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

NAVIGATING THE FUTURE

2018 COMPREHENSIVE ANNUAL FINANCIAL REPORT

for the Fiscal Year Ended June 30, 2018

"It is not the ship so much as the skillful sailing that assures the prosperous voyage."

-George William Curtis
American Writer

NAVIGATING THE FUTURE

As SamCERA approaches its 75 anniversary next year, we wanted to not only reflect on our past, but also take a look at where we are headed. As the retirement fund administrator serving employees from San Mateo County, the San Mateo Superior Court, and the San Mateo County Mosquito and Vector Control District, SamCERA's operations are focused on the prudent management of the Fund to provide a secure future for our members.

As we look toward the future, we embrace emerging opportunities to continue the tradition of providing excellent service to our membership, and seek new ways to increase the effectiveness of our services. We are also prepared to navigate changes through strategic planning that plots our course over the next number of years.

As we navigate the future, the Board and staff are committed to diligently manage the Fund with a sustainable and long term approach to ensure benefits for our membership.

San Mateo County Employees' Retirement Association

A Pension Trust Fund of the County of San Mateo and Participating Employers

Comprehensive Annual Financial Report

For the Fiscal Year Ended June 30, 2018

Scott Hood
Chief Executive Officer

Tat-Ling Chow
Finance Officer

Michael Coultrip
Chief Investment Officer

SamCERA

100 Marine Parkway, Suite 125

Redwood City, California 94065

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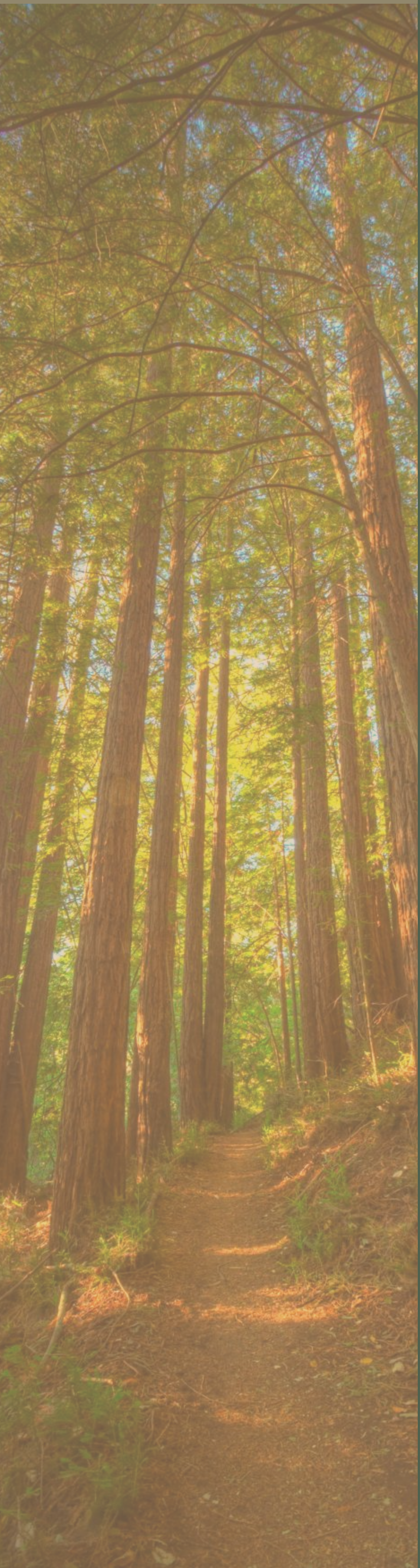


INTRODUCTORY SECTION

"Someone is sitting in the shade today because someone planted a tree a long time ago."

-Warren Buffett
American Businessman and Philanthropist

SAMCERA's MISSION

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

SAMCERA's GOALS

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

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

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

ADMINISTRATOR'S LETTER OF TRANSMITTAL

100 Marine Parkway, Suite 125
Redwood City, CA 94065
Phone: 650-599-1234
Toll Free: 1-800-339-0761
Fax: 650-591-1488
Web: www.samcera.org
Email: samcera@samcera.org

Scott Hood
SamCERA
Chief Executive Officer

Board of Retirement

San Mateo County Employees' Retirement Association

Dear Trustees:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the San Mateo County Employees' Retirement Association (SamCERA) for the fiscal year ended June 30, 2018.

SamCERA's management is responsible for a fair presentation of financial data and a complete disclosure of all matters of material consequence. Management's discussion and analysis of the data are presented on pages 30-38.

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

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

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

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

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

SamCERA engages an independent actuarial consulting firm, Milliman Inc., to conduct an annual actuarial valuation of the pension plan. The purpose of this valuation is to reassess the magnitude of the benefit commitments in comparison with the assets expected to be available to support those commitments so that employer and employee contribution rates can be adjusted accordingly. Triennially, SamCERA requests its actuarial consulting firm to perform an actuarial experience study so that appropriate assumptions can be determined for valuing the plan's liabilities. SamCERA strives to provide the most recent financial and actuarial data in its annual report.

Authority, Responsibilities & Duties

The San Mateo County Board of Supervisors established retirement benefits for County employees effective on 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 provides retirement, disability, and death benefits for its eligible members and beneficiaries in accordance with the CERL, the California Public Employees' Pension Reform Act of 2013 (PEPRA - Government Code Section 7522 et seq.), and other applicable statutes, regulations and case law.

The Board, serving as fiduciary for all SamCERA's members and beneficiaries under the California Constitution, Article XVI, Section 17 and the CERL, is responsible for administering the system. The Board has adopted the Regulations of the Board of Retirement, and among other policies, its Mission & Goals; Investment Policy Statement; Conflict of Interest Code; and Code of Conduct, which reflect the Board's guiding policies. The Board annually adopts an operating budget for the administration of SamCERA, which is discussed in the Financial Section beginning on page 27. A breakdown of the budget allotment versus actual expenses is presented on pages 68-70. In addition, the Board has authorized the execution of contracts for the professional services of an actuary, an auditing actuary, an investment consultant, investment managers, a global custodian, a financial auditor, 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 23.

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

Employers participating in the retirement system include the County of San Mateo (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. More than 85% of SamCERA's members are classified as General Members while the remaining are public safety employees classified as Safety or Probation Members.

Looking Backward and Forward

For a summary of highlights for fiscal year 2017-18, I encourage you to review the following narrative information, as well as Management's Discussion and Analysis beginning on page 30. Details on SamCERA's investment portfolio can be found in the Chief Investment Officer's Report beginning on page 83.

Trustees

The SamCERA Board of Retirement 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 her publicly elected office; all other Trustees serve for a term of three years. In addition, there is one elected Safety Member Alternate and one elected Retiree Member Alternate. The officers for the Board for fiscal year 2017-18 were: Mark Battey, Chair; Shirley Tourel, Vice Chair; and David Spinello, Secretary. Other members of the Board were: Sandie Arnott, Al David, Eric Tashman, Benedict J. Bowler, Paul Hackleman, and Kurt Hoefer. Alternate Trustees were Susan Lee and Alma Salas.

Investments

This year's returns of 6.70%, net of investment manager fees, fell slightly short of SamCERA's assumed rate of return of 6.75% and lower than the policy benchmark by 1.10%, for the one-year period ended in June 2018. SamCERA earned a positive return for fiscal year 2017-18 in all of its 5 asset class composites: Public Equity, Fixed Income, Alternatives, Inflation Hedge and Risk Parity. The highest performance classes were Public Equity, Inflation Hedge and Risk

Parity while Alternatives and Fixed Income were the lowest returning asset classes. The fiscal year return ranked SamCERA's investment in the 4th quartile compared to SamCERA's peers (defined as public pension plans with greater than $1 billion in assets).

SamCERA's Board continues to implement its updated asset allocation policy, which began last fiscal year and is anticipated to be fully implemented by year 2020. Some allocations such as private real assets and real estate are expected to take longer to develop. During the 2018 fiscal year, allocation to U.S. equity was reduced and the allocation to inflation hedge assets was increased. Also, as a result of an annual review of the policy portfolio, exposure to alternatives was reduced and public equity was increased. These changes and others noted in the Chief Investment Officer's Report on page 83 are reflective of SamCERA's efforts to actively rebalance the portfolio to its long-term asset allocation policy. The goal is to keep a balanced risk posture without relying too much on any single asset, strategy, or return stream.

Actuarial

SamCERA continues to be a statewide leader in funding assumptions and was pleased to be ranked the 3rd most actuarially conservative among California retirement systems in a May 2018 survey from Roeder Financial. The survey ranks the funding assumptions used by California's public pension systems from "most conservative" to "most optimistic." SamCERA's high ranking was due mainly to its current funding method, where the June 30, 2008 Unfunded Actuarial Accrued Liability (UAAL) is amortized over a 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. In addition, its relatively low assumed investment earnings rate of 6.75% contributes to SamCERA's high ranking.

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. The independent actuarial consulting firm, Milliman Inc., 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 health of the fund at a given point in time and to recommend the employer and member contribution rates for the upcoming fiscal year. Triennially, Milliman Inc. 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 completed for the period ended April 30, 2017.

Milliman's actuarial valuation as of June 30, 2018, determined that the funding ratio increased from 84.3% to 87.5%. This increase was due primarily to employer contributions, including supplemental contributions that are intended to accelerate the elimination of the unfunded liability created by the financial crisis of 2008-2009 and due to the recognition of investment gains.

The Employer Normal Cost Rate decreased to 10.57% for fiscal year 2019-20 from 10.95% of covered payroll for fiscal year 2018-19. The decrease is due to the normal experience of SamCERA, which includes the continued growth of membership in Plan 7, the California Public Employees' Pension Reform Act of 2013 (PEPRA). Furthermore, the portion of the employer's contribution rate that finances the unfunded actuarial accrued liability (UAAL) decreased from 24.36% of pay to 23.10%. As mentioned, this was primarily due to recognition of investment gains from prior years and the additional supplemental contributions that were made.

Supplemental Contributions

The County continues to make supplemental contributions to accelerate the pay down of its UAAL in accordance with a Memorandum of Understanding (MOU) between the County and SamCERA that was established in 2013. 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 $145 million as of June 30, 2018. Furthermore, the County is committed to continue supplemental contributions over the next several 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 decreased slightly below $2 million as of June 30, 2018 due to a change in the recognition period reflected in its MOU. The District chose to go from a 15-year recognition period to a 5-year recognition period.

Cost of Living Adjustment

The annual Consumer Price Index for the Bay Area reflects higher inflation than the rest of the Country. Due to inflation, most SamCERA retirees and beneficiaries received a Cost of Living Adjustment (COLA) of 2.0% or 3.0%, depending on the COLA limit of their plan. The COLA for Plan 1 and Plan 2 was 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 continues to improve the pension administration system that was implemented in January 2017 through exhaustive testing and monitoring. Staff is also currently researching new features that may be implemented in the future to enhance the user experience. In July 2017, the first SamCERA app was launched. The app is a convenient way for members to access their retirement account using a mobile device.

Staff Strategic Planning

SamCERA's staff continue to implement a two-year strategic plan and action matrix which were developed by staff and approved by the Board in 2017. Progress on these goals will be tracked and updated throughout fiscal year 2018-19.

Moving forward, SamCERA will continue to pursue its three major goals described below, all of which are derived from and consistent with SamCERA's mission statement:

1. ASSET MANAGEMENT GOAL

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

Projects under this goal include: (1) analyzing whether to carve out a portion of the portfolio to specifically protect against an equity draw down event, (2) determining whether standardized reporting can be implemented with our private equity managers, (3) working with the Information Technology (IT) team to develop a streamlined tech solution to track investment manager reporting, and (4) enhancing the investment risk measurement and management of the portfolio.

2. 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 the development of a robust member education program. Furthermore, staff is working to ensure the pension administration system is performing as expected through monitoring and regular testing.

3. 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, enhancing features and insuring 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-first 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, 2017. The certificate is reproduced on page 19.

SamCERA is also the recipient of the GFOA Award for Outstanding Achievement in Popular Annual Financial Reporting (PAFR) for the fifteenth year running and has received this honor for the PAFR for the fiscal year ended June 30, 2017.

Additionally, the Public Pension Coordinating Council (the Council) presented SamCERA with its Public Pension Standards Award for 2017. 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 and SamCERA staff who always performs diligently to ensure the successful operation and financial soundness of SamCERA and is committed in maintaining the highest financial reporting standards. I am also appreciative of the continuing cooperation and open communication that SamCERA has with all its participating employers.

As it has for the past 74 years, SamCERA will continue to navigate its way through smooth and rough economic waters with a sense of direction, purpose and vision to ensure benefits for our membership.

Respectfully submitted,

Scott Hood

Chief Executive Officer

October 22, 2018

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, 2017

Christopher P. Morrill

Executive Director/CEO

PPCC Public Pension Standards Award

Public Pension Coordinating Council

Public Pension Standards Award
For Funding and Administration
_2017_

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)

Alan H. Winkle
Program Administrator

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 survivors and 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.

Sandie Arnott
BOARD MEMBER

Ex Officio per the 1937 Act, First Member

Shirley Tourel
VICE-CHAIR

Elected by the General Members, Second Member

Al David
BOARD MEMBER

Elected by the General Members, Third 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

LEADERSHIP IS THE CAPACITY TO TRANSLATE VISION INTO REALITY

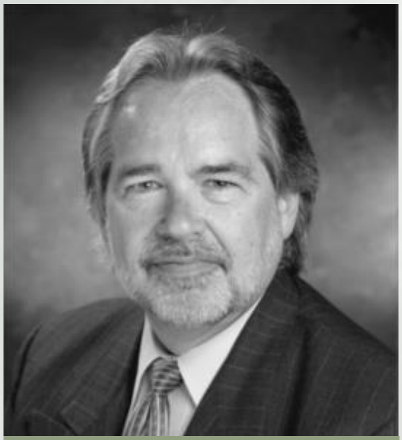
-Warren Bennis, American Scholar

Mark Battey
CHAIR

Appointed by the Board of Supervisors, Sixth Member

David Spinello
SECRETARY

Elected by the Safety Members, Seventh Member



Paul Hackleman
BOARD MEMBER

Elected by the Retired Members, Eighth Member

Kurt Hoefer
BOARD MEMBER

Appointed by the Board of Supervisors, Ninth Member

Alma Salas
BOARD MEMBER

Elected by the Retired Members, Retiree Alternate

Susan Lee
BOARD MEMBER

Elected by the Safety Members, Alternate Member

See page 99 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)

Professional Service	Consultant
Auditing Actuary	Segal Consulting
Auditors	Brown Armstrong Accounting Corporation
Consulting Actuary	Milliman, Inc.
Commercial Banking	Union Bank
Custodian	Northern Trust Corporation
Investment Consultant	Verus Advisory, Inc.
Pension Administration Software System	Vitech
Security Monitoring Counsel	Berman Tabacco Bernstein Litowitz Berger and Grossman LLP Grant and Elsenhofer LLP
Investment Software Support	eVestment Alliance, LLC
Taiwan Tax Agent	Faith Global Company, Limited
Tax Counsel	Reed Smith LLP
Trade Cost Analysis Consultant	Zeno AN Solutions

FINANCIAL SECTION

"If you can't explain it simply, you don't understand it well enough."

-Albert Einstein
German-American Physicist

BROWN ARMSTRONG
CERTIFIED PUBLIC ACCOUNTANTS

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

LAGUNA HILLS OFFICE
23272 MILL CREEK DRIVE
SUITE 255
LAGUNA HILLS, CA 92653
TEL 949.652.5422

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

WWW.BACPAS.COM

BROWN ARMSTRONG
Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

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

Report on the Financial Statements 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, 2018; the Statement of Changes in Fiduciary Net Position for the fiscal year then ended; and the related notes to the financial statements, which collectively comprise SamCERA's basic financial statements as listed in the table of contents. We have also audited the Schedule of Cost Sharing Employer Allocations 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, 2018, listed as other information in the table of contents.

Management's Responsibility for the Financial Statements and Other Information

SamCERA's management is responsible for the preparation and fair presentation of these financial statements and other information in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements 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 financial statements and other information based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and other information are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements and other information. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the 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 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 financial statements and other information.

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

Opinions

In our opinion, the financial statements and the other information referred to above present fairly, in all material respects, the fiduciary net position of SamCERA as of June 30, 2018; 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, 2018, in conformity 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 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.

Additional Information

The introductory, investment, actuarial, statistical, and compliance sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and 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 22, 2018, 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 to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering SamCERA's internal control over financial reporting and compliance.

Report on Summarized Comparative Information

We have previously audited SamCERA's June 30, 2017, financial statements, and our report dated October 23, 2017, 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, 2017, is consistent in all material respects, with the audited financial statements from which it has been derived.

Restrictions on Use

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

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 22, 2018

Management's Discussion and Analysis for Fiscal Year 2017-18

As fiduciaries of the San Mateo County Employees' Retirement Association (SamCERA), we provide this overview and analysis of SamCERA's financial position as of June 30, 2018, and results of operation for the fiscal year ended June 30, 2018. The information presented here, in conjunction with the Notes to the Basic Financial Statements beginning on page 41, provides a clear picture of SamCERA's overall financial status and activities.

Financial Highlights

- As of June 30, 2018, SamCERA's net position (total assets minus total liabilities) was about $4.4 billion, an increase of $335 million, or 8%, over the prior fiscal year-end. The net position balance was exclusively restricted for pension benefits.

- Total assets increased $331 million, or 8%, over the year. The increase was mainly from new investment purchases and market appreciation of investments.

- Total liabilities decreased $4 million, or 29%, over the year as most investment purchase transactions were completed and settled before year-end.

- Total additions to SamCERA's net position decreased $146 million, or 21%, to $552 million from $698 million last fiscal year. The net investment return dropped to 6.7% this year from 12.6% last year. Public equity and alternatives were the main detractors of performance.

- Total deductions from SamCERA's net position increased $16 million, or 8%, to $216 million from $200 million last fiscal year. The increase was triggered mainly by an increase in the number of retirees receiving pension benefits.

- The funded ratio for SamCERA as of June 30, 2018, increased from 84.3% to 87.5% over the year, based upon the most recent actuarial valuation. The improvement in the funded ratio was mainly from employer contributions to amortize the unfunded actuarial accrued liability (UAAL) and the recognition of investment gains from prior years.

- The net pension liability of participating employers was $488 million as of June 30, 2018, which approximates to 91% of collective covered payroll based on the Governmental Accounting Standards Board (GASB) Statement No. 67.

- The overall financial position of SamCERA has improved over the year. SamCERA remains in good financial position to meet its obligations to plan participants and beneficiaries.

Overview of Financial Statements

The following discussion and analysis serve as an introduction and overview of SamCERA's basic financial statements. The basic financial statements and required disclosures are prepared in accordance with the accounting principles and reporting standards prescribed by 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 beneficiaries as well as outstanding liabilities as of June 30, 2018. 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 39 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 deprecation) 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 40 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 41-71 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 72-74.

- 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 the statutory actuarially determined contributions over a period of time.
- Schedule of Investment Returns – shows the "money-weighted rate of return" for investments, net of investment manager expenses. The money-weighted rate of return is a measure of investment performance adjusted for cash flows and the changing amounts actually invested.
- Notes to the Required Supplemental Information – disclose additional details in relation to the required supplemental 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 75-77 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 78-80 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, 2018, was approximately $4.4 billion, which represents an increase of $335 million, or 8%, over the reporting period.

Statement of Fiduciary Net Position

June 30 (Dollars in Thousands)

	2018	2017	Increase (Decrease) Amount	Percentage
Assets				
Cash and cash equivalents	$ 53,125	$ 192,194	$ (139,069)	-72%
Cash management overlay	12,984	25,208	(12,224)	-48%
Securities lending cash collateral	1,486	-	1,486	-
Receivables	19,611	25,399	(5,788)	-23%
Prepaid expense	8	8	-	0%
Investments at fair value	4,289,745	3,802,162	487,583	13%
Capital assets, net	6,804	7,629	(825)	-11%
Total assets	4,383,763	4,052,600	331,163	**8%**
Liabilities				
Investment management fees	1,663	1,822	(159)	-9%
Due to broker for investments purchased	5,408	9,417	(4,009)	-43%
Collateral payable for securities lending	1,489	-	1,489	-
Other	1,241	2,659	(1,418)	-53%
Total liabilities	9,801	13,898	(4,097)	**-29%**
Net position restricted for pensions	**$ 4,373,962**	**$ 4,038,702**	**$ 335,260**	**8%**

Assets. SamCERA's total assets increased $331 million, or 8%. Significant changes over the year include the following:

- $139 million decrease in cash and cash equivalents. Last fiscal year-end SamCERA accumulated a significant amount of cash from the County of San Mateo (the County) supplemental contributions as well as portfolio rebalancing. The intent was to make sure sufficient cash was available to fund new planned investments in fiscal year 2017-18.

- $12 million decrease in cash management overlay. Cash held in the cash management overlay account was driven by operational needs. Less cash was kept in this account to match diminishing needs.

- $1.5 million increase in securities lending cash collateral. SamCERA resumed its securities lending activities in July of 2017 and, in exchange, secured cash collateral from securities on loan.

- $6 million decrease in receivables. Most of the investments sold were completed and settled before the fiscal year-end. As a result, outstanding receivables were considerably smaller when compared to last fiscal year-end.

- $488 million increase in investments. SamCERA implemented phase two of its new asset allocation policy by increasing its investments in fixed income equities and inflation hedge funds. The remaining increase came mainly from the appreciation of investments.

Liabilities. SamCERA's total liabilities decreased $4 million, or 29%. The total amount due to investment brokers declined by $4 million as most of the investment purchase transactions were completed and settled before the fiscal year-end.

Analysis of Changes in Fiduciary Net Position

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 $335 million, or 8%, for the fiscal year ended June 30, 2018.

