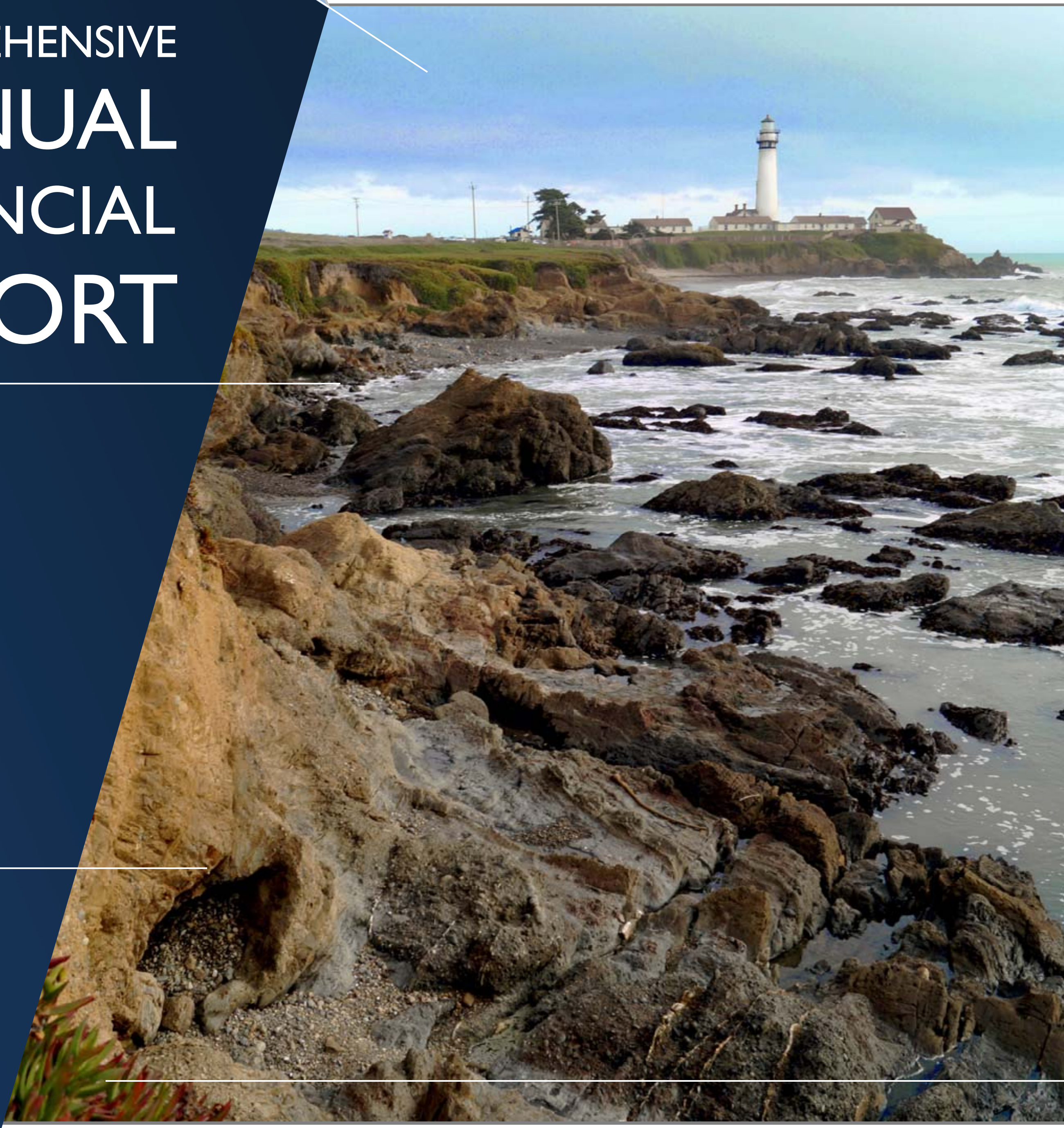
SamCERA
SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

# COMPREHENSIVE ANNUAL FINANCIAL REPORT



2016

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

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

San Mateo County Employees' Retirement Association

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

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2016


Scott Hood
Chief Executive Officer

Tat-Ling Chow
Finance Officer

Michael Coultrip
Chief Investment Officer

SamCERA

100 Marine Parkway, Suite 125

Redwood City, California 94065

# TABLE OF CONTENTS

## Introductory Section

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

## Financial Section

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

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

## Investment Section

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

## Actuarial Section

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

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

## Statistical Section

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

## Compliance Section

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

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# INTRODUCTORY SECTION

## SamCERA's Mission

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

## SamCERA's Goals

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

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

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

## ADMINISTRATOR'S LETTER OF TRANSMITTAL

SamCERA
SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

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Scott Hood
SamCERA
Chief Executive Officer

