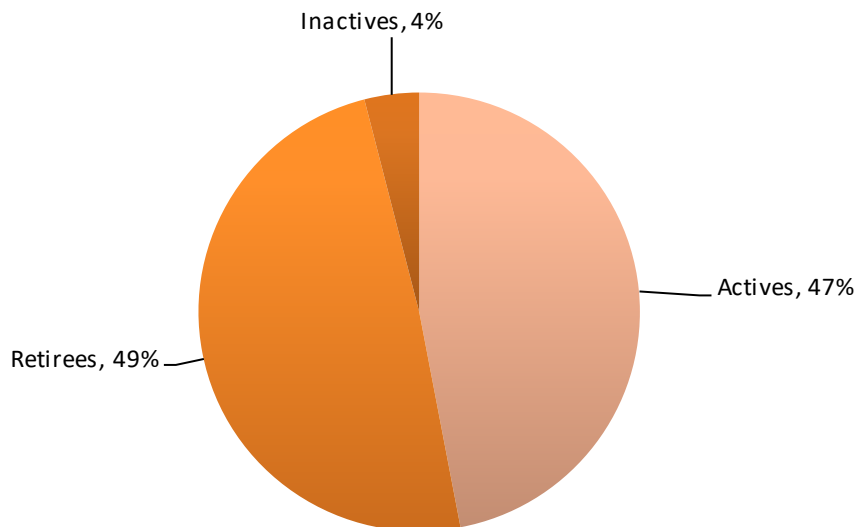


**ACTUARIAL VALUATION—SAMCERA'S LIABILITIES**

---

As of June 30, 2020

SamCERA's liabilities reflect benefits already earned in the past and those expected to be earned in the future by current members.



**SCHEDULE OF ACTIVE MEMBER VALUATION DATA**

Valuation Date As of June 30,	Number of Active Members		Annual Salary	Annual Average Salary	Percentage Change in Annual Average Salary
2020	General	4,655	\$496,992,584	\$106,765	3.2%
	Safety	522	72,724,015	139,318	4.2%
	Probation	223	24,856,263	111,463	7.0%
	<b>Total</b>	<b>5,400</b>	<b>\$594,572,862</b>	<b>\$110,106</b>	<b>3.4%</b>
2019	General	4,610	\$476,944,186	\$103,459	6.1%
	Safety	530	70,890,519	133,756	1.7%
	Probation	237	24,680,991	104,139	3.6%
	<b>Total</b>	<b>5,377</b>	<b>\$572,515,696</b>	<b>\$106,475</b>	<b>5.5%</b>
2018	General	4,603	\$448,931,595	\$97,530	3.3%
	Safety	508	66,799,289	131,495	1.6%
	Probation	256	25,741,800	100,554	4.0%
	<b>Total</b>	<b>5,367</b>	<b>\$541,472,684</b>	<b>\$100,889</b>	<b>3.1%</b>
2017	General	4,560	\$430,613,886	\$94,433	2.3%
	Safety	503	65,105,116	129,434	4.1%
	Probation	274	26,503,623	96,729	9.1%
	<b>Total</b>	<b>5,337</b>	<b>\$522,222,625</b>	<b>\$97,849</b>	<b>2.8%</b>
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%
	<b>Total</b>	<b>5,187</b>	<b>\$493,790,365</b>	<b>\$95,198</b>	<b>4.8%</b>
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%
	<b>Total</b>	<b>5,095</b>	<b>\$462,640,136</b>	<b>\$90,803</b>	<b>5.8%</b>
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%
	<b>Total</b>	<b>5,004</b>	<b>\$429,407,376</b>	<b>\$85,813</b>	<b>1.8%</b>
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%
	<b>Total</b>	<b>4,917</b>	<b>\$414,551,308</b>	<b>\$84,310</b>	<b>0.4%</b>
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%
	<b>Total</b>	<b>5,095</b>	<b>\$427,649,539</b>	<b>\$83,935</b>	<b>1.8%</b>
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%
	<b>Total</b>	<b>5,245</b>	<b>\$432,542,047</b>	<b>\$82,468</b>	<b>0.9%</b>

Note: See further details for participating employers and active members in the Statistical Section.

**FUNDED LIABILITIES BY TYPE**

(Dollars in Thousands)

Actuarial Valuation Date as of June 30,	Valuation Assets	Actuarial Accrued Liabilities			Portion of Actuarial Accrued Liabilities Covered by Assets		
		Active Member Contributions (A)	Retirees and Beneficiaries <sup>(1)</sup> (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
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%
2017	3,976,717	735,102	2,811,651	1,173,097	100%	100%	37%
2018	4,351,502	783,887	3,032,813	1,153,835	100%	100%	46%
2019	4,685,502	769,137	3,369,094	1,321,747	100%	100%	41%
2020	4,998,316	858,906	3,609,214	1,317,934	100%	100%	40%

<sup>(1)</sup> Includes inactive members**SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM THE ROLLS**

Fiscal Year Ended June 30,	Added to Rolls <sup>(1)</sup>		Removed from Rolls		Rolls at Year-End			
	Number	Annual Benefits (in Thousands)	Number	Annual Benefits (in Thousands)	Number	Total Retiree Payroll (in Thousands)	% Increase in Payroll	Average Monthly Benefits
2011 <sup>(2)</sup>	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
2017	310	16,738	102	3,867	4,956	199,068	6.9	3,347
2018	315	21,360	162	5,242	5,109	215,186	8.1	3,510
2019	306	24,547	190	5,769	5,225	233,964	8.7	3,731
2020	362	23,862	133	4,862	5,454	252,963	8.1	3,865

<sup>(1)</sup> Amount added to rolls includes COLAs granted in year to continuing retirees and beneficiaries.<sup>(2)</sup> Revised from June 30, 2011 valuation for corrections.

**ACTUARIAL ANALYSIS OF FINANCIAL EXPERIENCE**

As of June 30 (Dollars in Thousands)

Summary of (Gains) / Losses	Change in Liability					
	2020	2019	2018	2017	2016	2015
<b>Unfunded Liability as of July 1</b>	\$ 774,476	\$ 619,033	\$ 743,133	\$ 737,570	\$ 702,236	\$ 803,855
Expected Change in Unfunded Actuarial						
Accrued Liability	(85,527)	(153,261)	(109,756)	(110,404)	(96,454)	(76,018)
Salary (Gain) / Loss	25,190	50,472	10,401	27,685	24,707	39,129
Retiree COLA more / (less) than Expected	18,992	21,749	12,203	7,050	(6,275)	3,648
Asset (Gain) / Loss	15,884	46,909	(42,796)	(28,286)	27,821	(74,068)
Change due to Assumption Changes	11,593	173,944	-	133,221	89,364	-
Miscellaneous Experience	27,129	15,630	5,848	(23,703)	(3,829)	5,690
<b>Unfunded Liability as of June 30</b>	<b>\$ 787,737</b>	<b>\$ 774,476</b>	<b>\$ 619,033</b>	<b>\$ 743,133</b>	<b>\$ 737,570</b>	<b>\$ 702,236</b>

Note: The above information became available since fiscal year 2015.

**SCHEDULE OF FUNDING PROGRESS**

(Dollars in Thousands)

This schedule provides information about the funding progress of the pension plan.

Actuarial Valuation Date as of June 30,	(a) Actuarial Value of Valuation Assets	(b) Actuarial Accrued Liability	(b-a) Unfunded Actuarial Liability (UAAL)	(a/b) Funded Ratio	(c) Covered Payroll	[(b-a)/c] UAAL as a Percentage of Covered Payroll
2011	\$2,405,140	\$3,246,727	\$841,587	74.1%	\$427,041	197.07%
2012	2,480,271	3,442,553	962,282	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%
2017	3,976,717	4,719,850	743,133	84.3%	510,132	145.67%
2018	4,351,502	4,970,535	619,033	87.5%	535,938	115.50%
2019	4,685,502	5,459,978	774,476	85.8%	554,734	139.61%
2020	4,998,316	5,786,054	787,738	86.4%	593,295	132.77%

Note: The ten-year schedule of actuarially determined and actual contributions can be found in the Financial Section under Required Supplementary Information.