Statement of changes in Fiduciary Net Position

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

			Increase (Decrease)	
	2018	2017	Amount	Percentage
Additions				
Employer contributions	$ 207,257	$ 198,727	$ 8,530	4%
Member contributions	64,204	62,160	2,044	3%
Net investment income	280,076	436,603	(156,527)	-36%
Net securities lending income	43	46	(3)	-7%
Other	27	27	-	0%
Total additions	551,607	697,563	(145,956)	-21%
Deductions				
Service retirement benefits	179,880	166,975	12,905	8%
Disability retirement benefits	23,872	22,690	1,182	5%
Survivor, death and other benefits	976	699	277	40%
Member refunds	4,326	2,876	1,450	50%
Administrative expenses	5,849	5,983	(134)	-2%
Information Technology expenses	1,444	996	448	45%
Other expenses	-	30	(30)	-100%
Total deductions	216,347	200,249	16,098	8%
Changes in net position	335,260	497,314	(162,054)	-33%
Net position restricted for pensions				
Beginning of year	4,038,702	3,541,388	497,314	14%
End of year	**$ 4,373,962**	**$4,038,702**	**$ 335,260**	8%

Additions. Total additions to SamCERA's net position decreased $146 million, or 21%, when compared to last fiscal year. Significant changes include the following:

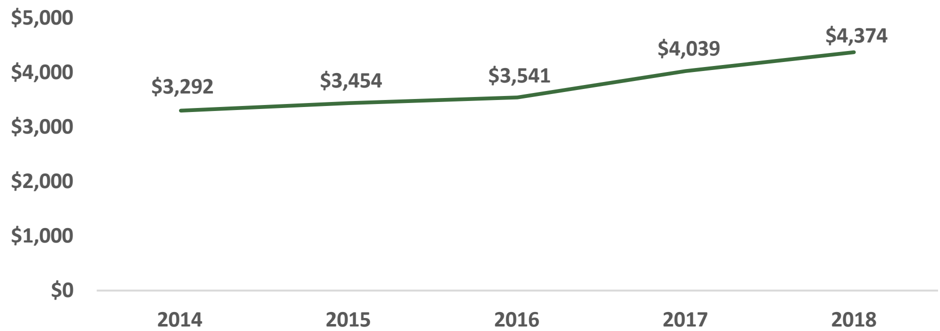
- $9 million increase in employer contributions. In its 2016 actuarial valuation, SamCERA adopted a new economic assumption changing the assumed rate of investment return from 7.25% to 7.00%, effective July 1, 2017. This change triggered a modest increase of $15 million in employer required contributions during fiscal year 2017-18. The increase was partially offset by a $6 million decrease in the County's supplemental contributions, from $33.6 million last year to $27.6 million this year. To accelerate the payoff of unfunded liabilities, employers may make supplemental contributions to the Retirement fund.

- $157 million decrease in net investment income. The return from the investment portfolio slipped from 12.6% last year to 6.7% this year. Public equity (primarily international equities) and alternatives (with primary impact from absolute return and secondary impact from private equity) were the main detractors of performance.

Deductions. Total deductions increased $16 million, or 8%, compared to last fiscal year. The increase was due mainly to an increase in the number of retirees with a relatively higher final average compensation, and thus a higher benefit.

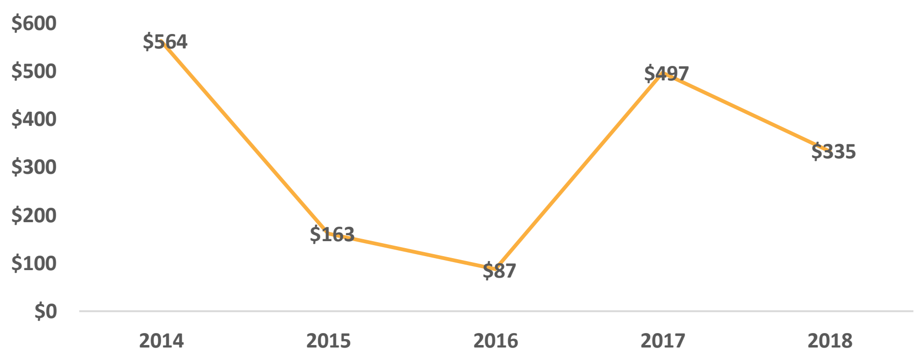
SamCERA's Fiduciary Net Position

June 30 (Dollars in Millions)



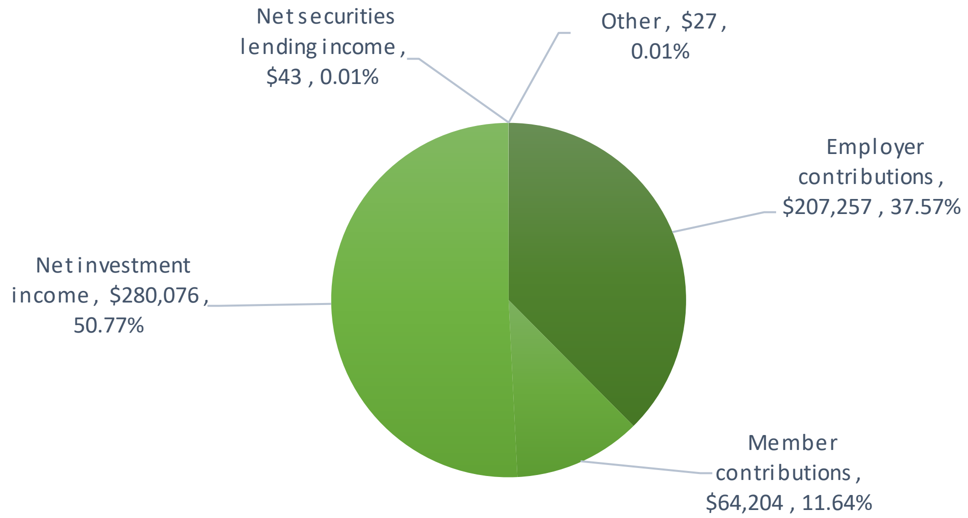
Changes in SamCERA's fiduciary Net Position

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



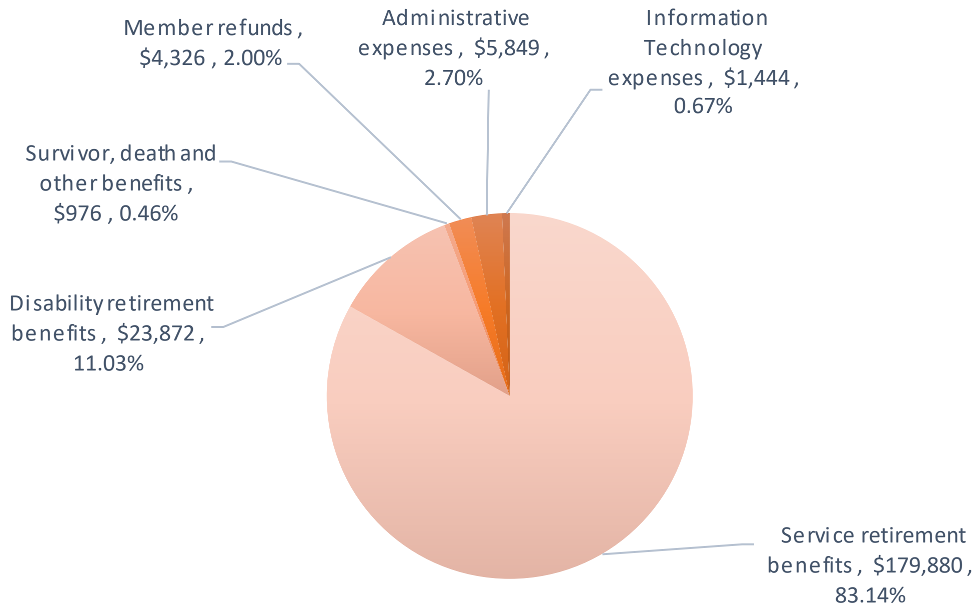
ADDITIONS TO FIDUCIARY NET POSITION

For the Fiscal Year Ended June 30, 2018 (Dollars in Thousands)



DEDUCTIONS FROM FIDUCIARY NET POSITION

For the Fiscal Year Ended June 30, 2018 (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 actuarial 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 maintain equity among generations of members and taxpayers.

Triennial Experience Study

In 2017, SamCERA's actuary performed a triennial "experience study" to reassess the reasonableness of the assumptions used in the valuation. These assumptions are critical in assisting the Retirement Fund in pre-funding for the benefits prior to retirement. Based on the actuary's recommendations, the Retirement Board (the Board) adopted several new economic and demographic assumptions for the valuation as of June 30, 2017.

For the economic assumptions, the investment return was adjusted from 7.00% to 6.75%, the general wage growth as well as the payroll growth from 3.25% to 3.00%, and the price inflation from 2.75% to 2.50%. For the demographic assumptions, the Board approved several changes in alignment with the results of the recent "experience study" that are used to predict future member behavior, such as retirement, disability, and mortality.

Plan Assets, Liabilities, and Funded Ratio

One measure of the funding adequacy of the retirement system is the Funded Ratio. According to the latest actuarial valuation as of June 30, 2018, the plan's funded ratio (actuarial value of assets to actuarial accrued liabilities) increased to 87.5% as of June 30, 2018, from 84.3% as of June 30, 2017. The increase resulted primarily from employer contributions to amortize the UAAL and the recognition of investment gains from prior years.

As of June 30, 2018, the actuarial value of plan assets was $4.4 billion, and the actuarial accrued liability was $5.0 billion. The difference between these two amounts represents the UAAL (the gap between promised benefits and the funding available to meet those obligations), which amounted to $619 million (or 115.5% of the collective covered payroll of participating employers, totaling $536 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.

SamCERA's Fiduciary Responsibilities

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

Requests for Information

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

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

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

Statement of Fiduciary Net Position

June 30, 2018 (with comparative amounts as of June 30, 2017)

	2018	2017
ASSETS		
Cash and short-term investments:		
Cash and cash equivalents	$ 53,125,429	$ 192,194,061
Cash management overlay	12,984,127	25,207,998
Securities lending cash collateral	1,486,415	-
Total cash and short-term investments	67,595,971	217,402,059
Receivables:		
Contributions	9,422,510	8,622,173
Due from broker for investments sold	4,152,242	8,273,972
Investment income	5,930,254	8,406,749
Securities lending income	10,453	-
Other	95,057	95,657
Total receivables	19,610,516	25,398,551
Prepaid expense	7,669	7,669
Investments at fair value:		
Public equity	1,809,329,959	1,717,793,138
Fixed income	892,923,149	738,544,220
Alternatives	514,972,248	480,730,879
Risk parity	311,126,425	291,757,142
Inflation hedge	761,393,517	573,336,864
Total investments at fair value	4,289,745,298	3,802,162,243
Capital assets	8,040,088	8,041,551
Less: accumulated depreciation	(1,236,535)	(412,178)
Capital assets, net of accumulated depreciation	6,803,553	7,629,373
Total assets	4,383,763,007	4,052,599,895
LIABILITIES		
Payable - Investment management fees	1,663,178	1,822,557
Due to broker for investments purchased	5,408,607	9,416,634
Securities lending collateral due to borrowers	1,488,689	-
Other	1,241,019	2,658,714
Total liabilities	9,801,493	13,897,905
NET POSITION RESTRICTED FOR PENSIONS	**$ 4,373,961,514**	**$ 4,038,701,990**

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, 2018
(with comparative amounts for the fiscal year ended June 30, 2017)

	2018	2017
ADDITIONS		
Contributions:		
Employer	$ 207,256,713	$ 198,727,135
Member	64,204,278	62,160,101
Total contributions	271,460,991	260,887,236
Investment income:		
Interest and dividends	45,060,738	38,445,658
Net appreciation in fair value of investments	275,224,883	431,845,614
Total investment income	320,285,621	470,291,272
Less: investment expenses	(40,210,092)	(33,688,058)
Net investment income	280,075,529	436,603,214
Securities lending income:		
Earnings	52,886	68,090
Rebates	8,141	(10,072)
Fees	(17,698)	(12,747)
Net securities lending income	43,329	45,271
Other additions	27,540	27,221
Total additions	**551,607,389**	**697,562,942**
DEDUCTIONS		
Member benefits:		
Service retirement benefits	179,880,342	166,975,634
Disability retirement benefits	23,872,145	22,689,813
Survivor, death and other benefits	976,386	698,946
Total member benefits	204,728,873	190,364,393
Member refunds	4,325,730	2,875,887
Administrative expenses	5,849,252	5,983,356
Information technology expenses	1,444,010	995,979
Other expenses	-	29,834
Total deductions	**216,347,865**	**200,249,449**
Net increase	335,259,524	497,313,493
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year	4,038,701,990	3,541,388,497
End of year	**$ 4,373,961,514**	**$ 4,038,701,990**

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

General

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

Under the CERL, the management of SamCERA is vested in the Board consisting of nine members: the first member is the County Treasurer; the second and third members are General Members of SamCERA elected by their peers; the fourth, fifth, sixth and ninth members are qualified electors of the County and appointed by the County Board of Supervisors; the seventh member is elected by and a member of SamCERA's Safety membership; and the eighth member is a Retired Member elected from the retired membership. In addition, there is one elected Safety Member Alternate and one elected Retired Member Alternate. Subject to the following fiduciary responsibilities, the Board oversees and guides the pension plans:

(1) solely in the interest of, and for the exclusive purpose of, providing economic benefits to participants and their beneficiaries;

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

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

Pension Plans

SamCERA has 15 defined benefit plans based on a member's date of entry into SamCERA. These plans cover members classified as general, safety, and probation. The tables on the following two pages provides details for each of these plans.

Benefit Plans

June 30, 2018

		General Member	Probation Member	Safety Member
Plan 1	Hire Date	On or before 7/5/80	On or before 7/5/80	On or before 7/5/80
	Benefit factor	2%@55.5	3%@50	3%@50
	Maximum COLA	5%	3%	5%
	FAC Period	Highest 1 year	Highest 1 year	Highest 1 year
	Eligibility for Service Retirement	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 20 years of service.	Age 50 with 10 years of service; any age with 20 years of service.
Plan 2	Hire Date	7/6/80 - 7/12/97	7/6/80 - 7/12/97	7/6/80 - 7/12/97
	Benefit factor	2%@55.5	3%@50	3%@50
	Maximum COLA	3%	3%	3%
	FAC Period	Highest 1 year	Highest 1 year	Highest 1 year
	Eligibility for Service Retirement	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 20 years of service.	Age 50 with 10 years of service; any age with 20 years of service.
Plan 3	Hire Date	On or before12/22/12, a non-contributory plan.	Not applicable	Not applicable
		(After five years of service, Plan 3 members can elect membership under the eligible contributory plan. Members currently working in a contributory plan with Plan 3 service may purchase an upgrade of their Plan 3 service. Plan 3 closed effective December 23, 2012.)		
		(If retirement occurs prior to age 65, benefit amount will be adjusted by an actuarial equivalent factor.)		
	Maximum COLA	No COLA	Not applicable	Not applicable
	FAC Period	Highest 3 years (non-consecutive)	Not applicable	Not applicable
	Eligibility for Service Retirement	Age 65 with 10 years of service; reduced benefit at age 55 with 10 years of service.	Not applicable	Not applicable

(Continued)

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.

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

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.

Pension Plan Membership

Plan membership as of June 30, 2018, is displayed in the table below.

SamCERA Membership

June 30 , 2018

	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Total
Retirees and beneficiaries currently receiving benefits								
General	1,518	1,979	135	780	2	0	1	4,415
Safety	271	212	0	76	1	0	0	560
Probation	36	66	0	32	0	0	0	134
Subtotal	1,825	2,257	135	888	3	0	1	5,109
Inactive employess entitled to but not currently receiving benefits (Deferred)								
General	9	310	72	759	80	0	294	1,524
Safety	1	20	0	46	8	0	8	83
Probation	0	16	0	39	1	0	3	59
Subtotal	10	346	72	844	89	0	305	1,666
Current employees, vested								
General	8	570	57	1,952	155	0	96	2,838
Safety	0	48	0	234	36	0	17	335
Probation	0	29	0	174	6	0	2	211
Subtotal	8	647	57	2,360	197	0	115	3,384
Current employees, non-vested								
General	0	0	5	20	113	0	1,627	1,765
Safety	0	0	0	0	23	0	150	173
Probation	0	0	0	0	2	0	43	45
Subtotal	0	0	5	20	138	0	1,820	1,983
Total Members	1,843	3,250	269	4,112	427	0	2,241	12,142

Note: Plans 1, 2, 3, and 4 are closed to new entrants. However, eligbible 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, years of service, and age factors to calculate benefits payable. In addition, SamCERA provides 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 certain limited adjustments for their member benefits.

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 requirement does 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 is entitled to withdraw member contributions plus accumulated interest upon termination of employment. If the member enters a reciprocal retirement system within 180 days, the member can elect to leave the accumulated contributions with SamCERA and receive a deferred retirement benefit when eligible. Eligible contributory 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 members in Plan 3 with ten years of service may elect a deferred retirement.

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

The COLA is based on information 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.

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 deprecation) in the fair value of investments is recorded as an increase (or decrease) to investment income, which includes both realized and unrealized gains and losses on investments, based upon investment valuations.

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

Investment Policy and Valuation

The Board has exclusive control of SamCERA's investments. Government Code Section 31595 of the CERL authorizes the Board to invest, or delegate the authority to invest, the assets of SamCERA in any investment allowed by statute and deemed prudent in the informed opinion of the Board. The Investment Policy of SamCERA seeks to optimize long-term returns within acceptable risk parameters. The Board periodically reviews the asset allocation in response to changing market conditions that may affect forward-looking expected returns of asset classes.

During the fiscal year, the Board adjusted the target policy asset allocation that was initially set in October 2016. The new policy reduced exposure to alternatives and increased exposure to public equity. The Board also approved an allocation to include low volatility equity and a 50% currency hedge for developed international equity. The new target policy consists of 37% in public equity, 23% in fixed income, 12% in alternatives, 8% in risk parity, and 20% in inflation hedge. Implementation of the new policy will take multiple phases and is anticipated to be completed by year 2020.

As of June 30, 2018, the target asset allocation incorporated in SamCERA's Investment Policy and detailed in the Investment Section of this report only reflects the portion of the newly adopted allocation that has already been implemented. Due to the multiple phase process, SamCERA's current Investment Policy does not capture the new target policy so that the actual allocation does not significantly deviate from policy.

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 liquid 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 year. As of June 30, 2018, SamCERA reported $6.8 million in capital assets, net of accumulated depreciation of $1.2 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.

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 final reports, which may have a material effect on the financial statements or disclosures contained therein. After the fiscal year end, the Board approved a $20 million commitment to a private equity partnership on August 28, 2018.

Note 3: Funding Policy

The CERL establishes the basic contribution obligations for employers and members to the pension plan. The employer and member contribution rates adopted by the Board are based on recommendations from an independent actuary in accordance with membership type (General, Safety, and Probation) and the plan in which a member belongs.

The funding objective of the pension plan is to establish employer and member contribution rates which, over time, will 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.

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, 2018, are subject to “one year” deferral. Thus, the new contribution rates in the June 2018 valuation are effective on July 1, 2019.

Note 4: Member Contributions

Employee contributions are of three types: basic, COLA, and cost sharing. Active members are required to make contributions as described below:

- Basic contributions are required of all members as determined by the entry age (except for members in plan 3 and plan 7) and class of each member. Basic contributions generally cease when safety members reach 30 years of service.
- Cost sharing contributions apply to General members in Plans 1, 2, and 4 (except for the District and County’s Board of Supervisors) and Safety and Probation members in Plans 1, 2, 4, and 5. The cost sharing contribution rates vary 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. Effective July 2018, the County’s Board of Supervisors are required to make COLA cost sharing contributions.

Plan 3 is a non-contributory, which is open only for General members. 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). The member contribution rate for all plans combined increase from 11.92% in fiscal year 2017 to 12.07% in fiscal year 2018. The increase is largely driven by revised economic assumptions which include a lower expectation for future investment returns.

Note 5: Employer Contributions

For the fiscal year ended June 30, 2018, the employer statutory contribution rate for all plans combined was 33.76% of actual covered payroll with 10.24% attributed to the normal cost and 23.52% to the UAAL amortization. These contribution rates were actuarially determined.

EMPLOYER CONTRIBUTION RATES AS A PERCENTAGE OF COVERED PAYROLL

	2018	2017	Change
Normal Cost	10.24%	10.03%	0.21%
UAAL Amortization	23.52%	21.93%	1.59%
Total Contribution Rate	**33.76%**	**31.96%**	**1.80%**

The employer normal cost rate increased from 10.03% to 10.24% of covered payroll. In addition, the employers’ statutory contribution rate to finance the UAAL over 15 years increased from 21.93% to 23.52% of covered payroll. The increase is mainly triggered by revised economic assumptions which include a lower expectation for future investment returns.

The employer statutory contributions, including the normal cost and the UAAL, are separately shown in the table below.

Schedule of Employer Contributions

(Dollars in Thousands)

Fiscal Year Ended June 30	(a) Actual Employer Contribution	(b) Actuarially Determined Contribution	(a) - (b) Supplemental Contribution		Percentage of Actuarially Determined Contribution Received
2009	$106,123	$106,123	$0		100%
2010	$106,265	$106,265	$0		100%
2011	150,475	150,475	-		100%
2012	150,950	139,407	11,543		100%
2013	144,308	131,294	13,014		100%
2014	202,877	152,877	50,000	(1)	100%
2015	180,704	169,814	10,890	(2)	100%
2016	191,094	170,046	21,048	(3)	100%
2017	198,727	164,877	33,850	(4)	100%
2018	207,257	179,627	27,630	(5)	100%

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

(2) The County made a supplemental continution of $10.9 million to accelerate the pay down of the County's UAAL.

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

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

(5) The County contributed additional funding of $27.6 million to accelerate the payoff of their UAAL.