Board of Retirement
San Mateo County Employees' Retirement Association

Dear Trustees:

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

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

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

The certified public accounting firm of Brown Armstrong Accountancy Corporation provides financial audit services to SamCERA. The objective of this financial audit is to ensure that SamCERA's financial statements are presented in conformity with Generally Accepted Accounting Principles (GAAP) in the United States of America and are free of material misstatements. Internal controls are reviewed to ensure that SamCERA's policies and procedures are being adhered to and that sufficient controls are in place to ensure reliable financial reporting and to safeguard SamCERA's assets. This report is prepared in accordance with GAAP as promulgated by the Governmental Accounting Standards Board (GASB).

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

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

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

## Authority, Responsibilities & Duties

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

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

The Board of Retirement (the Board), serving as fiduciary for all of SamCERA's members and beneficiaries under the California Constitution, Article XVI, Section 17 and the CERL, is responsible for administering the system. The Board has adopted the Regulations of the Board of Retirement, and among other policies, its Mission & Goals; Investment Policy Statement; Conflict of Interest Code; and Code of Conduct, which reflect the Board's guiding policies. The Board annually adopts an operating budget for the administration of SamCERA, which is discussed in the Financial Section beginning on page 23. A breakdown of the budget allotment versus expenditures is presented on pages 61-62. In addition, the Board has authorized the execution of contracts for the professional services of an actuary, an auditing actuary, an investment consultant, investment managers, a global custodian, a financial auditor, a medical advisor delegated by the County Health Officer, and an information technology consultant to help the Board fulfill its duties. The Board's primary professional consultants are highlighted in the organizational chart on page 21.

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

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

## Looking Backward and Forward

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

### Trustees

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

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

## Investments

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

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

## Staffing

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

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

## Actuarial

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

## Plan Funding Status

SamCERA maintains a funding goal that will fully fund the system's liabilities. Contributions, as a percentage of payroll, will remain as level as possible for the plan sponsors. The independent actuarial consulting firm, Milliman, acts as the plan's actuary and conducts annual actuarial valuations, which are presented to the Board annually. The purpose of the valuation is to recommend the employer and member contribution rates for the coming fiscal year. Triennially, Milliman conducts an experience study of SamCERA members and makes recommendations to the Board on key economic and non-economic assumptions. The most recent triennial experience study was performed for the period ended April 30, 2014.

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

The Employer Normal Cost Rate will increase to 10.25% for fiscal year 2017-18 from a mid-year adjusted 10.03% (unadjusted rate was 10.42%) of covered payroll for fiscal year 2016-17. The mid-year decrease was due mainly to negotiated increases in some member Cost of Living Adjustment (COLA) share contribution rates. The Employer Normal Cost decreased due to an increase of the number of members being part of the of the California Public Employees' Pension Reform Act of 2013 (PEPRA) plan. The portion of the employer's statutory contribution rate that finances the UAAL will increase to 23.52% for fiscal year 2017-18 from 21.93% for fiscal year 2016-17. This increase was in large part due to lowering the assumed rate of return to 7.0%. For almost all plans, member rates and member COLA rates increased over the previous year as a result.

## Supplemental Contributions

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

## Cost of Living Adjustment

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

## Information Technology

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

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

## Tax Determination Letter

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

## Strategic Planning

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

### 1. ASSET MANAGEMENT GOAL

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

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

### 2. CUSTOMER SERVICES GOAL

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

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

### 3. OPERATIONS GOAL

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

Operationally, SamCERA will continue to focus on the PASS implementation. Some related and supporting projects will also be undertaken. These projects include developing and executing a PASS communication plan to inform stakeholders of the impending changes. Likewise, staff will undertake a transition of the retiree health accounting functions back to the County's Human Resources Benefits Division and streamline a payment deduction method that will work with the new PASS system.