This page is intentionally left blank.



# STATISTICAL SECTION





## STATISTICAL SECTION

---

### Introduction

This section presents historical information for the past ten fiscal years about SamCERA's finances and operations. Some of the information in this section is compiled by SamCERA's actuary based on the information provided by SamCERA.

### CHANGES IN FIDUCIARY NET POSITION

---

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

	2020	2019	2018	2017	2016
<b>Additions</b>					
Employer Contributions	\$198,583	\$194,830	\$179,627	\$164,877	\$170,046
Employer Supplemental Contributions	0	50,668	27,630	33,850	21,048
Member Contributions	70,631	67,696	64,204	62,160	56,069
Total Contributions	269,214	313,194	271,461	260,887	247,163
Investment Income (Loss), net of Expenses	42,355	271,625	280,076	436,603	24,112
Securities Lending Income	37	66	43	46	278
Miscellaneous Additions	-	-	27	27	4,910
<b>Total Additions</b>	<b>311,606</b>	<b>584,885</b>	<b>551,607</b>	<b>697,563</b>	<b>276,463</b>
<b>Deductions</b>					
Retiree Benefits	242,025	223,614	204,728	190,364	179,498
Member Refunds	3,796	3,571	4,326	2,876	3,366
Administrative Expenses	6,372	6,057	5,849	5,983	5,962
Information Technology Expenses	2,021	2,495	1,444	996	714
Other Expenses	-	-	-	30	11
<b>Total Deductions</b>	<b>254,214</b>	<b>235,737</b>	<b>216,347</b>	<b>200,249</b>	<b>189,551</b>
<b>Changes in Pension Plan Net Position</b>	<b>\$57,392</b>	<b>\$349,148</b>	<b>\$335,260</b>	<b>\$497,314</b>	<b>\$86,912</b>

Note: Miscellaneous additions reported in fiscal year 2019 were reclassified and reported as part of investment income.

**CHANGES IN FIDUCIARY NET POSITION (CONTINUED)**

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

	2015	2014	2013	2012	2011
<b>Additions</b>					
Employer Contributions	\$169,814	152,877	131,294	139,407	\$150,475
Employer Supplemental Contributions	10,890	50,000	13,014	11,543	-
Member Contributions	48,012	46,594	55,408	49,687	49,013
Total Contributions	228,716	249,471	199,716	200,637	199,488
Investment Income (Loss), net of Expenses	111,320	482,050	326,983	(11,024)	437,654
Securities Lending Income	310	435	622	721	530
Miscellaneous Additions	-	179	160	29	73
<b>Total Additions</b>	<b>340,346</b>	<b>732,135</b>	<b>527,481</b>	<b>190,363</b>	<b>637,745</b>
<b>Deductions</b>					
Retiree Benefits	168,109	159,342	149,266	139,208	129,835
Member Refunds	3,357	3,214	5,750	3,627	2,474
Administrative Expenses	5,350	4,914	4,260	4,675	3,547
Information Technology Expenses <sup>(1)</sup>	629	731	654	325	-
Other Expenses	119	65	29	-	10
<b>Total Deductions</b>	<b>177,564</b>	<b>168,266</b>	<b>159,959</b>	<b>147,835</b>	<b>135,866</b>
<b>Changes in Pension Plan Net Position</b>	<b>\$162,782</b>	<b>\$563,869</b>	<b>\$367,522</b>	<b>\$42,528</b>	<b>\$501,879</b>

<sup>(1)</sup> Prior to fiscal year 2012, information technology expenses were included in the administrative expenses. Starting from fiscal year 2012, information technology expenses are separately tracked and accounted for.

**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
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
2017	62,160	198,727	436,603	73	697,563
2018	64,204	207,257	280,076	70	551,607
2019	67,696	245,498	271,625	66	584,885
2020	70,631	198,583	42,355	37	311,606

Note: Other additions reported in fiscal year 2019 were reclassified and reported as part of investment income.

**SCHEDULE OF DEDUCTIONS FROM FIDUCIARY NET POSITION BY TYPE**

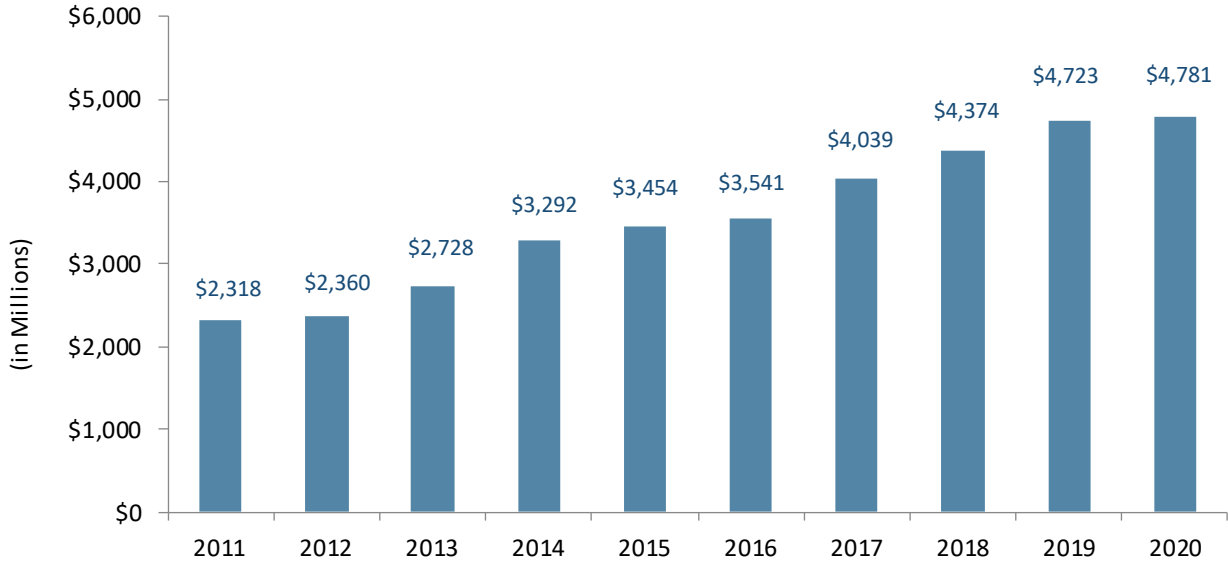
(Dollars in Thousands)

Fiscal Year Ended June 30	Retirement and Other Benefits	Member Refunds	Administrative Expenses <sup>(1)</sup>	Information Technology Expenses	Other Expenses	Total Deductions
2011	\$129,835	\$2,474	\$3,547	\$ -	\$10	\$135,866
2012	139,208	3,627	4,675	325	-	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
2017	190,364	2,876	5,983	996	30	200,249
2018	204,728	4,326	5,849	1,444	-	216,347
2019	223,614	3,571	6,057	2,495	-	235,737
2020	242,025	3,796	6,372	2,021	-	254,214

<sup>(1)</sup> Administrative expenses related to investments were classified as investment expenses prior to fiscal year 2012. Effective June 30, 2012, such expenses are reported as administrative expenses.