Supplemental Contributions from the County

In November 2013, the County reached an agreement with SamCERA to accelerate the pay down of the County's UAAL. Under this agreement, the County provided a supplemental contribution of $50 million in fiscal year 2014 and will continue to contribute $10 million annually 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 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. Deposits for more than six months prior to the interest crediting date will receive interest at the actuarially calculated return. In fiscal year 2018, the County contributed $27.6 million to the CSCA in addition to its annual required contribution. As of June 30, 2018, the CSCA had an aggregate reserve account balance of $145.4 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 2018 via two semi-annual prepayments (one in July 2017 and another in January 2018). The prepayments were based on the adopted actuarial contribution rate and the projected covered payroll by plan, discounted by the assumed actuarial rate of return. Throughout the year, the prepayments were periodically reduced by actual contributions as determined by the adopted actuarial contribution rate and the actual covered payroll by plan. After 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. Deposits for more than six months prior to the crediting date will receive interest at the actuarially calculated return.

As of June 30, 2018, the DSCA had an aggregate reserve account balance of $1.9 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 from June 30, 2018, 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.

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

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

SamCERA maintains cash deposits to support its investment activities and operational needs. As of June 30, 2018, $15.1 million of cash was held in a pooled money market fund with the Northern Trust Corporation, and $31.7 million in the investment pool with the County Treasurer. Cash held by investment managers at year-end amounted to $6.3 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 $413,799 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.

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

2017, 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 take more than one year to complete.

Target Asset Allocation. As of June 30, 2018, SamCERA's target asset allocation consists of 40% in public equity, 21% in fixed income, 13% in alternatives, 8% in risk parity, and 18% in the inflation hedge asset class. The actual asset allocation at fiscal year-end consisted of 41.6% in public equity, 20.5% in fixed income, 11.8% in alternatives, 7.1% in risk parity, 17.5% in inflation hedge, and 1.5% in cash and cash equivalents.

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. The annual money-weighted rate of return was 6.53% on SamCERA's investments, net of investment manager fees, for the fiscal year ended June 30, 2018.

Long-Term Expected Rate of Return. The long-term expected rate of return on pension plan investments was determined using a building-block method. Under this method, expected future real rate of returns (expected returns, net of inflation) are developed for each major asset class. Such information is combined to produce the long-term expected rate of return for the entire investment portfolio by weighing the expected future real rates of return against the target asset allocation percentage.

LONG-TERM EXPECTED RATE OF RETURN

June 30, 2018

Asset Class	Target Allocation	Long-Term Expected Rate of Return
Public Equity	40%	4.4%
Fixed Income	21%	1.2%
Alternatives	13%	3.7%
Risk Parity	8%	5.1%
Inflation Hedge	18%	4.2%
Total	**100%**	

The table above 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.

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. The investment guidelines in most cases stipulate the investment style, performance objective, performance benchmarks, and portfolio characteristics.

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

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 eleven external investment pools 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

June 30, 2018

Investment Portfolio	Fair Value	Weighted Average Coupon	Weighted Average Maturity (Years)	Effective Duration (Years)
Opportunistic Credit Funds [(1)]	$ 209,690,322	7.47%	6.40	1.48
BlackRock Intermediate Government Bond	214,832,349	2.10%	4.01	3.74
Fidelity Institutional Asset Management	260,132,045	3.10%	8.92	6.20
PIMCO	79,776,723	4.30%	9.03	4.99
Western Asset Management	128,491,710	2.80%	6.64	3.65
Total	**$ 892,923,149**			

[(1)] This category consists of seven opportunistic Credit Funds managed by Angelo Gordon (two funds), Beach Point, Brigade Capital Management, Franklin Templeton, Tennenbaum Capital Partners, and White Oak.

Custodial Credit Risk – Investments. The custodial credit risk is the risk that, in the event of the failure of a counterparty to a transaction, SamCERA will not be able to recover the value of 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, 2018, SamCERA had no investments that were exposed to custodial credit risk.

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, 2018, is summarized in the table on the right.

Quality Breakdown for SamCERA's Investment in Bonds as of June 30, 2018

Credit Risk	Active Management	Commingled Management
AAA	100.0%	46.8%
AA	-	3.8%
A	-	7.3%
BBB	-	1.6%
Less than BBB	-	28.3%
NR	-	12.2%
Total	**100.0%**	**100.0%**

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 Currency Risk Analysis

June 30, 2018

Trade Country Name	Common Stock	Foreign Currency	Total
Australia	$ 14,256,610	$ 8,944	$ 14,265,554
Brazil	2,792,410	-	2,792,410
Canada	5,307,426	396,535	5,703,961
Switzerland	20,339,791	-	20,339,791
Denmark	10,987,749	-	10,987,749
Europe	96,517,261	57,724	96,574,985
United Kingdom	83,332,875	-	83,332,875
Hong Kong	13,830,620	-	13,830,620
India	6,706,501	17,531	6,724,032
Japan	74,831,735	273,024	75,104,759
South Korea	4,652,882	-	4,652,882
Mexico	1,577,799	-	1,577,799
Malaysia	2,616,760	-	2,616,760
Philippines	900,347	-	900,347
Sweden	19,242,468	-	19,242,468
Singapore	16,150,589	20	16,150,609
South Africa	10,909,213	-	10,909,213
Total	**$ 384,953,036**	**$ 753,778**	**$ 385,706,814**

Concentration of Credit Risk. This risk is the risk of loss attributed to the magnitude of SamCERA's investment in a single issuer of securities. Investments issued or explicitly guaranteed by the U.S. Government and pooled investments are excluded from the concentration of credit risk analysis. As of June 30, 2018, SamCERA does not have investments in a single issuer with five percent or more of SamCERA's fiduciary net position.

Derivatives

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

SamCERA 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, and 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, 2018, the derivatives held an aggregate negative notional amount of $12.9 million. The fair value of derivatives totaling a negative amount of $222,860 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 2018 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, 2018, is not material.

INVESTMENT DERIVATIVES

June 30, 2018

Type of Derivatives	Notional Value	Fair Value
Interest Rate Contracts - Short	$ (7,246,992)	$ 9,195
Interest Rate Contracts - Long	(26,951,734)	(34,703)
Foreign Exchange Contracts - Short	(1,675,520)	(15,510)
Equity Contracts - Short	23,002,765	(181,842)
Total	**$ (12,871,481)**	**$ (222,860)**

Interest Rate Risk – Derivatives. SamCERA's investments in derivatives are highly sensitive to changes in interest rates. The investment maturities for these investments in the table above are 3 months or less.

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, 2018, 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, 2018, 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 longer 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 have 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, 2018, the fair value of securities on loan reported and the total collateral held amounted to $2.09 million and $2.16 million (with $1.49 million in cash collateral and $0.67 million in non-cash collateral), respectively. The amount of collateral exceeded the amount of securities on loan by $70,949. The securities on loan include U.S. agencies securities, U.S. corporate fixed income securities, U.S. equities, U.S. government fixed income securities, international equities, and international government fixed income securities.

The cash collateral received on each loan was invested in a short-term investment pool, the Northern Institutional Liquid Assets Portfolio (NILAP), managed by the securities lending agent. The average maturity of securities on loan was approximately 33 days as of June 30, 2018. 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, 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, 2018, the Fund had an interest sensitivity of 15 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 - reflects prices quoted in active markets.
- Level 2 - reflects prices that are based on a similar observable asset either directly or indirectly, which may include inputs in markets that are not considered to be active.
- Level 3 - reflects prices based upon unobservable sources.

The categorization of investments within the fair value hierarchy (see pages 61-62) is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk.

Fair Value Measurement

June 30, 2018

Investments by Fair Value Level	June 30, 2018	Fair Value Measurements Using: Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
DEBT SECURITIES			
US Government Securities	$ 87,507,711		$ 87,507,711
Total Debt Securities	87,507,711		87,507,711
EQUITY SECURITIES			
Foreign Stocks	424,340,902	$ 424,340,902	
US Common & Preferred Stock	11,702,329	11,702,329	
Total Equity Securities	436,043,231	436,043,231	
COMMINGLED FUNDS			
Domestic Bond Funds	423,100,782	79,776,723	343,324,059
Domestic Equity Funds	825,594,814		825,594,814
International Equity Funds	330,061,250		330,061,250
Liquid Pool Funds	263,283,877		263,283,877
Total Commingled Funds	1,842,040,723	79,776,723	1,762,264,000
Total Investments by Fair Value Level	**2,365,591,665**	**$ 515,819,954**	**$ 1,849,771,711**
Investments Measured at the Net Asset Value (NAV)			
Domestic Bond Funds	429,768,231		
Global Bond Funds	40,054,136		
Domestic Equity Funds	156,868,228		
International Equity Funds	60,762,436		
Real Estate Funds	349,361,380		
Risk Parity Funds	311,126,425		
Absolute Return/Hedge Funds	242,487,811		
Private Equity Funds	272,484,437		
Private Real Asset Funds	61,240,549		
Total Investments Measured at NAV	**1,924,153,633**		
Total Investments	**$ 4,289,745,298**		
Derivatives [1]			
Interest Rate Contracts - Short	$ 9,195		$ 9,195
Interest Rate Contracts - Long	(34,703)		(34,703)
Foreign Exchange Contracts - Short	(15,510)		(15,510)
Equity Contracts - Short	(181,842)	$ (181,842)	-
Total Derivatives	**$ (222,860)**	**$ (181,842)**	**$ (41,018)**

[1] Derivatives are reported under cash management outlay and inflation hedge on the Statement of Fiduciary Net Position.

Investments Measured at Net Asset Value (NAV)

June 30, 2018

Investments Measured at NAV	6/30/2018	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period
Domestic Bond Funds [1]	$ 429,768,231	$ -	Daily, Quarterly	15-90 days
Global Bond Funds [1]	40,054,136	-	Monthly	15 days
Domestic Equity Funds [1]	156,868,228	-	Daily	1-5 days
International Equity Funds [1]	60,762,436	-	Daily	1-10 days
Real Estate Funds [2]	349,361,380	53,300,000	Quarterly, Not Eligible	45 days
Risk Parity Funds [3]	311,126,425	-	Monthly	15 days
Hedge Funds/Absolute Return [4]	242,487,811	-	Semi-Monthly, Monthly	5-75 days
Private Equity Funds [5]	272,484,437	159,700,000	Not Eligible	Not applicable
Private Real Asset Funds [5]	61,240,549	78,900,000	Not Eligible	Not applicable
Total Investments Measured at NAV	**$ 1,924,153,633**	**$ 291,900,000**		

(1) **Bond and Equity Funds.** This type includes seven domestic bond funds, one global bond fund, one domestic equity fund, and one international equity fund that is considered to be in 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. The fair values of the investments in this type have been determined using the NAV (or its equivalent) of the Plan’s ownership interest in partners’ capital. One investment has quarterly liquidity while the other two are ineligible for redemption.

(3) **Risk Parity Funds.** This type includes two risk parity funds that seek to generate returns from a risk diversified portfolio of asset exposures. The fair values of the investments in this type have been determined using the NAV (or its equivalent) of the Plan’s ownership interest in partners’ capital. The funds can be redeemed on a monthly basis.

(4) **Absolute Return/Hedge Funds**. This strategy consists of two multi-strategy absolute return/hedge funds. One fund delivers efficient exposure to a well-diversified portfolio of hedge fund strategies and the other builds a broad range of return-seeking positions (i.e. multi-strategy) with high underlying liquidity that incorporates multiple risk views.

(5) **Private Equity and Real Asset Funds.** This type includes twenty-two private equity funds, investing primarily in Buyout Funds, Venture Capital, and Debt/Special Situations. This type also includes eight 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.

As of June 30, 2018, 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, 2018. 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 6.92% 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 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.

Schedule of Employer Net Pension Liability

June 30, 2018

This schedule displays the total pension liability, the plan fiduciary net position, and the net pension liability of all participating employers, which were determined in conformity with the requirements prescribed by GASB Statement No. 67.

Net Pension Liability	**June 30, 2018**
Total pension liability	$ 4,862,308,884
Less: Plan fiduciary net position	(4,373,961,514)
Employers' net pension liability	**$ 488,347,370**
Plan fiduciary net position as a % of total pension liability	89.96%
Covered payroll	$ 535,937,622
Net employers' pension liability as a % of covered payroll	91.12%

Note: The total pension liability was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial assumptions and methods shown below.

Discount rate	6.92%
Long-term expected rate of return, net of expenses	6.75%

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.

Valuation date	June 30, 2018
Measurement date	June 30, 2018
Key assumptions	
Investment rate of return [(1)]	6.92%
General wage increases	3.00%
Inflation	2.50%
Mortality	Various rates based on mortality tables described in the June 30, 2018, actuarial valuation.
Actuarial experience study	July 1, 2014 to April 30, 2017
Actuarial cost method	Individual Entry Age Normal
Asset Valuation Method	Fair market value
Smoothing period	5 years
Recognition method	Non-asymptotic
Corridor	80% to 120% of fair value
Amortization of Unfunded Actuarial Accrued Liability (UAAL) [(2)]	UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers that are determined annually ("layer" amortization).

[(1)] Differs from actuarial valuation for funding purposes due to addition of administrative load of 0.17%.

[(2)] 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, which are tracked separately in the County and District Supplemental Contribution Accounts. Contributions in a given year are amortized as a level percentage of pay over a 15-year closed period.

Discount Rate

The discount rate used to measure the total pension liability was 6.92% as of June 30, 2018. 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 participating employers at year-end, using the current discount rate of 6.92%, 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

June 30, 2018

	1% Decrease (5.92%)	Current Discount Rate (6.92%)	1% Increase (7.92%)
Total pension liability	$ 5,557,754,877	$ 4,862,308,884	$ 4,295,553,995
Less: Fiduciary net position	(4,373,961,514)	(4,373,961,514)	(4,373,961,514)
Net pension liability	**$ 1,183,793,363**	**$ 488,347,370**	**$ (78,407,519)**

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, 2018, are presented in the following table.

RESERVES REQUIRED BY THE CERL FOR REPORTING PURPOSES

June 30, 2018

Valuation Reserves	
Member Reserve	$ 783,887,242
Employer Advance Reserve	957,022,725
Retiree Reserve	1,100,793,261
Cost of Living Adjustment Reserve	1,378,769,193
County Supplementary Contribution Account Reserve	145,455,548
District Supplementary Contribution Account Reserve	1,929,236
Total Valuation Reserves	4,367,857,205
Non-Valuation Reserves	
Contingency Reserve	43,954,571
Unallocated Earnings/Losses Reserve	(16,288,265)
Total Non-Valuation Reserves	27,666,306
Market Stabilization Account	(21,561,997)
Total Reserves (Market Value of Assets)	**$ 4,373,961,514**

Valuation Reserves

The valuation reserves generally receive interest at the assumed actuarial interest rate semi-annually. The valuation reserves are made up of the following:

Member 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 at the time a member retires.

Employer Advance Reserve represents funding provided by employers for future retirement payments to active and inactive (deferred) members. Additions include employer contributions and interest credited. Deductions include lump-sum death benefit payments to members' survivors, supplementary disability payments, and transfers to the Retiree Reserve at the time 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, beneficiaries, and survivors.

Cost of Living Adjustment Reserve represents employer contributions accumulated for future cost of living adjustments under provisions of the CERL. Additions include contributions from employers and interest credited. Deductions include payments to retired members, beneficiaries, and survivors.

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

SamCERA semi-annually updates its reserve balances on December 31 and on June 30 to incorporate interest credit as specified in Article 5 of the CERL (Semi-Annual Interest Crediting). The amount of interest (or net earnings) to be distributed for each semi-annual period is based on the actuarial smoothing process described later. To the extent that net earnings are available, interest is credited to all components of valuation reserves (with the exception of the Member Reserve, the CSCA, and the DSCA) at a rate of one-half of the assumed investment earnings rate. Earnings from the five-year smoothing process were mostly sufficient to provide interest credits to the valuation reserves.

The Member Reserve is credited semi-annually in amounts that are equal to the lesser of one half of the assumed investment earnings rate, or the actuarial earnings rate for the prior six-month period. The rate credited shall not be less than zero. The actuarial assumed interest rate in effect for the members' interest credit during the fiscal year was 3.5% semi-annually. The actuarial rates of return were 4.038% for the six-months ended December 31, 2017 and 3.613% for the six-months ended June 30, 2018.

The CSCA and the DSCA are credited semi-annually in accordance with provisions of the "Memorandum of Understanding" between SamCERA and the employers.

Non-Valuation Reserves

The Board established two non-valuation reserve accounts: Contingency Reserve and Unallocated Earnings/Losses Reserve. The balances in these non-valuation reserve accounts are not used to determine employers' statutory contribution rates.

Contingency Reserve is established to meet the reserve requirement under Section 31592 of the CERL that at least one percent of the fund's actuarial value of assets be kept as reserves against future earning deficiencies, investment losses, and other contingencies. Additions to the reserve include investment income and other revenues. Deductions from the reserve include investment and administrative expenses as well as interest allocated to other reserves.

The Board adopted an *Interest Crediting Policy* stipulating how earnings should be allocated among different valuation reserves. When there are insufficient allocable earnings to cover interest credited to the reserves specified in the interest crediting policy, the funding in the Contingency Reserve may be used to cover the shortage. However, in no event may the Contingency Reserve be allowed to drop below one percent of the actuarial value of assets.

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

Unallocated Earnings/Losses Reserve is established to account for periods when actual earnings do not equal the actuarial assumed interest earnings rate. The Board adopted a *Five-year Actuarial Smoothing Policy* to value actuarial assets and calculate the UAAL.

The smoothing process operates semi-annually, with calculation periods ending December 31 and June 30, to spread the difference between actual and expected market return over five years (or ten successive semi-annual periods). This smoothing process affects the net investment income reported on the Statement of Changes in Fiduciary Net Position.

For the fiscal year ended June 30, 2018, smoothed earnings of $33 million were distributed to the Unallocated Earnings/Losses Reserve, bringing the year-end balance in this account to a negative $16 million from a negative $49 million last year.

Market Stabilization Account

The Market Stabilization Account is designed to minimize the impact of short-term volatility in the fair value of the retirement fund on employer and member contribution rates by smoothing market returns over a five-year period. The Board adopted a Market Stabilization Account policy to limit the actuarial value of assets not to exceed ±20% of the fair value.

The balance in this account, arising from a *Five-year Actuarial Smoothing Policy*, represents the difference between (1) the aggregate amount initially deferred (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. As of June 30, 2018, the balance in the Market Stabilization Account was negative $22 million.

Note 9: Administrative Expenses

The Board annually adopts an operating budget for the administration of SamCERA. Administrative expenses are charged against earnings of the retirement fund and cannot exceed twenty-one hundredth of one percent (0.21%) of the accrued actuarial liabilities as set forth under Government Code Section 31580.2 of the CERL. 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, 2016 (the latest information available when preparing the administrative budget for fiscal year 2018). 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, 2018.

Administrative Expenses For the Fiscal Year Ended June 30, 2018, Compared to Actuarial Accrued Liability as of June 30, 2016

(Dollars in Thousands)

Actuarial Accrued Liability (AAL) as of June 30, 2016	$	4,362,296	(a)
Maximum Allowed for Administrative Expenses (AAL*0.21%)	$	9,161	(b)
Operating Budget for Administrative Expenses	$	6,637	(c)
Actual Administrative Expenses	$	5,849	(d)
Excess of Allowed over Actual Administrative Expenses	$	3,312	=(b) - (d)
Excess of Budgeted over Actual Administrative Expenses	$	788	=(c) - (d)
Actual Administrative Expenses as a Percentage of Actuarial Accrued Liability as of June 30, 2016		**0.13%**	**= (d)/(a)**

SamCERA's Administrative Expenses, Budget vs. Actual

For the Fiscal Year Ended June 30, 2018

	Budget	Actual	Under Budget	% of Budget Remaining
Salaries and benefits	$5,053,771	$4,635,224	$418,547	8%
Services and supplies	1,582,906	1,214,028	368,878	23%
Total expenses	**$6,636,677**	**$5,849,252**	**$787,425**	**12%**

The overall salaries and benefits for the fiscal year 2018 were 8% below the budget, primarily due to the timing of filling the Communications Specialist and the Executive Secretary vacant positions. The overall expenses for services and supplies were 23% below the budget. Major reasons include the following:

- SamCERA engaged a new insurance provider for the required fiduciary insurance. The annual premium paid to the new insurance provider was less expensive than the former provider.

- Among all members applying for disability retirement, only two members required an independent medical evaluation per SamCERA's medical advisor's recommendation. In addition, only a handful of members pursued a formal hearing for their disability cases.

- Board members attended less out-of-state conferences than anticipated, which reduced spending on conference and related travel expenses.

- Postage and printing expenses continued to sink due to SamCERA's persistent efforts to communicate with its members and business partners electronically, whenever possible. In addition, most of the printing and mailing jobs were performed in-house rather than relying on outside service providers as a measure to keep operating costs down.

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 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, 2018.The overall Information

SamCERA's information technology Expenses, Budget vs. Actual

For the Fiscal Year Ended June 30, 2018

	Budget	Actual	Under Budget	% of Budget Remaining
Property and equipment	$ 100,000	$ 25,060	$ 74,940	75%
Information technology infrastructure	1,533,340	587,306	946,034	62%
Research and development	34,000	7,287	26,713	79%
Total expenses	**$1,667,340**	**$619,653**	**$1,047,687**	63%

(1) In fiscal year 2018, SamCERA reported a total depreciation expense of $824,357 on its basic financial statements. Since depreciation is a non-cash expense and not included in the adopted budget, it was excluded from the above schedule.

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

- The amounts budgeted for computer equipment, software, server, and technical support from the County's Information System Department were mostly earmarked for unexpected needs. Throughout the year, the need for unplanned purchases or services was sparse.

- The Virtual Private Network project, which allows remote users to securely access enterprise applications and other resources, was deferred due to limited resources in the technology team.

- The Electronic Content Management project was deferred as priorities were given to time-pressing activities that were critical to the business operation.

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 County's settled claims have not exceeded the insurance coverage in the past three fiscal years.

The Retirement Board members and senior staff purchase separate Fiduciary Liability coverage for 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, 2018, SamCERA had a total "uncalled capital" of $291.9 million, with $159.7 million in private equity investments, $78.9 million in private real asset investments, and $53.3 million in real estate investments. SamCERA is still in the process of building out its private equity, private real asset, and real estate portfolios and intends to make additional capital commitments over the next three to five years.

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.