## Certificate of Achievement and Acknowledgements

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

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

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

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

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

Respectfully submitted,

Scott Hood
Chief Executive Officer
October 18, 2016

## GFOA CERTIFICATE OF ACHIEVEMENT

Government Finance Officers Association

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

**San Mateo County**

**Employees' Retirement Association**

**California**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

**June 30, 2015**

Executive Director/CEO

## PPCC PUBLIC PENSION STANDARDS AWARD

PPCC

Public Pension Coordinating Council

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

Presented to

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

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

*Presented by the Public Pension Coordinating Council, a confederation of*

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

Alan H. Winkle

Alan H. Winkle
Program Administrator

## Members of the Board of Retirement (June 30, 2016)

### Sandie Arnott

*Ex Officio per the CERL, First Member*

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

### Shirley Tourel

*Elected by the General Members, Second Member*

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

### Natalie Kwan Lloyd

*Elected by the General Members, Third Member, Secretary*

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

### Eric Tashman

*Appointed by the Board of Supervisors, Fourth Member*

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

### Benedict J. Bowler

*Appointed by the Board of Supervisors, Fifth Member*

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

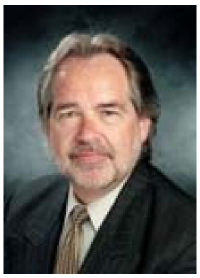
### Mark Battey

*Appointed by the Board of Supervisors, Sixth Member*

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

### David Spinello
*Elected by the Safety Members, Seventh Member*

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



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

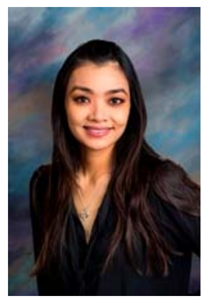
Paul served as the County Benefits Manager from 1982 through March 2008. He is also a former member of the Board of Retirement, having served from June 2005 through March 2008 while actively employed. Today he is the head of I.C. Benefits Consulting. He was elected in 2010, and reelected in 2013 and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

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

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

### Alma Salas
*Elected by the Retired Members, Retiree Alternate*

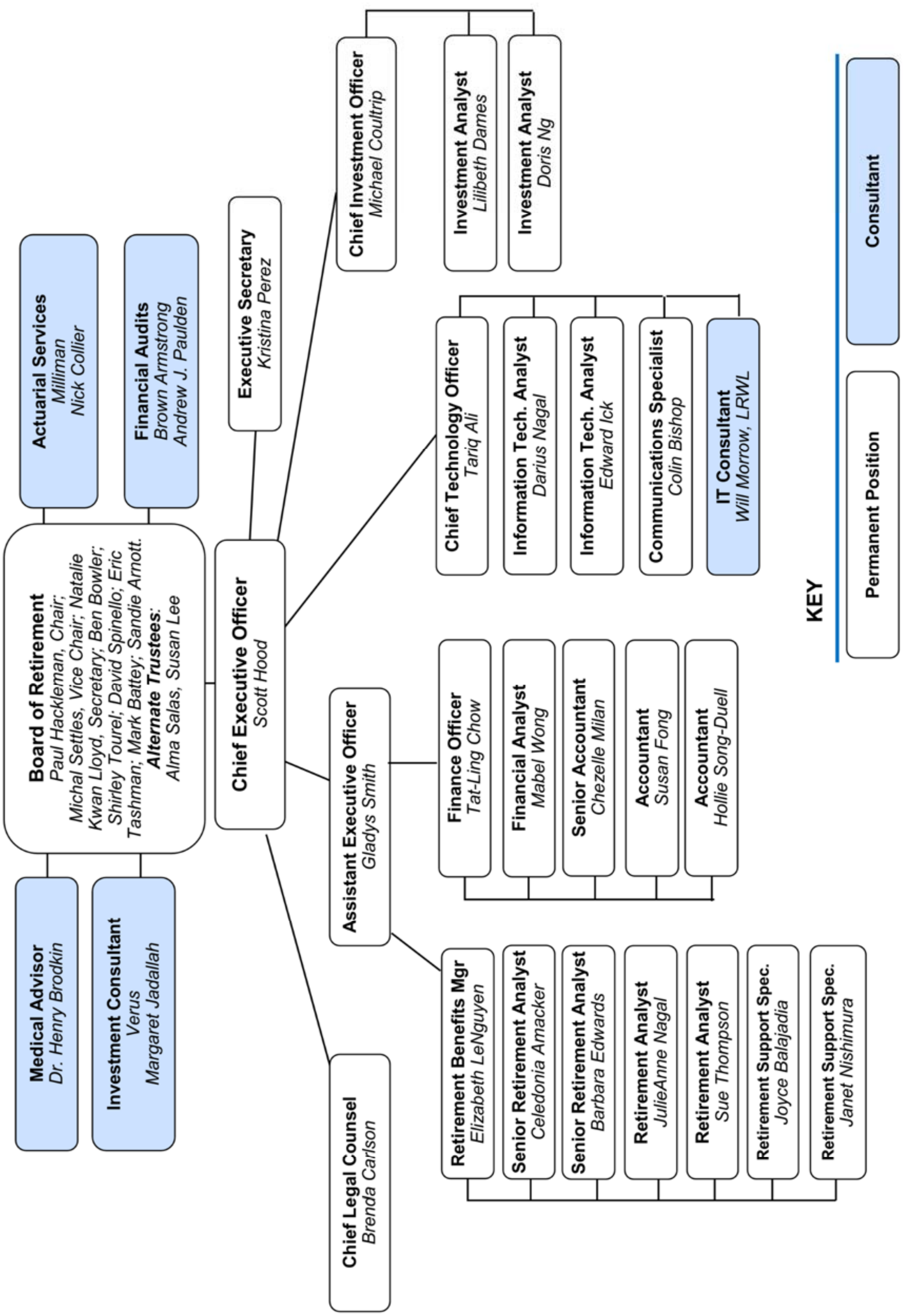
Alma Salas was a Probation Services Manager with the San Mateo County Probation Department before her retirement in May 2013. Alma first joined the Board of Retirement in May of 2001, and served as Board of Retirement Chair during the 2004-05 fiscal year. She was elected in June 2013 to serve as the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