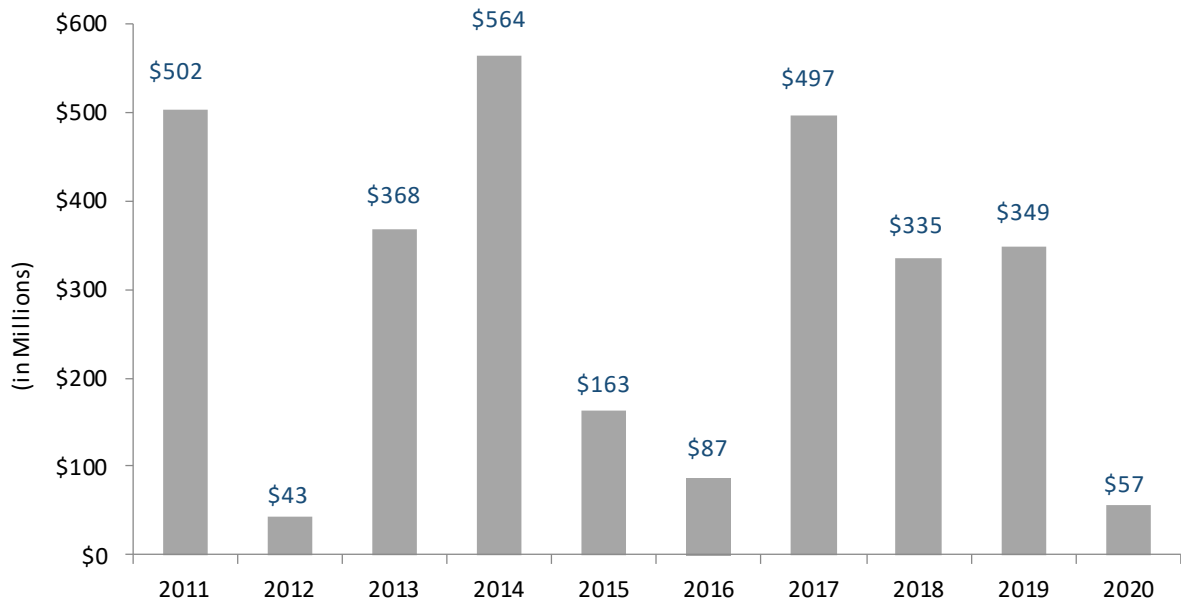
**TOTAL FIDUCIARY NET POSITION**

As of June 30



**CHANGES IN FIDUCIARY NET POSITION**

For the Fiscal Years Ended June 30



**SUMMARY OF RETIRED BENEFITS, REFUNDS, AND INACTIVE MEMBERS**

	2020	2019	2018	2017
<b>RETIRED MEMBERS</b>				
<b>Service Retirement <sup>(1)</sup></b>				
Number	4,906	4,697	4,604	4,458
Annual Benefit	\$212,632,929	\$196,874,097	\$179,880,342	\$166,975,634
Average Monthly Payment	\$3,612	\$3,493	\$3,256	\$3,121
<b>Survivor</b>				
Number	34	30	29	27
Annual Benefit	\$958,068	\$982,715	\$781,459	\$661,162
Average Monthly Payment	\$2,348	\$2,730	\$2,246	\$2,041
<b>Death</b>				
Number	4	7	4	1
Annual Benefit	\$295,630	\$249,751	\$194,927	\$26,646
Average Monthly Payment	\$6,159	\$2,973	\$4,061	\$2,221
<b>Other Benefits</b>				
Number	4	4	-	1
Annual Benefit	\$536,331	\$295,600	\$0	\$11,138
Average Monthly Payment	\$11,174	\$6,158	\$0	\$928
<b>Disability Retirement</b>				
Number	506	487	472	469
Annual Benefit	\$27,601,908	\$25,211,881	\$23,872,145	\$22,689,813
Average Monthly Payment	\$4,546	\$4,314	\$4,215	\$4,032
<b>Total Retired Members</b>				
Number	5,454	5,225	5,109	4,956
Annual Benefit	\$242,024,866	\$223,614,044	\$204,728,873	\$190,364,393
Average Monthly Payment	\$3,698	\$3,566	\$3,339	\$3,201
<b>REFUND</b>				
General	\$3,177,699	\$3,478,748	\$3,252,941	\$2,511,145
Safety	\$618,577	\$92,331	\$1,072,789	\$364,742
Total Refund	\$3,796,276	\$3,571,079	\$4,325,730	\$2,875,887
<b>INACTIVE MEMBERS</b>				
	<b>1,882</b>	<b>1,767</b>	<b>1,666</b>	<b>1,487</b>

<sup>(1)</sup> Included beneficiaries.

Note - This schedule is prepared by SamCERA based on the actual benefits disbursed.

**SUMMARY OF RETIRED BENEFITS, REFUNDS, AND INACTIVE MEMBERS (CONTINUED)**

	2016	2015	2014	2013
<b>RETIRED MEMBERS</b>				
<b>Service Retirement <sup>(1)</sup></b>				
Number	4,257	4,160	4,052	3,965
Annual Benefit	\$157,513,099	\$147,266,945	\$139,036,410	\$131,638,612
Average Monthly Payment	\$3,083	\$2,950	\$2,859	\$2,767
<b>Survivor</b>				
Number	27	29	30	31
Annual Benefit	\$652,711	\$661,222	\$654,972	\$649,930
Average Monthly Payment	\$2,015	\$1,900	\$1,819	\$1,747
<b>Death</b>				
Number	5	3	1	1
Annual Benefit	\$82,444	\$90,635	\$13,633	\$39,265
Average Monthly Payment	\$1,374	\$2,518	\$1,136	\$3,272
<b>Other Benefits</b>				
Number	5	4	7	8
Annual Benefit	\$158,478	\$51,734	\$370,340	\$232,593
Average Monthly Payment	\$2,641	\$1,078	\$4,409	\$2,423
<b>Disability Retirement</b>				
Number	454	442	428	393
Annual Benefit	\$21,090,529	\$20,038,671	\$19,266,623	\$16,705,247
Average Monthly Payment	\$3,871	\$3,778	\$3,751	\$3,542
<b>Total Retired Members</b>				
Number	4,748	4,638	4,518	4,398
Annual Benefit	\$179,497,261	\$168,109,207	\$159,341,978	\$149,265,647
Average Monthly Payment	\$3,150	\$3,021	\$2,939	\$2,828
<b>REFUND</b>				
General	\$2,991,126	\$3,011,758	\$3,058,864	\$5,161,430
Safety	\$375,311	\$345,253	\$155,265	\$588,346
Total Refund	\$3,366,437	\$3,357,011	\$3,214,129	\$5,749,776
<b>INACTIVE MEMBERS</b>				
	1,486	1,384	1,304	1,306

<sup>(1)</sup> Included beneficiaries.

Note 1 - This schedule is prepared by SamCERA based on the actual benefits disbursed.

Note 2 - Data prior to fiscal year 2013 is not available.



**SCHEDULE OF AVERAGE PENSION BENEFIT PAYMENTS**

	Years of Service Credit						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
<b>7/1/2019 - 6/30/2020</b>							
<b>Retirees - Service and Disabilities</b>							
Average Monthly Gross Benefit	\$394	\$1,450	\$2,633	\$3,875	\$5,190	\$7,485	\$8,072
Average Final Compensation	\$9,677	\$9,801	\$8,672	\$9,005	\$9,905	\$11,042	\$10,001
Number of Retirees	12	33	45	40	37	35	56
<b>Beneficiaries</b>							
Average Monthly Gross Benefit	\$1,244	\$1,954	\$1,796	\$3,080	\$3,058	\$5,083	\$7,308
Average Final Compensation	\$2,624	\$5,459	\$6,047	\$9,860	\$5,807	\$7,574	\$9,557
Number of Beneficiaries	6	3	6	9	5	5	5
<b>7/1/2018 - 6/30/2019</b>							
<b>Retirees - Service and Disabilities</b>							
Average Monthly Gross Benefit	\$425	\$1,564	\$2,484	\$4,013	\$5,002	\$7,792	\$8,675
Average Final Compensation	\$10,219	\$9,667	\$8,886	\$8,901	\$8,823	\$11,094	\$10,494
Number of Retirees	11	37	49	44	45	42	32
<b>Beneficiaries</b>							
Average Monthly Gross Benefit	\$1,218	\$1,828	\$1,174	\$134	\$2,052	\$3,757	\$6,841
Average Final Compensation	\$2,906	\$9,453	\$5,924	\$6,644	\$3,854	\$4,246	\$8,249
Number of Beneficiaries	11	4	5	1	2	5	5
<b>7/1/2017 - 6/30/2018</b>							
<b>Retirees - Service and Disabilities</b>							
Average Monthly Gross Benefit	\$613	\$1,327	\$2,192	\$3,541	\$5,616	\$6,728	\$8,213
Average Final Compensation	\$9,353	\$8,032	\$7,419	\$8,210	\$9,470	\$9,686	\$9,792
Number of Retirees	12	33	57	41	35	38	41
<b>Beneficiaries</b>							
Average Monthly Gross Benefit	\$1,962	\$1,460	\$1,455	\$1,861	\$2,640	\$6,712	\$4,033
Average Final Compensation	\$4,880	\$8,022	\$5,806	\$6,311	\$6,057	\$6,777	\$5,995
Number of Beneficiaries	13	10	9	5	6	8	7
<b>7/1/2016 - 6/30/2017</b>							
<b>Retirees - Service and Disabilities</b>							
Average Monthly Gross Benefit	\$388	\$1,429	\$2,264	\$3,155	\$5,501	\$6,533	\$6,902
Average Final Compensation	\$6,313	\$6,428	\$7,311	\$7,237	\$9,197	\$9,440	\$8,334
Number of Retirees	13	35	47	37	37	32	33
<b>Beneficiaries</b>							
Average Monthly Gross Benefit	\$1,197	\$574	\$1,665	\$2,916	\$1,299	\$0	\$0
Average Final Compensation	\$2,152	\$3,564	\$2,251	\$3,852	\$3,474	\$0	\$0
Number of Beneficiaries	8	6	5	1	1	0	0
<b>7/1/2015 - 6/30/2016</b>							
<b>Retirees - Service and Disabilities</b>							
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 Retirees	16	47	56	54	26	28	21
<b>Beneficiaries</b>							
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 Beneficiaries	14	9	5	2	4	7	7