	2018	2017	2016	2015	2014
Total Pension Liability					
Service cost	$ 107,738,142	$ 96,411,681	$ 96,308,679	$ 90,955,831	$ 87,512,515
Interest on total pension liability	319,776,913	306,404,154	290,843,506	272,953,777	265,430,896
Effect of plan changes	-	-	-	-	-
Effect of assumption changes or inputs	-	147,541,839	85,538,873	-	37,853,852
Effect of economic/demographic gains (losses)	27,753,956	4,834,605	17,875,272	50,655,233	(31,415,241)
Benefit payments and refund of contributions	(209,054,603)	(193,240,280)	(182,863,698)	(171,466,218)	(162,556,107)
Net change in total pension liability	246,214,408	361,951,999	307,702,632	243,098,623	196,825,915
Total pension liability, beginning	4,616,094,476	4,254,142,477	3,946,439,845	3,703,341,222	3,506,515,307
Total pension liability, ending (a)	$4,862,308,884	$4,616,094,476	$4,254,142,477	$3,946,439,845	$3,703,341,222
Fiduciary Net Position					
Employer contributions	$ 207,256,713	$ 198,727,135	$ 191,094,488	$ 180,704,280	$ 202,877,362
Member contributions	64,204,278	62,160,101	56,068,706	48,011,698	46,593,698
Investment income net of investment expenses	280,146,398	436,675,706	29,299,764	111,630,036	482,663,965
Benefit payments and refund of contributions	(209,054,603)	(193,240,280)	(182,863,698)	(171,466,218)	(162,556,107)
Administrative and technology expenses	(7,293,262)	(7,009,169)	(6,687,091)	(6,097,422)	(5,710,296)
Net change in plan fiduciary net position	335,259,524	497,313,493	86,912,169	162,782,374	563,868,622
Fiduciary net position, beginning	4,038,701,990	3,541,388,497	3,454,476,328	3,291,693,954	2,727,825,332
Fiduciary net position, ending (b)	$4,373,961,514	$4,038,701,990	$3,541,388,497	$3,454,476,328	$3,291,693,954
Net pension liability, ending = (a) - (b)	$ 488,347,370	$ 577,392,486	$ 712,753,980	$ 491,963,517	$ 411,647,268
Fiduciary net position as a % of total pension liability	89.96%	87.49%	83.25%	87.53%	88.88%
Covered payroll	$ 535,937,622	$ 510,132,014	$ 472,384,955	$ 439,017,764	$ 416,273,731
Net pension liability as a % of covered payroll	91.12%	113.18%	150.88%	112.06%	98.89%

Note 1: This schedule will ultimately show information for ten years. Additional years will be displayed as they become available.

Note 2: In accordance with GASB Statement No. 82 , covered payroll is the payroll on which contributions are based.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Last Ten Fiscal Years

This schedule provides information about the statutory contributions of all participating employers and the percentage of the statutory contributions recognized by the plan.

Fiscal Year Ended June 30	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll [1]	As a % of Covered Payroll: Actuarially Determined Contribution	As a % of Covered Payroll: Actual Employer Contribution	
2009	$ 106,123,055	$ 106,123,055	$ -	$ 433,668,170	24.47%	24.47%	
2010	106,265,329	106,265,329	-	434,295,179	24.47%	24.47%	
2011	150,474,872	150,474,872	-	427,041,368	35.24%	35.24%	
2012	139,406,807	150,949,791	(11,542,984)	418,915,989	33.28%	36.03%	2
2013	131,293,846	144,308,171	(13,014,325)	404,360,891	32.47%	35.69%	2
2014	152,877,362	202,877,362	(50,000,000)	416,273,731	36.73%	48.74%	3
2015	169,814,170	180,704,280	(10,890,110)	439,017,764	38.68%	41.16%	3
2016	170,046,059	191,094,488	(21,048,429)	472,384,955	36.00%	40.45%	3 ,4
2017	164,877,135	198,727,135	(33,850,000)	510,132,014	32.32%	38.96%	3 ,4
2018	179,626,584	207,256,713	(27,630,129)	535,937,622	33.52%	38.67%	3

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

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

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

4 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 contribution, respectively.

SCHEDULE OF INVESTMENT RETURNS

For the Fiscal Years Ended June 30

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 ten years. Additional years will be displayed as they become available prospectively.

	2018	2017	2016	2015	2014
Annual time-weighted rate of return, net of investment manager expenses [1]	6.70%	12.58%	0.74%	3.53%	17.29%
Annual money-weighted rate of return, net of investment manager expenses [1, 2]	6.53%	12.48%	0.49%	3.37%	17.22%

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

2 Rates of return for prior years may be subject to minor revisions as needed.

Notes to the Required Supplementary Information

Actuarial Valuation Methods and Assumptions

The employer statutory contribution rates for the fiscal year ended June 30, 2018, are determined by the actuarial valuation as of June 30, 2016. Details of actuarial methods and assumptions selected for the 2016 actuarial valuation are summarized in the table below.

Actuarial Valuation as of June 30, 2016 (For Funding Purposes)

VALUATION DATE	June 30, 2016
ACTUARIAL COST METHOD	Entry Age Normal
AMORTIZATION METHOD	Level Percent of Payroll
AMORTIZATION PERIOD	UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers which are determined annually.
ASSET VALUATION METHOD	5-year smoothed recognition of asset gains and losses (determined as the difference of the actual fair value to the expected fair value), which cannot vary more than 20% from the fair value.
ACTUARIAL ASSUMPTIONS:	
INVESTMENT RATE OF RETURN	7.00%, net of pension plan investment and administrative expenses
INFLATION RATE (CPI)	2.75%
GENERAL WAGE INCREASE	3.25%
DEMOGRAPHIC ASSUMPTIONS:	
SALARY INCREASE DUE TO SERVICE	See June 30, 2016 actuarial valuation report for details.
RETIREMENT	See June 30, 2016 actuarial valuation report for details.
DISABILITY	See June 30, 2016 actuarial valuation report for details.
MORTALITY	See June 30, 2016 actuarial valuation report for details.

Changes in Assumptions

In July 2017, the Retirement Board adopted the assumptions developed from the latest triennial Investigation of Experience Study for use in the 2017 and 2018 valuations. These changes include 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 investment return rate was changed from 7.00% to 6.75%, the CPI from 2.75% to 2.50%, and the general wage increase from 3.25% to 3.00%. The new mortality assumption resulted in an increase in assumed life expectancy compared to the prior assumption.

Supplementary Information

Schedule of Administrative Expenses

For the Fiscal Year Ended June 30, 2018

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	$ 3,040,874
Benefits	1,594,350
Total Salaries & Benefits	4,635,224
Services & Supplies	
Board Expenses	6,500
Insurance	57,631
Medical Evaluation	12,340
Member Education	48,929
Education & Conference	95,105
Transportation & Lodging	53,612
Property & Equipment	15,353
General Office Supplies	20,583
Postage, Printing & Copying	21,118
Leased Facilities	476,638
County Services	327,333
Audit Services	56,100
Other Administration	22,786
Total Services & Supplies	1,214,028
Total Administrative Expenses	**$ 5,849,252**

Schedule of Information Technology Expenses

For the Fiscal Year Ended June 30, 2018

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

Property and Equipment	$ 25,060
Information Technology Infrastructure	594,593
Depreciation Expense	824,357
Total Information Technology Expenses	**$ 1,444,010**

Schedule of Investment Expenses

For the Fiscal Year Ended June 30, 2018

The schedule below shows the investment expenses for the generation of investment income during the reporting period.

Investment Management Fees (by Asset Class)	
Public Equity	$ 4,842,760
Fixed Income	3,953,549
Alternatives	7,490,960
Risk Parity	1,154,016
Inflation Hedge	4,499,684
Cash	114,791
Total Investment Management Fees	22,055,760
Other Investment Expenses	
Investment Consultant	468,952
Actuarial Consulting	160,996
Master Custodian	324,375
Other Professional Services	20,825
Total Other Investment Expenses	975,148
Other Investment Related Expense	13,899,537
Interest Paid on Prepaid Contribution	3,279,647
Total Investment Expenses	**$ 40,210,092**

Schedule of Payments to Consultants (Other Than Investment Advisors)

For the Fiscal Year Ended June 30, 2018

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.

Custodian Services	
Northern Trust Corporation	$ 324,375
Actuarial Consulting Services	
Milliman Inc. and Segal Consulting	160,996
Audit Services (1)	
Brown Armstrong Accountancy Corporation	56,100
Other Professional Services	
eVestment, Faith Global, Zeno	20,825
Total Payments to Consultants	**$ 562,296**

(1) 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 that "The expenses of investing its moneys shall be borne solely by the system. The following types of expenses shall not be considered a cost of administration of the retirement system, but shall be considered a reduction in earnings from those investments or a charge against the assets of the retirement system as determined by the board:

(a) The costs, as approved by the board, of actuarial valuations and services rendered pursuant to §31453.

(b) The compensation of any bank or trust company performing custodial services.

(c) When an investment is made in deeds of trust and mortgages, the fees stipulated in any agreement entered into with a bank or mortgage service company to service such deeds of trust and mortgages.

(d) Any fees stipulated in an agreement entered into with investment counsel for consulting or management services in connection with the administration of the board's investment program, including the system's participation in any form of investment pools managed by a third party or parties.

(e) The compensation to an attorney for services rendered pursuant to §31607 or legal representation rendered pursuant to §31529.1."

Other information

Schedule of employer pension amounts allocated by cost sharing plan (GASB Statement No. 68)

June 30, 2018

		Deferred Outflows of Resources					Deferred Inflows of Resources				Pension Expense Excluding That Attributable to Employer-Paid Member Contributions		
Employer	Net Pension Liability	Differences Between Expected and Actual Economic Experience	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Economic Experience	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
County of San Mateo	$ 470,229,683	$ 40,812,597	$ 11,936,088	$118,186,973	$ 2,003,621	$ 172,939,279	$ -	$ -	$ 266,104	$ 266,104	$ 135,432,041	$ 1,363,595	$ 136,795,636
San Mateo Superior Court	16,847,984	1,462,285	427,661	4,234,552	-	6,124,498	-	-	2,168,649	2,168,649	4,852,431	(1,655,943)	3,196,488
San Mateo County Mosquito & Vector Control District	1,269,703	110,201	32,230	319,126	760,029	1,221,586	-	-	328,897	328,897	365,690	292,348	658,038
Total	$ 488,347,370	$ 42,385,083	$ 12,395,979	$122,740,651	$ 2,763,650	$ 180,285,363	$ -	$ -	$ 2,763,650	$ 2,763,650	$ 140,650,162	$ -	$ 140,650,162

Schedule of cost sharing employer Allocations (GASB Statement No. 68)

Employer	Fiscal Year Ended June 30, 2018 Actual Employer Contributions	Actuarially Determined Contributions	Employer Allocation Percentage	Net Pension Liability
County of San Mateo	$200,589,451	$172,959,322	96.29%	$ 470,229,683
San Mateo Superior Court	6,199,827	6,199,827	3.45%	16,847,984
San Mateo County Mosquito & Vector Control District	467,435	467,435	0.26%	1,269,703
Total	**$207,256,713**	**$179,626,584**	**100.00%**	**$ 488,347,370**

Note: Employer allocation percentage (or proportionate share) is based on statutory 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, 2018, and (4) the GASB Statement No. 68 Actuarial Valuation based on a June 30, 2018 Measurement Date for Employer Reporting as of June 30, 2019; in accordance with accounting principles generally accepted 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 accounting principles generally accepted in the United States of America, 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, and the remaining difference between projected and actual investment earnings on pension plan investments at June 30, 2018, 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, 2017 (the beginning of the measurement period ended June 30, 2018).

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, 2018, 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

"Don't judge each day by the harvest that you reap, but by the seeds that you plant."

-Robert Louis Stevenson
British Author

Chief Investment Officer's Report

SamCERA
SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

100 Marine Parkway, Suite 125
Redwood City, CA 94065
Phone: 650-599-1234
Toll Free: 1-800-339-0761
Fax: 650-591-1488
Web: www.samcera.org
Email: samcera@samcera.org

Michael Coultrip
SamCERA
Chief Investment Officer

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, 2018. This data was compiled by SamCERA's investment staff, its investment consultant, Verus Advisory (Verus), 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.

Portfolio Performance

SamCERA's portfolio market value increased to $4.37 billion as of June 30, 2018, as the net combination of portfolio appreciation and contributions, less total deductions (i.e., benefits paid, administrative expense, etc.), added approximately $335 million to the fund.

SamCERA's portfolio returned 6.7% net of investment management fees for the fiscal year ended June 30, 2018, underperforming SamCERA's policy benchmark return by 1.1%. This fiscal-year performance resulted in 4th quartile 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 ended June 30, 2018. Despite the underperformance in the current fiscal year, longer-term results show above median returns over longer timeframes (namely the 5 and 10-year 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. While SamCERA had lower risk than the benchmark over all trailing periods, underperformance in the current fiscal year resulted in a lower risk-adjusted return compared to the benchmark over the trailing one-year period. Over longer-term periods, SamCERA had a higher or similar risk-adjusted return to the benchmark.

Table One: SamCERA Total Fund Net Performance Characteristics Ended June 30, 2018

	1 Year	3 Years	5 Years	10 Years
SamCERA Return	6.7%	6.5%	8.0%	6.1%
Benchmark Return	7.8%	7.0%	8.2%	6.8%
Excess Return	-1.1%	-0.5%	-0.2%	-0.7%
Peer Rank Return (Percentile)	92nd	57th	41st	48th
SamCERA Risk (Standard Deviation)	4.5	6.1	6	10.2
Benchmark Risk (Standard Deviation)	4.9	6.6	6.4	10.8
SamCERA Sharpe Ratio	1.2	1	1.3	0.6
Benchmark Sharpe Ratio	1.3	1	1.2	0.6

Table Two below shows the current allocation and the primary composite relative returns for the year ended June 30, 2018.

All five of SamCERA's asset class composites provided positive returns for the year. Public Equity was the highest performing composite and returned 10.9%. Inflation Hedge and Risk Parity returned 6.7% and 6.6%, respectively, while Alternatives was up 2.6%. Fixed income, which was up 1.0%, was the lowest returning composite for the year.

In terms of relative performance versus the benchmark, Alternatives (primary impact from hedge funds/absolute return, with secondary impact from private equity) were the main detractor. Public Equity (primarily international equity) also detracted, while Fixed Income outperformed during the year.

Table Two: SamCERA Composite Net Performance for Trailing Year Ended June 30, 2018

Composite	Allocation	Composite Return	Benchmark Return	Excess Return
Public Equity	41.6%	10.9%	11.8%	-0.9%
Fixed Income	20.5%	1.0%	0.0%	1.0%
Alternatives	11.8%	2.6%	10.0%	-7.4%
Risk Parity	7.1%	6.6%	7.3%	-0.7%
Inflation Hedge	17.5%	6.7%	7.2%	-0.5%

Note: Cash balance was 1.5% as of June 30, 2018.

Market Review

Global equities again provided strong returns during the fiscal year, as global growth prospects have generally been favorable, especially in the U.S. U.S. economic growth has been strong, assisted in part by fiscal stimulus provided by the passage of the Tax Cuts and Jobs Act, resulting in strong corporate earnings growth. The strong equity performance came in spite of a number of events through the year, including elevated geopolitical risks, concerns over potential trade war implications, and recent heightened equity volatility during the second half of the fiscal year.

The broad U.S. equity market, as measured by the Russell 3000 Index, a broad basket of U.S. stocks, returned 14.8% during the year. Large-capitalization stocks in the U.S. (as measured by the Russell 1000 Index) were higher by 14.5%, while smaller-capitalization stocks (as measured by the Russell 2000 Index) performed even better, returning 17.6% for the year. In terms of sector performance, technology (up 31.3%) provided the highest return, followed by consumer discretionary and energy. Consumer staples (down -3.9%) performed the worst, along with more defensive sectors with higher interest rate sensitivity, including telecommunications and utilities.

The broad international equity market had positive results during the fiscal year, but less than the returns generated in the U.S. equity markets. The developed international market, as measured by the MSCI EAFE (Morgan Stanley Capital Investment Europe, Australasia, and Far East Index), was up 6.8%, while emerging market equity, as measured by the MSCI Emerging Markets Index, returned 8.2%.

The U.S. Federal Reserve raised short-term interest rates three times during the fiscal year as the U.S. economy continued its steady growth. The target Fed Funds Rate range is now at 1.75% to 2.0%, up from 1.0% to 1.25% at the beginning of the fiscal year. In addition, the U.S. Federal Reserve continued its monetary policy normalization by beginning the process of shrinking its balance sheet, allowing a portion of its Treasury bond and mortgage-backed security holdings to roll-off without reinvesting the proceeds.

Longer-term interest rates also increased, although not as much as the shorter-term rates. The 10-year U.S. Treasury yield increased 0.56% during the fiscal year, ended at 2.86%, up from the 2.3% rate at the beginning of the year. These interest rate movements have resulted in a flatter yield curve (which is when the spread in yields between the Treasury's two-year and 10-year notes narrows), which historically can be a prelude to a weaker economy.

Performance across fixed income sectors varied, with high yield credit and Treasury Inflation-Protected Securities (TIPS) providing positive returns, while more interest-rate sensitive fixed income (long-dated Treasuries, investment grade credit, and mortgage-backed securities) provided flat to modest negative returns on the year. The broad U.S. bond market (as measured by the Bloomberg Barclays Aggregate Index) returned -0.4% on the year.

Portfolio Changes

SamCERA developed an implementation plan to progress towards the new policy approved last fiscal year. It is anticipated that final implementation of the policy will take multiple years and be completed by 2020, as increased allocations to private real assets and real estate will take time to build out. An interim step was completed during the year, with the allocation to U.S. equity reduced by 2% and the allocation to Inflation Hedge assets increased by 2%.

SamCERA tweaked the final policy allocation as part of its annual review of the policy portfolio during the fiscal year. Exposure to Alternatives was reduced by 1% while Public Equity was increased by 1%. Furthermore, allocations to low volatility equity and a 50% currency hedge for developed international equity were approved to dampen expected portfolio volatility. Table Three compares SamCERA's current "interim" policy and the final target policy weights (inclusive of the recent changes as described above) across the five primary asset classes.

In addition to the policy changes described above, the sub-allocation within Fixed Income was changed. First, the dedicated global bond asset class was removed from the fixed income portfolio to simplify the portfolio structure. Next, the global bond manager in this asset class was reclassified into the opportunistic credit bucket, and the allocation to the manager was reduced from approximately 3% to 1% of total plan assets, to make its risk contribution more consistent with the other opportunistic credit managers. The balance of the proceeds (2%) was moved to the core bond bucket. These changes within Fixed Income were made to provide better diversification of manager concentration risk to the portfolio while also increasing the defensive nature of the fixed income portfolio.

Table Three: SamCERA Asset Allocation Policy Portfolio Summary

Asset Class	Current Interim Policy	Target Policy	% Change
Public Equity	40%	37%	-3%
Fixed Income	21%	23%	2%
Alternatives	13%	12%	-1%
Risk Parity	8%	8%	0%
Inflation Hedge	18%	20%	2%

For the year, SamCERA made commitments to three new private equity partnerships, totaling $60 million. This brings the total commitments for the private equity program to $410.5 million across venture capital, buyouts, and special situations. Subsequent to the end of the fiscal year, SamCERA committed $20 million to a new partnership in its private equity category.

SamCERA also made commitments worth $39.8 million to two new partnerships in its private real asset category, bringing the total commitments to $149.8 million.

Conclusion

With the backdrop of potentially more divergent growth prospects (and the resulting divergent policy responses) across the globe, SamCERA continues to be mindful of higher potential return volatility caused by a potential policy misstep. Moreover, given that we are most likely in the late stages of the economic cycle, and with record high equity prices in the U.S., we believe that it is extremely important in this environment to understand the risks one is taking in generating the return stream they are receiving from their portfolio. With that thought in mind, SamCERA continues to actively rebalance the portfolio to its long-term policy asset allocation weights to keep a balanced risk posture without relying too much on any single asset, strategy, or return stream.

Respectfully Submitted,

Michael R Coultrip

Michael Coultrip
Chief Investment Officer
September 13, 2018

Investment Consultant’s Report on Investment Activities

Verus

September 5, 2018

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

Dear Board Members:

Important events during fiscal year 2018 included significant U.S. corporate tax reform, the beginnings of an unwind of quantitative easing, and the potential for meaningful changes to U.S. trade policy. Gains in equities were impacted by historically strong earnings growth, driven by both net margin expansion due to corporate tax cuts and top-line revenue growth. U.S. equities posted strong returns over the 12-month period ending in June even after experiencing a 10% drawdown and corresponding spike in volatility in February.

International equities underperformed domestic equities, particularly after the sell-off in February. Compared to the second half of 2017, a stronger U.S. dollar, more moderate economic and earnings growth, and uncertainty surrounding U.S. trade policy weighed on both international developed and emerging market equities in the first half of 2018. The European Central Bank signaled it will cut asset purchases to zero by year-end, but also communicated it plans on keeping interest rates unchanged until the latter half of 2019.

Short-term Treasury yields rose steadily over the fiscal year and outpaced increases in long-term yields, resulting in a flattening of the yield curve. At the end of the period, the spread between the 10- and 2-year Treasury yields was 33 basis points. The Fed tightened monetary policy further with two rate hikes in March and June of 2018 along with the balance sheet unwind continuing as planned. Fed policy makers indicated the central bank will raise interest rates two more times this year.

The S&P 500 Index returned 14.4% over the period. Equity market appreciation continued to be fueled by growth and momentum factors based mainly in large technology companies, including Apple, Amazon, and Alphabet – the S&P 500 technology sector returned 31.3% over the year.
The MSCI EAFE USD and MSCI Emerging Markets USD Indexes returned 6.8% (6.6% local currency) and 8.2% (10.9% local currency), respectively. USD strength during the first half of 2018 and concerns over potential changes to U.S. trade policy weighed on non-U.S. market returns. The BBgBarc U.S. Treasury Index returned -0.6% over the fiscal year as price declines more than offset income returns. Global ex U.S. sovereign yields remained relatively low and the spread between U.S. interest rates and the rest of the developed world widened.