### Susan Lee
*Elected by the Safety Members, Safety Alternate*

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

## SamCERA Organizational Chart (June 30, 2016)




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

# FINANCIAL SECTION

BROWN ARMSTRONG
CERTIFIED PUBLIC ACCOUNTANTS

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SUITE 150
STOCKTON, CA 95207
TEL 209.451.4833

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

BROWN ARMSTRONG
*Certified Public Accountants*

**INDEPENDENT AUDITOR'S REPORT**

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

**Report on the Financial Statements**

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

**Management's Responsibility for the Financial Statements and Other Information**

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

**Auditor's Responsibility**

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

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

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

**Opinions**

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

**Emphasis of Matter**

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

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

**Other Matters**

*Required Supplementary Information*

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

*Other Supplementary Information*

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

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

*Additional Information*

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

**Other Reporting Required by *Government Auditing Standards***

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

**Report on Summarized Comparative Information**

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

**Restrictions on Use**

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

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 18, 2016

## MANAGEMENT'S DISCUSSION AND ANALYSIS FISCAL YEAR 2015-16

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

### Financial Highlights

- SamCERA's fiduciary net position restricted for pension benefits as of June 30, 2016, was about $3.5 billion, an increase of $87 million, or 3%, over the prior fiscal year-end.

- Total assets increased by $60 million, or 2%, over the year. The increase was mainly from investment earnings as well as employer and member contributions.

- Total liabilities decreased by $26 million, or 21%, over the year. The decrease was due primarily to the payoff of a sizable payable and the decline in securities lending collateral due to borrowers.

- Total additions to SamCERA's fiduciary net position decreased $64 million, or 19%, to $276 million from $340 million last year. The decrease was primarily from a $87 million decline in net investment income. The net return from SamCERA's investment was 0.7% net of investment management fees compared to 3.5% last year. Throughout the year, the market conditions were overshadowed by a myriad of concerns, such as global growth concerns, concerns of a hard landing in China, continued heightened geopolitical concerns, and the fallout from the Brexit decision in the United Kingdom.

- Deductions from SamCERA's fiduciary net position increased $12 million, or 7%, to $190 million from $178 million last year. The increase was triggered mainly by an increased number of retirees receiving pension benefits.

- The funded ratio for SamCERA as of June 30, 2016, increased to 83.1% from 82.6% over the year, based upon the most recent actuarial valuation. The improvement in funded ratio was due primarily to employer contributions to amortize the unfunded actuarial accrued liabilities (UAAL), which was partially offset by the increase in UAAL from revised economic assumptions.

- The net pension liability of participating employers was $713 million as of June 30, 2016, which approximates to 150.88% of collective covered payroll based on the Governmental Accounting Standards Board (GASB) Statement No. 67.

- Despite recent market volatility and increased retirement benefits, the overall financial position of SamCERA has improved. SamCERA remains in good financial position to meet its obligations to plan participants and beneficiaries.

### Overview of Financial Statements

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

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

## Basic Financial Statements

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

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

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

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

Member and employer contributions are recognized in the period in which contributions are due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with plan terms. Investment income is recognized when earned, and expenses are recognized when incurred. The net appreciation (or 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.

## Notes to the Basic Financial Statements

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

## Required Supplementary Information

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

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

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

### Other Supplementary Information

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

### Other Information

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

### Financial Analysis

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

### Analysis of Fiduciary Net Position

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

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

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

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

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

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

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

## STATEMENT OF FIDUCIARY NET POSITION

*June 30 (Dollars in Thousands)*

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

## SAMCERA'S FIDUCIARY NET POSITION

*June 30 (Dollars in Millions)*

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

## Analysis of Changes in Fiduciary Net Position

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

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

- Employer contributions increased by $10 million. The County as well as the District both decided to accelerate the payoff of their unfunded liabilities. The County increased its supplemental contribution to $19.5 million from $10.9 million last year. In October 2015, the District made a one-time supplemental contribution of $1.5 million.