**SCHEDULE OF AVERAGE PENSION BENEFIT PAYMENTS (CONTINUED)**

	Years of Service Credit						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
<b>7/1/2014 - 6/30/2015</b>							
<b>Retirees - Service and Disabilities</b>							
Average Monthly Gross Benefit	\$564	\$1,479	\$2,538	\$3,755	\$4,264	\$7,245	\$6,140
Average Final Compensation	\$4,191	\$6,262	\$7,158	\$8,074	\$7,548	\$9,423	\$7,752
Number of Retirees	21	35	52	35	20	38	31
<b>Beneficiaries</b>							
Average Monthly Gross Benefit	\$1,753	\$1,193	\$1,120	\$2,380	\$2,147	\$4,633	\$6,036
Average Final Compensation	N/A	\$3,587	\$3,867	\$6,994	\$4,521	\$8,971	\$8,071
Number of Beneficiaries	11	3	3	6	5	5	6
<b>7/1/2013 - 6/30/2014</b>							
<b>Retirees - Service and Disabilities</b>							
Average Monthly Gross Benefit	\$1,608	\$1,758	\$2,384	\$3,351	\$4,613	\$6,349	\$6,713
Average Final Compensation	\$6,920	\$6,729	\$6,570	\$7,614	\$7,740	\$9,292	\$7,528
Number of Retirees	16	61	49	40	32	13	18
<b>Beneficiaries</b>							
Average Monthly Gross Benefit	\$891	\$660	\$1,898	\$946	\$4,457	\$3,550	\$6,239
Average Final Compensation	N/A	\$6,305	\$5,433	\$2,906	\$7,872	\$5,504	\$6,611
Number of Beneficiaries	10	3	6	5	3	2	2
<b>7/1/2012 - 6/30/2013</b>							
<b>Retirees - Service and Disabilities</b>							
Average Monthly Gross Benefit	\$643	\$1,330	\$2,513	\$3,516	\$5,226	\$6,672	\$7,309
Average Final Compensation	\$5,234	\$5,831	\$7,321	\$7,344	\$8,135	\$8,458	\$7,818
Number of Retirees	16	39	59	21	30	24	20
<b>Beneficiaries</b>							
Average Monthly Gross Benefit	\$1,434	\$1,747	\$1,494	\$1,500	\$1,321	\$5,182	\$4,166
Average Final Compensation	\$589	\$5,140	\$5,255	\$4,536	\$3,446	\$7,516	\$6,039
Number of Beneficiaries	16	2	6	4	3	1	4
<b>7/1/2011 - 6/30/2012</b>							
<b>Retirees - Service and Disabilities</b>							
Average Monthly Gross Benefit	\$897	\$1,427	\$2,328	\$3,597	\$5,175	\$5,611	\$7,527
Average Final Compensation	\$4,235	\$5,896	\$6,667	\$7,228	\$7,812	\$7,344	\$7,763
Number of Retirees	19	37	47	25	47	32	29
<b>Beneficiaries</b>							
Average Monthly Gross Benefit	\$1,789	\$736	\$2,382	\$2,390	\$1,658	\$4,347	\$4,878
Average Final Compensation	N/A	\$3,913	\$5,200	\$5,818	\$4,338	\$6,102	\$6,464
Number of Beneficiaries	16	1	5	4	5	3	4
<b>7/1/2010 - 6/30/2011</b>							
<b>Retirees - Service and Disabilities</b>							
Average Monthly Gross Benefit	\$577	\$1,190	\$2,112	\$3,770	\$4,881	\$6,452	\$8,122
Average Final Compensation	\$3,207	\$6,268	\$5,895	\$7,761	\$7,562	\$8,466	\$8,322
Number of Retirees	16	25	52	29	52	26	25
<b>Beneficiaries</b>							
Average Monthly Gross Benefit	\$1,190	\$1,407	\$1,333	\$2,101	\$2,082	\$1,951	\$8,657
Average Final Compensation	N/A	\$6,549	\$4,186	\$5,178	\$5,772	\$4,457	\$7,765
Number of Beneficiaries	12	1	6	3	6	1	1

Distribution of Retired Members by Age and Retirement Years - All Plans Combined

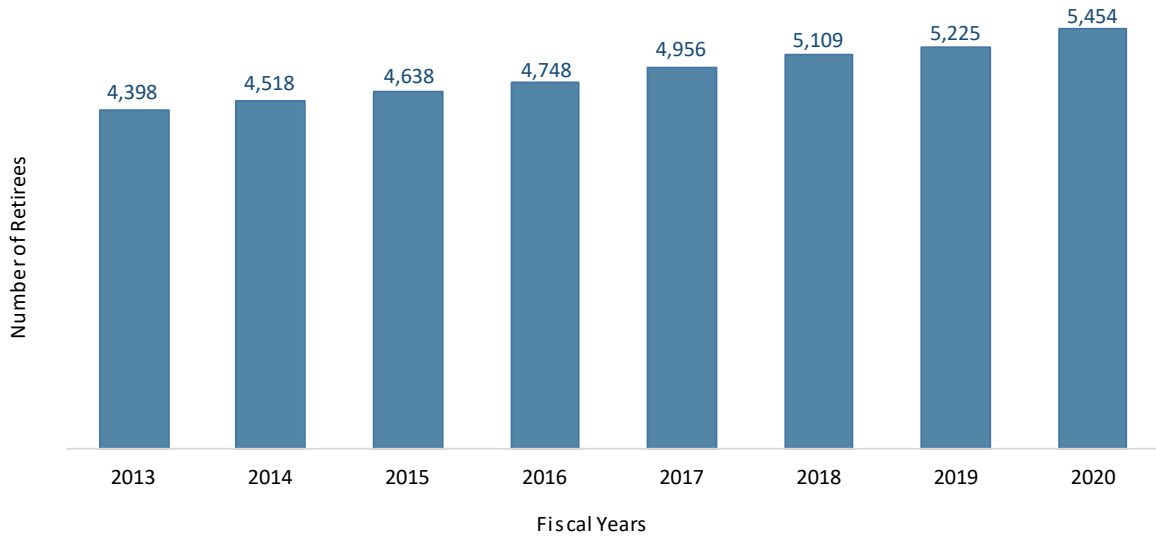
**DISTRIBUTION OF RETIRED MEMBERS BY AGE AND RETIREMENT YEAR - ALL PLANS COMBINED**