PLAN INVESTMENT RESULTS

The San Mateo County Employees’ Retirement Association (the Association) total Plan returned 6.7% net of fees for the fiscal year ended 6/30/18. The total Plan underperformed its policy index which returned 7.8% for this time period but produced a return approximately in line with the Plan’s actuarial expected return of 6.75%. For the fiscal year, the total Plan ranked in the 92nd percentile for Public Fund Defined Benefit Plans greater than $1 billion. SamCERA has been actively working to reduce

SEATTLE | LOS ANGELES | SAN FRANCISCO | VERUSINVESTMENTS.COM equity beta risk in the portfolio which has resulted in a strategic asset allocation that is lower in equity exposure than many of its peers, resulting in a lower peer ranking for the period. The biggest drivers of fiscal year performance for the Plan on an absolute basis came from U.S. equity, private equity, liquid real assets and real estate. On a relative basis, absolute return investments, private equity and international equity were the biggest drivers of underperformance versus the policy index.

The U.S. Equity portfolio outperformed its U.S. equity policy benchmark by 20 basis points on a net of fee basis during the fiscal year (15.0% versus 14.8% for the composite benchmark, respectively), which placed it in the 40th percentile of the peer universe. Within U.S. Equity, SamCERA's Large Cap composite beat its benchmark (15.1% vs. 14.5% for the Russell 1000 Index) and ranked in the 36th percentile of the peer universe. Outperformance was driven by the Plan's sole active large cap manager D.E. Shaw. Conversely, the Small Cap composite returned a robust absolute return of 14.6% but underperformed the Russell 2000 Index (17.6%). The Small Cap portfolio uses a single quantitative, low tracking error manager with a factor-based approach. The unusually large discrepancy between growth and value index returns (21.9% for the Russell 2000 Growth Index vs. 13.1% for the Russell 2000 Value Index) resulted in underperformance given the manager's value leanings.

During the fiscal year, the International Equity Composite underperformed its composite benchmark, returning 6.4% net of fees compared to 7.8% for the MSCI ACWI ex-US IMI Index; this result ranked in the 61st percentile of the peer group. The Plan's active developed international managers underperformed their respective style benchmarks during the fiscal year but provided returns that were within expectations. The Plan's emerging markets portfolio continued to trail its benchmark (3.1% vs. 8.6% for the MSCI Emerging Markets Index) because of the manager's structural underweight to China and the investment technology sector, both of which performed strongly during the period.

In fiscal year 2018, the Plan's Total Fixed Income Composite net return of 1.0% beat the Blended Fixed Income benchmark return of 0.0%. The Core Fixed Income and Opportunistic Credit components of the portfolio were both additive to returns on a relative basis. Angelo Gordon's securitized portfolios performed strongly during the period (20.3% for STAR, 24.8% for OWL). Over the fiscal year, Franklin Templeton's global bond mandate was recategorized as an Opportunistic Credit strategy given its high tracking error, absolute return objectives. PIMCO Diversified Income was added to the Opportunistic Credit portfolio as a broad credit manager that can invest across sectors, regions and credit quality. SamCERA added a passive intermediate government portfolio to the Core Fixed Income component of the portfolio to serve in a diversifying function. The Plan continued to fund its private credit investments during the fiscal year as a means of generating returns from contractual yield from underlying loans which are less directly correlated with interest rate changes.

SamCERA's Risk Parity component of the portfolio underperformed its benchmark during the fiscal year (6.6% net of fees versus 7.3% for the 60% MSCI World/40% Bloomberg Barclays Global Aggregate blended benchmark). Similar to last year, the risk parity managers trailed their equity-centric benchmark given the strong equity market. SamCERA revisited its decision to invest in Risk Parity during the fiscal year and determined that it meets the Plan's goal of reducing risk while seeking strong risk-adjusted returns.

SamCERA's Alternatives portfolio, comprised of Private Equity and Absolute Return strategies, underperformed for the year ended June 30, 2018 (2.6% versus 10.0% for the composite benchmark). While the Private Equity portfolio produced a fairly robust time-weighted return of 9.3%, the portfolio trailed the Russell 3000 + 3% 1 quarter lagged index (13.6%). As noted above, U.S. equity market returns remained especially strong over the past fiscal year which negatively impacted Private Equity returns on a relative basis. The Absolute Return composite returned -3.6% compared to 5.6% for

London Interbank Offered Rate (LIBOR) + 4%. This poor return was driven by underperformance by both of its absolute return managers; AQR DELTA, in particular, had a poor showing caused by its reliance on value factor measures used in its quantitative approach.

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, and natural resources) and TIPS returned 6.7% compared to 7.2% for the blended Inflation Hedge index. The Real Estate component provided a solid return of 7.8%, ranking just shy of the top quartile in the peer group (27th percentile) but below the National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity (NCREIF ODCE) Index (8.4%). The liquid real asset pool, a liquid proxy which will be used as a funding vehicle for private real assets, produced a strong return (10.2% vs. 8.9% for the blended benchmark). Conversely, Private Real Assets underperformed its benchmark (-5.8% vs. 1.9% for the 50/50 S&P Global Infrastructure and Large-Mid Cap Commodities & Resources + 2% 1 qtr index lagged), driven by the J-curve effect of newer investments and poor performance from energy.

ASSET ALLOCATION AND MANAGER STRUCTURE

Over the fiscal year ended 6/30/18, the Plan reduced its actuarial rate of return from 7.0% to 6.75%. During the period, SamCERA completed its asset class structure reviews which resulted in the termination of the Plan's international small cap manager and a trimming of Franklin Templeton's global bond mandate to reduce its risk budget within the fixed income portfolio. SamCERA conducted its annual asset allocation review over the period and further reduced equity beta risk on the margin which was added to the inflation hedge component of the portfolio in increased recognition of inflation risk. The asset allocation changes maintain the same expected return for the portfolio but with a slightly lower expected risk. During the coming fiscal year, the Plan will be adding a low volatility U.S. equity strategy and further reducing risk through hedging a portion of its international equity exposure.

In summary, during a "risk on" period where the market rewarded equities, SamCERA's portfolio results appeared lackluster given the Plan's increased focus on diversifying risks with a goal of reducing equity beta and increasing inflation protection. The Plan continues to seek to diversify its risks in order to produce the highest possible returns in a cost effective and prudent manner. Verus believes that the SamCERA portfolio is well constructed to both participate in the current market environment and, importantly, protect on the downside should there be a downturn. We believe that SamCERA has constructed a diversified portfolio that will continue to serve its participants well over longer time periods.

Sincerely,

Margaret Jadallah

Margaret S. Jadallah

Verus

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.

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. Move toward full actuarial funding of the Pension Benefit Obligation based on Governmental Accounting Standards Board (GASB) Statement No. 25 and the Board's policy of layered 15-year unfunded actuarial accrued liability (UAAL) amortization periods.

C. Achieve a fund return that meets or exceeds the long-term forecast of capital market returns for the asset allocation portfolio benchmark over multiple economic cycles (e.g., 15-20 years).

D. Provide a more consistent return stream than a traditional 60% Equity/40% Fixed Income portfolio as measured by lower portfolio drawdowns over a full market cycle.

Investment Policy

The Investment Policy of the Board 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.

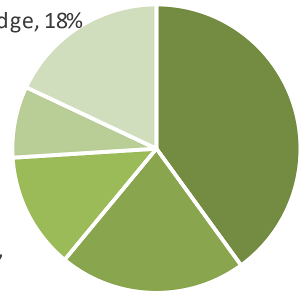
I. Rebalance the portfolio in accordance to the Rebalancing Policy set forth in Section 7.0 of the Investment Policy.

ASSET ALLOCATION

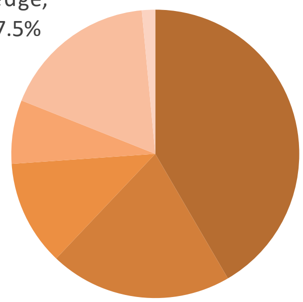
During the fiscal year, the Board adjusted the target policy asset allocation that was initially set in October 2016. The new policy reduced exposure to alternatives and increased exposure to public equity. The Board also approved an allocation to include low volatility equity and a 50% currency hedge for developed international equity. The new target policy consists of 37% in public equity, 23% in fixed income, 12% in alternatives, 8% in risk parity and 20% in inflation hedge. Implementation of the new policy will take multiple phases and is anticipated to be completed by year 2020.

As of June 30, 2018, the target asset allocation incorporated in SamCERA's Investment Policy only reflected the portion of the newly adopted allocation that has already been implemented. Due to the multiple phase process, SamCERA's Investment Policy does not capture the new target policy so that the actual allocation does not significantly deviate from policy.

Target Asset Allocation
June 30, 2018



Actual Asset Allocation
June 30, 2018



ASSETS ALLOCATION AS A PERCENTAGE OF FAIR VALUE

June 30, 2018

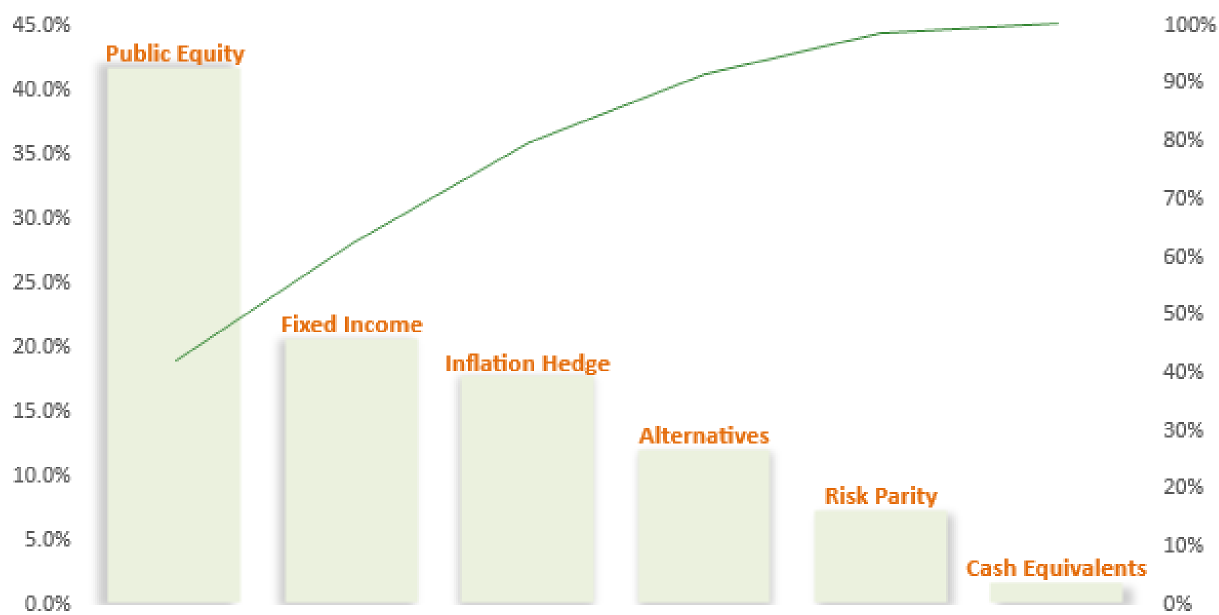
Asset Class	Target	Actual
Public Equity	40%	41.6%
Fixed Income	21%	20.5%
Alternatives	13%	11.8%
Risk Parity	8%	7.1%
Inflation Hedge	18%	17.5%
Cash Equivalents	0%	1.5%
Total	100%	**100.0%**

ASSETS UNDER MANAGEMENT

June 30, 2018

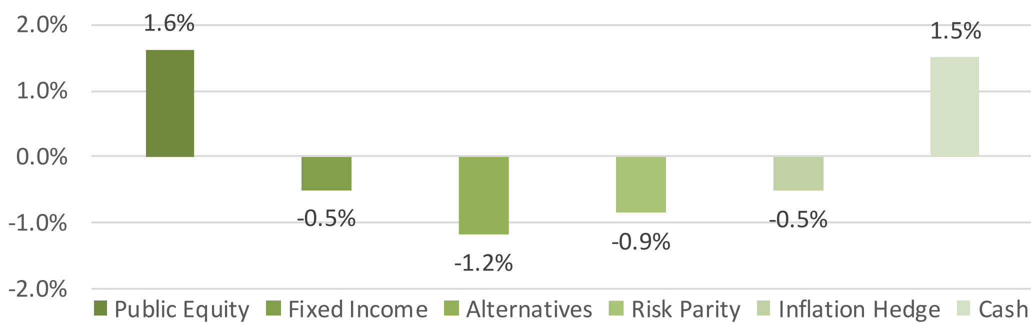
ASSET CLASS	Assets Under Management
Public Equity	$ 1,809,329,959
Fixed Income	892,923,149
Alternatives	514,972,248
Risk Parity	311,126,425
Inflation Hedge	761,393,517
Total Net Portfolio Value	**$ 4,289,745,298**

RECONCILIATION TO STATEMENT OF FIDUCIARY NET POSITION	
Total Net Portfolio Value	$ 4,289,745,298
Cash Equivalents	67,595,971
Receivables	19,610,515
Prepaid Expense	7,669
Capital Assets, Net of Depreciation	6,803,554
Payables	(9,801,493)
Fiduciary Net Position as of June 30, 2018	**$ 4,373,961,514**



Percent of Deviation from Asset Allocation

June 30, 2018



Benchmarks

June 30, 2018

Asset Class	Policy Benchmark
PUBLIC EQUITY	
Domestic Equity	54.8% Russell 3000
International Equity	45.2% Morgan Stanley Capital International ex-United States Investable Market Indexes (MSCI ex-US IMI)
FIXED INCOME	
Domestic Fixed Income	66.7% Bloomberg Barclays Aggregate (BBgBarc)
Opportunistic Credit	33.3% BBgBarc Intermediate High Yield (HY)
ALTERNATIVES	
Private Equity	53.8% Russell 3000 + 3% (1-quarter lag)
Hedge Funds/Absolute Return	46.2% London Interbank Offered Rate (LIBOR) + 4%
RISK PARITY	60% Morgan Stanley Capital International World 40% BBgBarc Global Aggregate
INFLATION HEDGE	
Real Estate	44.44% National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity (NCREIF ODCE)
Private Real Asset	11.11% Standard & Poor (S&P) Global Large-MidCap Commodity and Resource and in S&P Global Infrastructure + 2% (1-quarter lag)
Public Real Asset	11.12% Bloomberg Roll Select Commodity 11.11% Standard & Poor (S&P) Global Large-MidCap Commodity and Resource 11.11% S&P Global Infrastructure
TIPS	11.11% Barclays Treasury Inflation Protected Securities (TIPS)
CASH EQUIVALENTS	91-day Treasury-Bills

Schedule of Portfolio Returns

Performance as of June 30, 2018, Net of Fees

	Total Time-Weighted Rate of Return [6]		
Asset Class	**One Year**	**Three Years**	**Five Years**
PUBLIC EQUITY	**10.9%**	**8.7%**	**10.2%**
Public Equity Benchmark	11.8%	9.1%	10.6%
Domestic Equity	15.0%	11.0%	12.6%
Domestic Equity Benchmark	14.8%	11.3%	13.1%
International Equity	6.4%	5.5%	6.4%
International Equity Benchmark	7.8%	5.8%	6.7%
FIXED INCOME	**1.0%**	**3.5%**	**3.7%**
Fixed Income Benchmark	0.0%	2.6%	2.7%
Core Fixed Income	-0.2%	2.5%	3.0%
Core Fixed Income Benchmark	-0.4%	1.7%	2.3%
Opportunistic Credit	4.0%	6.3%	6.7%
Opportunistic Credit Benchmark	0.4%	4.4%	4.4%
ALTERNATIVES	**2.6%**	**6.1%**	**7.0%**
Alternatives Benchmark	10.0%	7.7%	8.2%
Private Equity	9.3%	13.5%	16.9%
Private Equity Benchmark	13.6%	13.2%	15.5%
Hedge Funds/Absolute Return	-3.6%	2.5%	4.1%
Hedge Funds/Absolute Return Benchmark	5.6%	4.9%	4.6%
RISK PARITY	**6.6%**	**5.5%**	**6.5%**
Risk Parity Benchmark	7.3%	7.5%	8.8%
INFLATION HEDGE [1]	**6.7%**	*****	*****
Inflation Hedge Benchmark	7.2%	*	*
Real Estate [2]	7.8%	9.0%	10.7%
Real Estate Benchmark	8.4%	9.4%	11.0%
Private Real Asset [3]	-5.8%	10.2%	*
Private Real Asset Benchmark	1.9%	4.4%	*
Public Real Assets [4]	10.2%	*	*
Public Real Assets Benchmark	8.9%	*	*
TIPS [5]	2.4%	1.8%	1.3%
TIPS Benchmark	2.1%	1.9%	1.7%
CASH EQUIVALENTS	**1.0%**	**1.1%**	**0.8%**
Cash Equivalents Benchmark	1.4%	0.7%	0.4%
TOTAL	**6.7%**	**6.5%**	**8.0%**
Policy Benchmark	7.8%	7.0%	8.2%

(1) The creation of a dedicated Inflation Hedge asset class was effective April 1, 2016.

(2) Prior to April 1, 2016, Real Estate assets were allocated to SamCERA's allocation to a dedicated Real Estate asset class.

(3) Prior to April 1, 2016, Private Real assets were allocated as part SamCERA's allocation to Alternatives.

(4) The dedicated Public Real Assets were funded October 2016.

(5) Prior to April 1, 2016, TIPS assets were allocated as part SamCERA's allocation to Fixed Income.

(6) 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 [1]

June 30, 2018

Shares	Company Name	Fair Value
179,151	Apple Inc	$ 25,210,168
276,024	Microsoft Corp	20,691,571
14,806	Amazon	19,131,862
86,603	Facebook Inc	12,793,042
561,869	UTD O/S Bank NPV	10,887,414
70,551	Berkshire Hathaway Inc	10,010,488
123,391	JP Morgan Chase & Co	9,774,121
154,292	Exxon Mobil Corp	9,703,567
11,089	Alphabet Inc	9,404,755
97,776	Johnson & Johnson	9,019,084
	Total Top 10 Equities	**$ 136,626,072**

[1] 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 [1]

June 30, 2018

Security	Coupon	Maturity	Fair Value
US TREAS INFL INDEXED BONDS	2.375	1/15/2025	$ 13,582,832
UNITED STATES TREAS NTS TIPS	0.375	7/15/2023	13,107,379
UNITED STATES TREAS INFL INDEXED NTS	0.125	7/15/2022	13,104,519
UNITED STATES OF AMER TREAS NOTES	1.250	7/15/2020	11,303,237
UNITED STATES OF AMER INFL INDXD TREAS NOTES	0.250	1/15/2525	10,552,064
US TREAS BDS INDEX LINKED NOTES	2.375	1/15/2027	7,165,542
UNITED STATES TREAS	1.000	2/15/2048	6,779,514
UNITED STATES TREAS INFL INDEX NTS	0.500	1/15/2028	6,559,476
UNITED STATES TREAS	2.250	2/15/2027	6,468,364
UNITED STATES TREAS NTS	2.250	11/15/2025	6,019,652
Total Top 10 Fixed Income			**$94,642,579**

[1] 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

June 30, 2018

GROWTH

Domestic Equity
BlackRock
DE Shaw
Quantitative Management Associates

International Equity
Baillie Gifford
BlackRock
Mondrian Investment Partners
Parametric Portfolio Associates

Private Equity
ABRY 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
Brigade Capital Management
Franklin Templeton
PIMCO
Tennenbaum Capital Partners
White Oak

DIVERSIFYING

Fixed Income
BlackRock
Fidelity Institutional Asset Management
Western Asset Management

Absolute Return
Aberdeen Standard Investments
AQR Capital Management

INFLATION HEDGE

Public Real Assets
State Street Global Advisors

Real Estate
Invesco
PGIM

Private Real Assets
Blue Road Capital
CIM Group
EnCap Investments
EverStream Energy Capital Management
LS Power
Quantum Energy Partners
Sheridan Production Partners
Taurus Funds Management

TIPS
Brown Brothers Harriman

RISK PARITY
AQR Capital Management
PanAgora Asset Management

CASH OVERLAY
Parametric Portfolio Associates

Schedule of Professional Services and Fees

For the Fiscal Year Ended June 30, 2018

	Management Fees	Fair Value
ASSETS UNDER MANAGEMENT		
Public Equity	$ 4,842,760	$1,809,329,959
Fixed Income	3,953,549	892,923,149
Alternatives	7,490,960	514,972,248
Risk Parity	1,154,016	311,126,425
Inflation Hedge	4,499,684	761,393,517
Cash	114,791	12,984,127
Total	**$ 22,055,760**	**$4,302,729,425**
OTHER INVESTMENT EXPENSES		
Investment Consultant	$ 468,952	
Actuarial Consulting	160,996	
Master Custodian	324,375	
Other Professional Services	20,825	
Total	**$ 975,148**	

Top 10 Broker Commissions

Commission per Share Traded, For the Fiscal Year Ended June 30, 2018

Brokerage Firm	Commission	Number of Shares Traded	Commission per share
HSBC Bank PLC	$ 11,649	1,413,044	$0.008
Instinet Europe	9,874	897,127	0.011
Sanford C. Bernstein Ltd	6,382	1,432,157	0.004
Northern Trust Securities	6,293	244,832	0.026
Merrill Lynch International	5,782	1,810,454	0.003
Credit Suisse Securities (Europe)	4,529	241,680	0.019
Citigroup Global Markets	4,285	564,307	0.008
RBC Europe Limited	3,979	72,328	0.055
Deutsche Bank Securities	3,867	525,846	0.007
Morgan Stanley And Co.	3,725	1,524,128	0.002
All Other Brokerage Firms	38,754	484,890,423	0.000
Total	**$ 99,119**	**493,616,326**	

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ACTUARIAL SECTION

"An investment in knowledge pays the best interest"

-Benjamin Franklin
American Author, Scientist and Statesman

ACTUARY'S CERTIFICATION

Milliman

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

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

milliman.com

October 8, 2018

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 valuations is shown below:

Valuation Date	Funded Ratio
June 30, 2016	83.1%
June 30, 2017	84.3%
June 30, 2018	87.5%

The funded ratio increased in the last year primarily due to contributions in excess of the value of benefits as well as recognition of investment gains from prior years.