- Member contributions increased by $8 million. The increase was due primarily to various Memoranda of Understanding between the County and its general plan members in certain bargaining units under which members are required to make contributions towards the Cost of Living Adjustment (COLA). As a result, the County's contributions for COLA were reduced by the amount picked up by the members.

- Net investment income decreased by $87 million. SamCERA's investment portfolio returned 0.7% net of investment management fees compared to 3.5% last year. Throughout the year, the global markets were overshadowed by global concerns, which included global growth concerns, falling commodity prices, concerns of a hard landing in China, financial repression from negative interest rates in Japan and parts of the European Union, continued heightened geopolitical concerns, and the fallout from the Brexit vote in the United Kingdom.

- Other additions increased by $5 million. One of the general partners with Everstream Solar Infrastructure Fund Limited Partnership was in default. Its equity was distributed to the remaining general partners, including SamCERA. Consequently, SamCERA recognized an unanticipated gain of $4.5 million.

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

## Actuarial Valuation

SamCERA engages an independent actuarial firm, Milliman, to perform an annual actuarial valuation to monitor its funding status and funding integrity. The valuation reassesses the magnitude of SamCERA's benefit commitments, in comparison with the assets expected to be available to support those commitments. Valuation results will be used to determine employer and member contribution rates for funding purposes.

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

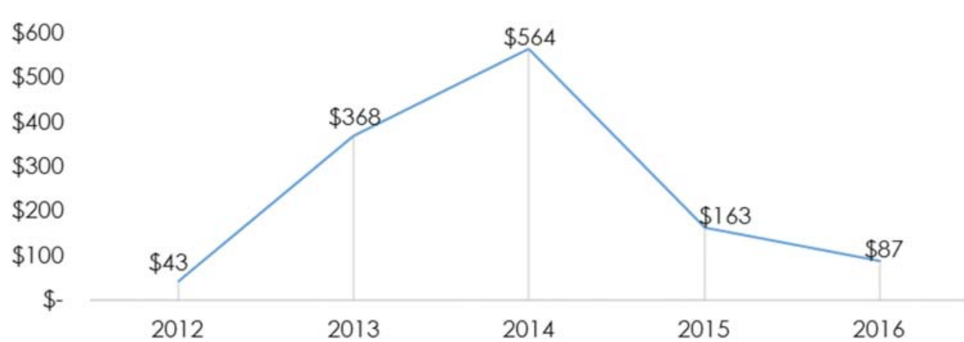
## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