As of June 30, 2020

Age	Retirement Year								Total Count
	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	
Under 35	-	-	-	-	1	4	2	-	7
35-39	-	-	1	1	-	2	3	1	8
40-44	-	-	-	-	1	6	14	-	21
45-49	-	-	-	-	9	7	23	3	42
50-54	-	-	2	7	8	13	130	27	187
55-59	-	-	6	10	18	89	249	29	401
60-64	-	1	11	17	72	200	347	66	714
65-69	-	6	10	75	196	336	374	22	1,019
70-74	7	16	84	169	309	329	191	10	1,115
75-79	10	50	132	200	266	130	62	7	857
80-84	31	85	103	127	73	35	21	4	479
85-89	43	62	97	37	26	26	18	3	312
90-94	77	45	34	9	5	7	11	1	189
95-99	48	9	12	7	4	2	6	1	89
100 & Over	8	1	3	-	-	1	1	-	14
<b>Total Count</b>	<b>224</b>	<b>275</b>	<b>495</b>	<b>659</b>	<b>988</b>	<b>1,187</b>	<b>1,452</b>	<b>174</b>	<b>5,454</b>

**NUMBER OF RETIREES AND BENEFICIARIES RECEIVING BENEFITS**

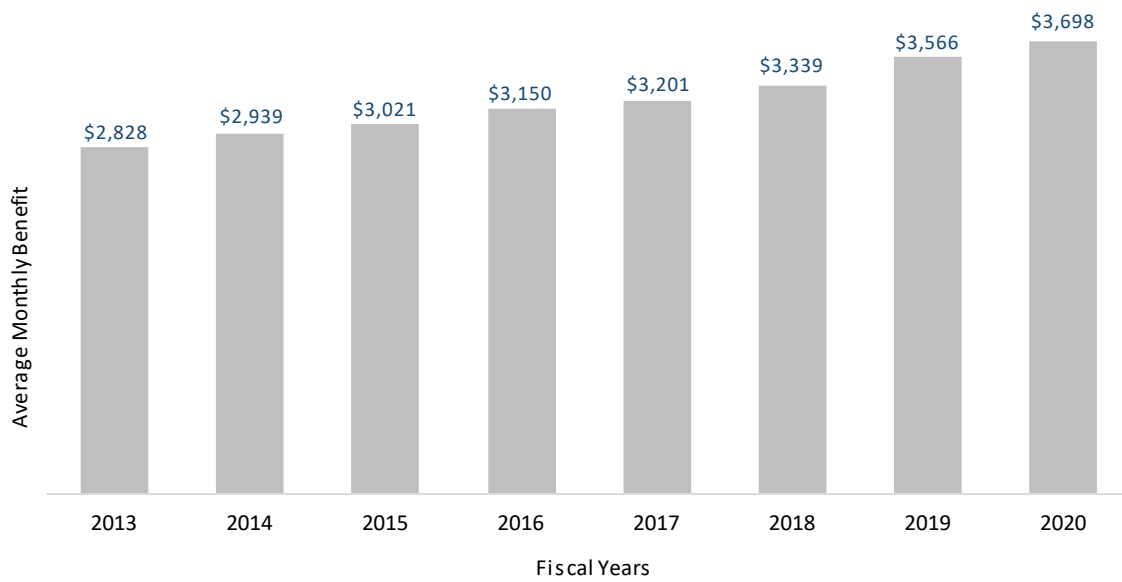
As of June 30



Note: Information prior to fiscal year 2013 is not available.

**AVERAGE MONTHLY BENEFIT TO RETIREES AND BENEFICIARIES**

For the Fiscal Years Ended June 30



Note: Information prior to fiscal year 2013 is not available.

**SCHEDULE OF AVERAGE MONTHLY SALARY OF ACTIVE MEMBERS**

For the Fiscal Years Ended June 30 (by Plan and Membership Type)

	2020	2019	2018	2017	2016
General Plan 1	\$11,102	\$9,793	\$10,121	\$11,305	\$9,945
General Plan 2	10,665	10,088	9,526	8,994	8,636
General Plan 3	8,221	7,872	7,462	7,484	7,173
General Plan 4	9,671	9,302	8,534	8,134	7,807
General Plan 5	10,635	10,180	9,672	8,980	8,485
General Plan 7	7,726	7,395	6,974	6,737	6,714
<b>Average Monthly Salary for General Plan</b>	<b>8,897</b>	<b>8,622</b>	<b>8,128</b>	<b>7,869</b>	<b>7,694</b>
Safety Plan 1	0	0	0	14,434	15,810
Safety Plan 2	15,125	14,197	13,607	13,528	12,505
Safety Plan 4	13,204	12,391	11,894	11,381	10,729
Safety Plan 5	12,367	11,708	11,349	10,544	9,940
Safety Plan 6	0	0	0	0	16,793
Safety Plan 7	9,581	9,030	8,747	8,356	7,538
<b>Average Monthly Salary for Safety Plan</b>	<b>11,610</b>	<b>11,146</b>	<b>10,958</b>	<b>10,786</b>	<b>10,364</b>
Probation 1	0	0	0	7,722	7,261
Probation 2	10,174	9,908	9,061	9,069	8,349
Probation 4	9,827	9,103	8,714	8,270	7,454
Probation 5	9,343	8,587	8,219	7,612	6,429
Probation 6	0	0	0	7,347	6,259
Probation 7	7,598	6,973	6,676	6,121	5,962
<b>Average Monthly Salary for Probation Plan</b>	<b>9,289</b>	<b>8,678</b>	<b>8,379</b>	<b>8,061</b>	<b>7,391</b>
<b>Average Monthly Salary for All Plans</b>	<b>\$9,176</b>	<b>\$8,873</b>	<b>\$8,407</b>	<b>\$8,154</b>	<b>\$7,933</b>

**SCHEDULE OF AVERAGE MONTHLY SALARY OF ACTIVE MEMBERS (CONTINUED)**

For the Fiscal Years Ended June 30 (by Plan and Membership Type)

	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
General Plan 1	\$9,235	\$8,617	\$8,104	\$7,843	\$7,630
General Plan 2	8,186	7,584	7,355	7,340	7,208
General Plan 3	6,747	6,300	6,254	6,138	5,968
General Plan 4	7,386	6,873	6,662	6,580	6,398
General Plan 5	7,735	6,912	6,418	5,799	N/A
General Plan 7	6,315	5,721	5,433	N/A	N/A
<b>Average Monthly Salary for General Plan</b>	<b>7,351</b>	<b>6,884</b>	<b>6,762</b>	<b>6,726</b>	<b>6,599</b>
Safety Plan 1	14,712	14,091	13,185	12,624	12,073
Safety Plan 2	11,545	11,191	10,935	10,892	10,789
Safety Plan 4	9,919	9,581	9,402	9,351	9,230
Safety Plan 5	9,145	8,958	8,699	9,667	N/A
Safety Plan 6	16,010	14,381	12,374	N/A	N/A
Safety Plan 7	6,701	7,011	6,695	N/A	N/A
<b>Average Monthly Salary for Safety Plan</b>	<b>9,728</b>	<b>9,767</b>	<b>9,630</b>	<b>9,795</b>	<b>9,730</b>
Probation 1	7,038	6,874	6,618	6,618	7,533
Probation 2	8,012	7,699	7,445	7,454	7,349
Probation 4	7,267	6,922	6,622	6,686	6,505
Probation 5	6,106	5,916	5,242	4,949	N/A
Probation 6	5,739	5,216	4,808	5,239	N/A
Probation 7	5,684	5,807	7,742	5,239	N/A
<b>Average Monthly Salary for Probation Plan</b>	<b>7,216</b>	<b>6,998</b>	<b>6,770</b>	<b>6,844</b>	<b>6,719</b>
<b>Average Monthly Salary for All Plans</b>	<b>\$7,567</b>	<b>\$7,151</b>	<b>\$7,026</b>	<b>\$6,995</b>	<b>\$6,872</b>