It is our opinion that SamCERA continues in sound financial condition as of June 30, 2018 and will continue to remain in sound financial condition provided that employer contributions are made based on the current funding policy and the valuation is based on reasonable assumptions. To be in "sound financial condition," we believe the System should be projected to reach or exceed a 100% funded ratio in 30 years or less. SamCERA exceeds this criterion. Under SamCERA's funding policy, the employer's contributions are set equal to the employer normal cost rate plus the amortization payment of any Unfunded Actuarial Accrued Liability (UAAL). The amortization of the initial UAAL as of June 30, 2008 is funded over a closed 15-year period ending June 30, 2023. The amortization of any subsequent changes in the UAAL is funded over separate closed 15-year layers that are determined annually. It is the County's intent to make contributions in excess of those required under the funding policy. This, combined with SamCERA's short amortization period, is projected to increase the funded status in the future.

The June 30, 2018 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 actuarial assumptions were last reviewed in the triennial investigation of experience study as of April 30, 2017, and adopted by the Board in July 2017. The economic and demographic assumptions were re-adopted in May 2018. 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 6.92% 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.

Milliman

Board of Retirement
October 8, 2018
Page 2

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 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 are combined into a single amount to be recognized over a five-year (10 six-month) period. Beginning with the six-month period immediately following June 30, 2018, offsetting of current period gains or losses against prior period gains or losses will 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. Summary of retired and inactive member benefits
13. Schedule of employer net pension liability
14. Schedule of changes in net pension liability and related ratios of participating employers
15. Schedule of employer pension amounts allocated by cost sharing plan
16. Schedule of cost sharing employer allocations

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel. The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

Milliman

Board of Retirement
October 8, 2018
Page 3

We certify that the assumptions and methods used for funding and financial reporting purposes in the June 30, 2018 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,

Nick J. Collier, ASA, EA, MAAA
Consulting Actuary

Craig J. Glyde, ASA, EA, MAAA
Consulting Actuary

NJC/CJG/nlo

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.

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 recommendation, to the San Mateo County's Board of Supervisors for adoption.

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, 2018 valuation will become effective on July 1, 2019.

In addition to the annual valuation, SamCERA's actuary reviews the reasonableness of the economic and non-economic actuarial assumptions every three years (commonly referred to as 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 methodology that will better project benefits and liabilities.

Actuarial Methods and Assumptions (For Funding Purposes)

VALUATION DATE	June 30, 2018
ACTUARIAL COST METHOD	Entry Age Normal
ACTUARIAL EXPERIENCE STUDY	July 1, 2014 to April 30, 2017
AMORTIZATION METHOD	Level percentage of projected payroll
AMORTIZATION PERIOD	UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers that are determined annually.
ASSET VALUATION METHOD	5-year smoothed recognition of asset gains and losses (determined as the difference of the actual fair value to the expected fair value), which cannot vary more than 20% from the fair value.
ACTUARIAL ASSUMPTIONS	
Economic assumptions:	
Investment rate of return	6.75%
Inflation rate (CPI)	2.50%
General wage increases	3.00%
Demographic assumptions:	
Salary increases due to service	The total expected increase in salary represents the increase due to promotions and longevity, adjusted for an assumed 3.00% per annum increase in the general wage. The total result is compounded rather than additive.
Mortality	Rates are based on RP-2014 Healthy Annuitant Mortality Table for respective genders with MP-2014 Ultimate Projection Scale. See the valuation report as of June 30, 2018, for details.
Retirement	See the valuation report as of June 30, 2018, for details.
Disability	See the valuation report as of June 30, 2018, for details.
Other terminations of employment	See the valuation report as of June 30, 2018, for details.
Refund of contributions on vested termination	See the valuation report as of June 30, 2018, for details.

Note: The actuarial methods and assumptions were selected by the Retirement Board with the recommendation of the actuary.

Contributions

The participating employers and members are responsible for contributing to the cost of benefits each year (commonly known as normal cost). The portion not funded by member contributions is the responsibility of the employers (commonly known as the employer normal cost).

The employers are also responsible for funding shortfalls related to accrued liability for past services arising from changes in the economic and demographic assumptions. The employers' contribution towards the funding shortfalls is commonly known as the Unfunded Actuarial Accrued Liability (UAAL) contribution.

Actuarial Cost Method

The entry age normal cost method is 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 6.75%, net of both investment and administrative expenses; whereas the assumed investment return for financial reporting is 6.92%, 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 (commonly known as 15-year layered amortization).

Beginning with the June 30, 2010 actuarial valuation, the San Mateo County Mosquito and Vector Control District (the District) adopted the same "enhanced" benefit formula that applies to Plans 1, 2, and 4 of the County of San Mateo (the County) General members and the same member rates currently being paid by County members from those plans. Because the District does not participate in cost sharing on the member rates, the District has a separate normal cost rate and expected member contribution rates from the County General Group.

Actuarial Asset Valuation Method

The actuarial asset valuation method used is a 5-year smoothed recognition method with a 20% corridor. This method takes into account appreciation (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.

Effective with the June 30, 2018 valuation, all deferred gains and losses are combined into a single amount to be recognized over a five-year (10 six-month) period. A gain/loss for the current period will offset any unrecognized gains/losses from prior periods in the order of oldest to most recent. Any remaining gain/loss for the period is recognized over a five-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 District Supplemental Contribution Account (DSCA). Balances in these two accounts are separately tracked and systematically recognized to reduce the Statutory Contribution Rates. The CSCA balance is amortized based on a fixed schedule which will be adjusted based on the payroll assumption each year. The DSCA balance is amortized within a five-year period effective with the June 30, 2018 valuation, based on a fixed schedule which will be adjusted by the payroll assumption each year.

Actuarial Assumptions

Economic and demographic assumptions are used to determine future contribution requirements for employers and members. The demographic assumptions utilize the information from the latest Experience Study from July 1, 2014, to April 30, 2017. The assumptions selected are used to estimate the actuarial cost of the pension plan and determine the present contributions necessary to meet the pension benefits in the future.

The actuarial assumptions used in the valuation are intended to estimate the future experience of SamCERA's members and SamCERA's earnings in areas that may affect the projected benefit flow and anticipated investment earning. Any variations in future experience from these assumptions will result in corresponding changes in the estimated costs of SamCERA's benefits. The assumptions will next be reassessed in detail in year 2020 as part of the triennial investigation of experience.

Key Economic Assumptions

Investment Rate of Return. The future investment earnings of SamCERA's assets are accrued at an annual rate of 6.75% compounded annually (3.375% per six-month period), net of both investment and administrative expenses.

Inflation Rate. The assumed rate of inflation for the 2018 valuation is 2.50%.

Projected General Wage Increase. The assumed rate of annual wage increase is 3.00%.

Cost of Living Adjustment (COLA). The COLA adjustments depend upon the plan in which a member is enrolled and the Consumer Price Index (CPI) for the San Francisco Bay Area. The COLA is limited to 5% for General and Safety members in Plan 1; 3% for Probation members in Plan 1 and all members in Plan 2; and 2% for members in Plans 4, 5, 6, and 7. Plan 3 members do not receive a COLA.

Key Demographic Assumptions

Salary Increases due to Service. The projected annual increase in salary assumption includes an expected annual increase of 3.00% due to increases in the general wage level of membership and expected annual increases due to promotion and longevity, which vary depending on a member's years of service.

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— Active and Service Retired Members

The post-retirement mortality rates initially adopted on June 30, 2017, are used in the 2018 valuation for active members, members retired for service, and beneficiaries.

- Mortality for active members prior to termination. Use RP-2014 employee Mortality Table for respective genders with MP-2014 Ultimate Projection Scale (adjustment factor is 100%).

- Mortality for active members after termination and service retired members. Use RP2014-Healthy Annuitant Mortality Table for Males multiplied by 95%, with MP-2014 Ultimate Projection Scale (adjustment factor is 95%).

Mortality – Disabled Members

- General Members. Use average of RP-2014 Healthy Annuitant and Disabled Mortality Tables for respective genders, with MP-2014 Ultimate Projection Scale.

Separation from Active Status. The probabilities of termination of employment due to the causes stated below are presented on the following two pages. Each rate shown on these pages represents the probability that a member will separate from service at each age due to the particular reason. For example, a rate of 0.0300 for a member's service retirement at age 50 assumes that 30 out of 1,000 members who are age 50 will retire at that age.

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.

- Contribution withdrawal: Member terminates and elects a refund of member contributions, or a deferred vested retirement benefit.

- Service disability: Member receives disability retirement; disability is service related.

- Ordinary disability: Member receives disability retirement; disability is not service related.

- Service death: Member dies before retirement; death is service related.

- Ordinary death: Member dies before retirement; death is not service related.

Rate of Separation from Active Service

Years of Service	Other Terminations: Ordinary	Other Terminations: Vested	Age	Disability: Ordinary	Disability: Service	Death while Active: Ordinary	Death while Active: Service	Service Retirement
General Plan 1, 2 & 4 Male Members								
0	0.1300	0.0000	20	0.0002	0.0004	0.0004	0.0000	0.0000
5	0.0222	0.0411	30	0.0003	0.0006	0.0005	0.0000	0.0000
10	0.0136	0.0274	40	0.0007	0.0012	0.0006	0.0000	0.0000
15	0.0086	0.0204	50	0.0011	0.0021	0.0017	0.0000	0.0300
20	0.0038	0.0152	60	0.0016	0.0029	0.0047	0.0000	0.1500
30 & Above	0.0000	0.0000	75	0.0000	0.0000	0.0000	0.0000	1.0000
General Plan 1, 2 & 4 Female Members								
0	0.1300	0.0000	20	0.0003	0.0005	0.0002	0.0000	0.0000
5	0.0245	0.0455	30	0.0003	0.0006	0.0002	0.0000	0.0000
10	0.0149	0.0301	40	0.0007	0.0014	0.0004	0.0000	0.0000
15	0.0095	0.0225	50	0.0016	0.0030	0.0011	0.0000	0.0300
20	0.0042	0.0168	60	0.0026	0.0048	0.0024	0.0000	0.1500
30 & Above	0.0000	0.0000	75	0.0000	0.0000	0.0000	0.0000	1.0000
General Plan 3 Male Members								
0	0.1300	0.0000	20	0.0000	0.0000	0.0004	0.0000	0.0000
5	0.0222	0.0411	30	0.0000	0.0000	0.0005	0.0000	0.0000
10	0.0136	0.0274	40	0.0000	0.0000	0.0006	0.0000	0.0000
15	0.0086	0.0204	50	0.0000	0.0000	0.0017	0.0000	0.0000
20	0.0038	0.0152	60	0.0000	0.0000	0.0047	0.0000	0.0300
30 & Above	0.0000	0.0000	75	0.0000	0.0000	0.0000	0.0000	1.0000
General Plan 3 Female Members								
0	0.1300	0.0000	20	0.0000	0.0000	0.0002	0.0000	0.0000
5	0.0245	0.0455	30	0.0000	0.0000	0.0002	0.0000	0.0000
10	0.0149	0.0301	40	0.0000	0.0000	0.0004	0.0000	0.0000
15	0.0095	0.0225	50	0.0000	0.0000	0.0011	0.0000	0.0000
20	0.0042	0.0168	60	0.0000	0.0000	0.0024	0.0000	0.0400
30 & Above	0.0000	0.0000	75	0.0000	0.0000	0.0000	0.0000	1.0000
General Plan 5 & 7 Male Members								
0	0.1300	0.0000	20	0.0002	0.0004	0.0004	0.0000	0.0000
5	0.0222	0.0411	30	0.0003	0.0006	0.0005	0.0000	0.0000
10	0.0136	0.0274	40	0.0007	0.0012	0.0006	0.0000	0.0000
15	0.0086	0.0204	50	0.0011	0.0021	0.0017	0.0000	0.0270
20	0.0038	0.0152	60	0.0016	0.0029	0.0047	0.0000	0.1350
30 & Above	0.0000	0.0000	75	0.0000	0.0000	0.0000	0.0000	1.0000

Rate of Separation from Active Service (Continued)

Years of Service	Other Terminations: Ordinary	Other Terminations: Vested	Age	Disability: Ordinary	Disability: Service	Death while Active: Ordinary	Death while Active: Service	Service Retirement
General Plan 5 & 7 Female Members								
0	0.1300	0.0000	20	0.0003	0.0005	0.0002	0.0000	0.0000
5	0.0245	0.0455	30	0.0003	0.0006	0.0002	0.0000	0.0000
10	0.0149	0.0301	40	0.0007	0.0014	0.0004	0.0000	0.0000
15	0.0095	0.0225	50	0.0016	0.0030	0.0011	0.0000	0.0270
20	0.0042	0.0168	60	0.0026	0.0048	0.0024	0.0000	0.1350
30 & Above	0.0000	0.0000	75	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plan 1, 2 & 4 Male Members								
0	0.0700	0.0000	20	0.0000	0.0015	0.0004	0.0010	0.0000
5	0.0084	0.0156	30	0.0000	0.0018	0.0005	0.0010	0.0000
10	0.0047	0.0116	40	0.0000	0.0028	0.0006	0.0010	0.0000
15	0.0018	0.0092	50	0.0000	0.0077	0.0017	0.0010	0.1500
20 & Above	0.0000	0.0000	65	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plan 1, 2 & 4 Female Members								
0	0.0700	0.0000	20	0.0000	0.0015	0.0002	0.0010	0.0000
5	0.0084	0.0156	30	0.0000	0.0018	0.0002	0.0010	0.0000
10	0.0047	0.0116	40	0.0000	0.0028	0.0004	0.0010	0.0000
15	0.0018	0.0092	50	0.0000	0.0077	0.0011	0.0010	0.1500
20 & Above	0.0000	0.0000	65	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plan 5, 6 & 7 Male Members								
0	0.0700	0.0000	20	0.0000	0.0015	0.0004	0.0010	0.0000
5	0.0084	0.0156	30	0.0000	0.0018	0.0005	0.0010	0.0000
10	0.0047	0.0116	40	0.0000	0.0028	0.0006	0.0010	0.0000
15	0.0018	0.0092	50	0.0000	0.0077	0.0017	0.0010	0.0500
20 & Above	0.0000	0.0000	65	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plan 5, 6 & 7 Female Members								
0	0.0700	0.0000	20	0.0000	0.0015	0.0002	0.0010	0.0000
5	0.0084	0.0156	30	0.0000	0.0018	0.0002	0.0010	0.0000
10	0.0047	0.0116	40	0.0000	0.0028	0.0004	0.0010	0.0000
15	0.0018	0.0092	50	0.0000	0.0077	0.0011	0.0010	0.0500
20 & Above	0.0000	0.0000	65	0.0000	0.0000	0.0000	0.0000	1.0000

Summary of Significant Actuarial Statistics and Measures

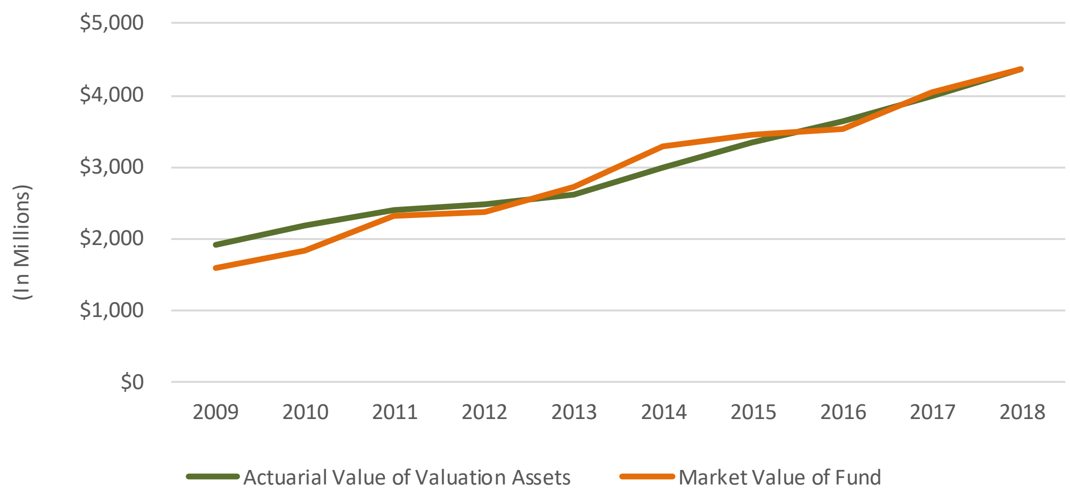
	June 30, 2018	June 30, 2017	Relative Change
ACTIVE MEMBERS			
Number of Members	5,367	5,337	0.6%
Average Age	45.1	44.2	2.0%
Average Credited Service	10.6	10.5	1.0%
Total Active Payroll ($ in Thousands)	$535,938	$510,132	5.1%
Average Monthly Salary	$8,407	$8,154	3.1%
RETIRED MEMBERS			
Number of Members			
Service Retirement	4,002	3,869	3.4%
Disability Retirement	472	469	0.6%
Beneficiaries	635	618	2.8%
Average Age	71.2	71.2	-
Actual Retiree Benefits Paid ($ in Thousands)	$204,729	$190,364	7.5%
Average Monthly Pension	$3,510	$3,347	4.9%
NUMBER OF INACTIVE MEMBERS	1,666	1,487	12.0%
ASSETS			
Market Value of Fund ($ in Thousands)	$4,373,962	$4,038,702	8.3%
Return on Market Value	6.7%	12.6%	
Valuation Assets (In Thousands)	$4,351,502	$3,976,717	9.4%
Return on Valuation Assets	7.8%	7.8%	
LIABILITY VALUES ($ IN THOUSANDS)			
Actuarial Accrued Liability	$4,970,535	$4,719,850	5.3%
Unfunded Actuarial Accrued Liability	$619,033	$743,133	(16.7)%
Deferred Asset (Gains) / Losses	$21,496	($21,816)	
FUNDED RATIO			
Based on valuation assets	87.5%	84.3%	3.8%

Valuation Assets

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

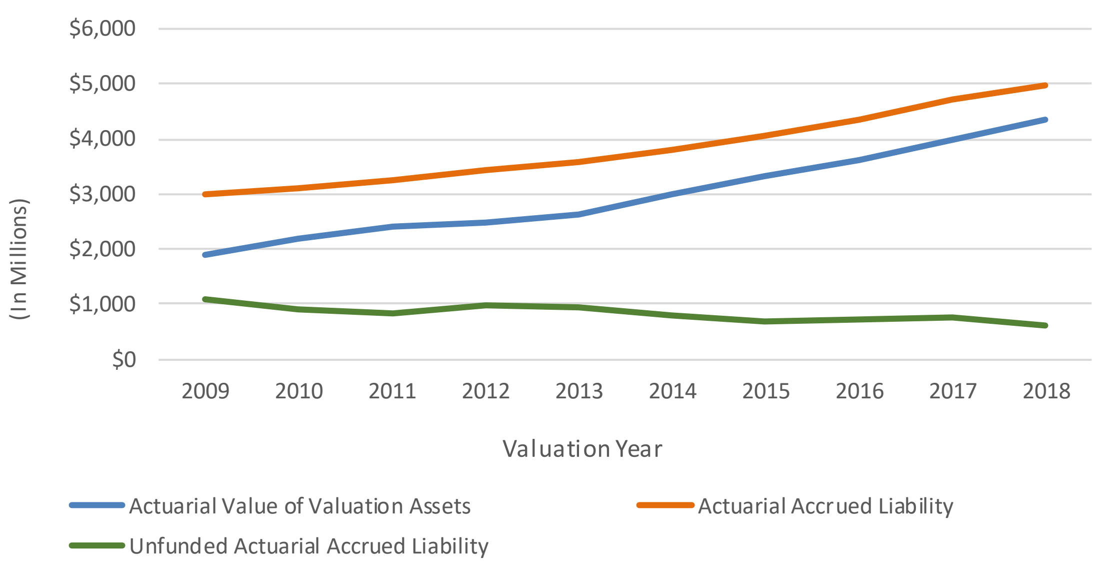
APPLICABLE VALUATION ASSETS

June 30



ACTUARIAL VALUATION

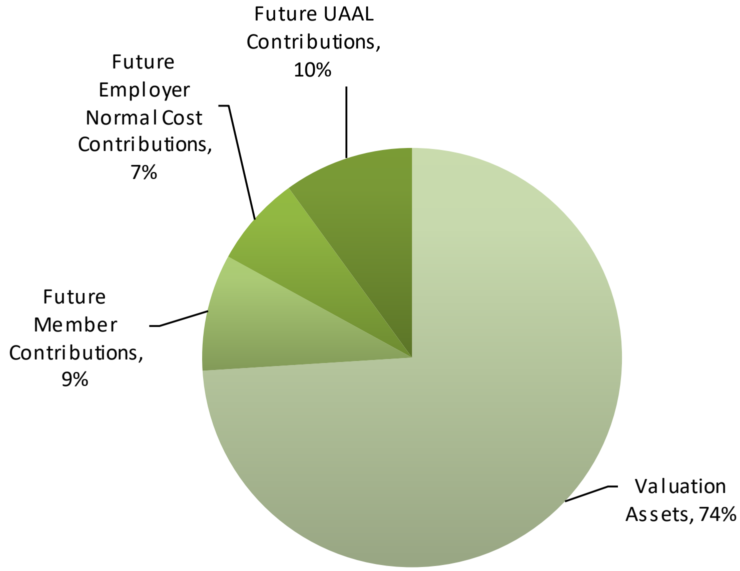
June 30



Actuarial Valuation—SamCERA's Resources

June 30, 2018

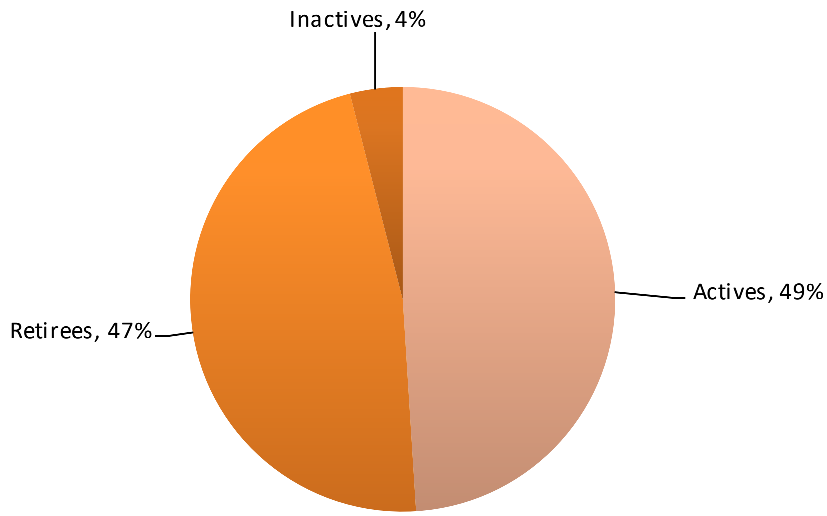
SamCERA's resources equal the actuarial assets plus the expected future contributions by both the employers and members.