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

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

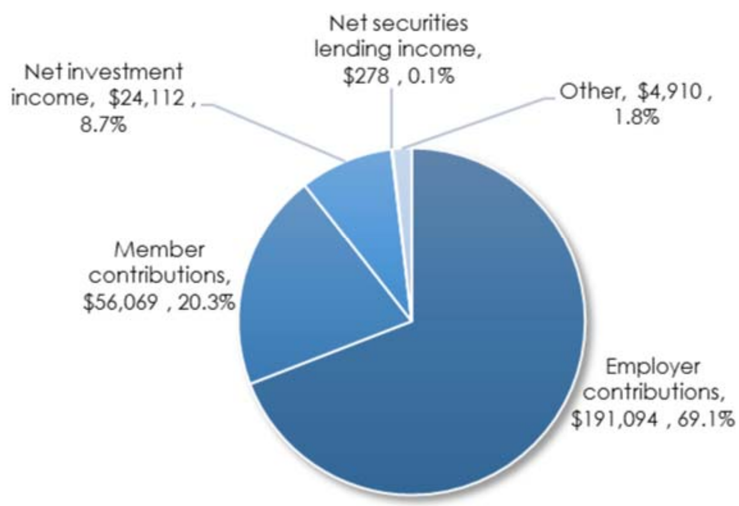
## CHANGES IN SAMCERA'S NET POSITION

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



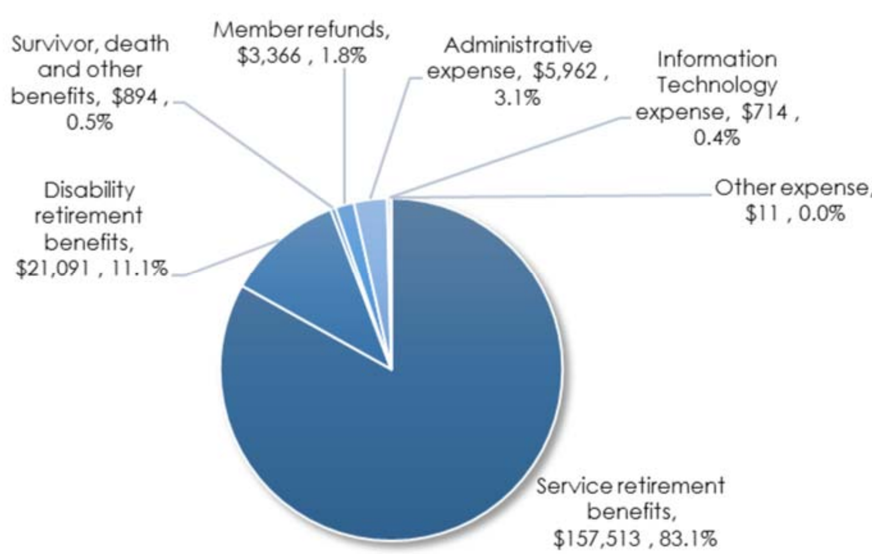
## ADDITIONS TO FIDUCIARY NET PENSION

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




## DEDUCTIONS FROM FIDUCIARY NET POSITION

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



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

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

### Plan Assets, Liabilities, and Funded Ratio

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

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

### SamCERA's Fiduciary Responsibilities

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

### Requests for Information

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

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

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

## STATEMENT OF FIDUCIARY NET POSITION

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

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

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

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

*For the Fiscal Year Ended June 30, 2016*
*(with comparative amounts for the fiscal year ended June 30, 2015)*

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

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

# NOTES TO THE BASIC FINANCIAL STATEMENTS

## Note 1: Plan Description

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

### General

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

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

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

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

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

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

### Pension Plans

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

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

## BENEFIT PLANS

*June 30, 2016*

| | | 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 30 years of service; or age 70 regardless of years of service. | Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service. |
| PLAN 2* | Hire Date | 7/6/80 - 7/12/97 | 7/6/80 - 7/12/97 | 7/6/80 - 7/12/97 |
| | Benefit factor | 2%@55.5 | 3%@50 | 3%@50 |
| | Maximum COLA | 3% | 3% | 3% |
| | FAC Period | Highest 1 year | Highest 1 year | Highest 1 year |
| | Eligibility for Service Retirement | Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service. | Age 50 with 10 years of service; any age with 20 years of service; or age 70 regardless of years of service. | Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service. |
| PLAN 3* | Hire Date | On or 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 to new members effective December 23, 2012.) (If retirement occurs prior to age 65, benefit amount will be adjusted by an actuarial equivalent factor.) | | |
| | Maximum COLA | No COLA | Not applicable | Not applicable |
| | FAC Period | Highest 3 years (non-consecutive) | Not applicable | Not applicable |
| | Eligibility for Service Retirement | Age 65 with 10 years of service; reduced benefit at age 55 with 10 years of service. | Not applicable | Not applicable |

**(Continued)**

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

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

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

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

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

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

## Pension Plan Membership

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

## Benefit Provisions

SamCERA provides basic service retirement, disability, and death benefits based on defined benefit formulas, which use final average compensation, years of service, and age factors to calculate benefits payable. In addition, SamCERA provides annual COLA upon retirement for members of Plans 1, 2, 4, 5, 6, and 7. The benefits of Plan 3 are reduced by a portion of the Social Security benefits received by the member. The CERL vests the County Board of Supervisors with the authority to initiate benefits. Each participating employer can make certain limited adjustment for their member benefits.

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

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

## SAMCERA MEMBERSHIP

*June 30, 2016*

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

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

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

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

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

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

The COLA is based on information released by the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers in the San Francisco, Oakland, and San Jose Bay Area. The increase is capped at 5% for General and Safety members in Plan 1; 3% for Probation members in Plan 1 and all members in Plan 2; and 2% for members in Plans 4, 5, 6, and 7. Plan 3 has no COLA.

## Note 2: Summary of Significant Accounting Policies

### Basis of Accounting

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

Employer and member contributions are recognized in the period in which contributions are due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with plan terms. Investment income is recognized as revenue when earned, and expenses are recognized when incurred. The net appreciation (or 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 (fiduciary in nature) and reported as a pension trust fund in the County's financial statements.

## Investment Policy and Valuation

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

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

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

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

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

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

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

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

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

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

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

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

## Foreign Currency Transactions

Gains and losses from foreign currency transactions during the year (including translation of international investments at fiscal year-end rates of exchange) are recorded as investment income. Forward currency contracts are used by SamCERA's investment managers to control currency exposure and facilitate the settlement of international security purchase and sale transactions. These contracts are agreements to exchange different currencies at specified rates and settlement dates. Differences between the contract and market exchange rates at settlement result in gains or losses, which are included in net investment income. Risks may arise from the possible inability of counterparties to meet the terms of their contracts as well as from movements in exchange and interest rates.