**SCHEDULE OF ACTIVE MEMBERS AND PARTICIPATING EMPLOYERS**

As of June 30

	2020	2019	2018	2017	2016
<b>COUNTY OF SAN MATEO</b>					
General Members	4,379	4,350	4,343	4,303	4,170
Safety Members	522	530	508	503	495
Probation Members	223	237	256	274	271
Subtotal	5,124	5,117	5,107	5,080	4,936
<b>SAN MATEO COUNTY SUPERIOR COURT</b>					
General Members	256	240	239	237	231
<b>SAN MATEO COUNTY MOSQUITO &amp; VECTOR CONTROL DISTRICT</b>					
General Members	20	20	21	20	20
<b>Total Active Membership</b>	<b>5,400</b>	<b>5,377</b>	<b>5,367</b>	<b>5,337</b>	<b>5,187</b>
<b>Percentage of Membership by Employer</b>					
County of San Mateo	94.89%	95.17%	95.16%	95.18%	95.16%
San Mateo County Superior Court	4.74%	4.46%	4.45%	4.45%	4.45%
San Mateo County Mosquito and Vector Control District	0.37%	0.37%	0.39%	0.37%	0.39%
<b>Total Percentage of Membership</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**SCHEDULE OF ACTIVE MEMBERS AND PARTICIPATING EMPLOYERS (CONTINUED)**

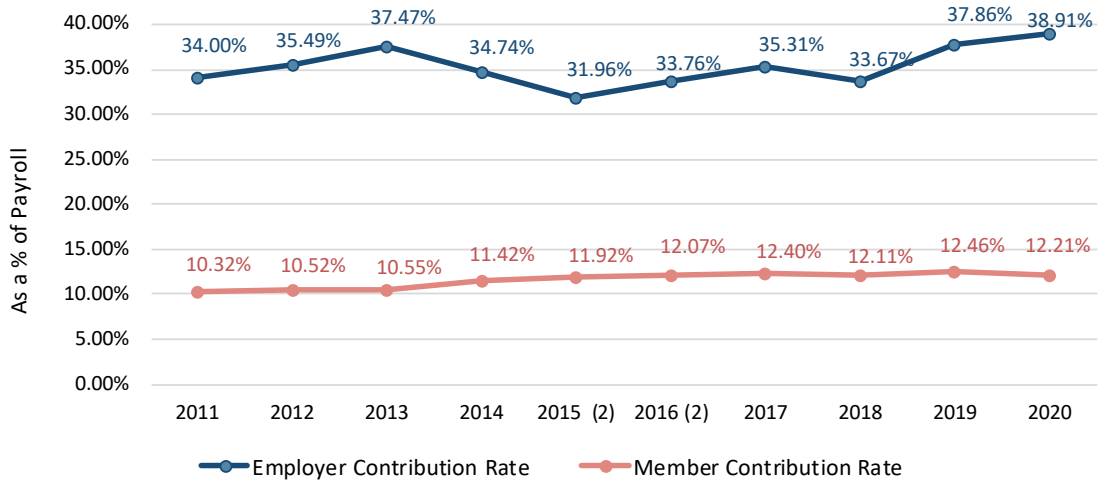
As of June 30

	2015	2014	2013	2012	2011
<b>COUNTY OF SAN MATEO</b>					
General Members	4,092	4,014	3,906	4,078	4,476
Safety Members	479	452	452	435	446
Probation Members	282	280	292	299	305
Subtotal	4,853	4,746	4,650	4,812	5,227
<b>SAN MATEO COUNTY SUPERIOR COURT</b>					
General Members	222	239	249	268	N/A
<b>SAN MATEO COUNTY MOSQUITO &amp; VECTOR CONTROL DISTRICT</b>					
General Members	20	19	18	15	18
<b>Total Active Membership</b>	<b>5,095</b>	<b>5,004</b>	<b>4,917</b>	<b>5,095</b>	<b>5,245</b>
<b>Percentage of Membership by Employer</b>					
County of San Mateo	95.25%	94.84%	94.57%	94.45%	99.66%
San Mateo County Superior Court	4.36%	4.78%	5.06%	5.26%	N/A
San Mateo County Mosquito and Vector Control District	0.39%	0.38%	0.37%	0.29%	0.34%
<b>Total Percentage of Membership</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Note: San Mateo County Superior Court was once a unit of the County of San Mateo, but was separated and became a unit of the State of California in fiscal year 2012.

**EMPLOYER AND MEMBER CONTRIBUTION RATES <sup>(1)</sup>**

Determined at June 30



<sup>(1)</sup> 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, 2020, will become effective on July 1, 2021.

<sup>(2)</sup> The Statutory Contribution Rates reflect changes in member rates negotiated subsequent to the 2015 and the 2016 valuations.

**EMPLOYER CONTRIBUTION RATES FOR ALL PLANS COMBINED AS A PERCENTAGE OF COVERED PAYROLL**

Employer Statutory Contribution Rate	Fiscal Year Beginning		Change
	July 1, 2021	July 1, 2020	
Gross Normal Cost	23.11%	23.73%	(0.62)%
Less: Member Contributions	(12.21)%	(12.46)%	0.25%
Employer Normal Cost	10.90%	11.27%	(0.37)%
UAAL Amortization	28.01%	26.59%	1.42%
<b>Total Employer Statutory Contribution Rate</b>	<b>38.91%</b>	<b>37.86%</b>	<b>1.05%</b>
<b>Statutory Contribution Rate by Employer</b>			
County of San Mateo	39.14%	38.06%	1.08%
San Mateo County Superior Court	35.85%	35.22%	0.63%
San Mateo County Mosquito & Vector Control District	12.76%	12.58%	0.18%

Notes:

- Detailed contribution rates by plan are reported on the 2020 actuarial valuation report.
- The Total Employer Statutory Contribution Rate of 38.91% is the aggregate rate for all employers.



## HISTORY OF EMPLOYER STATUTORY CONTRIBUTION RATES

Valuation Date	General Members (County & Court)			General Members (Nurses & UAPD)			General Members (District)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
June 30									
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%

Valuation Date	General Members (County)			General Members (Court)			General Members (District)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
June 30									
2015	8.67%	18.37%	27.04%	9.04%	19.54%	28.58%	11.75%	19.54%	31.29%
2016	8.91%	19.81%	28.72%	9.09%	21.30%	30.39%	12.02%	12.50%	24.52%
2017	9.58%	20.55%	30.13%	9.65%	22.58%	32.23%	12.32%	12.37%	24.69%
2018	9.22%	19.32%	28.54%	9.27%	21.76%	31.03%	12.13%	0.00%	12.13%
2019	9.93%	22.18%	32.11%	10.01%	25.21%	35.22%	12.58%	0.00%	12.58%
2020	9.57%	23.22%	32.79%	9.63%	26.22%	35.85%	12.37%	0.39%	12.76%

## Notes:

- Contribution rates shown are those calculated in the corresponding actuarial valuation. In some cases, actual contributions were higher.
- Beginning with the 2010 actuarial valuation, the Mosquito and Vector Control District adopted the same benefit formula and member contribution rates as Plan 1, 2 and 4 General County members (excluding cost sharing and COLA sharing on member rates).
- Beginning with the 2011 actuarial valuation, Plan 1, 2, and 4 members of the California Nurses Association (CNA) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
- Beginning with the 2012 actuarial valuation, Plan 1, 2, and 4 Probation members (excluding Managers) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
- Beginning with the 2013 actuarial valuation, Plan 1, 2, and 4 members of the Union of American Physicians & Dentists (UAPD) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing. In 2011 and 2012, these members contributed the same as County General members.
- Beginning with the 2015 actuarial valuation, Plan 1, 2, and 4 members of the UAPD and the CNA, and Probation members (Managers) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing.
- 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 District members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. Additionally, pick-up contributions are discontinued for members with benefits negotiated under the PDA bargaining unit.
- Effective October 2016, all members (except those with benefits negotiated under Board of Supervisors bargaining unit, and District members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. This is reflected in 2016 values.
- Effective July 1, 2018, the Board of Supervisors contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. Additionally, pick-up contributions were eliminated.