Actuarial Valuation—SamCERA's Liabilities

June 30, 2018

SamCERA's liabilities reflect benefits already earned in the past and those expected to be earned in the future by current members.



SOLVENCY TEST

(Dollars in Thousands)

Actuarial Valuation Date as of June 30,	Valuation Assets	Actuarial Accrued Liabilities: Active Member Contributions (A)	Actuarial Accrued Liabilities: Retirees and Beneficiaries[1] (B)	Actuarial Accrued Liabilities: Active Members (Employer Financed Portion) (C)	Portion of Actuarial Accrued Liabilities Covered by Assets (A)	Portion of Actuarial Accrued Liabilities Covered by Assets (B)	Portion of Actuarial Accrued Liabilities Covered by Assets (C)
2009	$1,909,679	$ 412,147	$1,670,547	$905,018	100%	90%	0%
2010	2,179,076	449,355	1,745,146	903,952	100%	99%	0%
2011	2,405,140	485,126	1,866,219	895,382	100%	100%	6%
2012	2,480,271	498,569	2,022,791	921,193	100%	98%	0%
2013	2,618,639	534,276	2,157,590	880,884	100%	97%	0%
2014	2,993,187	584,080	2,285,328	927,634	100%	100%	13%
2015	3,343,550	628,287	2,451,544	965,955	100%	100%	27%
2016	3,624,726	679,246	2,635,409	1,047,641	100%	100%	30%
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%

(1) Includes inactive members

SCHEDULE OF FUNDING PROGRESS

(Dollars in Thousands)

Actuarial Valuation Date as of June 30,	(a) Actuarial Value of Valuation Assets	(b) Actuarial Accrued Liability	(b-a) Unfunded Actuarial Accrued Liability (UAAL)	(a/b) Funded Ratio	(c) Covered Payroll	[(b-a)/c] UAAL as a Percentage of Covered Payroll
2009	$1,909,679	$2,987,712	$1,078,033	63.9%	$433,668	248.58%
2010	2,179,076	3,098,453	919,377	70.3%	434,295	211.69%
2011	2,405,140	3,246,727	841,587	74.1%	427,041	197.07%
2012	2,480,271	3,442,553	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%

Note: The ten-year schedule of actuarially determined and actual contributions can be found in the Financial Section under the Required Supplementary Information.

Demographic activity of retirees and beneficiaries

	Added to Rolls[1]		Removed from Rolls		Rolls End of Year			
Fiscal Year Ended June 30,	No.	Annual Benefits (in Thousands)	No.	Annual Benefits (in Thousands)	No.	Total Retiree Payroll (in Thousands)	% Increase in Payroll	Average Monthly Benefits
2009	159	$12,717	66	$3,281	3,935	$119,052	8.6	$2,521
2010	163	9,076	96	3,240	4,002	124,888	4.9	2,601
2011 [2]	209	12,703	64	2,916	4,147	134,675	7.8	2,706
2012	218	14,379	90	4,209	4,275	144,845	7.6	2,823
2013	186	13,024	63	3,095	4,398	154,774	6.9	2,933
2014	203	12,474	83	3,479	4,518	163,769	5.8	3,021
2015	213	16,290	93	4,179	4,638	175,880	7.4	3,160
2016	233	15,347	123	5,030	4,748	186,197	5.9	3,268
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

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

(2) Revised figures from the June 30, 2011 valuation.

Actuarial Analysis of Financial Experience

June 30 (Dollars in Thousands)

	Change In Liability				
Summary of (Gains) / Losses	**2018**	**2017**	**2016**	**2015**	**2014**
Unfunded Liability as of July 1	$743,133	$737,570	$702,236	$803,855	$954,111
Expected Change in Unfunded Actuarial Accrued Liability	(109,756)	(110,404)	(96,454)	(76,018)	(88,525)
Salary (Gain) / Loss	10,401	27,685	24,707	39,129	(15,884)
Retiree COLA more / (less) than Expected	12,203	7,050	(6,275)	3,648	(15,603)
Asset (Gain) / Loss	(42,796)	(28,286)	27,821	(74,068)	(88,035)
Change due to Assumption Changes	-	133,221	89,364	-	59,345
Miscellaneous Experience	5,848	(23,703)	(3,829)	5,690	(1,554)
Unfunded Liability as of June 30	**$619,033**	**$743,133**	**$737,570**	**$702,236**	**$803,855**

Summary of Active Member Valuation Data

Valuation Date As of June 30,	No. of Members		Annual Salary	Average Annual Salary	% Change Average Salary
2018	General	4,603	$448,931,595	$97,530	3.3%
	Safety	508	66,799,289	131,495	1.6%
	Probation	256	25,741,800	100,554	4.0%
	Total	5,367	$541,472,684	$100,889	3.1%
2017	General	4,560	$430,613,886	$94,433	2.3%
	Safety	503	65,105,116	129,434	4.1%
	Probation	274	26,503,623	96,729	9.1%
	Total	5,337	$522,222,625	$97,849	2.8%
2016	General	4,421	$408,191,518	$92,330	4.7%
	Safety	495	61,564,028	124,372	6.5%
	Probation	271	24,034,819	88,689	2.4%
	Total	5,187	$493,790,365	$95,198	4.8%
2015	General	4,334	$382,303,295	$88,210	6.8%
	Safety	479	55,917,864	116,739	-0.4%
	Probation	282	24,418,977	86,592	3.1%
	Total	5,095	$462,640,136	$90,803	5.8%
2014	General	4,272	$352,918,558	$82,612	2.5%
	Safety	452	52,974,475	117,200	-1.0%
	Probation	280	23,514,343	83,980	0.8%
	Total	5,004	$429,407,376	$85,813	2.2%
2013	General	4,173	$338,595,633	$81,140	0.5%
	Safety	452	52,233,510	115,561	-1.7%
	Probation	292	23,722,165	81,240	-1.1%
	Total	4,917	$414,551,308	$84,310	0.4%
2012	General	4,361	$351,965,689	$80,708	1.9%
	Safety	435	51,129,267	117,539	0.7%
	Probation	299	24,554,583	82,122	1.9%
	Total	5,095	$427,649,539	$83,935	1.8%
2011	General	4,494	$355,876,715	$79,189	0.5%
	Safety	446	52,073,940	116,758	2.2%
	Probation	305	24,591,392	80,628	0.0%
	Total	5,245	$432,542,047	$82,468	0.9%
2010	General	4,609	$363,305,740	$78,825	1.6%
	Safety	425	48,576,912	114,299	3.6%
	Probation	313	25,247,595	80,663	1.3%
	Total	5,347	$437,130,247	$81,752	1.8%
2009	General	4,777	$370,760,830	$77,614	4.1%
	Safety	436	48,120,081	110,367	2.9%
	Probation	330	26,270,802	79,608	4.6%
	Total	5,543	$445,151,713	$80,309	4.0%

Note: See further details for participating employers and active members in the Statistical Section.

STATISTICAL SECTION

"We advance on our journey only when we face our goal, we are confident and believe we are going to succeed."

-Orison Swett Marden
American Author

THE STATISTICAL SECTION

Introduction

This section provides detailed information for a more thorough understanding of the financial statements, note disclosures, and required supplementary information. 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)

	2018	2017	2016	2015	2014
Additions					
Employer Contributions	$207,257	$198,727	$191,094	$180,704	$202,877
Member Contributions	64,204	62,160	56,069	48,012	46,594
Total Contributions	271,461	260,887	247,163	228,716	249,471
Investment Income (loss), net of Expenses	280,076	436,603	24,112	111,320	482,050
Securities Lending Income	43	46	278	310	435
Miscellaneous Additions	27	27	4,910	0	179
Total Additions	551,607	697,563	276,463	340,346	732,135
Deductions					
Retiree Benefits	204,728	190,364	179,498	168,109	159,342
Member Refunds	4,326	2,876	3,366	3,357	3,214
Administrative Expenses	5,849	5,983	5,962	5,350	4,914
Information Technology Expenses	1,444	996	714	629	731
Other Expenses	0	30	11	119	65
Total Deductions	216,347	200,249	189,551	177,564	168,266
Changes in Pension Plan Net Position	**$335,260**	**$497,314**	**$86,912**	**$162,782**	**$563,869**

Changes in Fiduciary Net Position (Continued)

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

	2013	2012	2011	2010	2009
Additions					
Employer Contributions	$144,308	$150,950	$150,475	$106,265	$106,123
Member Contributions	55,408	49,687	49,013	50,319	50,372
Total Contributions	199,716	200,637	199,488	156,584	156,495
Investment Income (loss), net of Expenses	326,983	(11,024)	437,654	195,412	(457,309)
Securities Lending Income	622	721	530	743	1,631
Miscellaneous Additions	160	29	73	41	(16)
Total Additions	527,481	190,363	637,745	352,780	(299,199)
Deductions					
Retiree Benefits	149,266	139,208	129,835	122,141	113,991
Member Refunds	5,750	3,627	2,474	2,736	2,795
Administrative Expenses	4,260	4,675	3,547	3,373	3,287
Information Technology Expenses [1]	654	325	0	0	0
Other Expenses	29	0	10	33	67
Total Deductions	159,959	147,835	135,866	128,283	120,140
Changes in Pension Plan Net Position	**$367,522**	**$42,528**	**$501,879**	**$224,497**	**($419,339)**

[1] Prior to fiscal year 2012, information technology expenses were included in administrative expenses. Since fiscal year 2012, information technology expenses are detached from administrative expenses and are separately accounted for.

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
2009	$50,372	$106,123	($457,309)	$1,615	($299,199)
2010	50,319	106,265	195,412	784	352,780
2011	49,013	150,475	437,654	603	637,745
2012	49,687	150,950	(11,024)	750	190,363
2013	55,408	144,308	326,983	782	527,481
2014	46,594	202,877	482,050	614	732,135
2015	48,012	180,704	111,320	310	340,346
2016	56,069	191,094	24,112	5,188	276,463
2017	62,160	198,727	436,603	73	697,563
2018	64,204	207,257	280,076	70	551,607

Schedule of deductions from fiduciary net position by Type

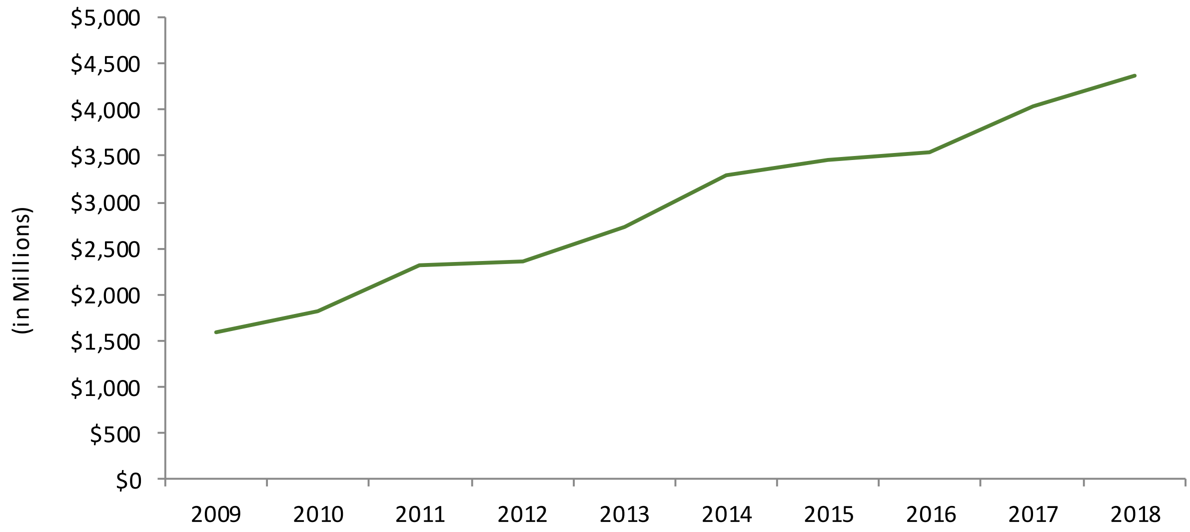
(Dollars in Thousands)

Fiscal Year Ended June 30	Retirement and Other Benefits	Member Refunds	Administrative Expenses [1]	Information Technology Expenses	Other Expenses	Total Deductions
2009	$113,991	$2,795	$3,287	$0	$67	$120,140
2010	122,141	2,736	3,373	0	33	128,283
2011	129,835	2,474	3,547	0	10	135,866
2012	139,208	3,627	4,675	325	0	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	0	216,347

[1] Administrative expenses related to investments were classified as investment expense in 2009-2011. Effective June 30, 2012, these expenses are included as Administrative Expenses.

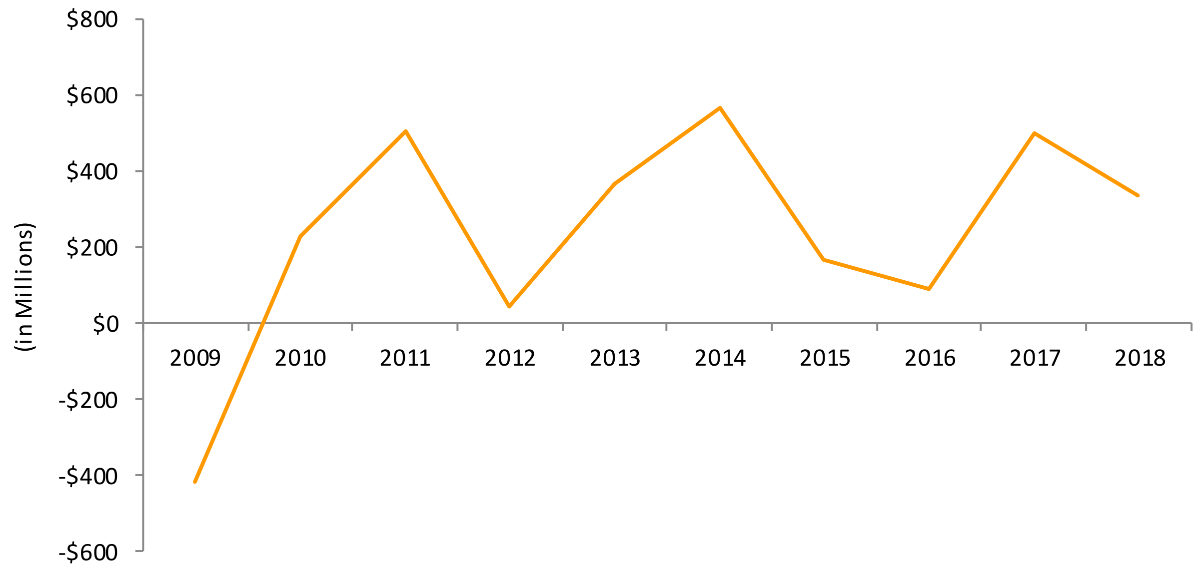
Total fiduciary Net Position

June 30



Changes in fiduciary Net Position

For the Fiscal Years Ended June 30



Note: The global economic downturn in fiscal year 2008-09 negatively impacted SamCERA's investment return.

SUMMARY OF RETIRED BENEFITS, REFUNDS, AND INACTIVE MEMBERS

RETIRED MEMBERS	2018	2017	2016	2015	2014
Service Retirement, Survivor, Death and Other Benefits					
Number	4,637	4,487	4,294	4,196	4,090
Annual Allowance	$ 180,856,728	$ 167,674,580	$ 158,406,732	$ 148,070,536	$ 140,075,355
Average Monthly Payment	$ 3,250	$ 3,114	$ 3,074	$ 2,941	$ 2,854
Disability Retirement					
Number	472	469	454	442	428
Annual Allowance	$ 23,872,145	$ 22,689,813	$ 21,090,529	$ 20,038,671	$ 19,266,623
Average Monthly Payment	$ 4,215	$ 4,032	$ 3,871	$ 3,778	$ 3,751
TOTAL RETIRED MEMBERS					
Number	5,109	4,956	4,748	4,638	4,518
Annual Allowance	$ 204,728,873	$ 190,364,393	$ 179,497,261	$ 168,109,207	$ 159,341,978
Average Monthly Payment	$ 3,339	$ 3,201	$ 3,150	$ 3,021	$ 2,939
REFUND					
General	$ 3,252,941	$ 2,511,145	$ 2,991,126	$ 3,011,758	$ 3,058,864
Safety	1,072,789	364,742	375,311	345,253	155,265
Annual Allowance	**$ 4,325,730**	**$ 2,875,887**	**$ 3,366,437**	**$ 3,357,011**	**$ 3,214,129**
INACTIVE MEMBERS	1,666	1,487	1,486	1,384	1,304

Note: This schedule is prepared by SamCERA based on the actual allowances disbursed.

Summary of Retired Benefits, Refunds, and Inactive Members (Continued)

RETIRED MEMBERS	2013	2012	2011	2010	2009
Service Retirement, Survivor, Death and Other Benefits					
Number	4,005	3,901	3,777	3,637	3,566
Annual Allowance	$ 132,560,400	$ 123,675,225	$ 115,281,613	$ 107,555,345	$ 100,174,246
Average Monthly Payment	$ 2,758	$ 2,642	$ 2,544	$ 2,464	$ 2,341
Disability Retirement					
Number	393	374	370	365	369
Annual Allowance	$ 16,705,247	$ 15,532,365	$ 14,552,927	$ 14,585,746	$ 13,816,561
Average Monthly Payment	$ 3,542	$ 3,461	$ 3,278	$ 3,330	$ 3,120
TOTAL RETIRED MEMBERS					
Number	4,398	4,275	4,147	4,002	3,935
Annual Allowance	$ 149,265,647	$ 139,207,590	$ 129,834,540	$ 122,141,091	$ 113,990,807
Average Monthly Payment	$ 2,828	$ 2,714	$ 2,609	$ 2,543	$ 2,414
REFUND [1]					
General	$ 5,161,430	$ 3,399,163	$ 2,379,790	$ 2,623,439	N/A
Safety	588,346	228,329	94,655	112,586	N/A
Annual Allowance	**$ 5,749,776**	**$ 3,627,492**	**$ 2,474,445**	**$ 2,736,025**	**$ -**
INACTIVE MEMBERS	1,306	1,212	1,190	1,207	1,230

Note: This schedule is prepared by SamCERA based on the actual allowances disbursed.

[1] Refund by type is not available prior to fiscal year 2009-10.