## Securities Lending Activity

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

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

## Receivables

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

### Capital Assets

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

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

### Estimates

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

### Subsequent Events

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

The Internal Revenue Service has previously ruled that retirement plans, such as SamCERA, under Section 401(a) of the Internal Revenue Code are not subject to tax under present income tax laws. On August 11, 2016, the Internal Revenue Service issued a favorable Tax Determination Letter for the pension plans administered by SamCERA. Thus, no provision for income taxes has been reported in the accompanying financial statements as the plans are exempt from federal and state income taxes under provisions of the Internal Revenue Code, Section 401.

### Reclassification

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

## Note 3: Funding Policy

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

Participating employers are required by statute to contribute amounts necessary to fund the estimated benefits accruing to members not otherwise funded by member contributions or expected investment earnings. Employer contribution rates for each plan are determined pursuant to Government Code Section 31453 of the CERL, using the entry age normal cost method based upon a level percentage of projected payroll. Employer contribution rates include an estimated amount necessary to finance benefits earned by members during the current year (normal cost) and an amount to amortize the unfunded actuarial accrued liability (UAAL).

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

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

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

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

## Note 4: Employer Contributions

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

### EMPLOYER CONTRIBUTION RATES AS A PERCENTAGE OF COVERED PAYROLL

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

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

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

## Supplemental Contributions from the County

In November 2013, the County reached an agreement with SamCERA to accelerate the pay down of the County's UAAL. Under this agreement, the County provided a supplemental contribution of $50 million in fiscal year 2014 and will continue to contribute an additional $10 million annually for the following nine years. A new account, known as the County Supplemental Contribution Account (CSCA), was set up to separately account for the supplemental contributions.

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

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

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

*(Dollars in Thousands)*

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

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

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

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

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

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

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

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

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

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

SamCERA established a new account, the District Supplemental Contribution Account (DSCA), to separately account for the District’s supplemental contributions. Deposits in the DSCA less than six months prior to the regular crediting dates of June 30 or December 31 will receive interest credit at the actual market investment return rate. Deposits for more than six months prior to a crediting date will receive interest at the actuarially calculated return. As of June 30, 2016, the DSCA had an aggregate balance of $1.6 million.

## Note 5: Deposits and Investments

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

### Deposits

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

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

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

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

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

## Investments

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

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

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

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

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

### LONG-TERM EXPECTED RATE OF RETURN

*June 30, 2016*

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

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

## Investment Risk

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

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

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

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

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

**Interest Rate Risk.** Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The longer the duration of the portfolio, the greater its price sensitivity to changes in interest rates. Duration is the measure of the price sensitivity of a fixed income portfolio to changes in interest rates, and calculated as the weighted average time to receive a bond's coupon and principal payments.

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

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

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

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

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

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

## COMMINGLED FIXED INCOME PORTFOLIO (JUNE 30, 2016)

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

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

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

## Derivatives

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

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

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

## FOREIGN CURRENCY RISK

*June 30, 2016*

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

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

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

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

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

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

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

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

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

## INVESTMENT DERIVATIVES

*June 30, 2016*

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

### Securities Lending Activity

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

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

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

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

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

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

The cash collateral received on each loan was invested in a short-term investment pool, the Northern Institutional Liquid Assets Portfolio (NILAP), managed by the securities lending agent. The average maturity of securities on loan was approximately 42 days as of June 30, 2016, which generally matches the average duration of maturities of 34 days for the NILAP cash collateral pool at June 30, 2016.

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

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

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

## Fair Value Measurement

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

- Level 1 – reflects prices quoted in active markets.
- Level 2 – reflects prices that are based on a similar observable asset either directly or indirectly, which may include inputs in markets that are not considered to be active.
- Level 3 – reflects prices based upon unobservable sources.