**HISTORY OF EMPLOYER STATUTORY CONTRIBUTION RATES (CONTINUED)**

Valuation Date	Safety Member			Probation Members (excluding Managers)			Probation Members (Managers)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
June 30									
2011	18.87%	41.75%	60.62%	19.50%	22.30%	41.80%	Same as Probation (exclude Managers)		
2012	19.05%	48.51%	67.56%	19.99%	26.71%	46.70%	Same as Probation (exclude Managers)		
2013	18.51%	50.33%	68.84%	18.33%	29.32%	47.65%	17.85%	29.32%	47.17%
2014	18.99%	46.48%	65.47%	18.92%	28.09%	47.01%	18.79%	28.09%	46.88%
2015	15.14%	43.58%	58.72%	15.31%	26.77%	42.08%	17.23%	26.77%	44.00%
2016	16.31%	44.25%	60.56%	15.94%	31.72%	47.66%	Same as Probation (exclude Managers)		
2017	17.28%	45.57%	62.85%	17.42%	32.87%	50.29%	Same as Probation (exclude Managers)		
2018	16.98%	44.68%	61.66%	16.95%	32.88%	49.83%	Same as Probation (exclude Managers)		
2019	18.02%	50.87%	68.89%	17.97%	42.55%	60.52%	Same as Probation (exclude Managers)		
2020	17.57%	54.42%	71.99%	18.30%	47.68%	65.98%	Same as Probation (exclude Managers)		

## Notes:

1. Contribution rates shown are those calculated in the corresponding actuarial valuation. In some cases, actual contributions were higher.
2. Beginning with the 2010 actuarial valuation, the Mosquito and Vector Control District adopted the same benefit formula and member contribution rates as Plan 1, 2 and 4 General County members (excluding cost sharing and COLA sharing on member rates).
3. Beginning with the 2011 actuarial valuation, Plan 1, 2, and 4 members of the California Nurses Association (CNA) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
4. Beginning with the 2012 actuarial valuation, Plan 1, 2, and 4 Probation members (excluding Managers) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
5. Beginning with the 2013 actuarial valuation, Plan 1, 2, and 4 members of the Union of American Physicians & Dentists (UAPD) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing. In 2011 and 2012, these members contributed the same as County General members.
6. Beginning with the 2015 actuarial valuation, Plan 1, 2, and 4 members of the UAPD and the CNA, and Probation members (Managers) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing.
7. Effective with the first pay period after June 30, 2016, all members (except those with benefits negotiated under Court Interpreters and Board of Supervisors bargaining units, and District members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. Additionally, pick-up contributions are discontinued for members with benefits negotiated under the PDA bargaining unit.
8. Effective October 2016, all members (except those with benefits negotiated under Board of Supervisors bargaining unit, and District members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. This is reflected in 2016 values.
9. Effective July 1, 2018, the Board of Supervisors contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. Additionally, pick-up contributions were eliminated.

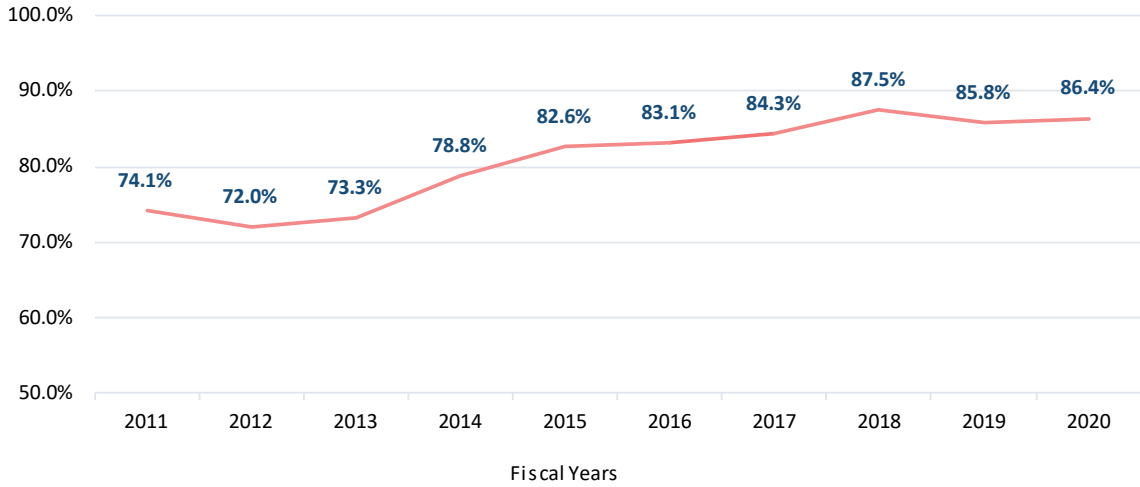
# COMPLIANCE SECTION





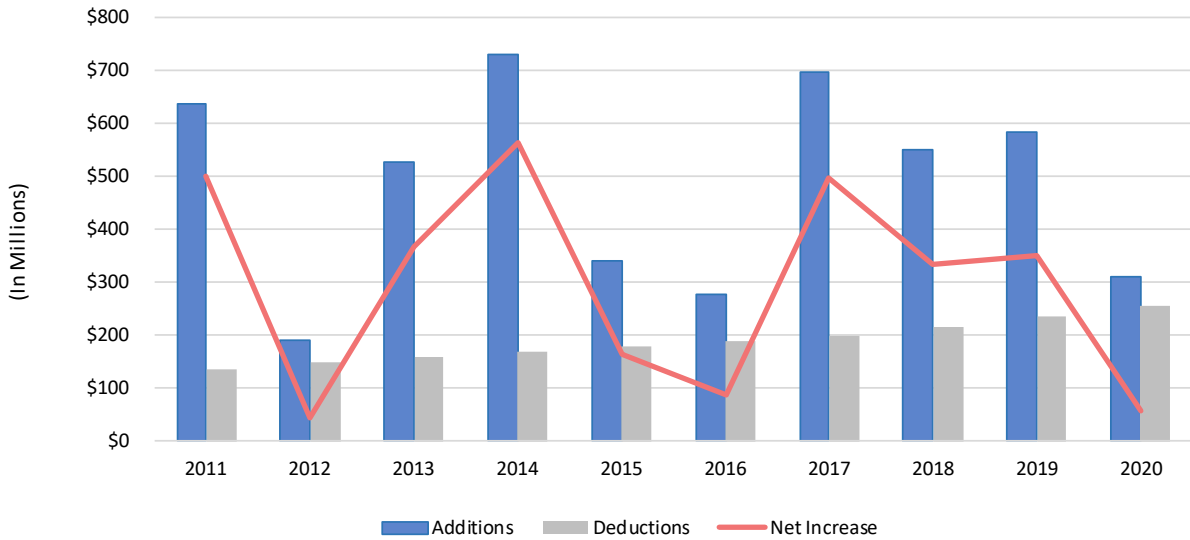
**SAMCERA'S FUNDED RATIO**

As of June 30



**ADDITIONS TO AND DEDUCTIONS FROM SAMCERA'S NET POSITION**

For the Fiscal Years Ended June 30





**BAKERSFIELD OFFICE  
(MAIN OFFICE)**

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

**FRESNO OFFICE**

10 RIVER PARK PLACE EAST  
SUITE 208  
FRESNO, CA 93720  
TEL 559.476.3592

**STOCKTON OFFICE**

1919 GRAND CANAL BLVD  
SUITE C6  
STOCKTON, CA 95207  
TEL 888.565.1040

WWW.BACPAS.COM

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

## 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 and Audit Committee of  
San Mateo County Employees' Retirement Association  
Redwood City, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the basic financial statements and other information (financial statements) of the San Mateo County Employees' Retirement Association (SamCERA) as of and for the fiscal year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise SamCERA's basic financial statements, and have issued our report thereon dated October 19, 2020.

#### **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) as a basis for designing 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 financial statements. 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

A handwritten signature in blue ink that reads "Brown Armstrong Accountancy Corporation". The signature is written in a cursive, flowing style.

Bakersfield, California  
October 19, 2020

This page is intentionally left blank.