Schedule of Average Pension Benefit Payments

Retirement Date	Years of Service Credit						
7/1/2017 - 6/30/2018	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30+**
Retirees - Service and Disabilities							
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 Retires	12	33	57	41	35	38	41
Beneficiaries							
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
7/1/2016 - 6/30/2017	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30+**
Retirees - Service and Disabilities							
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 Retires	13	35	47	37	37	32	33
Beneficiaries							
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
7/1/2015 - 6/30/2016	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30+**
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	$350	$1,536	$2,112	$3,210	$4,563	$5,841	$7,990
Average Final Compensation	$4,081	$6,646	$6,410	$9,032	$7,964	$8,548	$9,322
Number of Retires	16	47	56	54	26	28	21
Beneficiaries							
Average Monthly Gross Benefit	$1,732	$1,038	$1,368	$1,361	$3,304	$3,036	$3,554
Average Final Compensation	N/A	$3,434	$4,173	$3,756	$5,429	$4,972	$5,372
Number of Beneficiaries	14	9	5	2	4	7	7
7/1/2014 - 6/30/2015	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30+**
Retirees - Service and Disabilities							
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 Retires	21	35	52	35	20	38	31
Beneficiaries							
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
7/1/2013 - 6/30/2014	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30+**
Retirees - Service and Disabilities							
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 Retires	16	61	49	40	32	13	18
Beneficiaries							
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

Schedule of Average Pension Benefit Payments (Continued)

Retirement Date	Years of Service Credit						
7/1/2012 - 6/30/2013	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30+**
Retirees - Service and Disabilities							
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
Beneficiaries							
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
7/1/2011 - 6/30/2012	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30+**
Retirees - Service and Disabilities							
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
Beneficiaries							
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
7/1/2010 - 6/30/2011	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30+**
Retirees - Service and Disabilities							
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
Beneficiaries							
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
7/1/2009 - 6/30/2010	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30+**
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	$875	$1,281	$2,107	$3,932	$5,057	$6,175	$7,543
Average Final Compensation	$2,619	$5,480	$5,803	$7,587	$7,827	$7,818	$8,081
Number of Retirees	9	35	33	16	41	19	24
Beneficiaries							
Average Monthly Gross Benefit	$712	$2,679	$1,485	$1,170	$2,304	$3,992	$4,413
Average Final Compensation	N/A	$7,316	$5,457	$3,874	$5,546	$5,457	$5,166
Number of Beneficiaries	8	4	2	2	3	1	4
7/1/2008 - 6/30/2009	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30+**
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	$1,538	$1,412	$2,293	$3,028	$5,211	$6,372	$9,020
Average Final Compensation	$3,654	$4,685	$6,456	$6,882	$7,838	$7,241	$9,052
Number of Retirees	7	32	27	28	22	16	32
Beneficiaries							
Average Monthly Gross Benefit	$1,854	$913	$1,357	$1,003	$1,590	$4,130	$3,635
Average Final Compensation	N/A	$2,808	$5,068	$3,840	$6,395	$6,099	$4,661
Number of Beneficiaries	12	4	6	3	3	1	1

Schedule of Average Monthly Salary of Active Members

For the Fiscal Years Ended June 30 (by Plan and Membership Type)

	2018	2017	2016	2015	2014
General Plan 1	$10,121	$11,305	$9,945	$9,235	$8,617
General Plan 2	9,526	8,994	8,636	8,186	7,584
General Plan 3	7,462	7,484	7,173	6,747	6,300
General Plan 4	8,534	8,134	7,807	7,386	6,873
General Plan 5	9,672	8,980	8,485	7,735	6,912
General Plan 7	6,974	6,737	6,714	6,315	5,721
Average Monthly Salary for General Plan	**8,128**	**7,869**	**7,694**	**7,351**	**6,884**
Safety Plan 1	0	14,434	15,810	14,712	14,091
Safety Plan 2	13,607	13,528	12,505	11,545	11,191
Safety Plan 4	11,894	11,381	10,729	9,919	9,581
Safety Plan 5	11,349	10,544	9,940	9,145	8,958
Safety Plan 6	0	0	16,793	16,010	14,381
Safety Plan 7	8,747	8,356	7,538	6,701	7,011
Average Monthly Salary for Safety Plan	**10,958**	**10,786**	**10,364**	**9,728**	**9,767**
Probation 1	0	7,722	7,261	7,038	6,874
Probation 2	9,061	9,069	8,349	8,012	7,699
Probation 4	8,714	8,270	7,454	7,267	6,922
Probation 5	8,219	7,612	6,429	6,106	5,916
Probation 6	0	7,347	6,259	5,739	5,216
Probation 7	6,676	6,121	5,962	5,684	5,807
Average Monthly Salary for General Plan	**8,379**	**8,061**	**7,391**	**7,216**	**6,998**
Average Monthly Salary for All Plans	8,407	8,154	7,933	7,567	7,151

Schedule of Average Monthly Salary of Active Members (continued)

For the Fiscal Years Ended June 30 (by Plan and Membership Type)

	2013	2012	2011	2010	2009
General Plan 1	$8,104	$7,843	$7,630	$7,543	$7,534
General Plan 2	7,355	7,340	7,208	7,193	7,120
General Plan 3	6,254	6,138	5,968	5,818	5,791
General Plan 4	6,662	6,580	6,398	6,348	6,212
General Plan 5	6,418	5,799	N/A	N/A	N/A
General Plan 7	5,433	N/A	N/A	N/A	N/A
Average Monthly Salary for General Plan	**6,762**	**6,726**	**6,599**	**6,569**	**6,468**
Safety Plan 1	13,185	12,624	12,073	11,578	10,889
Safety Plan 2	10,935	10,892	10,789	10,548	10,135
Safety Plan 4	9,402	9,351	9,230	8,931	8,610
Safety Plan 5	8,699	9,667	N/A	N/A	N/A
Safety Plan 6	12,374	N/A	N/A	N/A	N/A
Safety Plan 7	6,695	N/A	N/A	N/A	N/A
Average Monthly Salary for Safety Plan	**9,630**	**9,795**	**9,730**	**9,525**	**9,197**
Probation 1	6,618	6,618	7,533	8,922	9,751
Probation 2	7,445	7,454	7,349	7,393	7,341
Probation 4	6,622	6,686	6,505	6,456	6,291
Probation 5	5,242	4,949	N/A	N/A	N/A
Probation 6	4,808	5,239	N/A	N/A	N/A
Probation 7	7,742	5,239	N/A	N/A	N/A
Average Monthly Salary for General Plan	**6,770**	**6,844**	**6,719**	**6,722**	**6,634**
Average Monthly Salary for All Plans	7,026	6,995	6,872	6,813	6,692

Schedule of Active Members and Participating Employers

June 30

	2018	2017	2016	2015	2014
COUNTY OF SAN MATEO					
General Members	4,343	4,303	4,170	4,092	4,014
Safety Members	508	503	495	479	452
Probation Members	256	274	271	282	280
Subtotal	5,107	5,080	4,936	4,853	4,746
SAN MATEO SUPERIOR COURT					
General Members	239	237	231	222	239
SAN MATEO COUNTY MOSQUITO & VECTOR CONTROL DISTRICT					
General Members	21	20	20	20	19
Total Active Membership	5,367	5,337	5,187	5,095	5,004
Percentage of Membership by Employer					
County of San Mateo	95.16%	95.18%	95.16%	95.25%	94.84%
San Mateo Superior Court	4.45%	4.45%	4.45%	4.36%	4.78%
San Mateo County Mosquito and Vector Control District	0.39%	0.37%	0.39%	0.39%	0.38%
Total Percentage of Membership	100.00%	100.00%	100.00%	100.00%	100.00%

Schedule of Active Members and Participating Employers (continued)

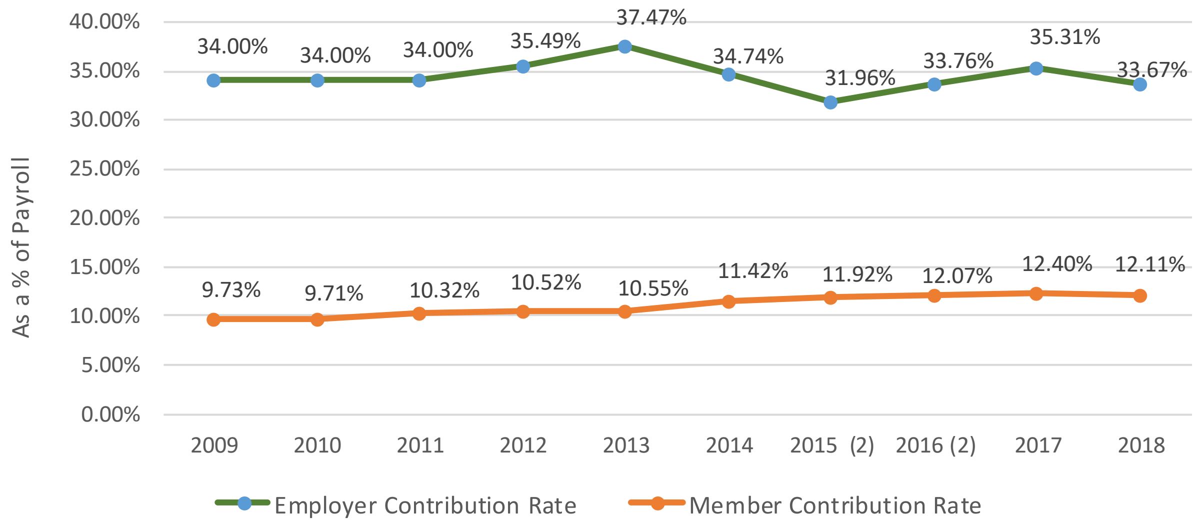
June 30

	2013	2012	2011	2010	2009
COUNTY OF SAN MATEO					
General Members	3,906	4,078	4,476	4,589	4,758
Safety Members	452	435	446	425	436
Probation Members	292	299	305	313	330
Subtotal	4,650	4,812	5,227	5,327	5,524
SAN MATEO SUPERIOR COURT					
General Members	249	268	N/A	N/A	N/A
SAN MATEO COUNTY MOSQUITO & VECTOR CONTROL DISTRICT					
General Members	18	15	18	20	19
Total Active Membership	4,917	5,095	5,245	5,347	5,543
Percentage of Membership by Employer					
County of San Mateo	94.57%	94.45%	99.66%	99.63%	99.66%
San Mateo Superior Court	5.06%	5.26%	N/A	N/A	N/A
San Mateo County Mosquito and Vector Control District	0.37%	0.29%	0.34%	0.37%	0.34%
Total Percentage of Membership	100.00%	100.00%	100.00%	100.00%	100.00%

Note: San Mateo Superior Court was once a unit of the County of San Mateo, but was separated and became a unit of the State of California since fiscal year 2011-12.

Employer and Member Contribution Rates [1]

Determined at June 30



[1] 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, 2018, will become effective on July 1, 2019.

[2] 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

	Fiscal Year Beginning		
	July 1, 2019 [1]	July 1, 2018	Change
Gross Normal Cost	22.68%	23.35%	-0.67%
Less: Member Contributions	(12.11)%	(12.40)%	0.29%
Employer Normal Cost	10.57%	10.95%	-0.38%
UAAL Amortization	23.10%	24.36%	-1.26%
Total Employer Contribution Rate	**33.67%**	**35.31%**	**-1.64%**

[1] The total employer rate of 33.67% is the aggregate rate for all employers. For the fiscal year beginning July 1, 2019, employer rates by employer are as follows:

a) The County of San Mateo's (the County) Statutory Contribution Rate is 33.85% of pay.

b) The San Mateo Superior Court's (the Court) Statutory Contribution Rate is 31.03% of pay.

c) The San Mateo County Mosquito & Vector Control District's (the District) Statutory Contribution rate is 12.13% of pay.

History of Employer Statutory Contribution Rates

Valuation Date	General Members (County & Court)			General Members (Nurses & UAPD)			General Members (District)		
June 30	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2009	10.11%	18.40%	28.51%	Same as County General			8.25%	15.09%	23.34%
2010	10.05%	16.35%	26.40%	Same as County General			11.70%	16.35%	28.05%
2011	9.71%	16.41%	26.12%	8.70%	16.41%	25.11%	11.97%	16.41%	28.38%
2012	9.98%	20.17%	30.15%	8.96%	20.17%	29.13%	11.68%	20.17%	31.85%
2013	9.74%	22.35%	32.09%	8.92%	22.35%	31.27%	11.70%	22.35%	34.05%
2014	10.12%	20.27%	30.39%	9.14%	20.21%	29.35%	11.72%	21.16%	32.88%

Valuation Date	General Members (County)			General Members (Court)			General Members (District)		
June 30	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2015	8.67%	18.37%	27.04%	9.04%	19.54%	28.58%	11.75%	19.54%	31.29%
2016	8.91%	19.81%	28.72%	9.09%	21.30%	30.39%	12.02%	12.50%	24.52%
2017	9.58%	20.55%	30.13%	9.65%	22.58%	32.23%	12.32%	12.37%	24.69%
2018	9.22%	19.32%	28.54%	9.27%	21.76%	31.03%	12.13%	0.00%	12.13%

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.

History of Employer Statutory Contribution Rates (Continued)

Valuation Date	Safety Member			Probation Members (excluding Managers)			Probation Members (Managers)		
June 30	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2009	19.21%	51.83%	71.04%	19.92%	23.84%	43.76%	Same as Probation (exclude Managers)		
2010	19.01%	44.50%	63.51%	19.85%	21.62%	41.47%	Same as Probation (exclude Managers)		
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)		

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.

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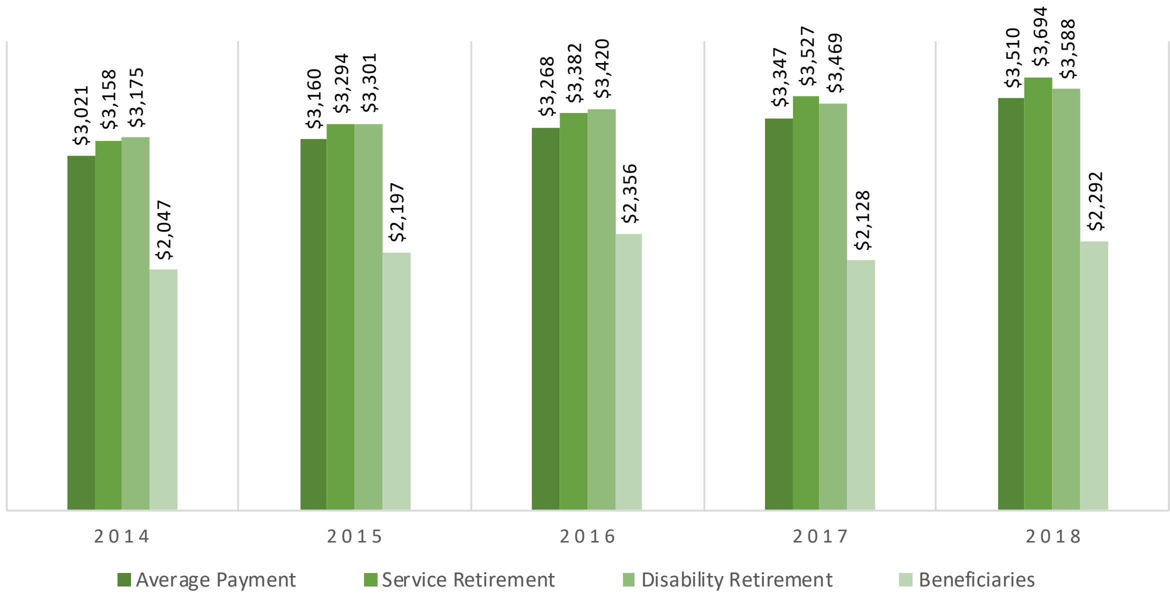
8. Effective October 2016, all members (except those with benefits negotiated under Board of Supervisors bargaining unit, and District members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. This is reflected in 2016 values.

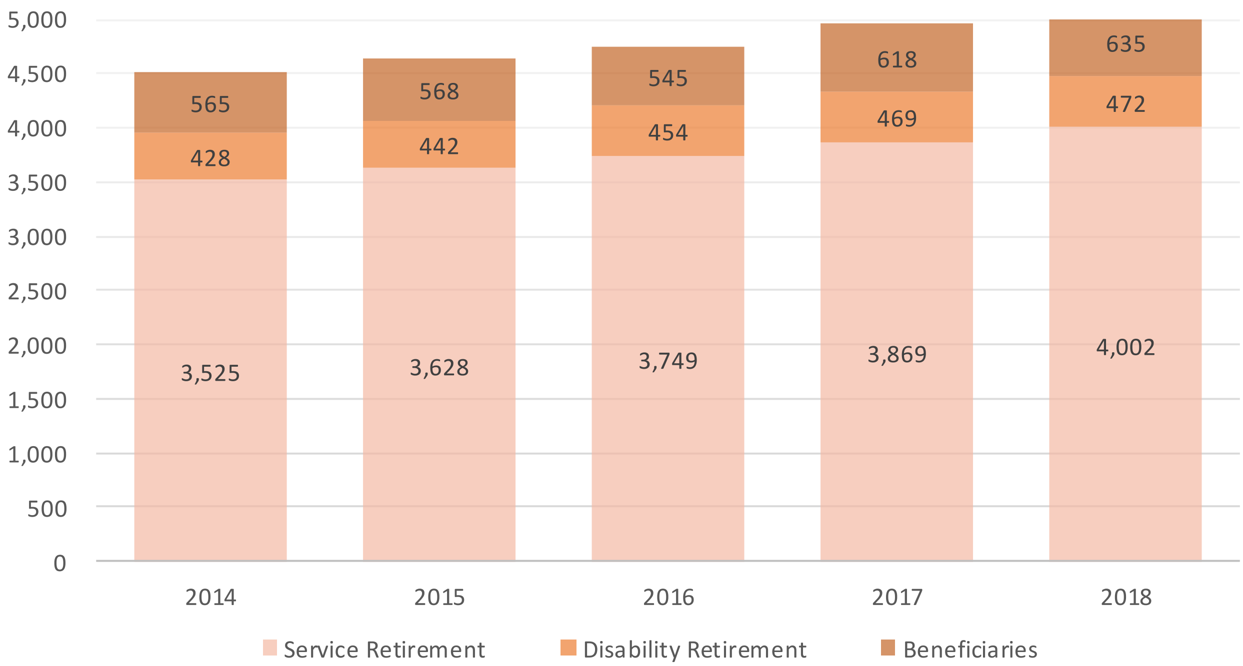
Average monthly retiree benefit payment

For the Fiscal Years Ended June 30



Number of retirees by category

June 30



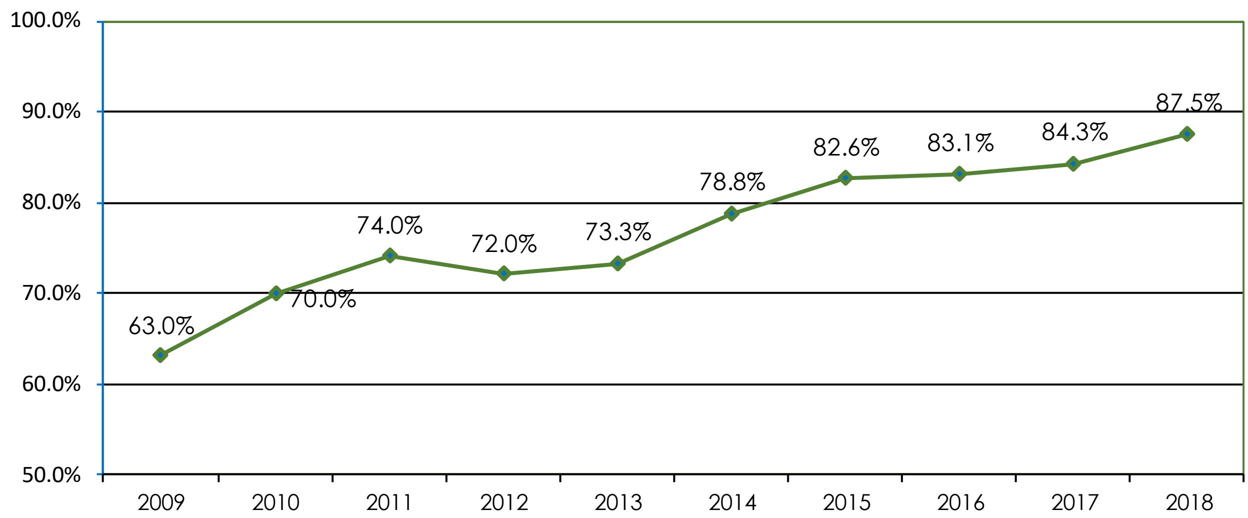
COMPLIANCE SECTION

"Integrity is the essence of everything successful."

-Buckminster Fuller
American Architect, Engineer and Futurist

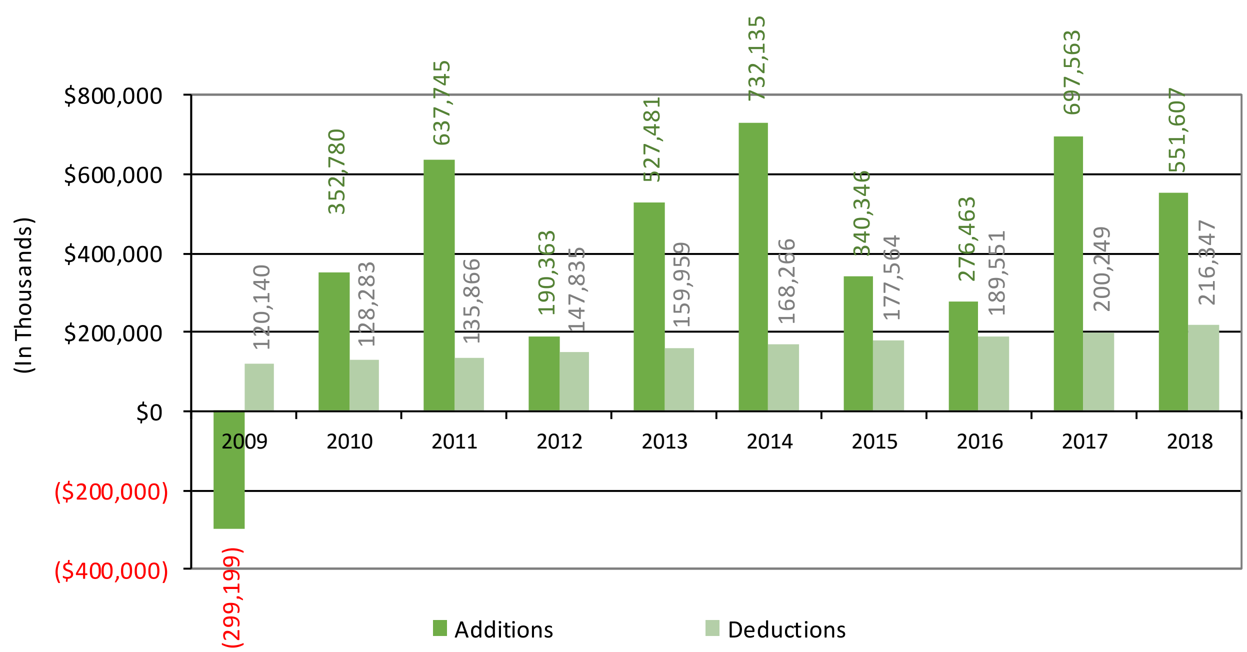
SamCERA's Funded Ratio

June 30



Additions to and Deductions from SamCERA's Net Position

For the Fiscal Years Ended June 30



Note: The global economic downturn in fiscal year 2008-09 negatively impacted SamCERA's investment return.

BROWN ARMSTRONG
CERTIFIED PUBLIC ACCOUNTANTS

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

LAGUNA HILLS OFFICE
23272 MILL CREEK DRIVE
SUITE 255
LAGUNA HILLS, CA 92653
TEL 949.652.5422

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

WWW.BACPAS.COM

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 financial statements of the San Mateo County Employees' Retirement Association (SamCERA) as of and for the fiscal year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise SamCERA's basic financial statements, and have issued our report thereon dated October 22, 2018.

Internal Control Over Financial Reporting

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

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

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

Compliance and Other Matters

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

Purpose of this Report

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

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 22, 2018

Online Information

This report can be found on SamCERA's website.

www.samcera.org

SamCERA
SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

100 Marine Parkway, Suite 125 | Redwood City, California 94065
Phone: 650-599-1234 | Toll-Free 800-339-0761 | Fax: 650-591-1488