## PHOTO CREDIT

### Photo Attributions:

Cover – Pung/Shutterstock.com

Page 2 – Dark Moon Pictures/Shutterstock.com; Evannovostro/Shutterstock.com; Paul Shuang/Shutterstock.com; Yuriy Kulik/Shutterstock.com

Page 3 – haveseen/Shutterstock.com

Page 10 – Chris LaBasco/Shutterstock.com

Page 21 – Jiyang Chen/Shutterstock.com

Page 26 – Sunny Tan/Shutterstock.com

Page 28 – Bildagentur Zoonar GmbH/Shutterstock.com

Page 88 – sarap/Shutterstock.com

Page 112 – Francesco Carucci/Shutterstock.com

Page 132 – Umesh Awasthi/Shutterstock.com

Page 150 – Always Wanderlust/Shutterstock.com



100 MARINE PARKWAY, SUITE 125  
REDWOOD CITY, CA 94065

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

October 27, 2020

Agenda Item 7.3

**TO:** Board of Retirement

**FROM:** Scott Hood, Chief Executive Officer  
Tariq Ali, Chief Technology Officer



**SUBJECT:** Agreement with Digital Deployment, Inc. for reworking of the SamCERA's public website, online web member services and various support and maintenance services.

**Recommendation**

Approve a resolution: (a) waiving the Request For Proposal Process; (b) authorizing the Chief Executive Officer to execute an agreement with Digital Deployment, Inc. for the reworking of the [www.samcera.org](http://www.samcera.org) public website, MySamCERA online web member services and various support and maintenance services through 2025; and (c) authorizing the Chief Executive Officer to execute contract amendments up to an aggregate of \$25,000 above the contract cap through the term of the agreement.

**Background**

After a competitive process, in 2015, Digital Deployment Inc. was selected to design SamCERA's public website "samcera.org" and have been maintaining it since its launch. During the last five years, Digital Deployment has been responsive and helpful to staff. In 2020, Digital Deployment began its redesign of our "MySamCERA" mobile application which is almost ready to launch.

**Discussion**

In the redesign of the mobile application, Digital Deployment coordinated with Vitech Inc., our pension administration software provider, for the use of its Application Program Interface (API) to access member's data. The mobile app enables members to perform retirement estimates, download forms, check beneficiary information and many other activities from their phones. As that process was successful, staff recommends that SamCERA contract with Digital Deployment to rework the MySamCERA online member services portal which provides similar member services to the mobile app. As they have accomplished with their updates to the mobile app, Digital Deployment will make our online MySamCERA portal a modern and even more user-friendly experience for our members.

The proposed contract would cover the reworking of the public website as well as our online web member services. And, as our current contract with Digital Deployment for the maintenance of the public SamCERA website ends December of 2020, it also would cover the support and maintenance for that site, the online web member services, the mobile app, and

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

the public website through 2026. Staff is of the opinion that SamCERA will be well served to receive the full suite of these Digital Deployment services to enable us to provide a seamless coordinated member self-service experience. To secure operational continuity in this area, staff recommends that it is in the best interest of SamCERA to waive the RFP process and enter into an agreement with Digital Deployment, Inc. for these additional services.

The total cost of the over 6-year agreement will be \$475,000. To address any unknown requirements or other additional required services, the attached resolution authorizes the Chief Executive Officer to execute subsequent amendments up to an aggregate of \$25,000 above the contract cap through the term of the agreement.

**Attachment**

Resolution Authorizing the Chief Executive Officer to Execute an Agreement with Digital Deployment, Inc

**RESOLUTION AUTHORIZING THE CHIEF EXECUTIVE OFFICER TO EXECUTE AN AGREEMENT  
WITH DIGITAL DEPLOYMENT, INC**

RESOLUTION 2020-\_\_\_\_\_

**WHEREAS**, in 2015, after a competitive process, Digital Deployment Inc. was selected to design SamCERA's public website "samcera.org" and have been maintaining it since its launch, and in 2020, Digital Deployment redesigned SamCERA's "MySamCERA" mobile application; and

**WHEREAS**, staff has determined that SamCERA's public website and SamCERA's online web member services should be redesigned and updated by Digital Deployment, Inc.; and

**WHEREAS**, staff has recommended, and this Board has determined, that it is in the best interest of SamCERA to waive the Request for Proposal process and to enter into an agreement with Digital Deployment, Inc. to rework the SamCERA's public website, MySamCERA on-line web member services and for various support and maintenance services through 2026; and

**WHEREAS**, the Board desires enter into an agreement with Digital Deployment for these services at an amount not to exceed \$475,000; therefore, be it

**RESOLVED** that the Board finds that SamCERA's best interest would be served by waiving the Request for Proposal process and is hereby waiving the Request for Proposal process and authorizing and directing the Chief Executive Officer to execute an agreement in the amount of \$475,000 with Digital Deployment, Inc. to rework the SamCERA's public website, MySamCERA online web member services and various support and maintenance services through 2026; and

**BE IT FURTHER RESOLVED**, that to address any unknown requirements or other additional required services, the Chief Executive Officer is authorized to execute subsequent amendments up to an aggregate of \$25,000 throughout the term of the agreement.

\* \* \* \* \*

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on October 27, 2020.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

---

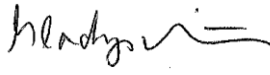
Katherine O'Malley  
Board Secretary

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

October 27, 2020

Agenda Item 7.4

**TO:** Board of Retirement

**FROM:** Gladys Smith, Assistant Executive Officer 

**SUBJECT:** Board of Retirement Meeting Schedule for 2021

**Recommendation**

Approve a Resolution Setting the Board of Retirement's Regular Meeting Schedule for Calendar Year 2021

**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 am. It further provides that by resolution, the Board may add, cancel and/or change the date, time and/or location of meetings, if the proposed change is included on the agenda of a regular meeting.

Historically, the Board combines its November and December meetings due to conflicts with the Thanksgiving and Christmas holidays. 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 2021 proposed schedule includes:

- Ten total meetings;
- Holding all, but the December meeting, on the fourth Tuesday of the month;
- Convening the meetings at 10:00 a.m., except for the Board/Staff Retreat meeting;
- Holding the annual Board/Staff Retreat on March 23 (fourth Tuesday) with regular business taken up at 8:30 a.m;
- Holding **no** meeting in June 2021;
- Holding **no** meeting in November due to the Thanksgiving Day holiday; and
- Holding the December meeting on December 7, 2021, the first Tuesday of that month; because of the holidays and to space the time between the October and December meetings.

**Attachment**

Resolution Setting the Board of Retirement's Regular Meeting Schedule for Calendar Year 2021

**RESOLUTION SETTING THE BOARD OF RETIREMENT'S REGULAR  
MEETING SCHEDULE FOR CALENDAR YEAR 2021**

RESOLUTION 2020-\_\_\_\_\_

RESOLVED, by the Board of Retirement, that

WHEREAS, Board of Regulation Article III, Section 3.4 "Regular Meetings" provides that regular meetings of the Board shall be held on the Fourth Tuesday of each month. Meetings shall begin at 10:00 a.m. Meetings shall be held in SamCERA's offices; and

WHEREAS, Regulation Section 3.4 further provides that by resolution, the Board may add, cancel, and or change the date, time and/or location of meetings within the County, if the proposed change is included on the agenda of a regular meeting; and

WHEREAS, this Board desires to set its meeting schedule for calendar year 2021 which generally has its meetings on the Fourth Tuesday of the month, but also reflects some cancellations, date changes and one time change;

NOW, THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that the schedule of regular meetings for the Board of Retirement for calendar year 2021 shall be as reflected on the attached schedule, unless changed by subsequent resolution of the Board:

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on October 27, 2020.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

---

Katherine O'Malley, Board Secretary  
SamCERA

## 2021 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	26	FOURTH TUESDAY	10:00 A.M.
FEBRUARY	23	FOURTH TUESDAY	10:00 A.M.
MARCH (BOARD/STAFF RETREAT)	23	FOURTH TUESDAY	8:30 A.M. BUSINESS ITEMS, FOLLOWED BY RETREAT
APRIL	27	FOURTH TUESDAY	10:00 A.M.
MAY	25	FOURTH TUESDAY	10:00 A.M.
JUNE	NO MEETING	NONE	10:00 A.M.
JULY	27	FOURTH TUESDAY	10:00 A.M.
AUGUST	24	FOURTH TUESDAY	10:00 A.M.
SEPTEMBER	28	FOURTH TUESDAY	10:00 A.M.
OCTOBER	26	FOURTH TUESDAY	10:00 A.M.
NOVEMBER	NO MEETING	NONE	
DECEMBER	7	FIRST TUESDAY	10:00 A.M.