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

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

## FAIR VALUE MEASUREMENT

*June 30, 2016*

| | | Fair Value Measurements Using | |
|---|---|---|---|
| **Investments by Fair Value Level** | **6/30/2016** | **Quoted Prices in Active Markets for Identical Assets (Level 1)** | **Significant Other Observable Inputs (Level 2)** |
| DEBT SECURITIES | | | |
| U.S. Government Securities | $ 67,969,922 | | $ 67,969,922 |
| Total Debt Securities | 67,969,922 | | 67,969,922 |
| EQUITY SECURITIES | | | |
| Foreign Stocks | 326,134,046 | $ 326,134,046 | |
| U.S. Common & Preferred Stock | 395,816,701 | 395,816,701 | |
| Total Equity Securities | 721,950,747 | 721,950,747 | |
| COMMINGLED FUNDS | | | |
| Domestic Bond Funds | 103,756,803 | | 103,756,803 |
| Domestic Equity Funds | 575,736,217 | | 575,736,217 |
| International Equity Funds | 197,068,776 | | 197,068,776 |
| Total Commingled Funds | 876,561,796 | | 876,561,796 |
| Total Investments by Fair Value Level | 1,666,482,465 | **$ 721,950,747** | **$944,531,718** |
| | | | |
| **Investments Measured at the Net Asset Value (NAV)** | | | |
| Domestic Bond Funds | 406,847,249 | | |
| Global Bond Funds | 100,003,677 | | |
| Domestic Equity Funds | 118,848,435 | | |
| International Equity Funds | 109,769,681 | | |
| Real Estate Funds | 244,562,681 | | |
| Risk Parity Funds | 280,336,352 | | |
| Absolute Return/Hedge Funds | 183,886,218 | | |
| Private Equity Funds | 220,490,722 | | |
| Private Real Asset Funds | 37,147,517 | | |
| Total Investments Measured at NAV | 1,701,892,532 | | |
| | | | |
| **Total Investments** | **$ 3,368,374,997** | | |
| | | | |
| **Derivatives (1)** | | | |
| Currency Exchange Contracts - Forwards | **$ 46** | | **$ 46** |

(1) Derivatives are reported under "Cash management overlay" on the Statement of Fiduciary Net Position.

## INVESTMENTS MEASURED AT NET ASSET VALUE

*June 30, 2016*

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

(1) **Bond and Equity Funds.** This type includes five domestic bond funds, one global bond fund, one domestic equity fund, and two international equity funds that are considered to be in commingled in nature. Each is valued at the NAV of units held at the end of the period based upon the fair value of the underlying investments.

(2) **Real Estate Funds.** This type includes two real estate funds that invest primarily in a diversified portfolio of institutional quality multi-family, industrial, retail and office assets in the United States. The fair values of the investments in this type have been determined using the NAV (or its equivalent) of the Plan's ownership interest in partners' capital. One investment has quarterly liquidity while the other is ineligible for redemption.

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

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

(5) **Private Equity and Real Asset Funds.** SamCERA's private equity portfolio consists of eighteen funds, investing primarily in buyout funds, venture capital, and debt/special situations. The private real asset portfolio comprises of six funds, investing in infrastructure, mining finance, solar, energy, and farmland. The fair values of these funds have been determined using net assets values one quarter in arrears plus current quarter cash flows. These funds are not eligible for redemption. Distributions are received as underlying investments with the funds are liquidated, which on average can occur over the span of 5 to 10 years.

## Note 6: Pension Disclosures

### Net Pension Liability

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

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

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

### Actuarial Assumptions

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

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and that actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future.

Calculations, which reflect a long-term perspective, are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point.

### Discount Rate

The discount rate (the assumed investment rate of return) used to measure the total pension liability was 7.20% as of June 30, 2016. The projection of cash flows used to determine the discount rate assumed both employer and member contributions will be made at rates equal to the actuarially determined contribution rates.

According to the latest actuarial study, SamCERA's fiduciary net position is projected to be available to make all projected future benefit payments of current active employees, inactive members, retirees, and beneficiaries. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return, gross of administrative expenses.

### Sensitivity Analysis

The employers' net pension liability changes with adjustments to the discount rate. The table on page 58 presents the net pension liability of participating employers calculated using the current discount rate of 7.20%, as well as what the net pension liability would be using a discount rate that is one percent lower (6.20%) or one percent higher (8.20%) than the current discount rate.

## SCHEDULE OF NET PENSION LIABILITY AS OF JUNE 30, 2016

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

| Net Position Liability | **June 30, 2016** |
|---|---|
| Total pension liability | $ 4,254,142,477 |
| Less: fiduciary net position | (3,541,388,497) |
| Net pension liability | $ 712,753,980 |
| | |
| Fiduciary net position as a % of total pension liability | 83.25% |
| Covered payroll | $ 472,384,955 |
| Net pension liability as a % of covered payroll | 150.88% |

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

| | |
|---|---|
| Discount rate | 7.20% |
| Long-term expected rate of return, net of expenses* | 7.00% |

* The fiduciary net position was projected to be available to make all projected future benefit payments of current active employees, inactive members, retirees, and beneficiaries. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return, gross of administrative expenses.

| | |
|---|---|
| Valutaion date | June 30, 2016 |
| Measurement date | June 30, 2016 |
| Key assumptions | |
| Investment rate of return [(1)] | 7.20% |
| Inflation | 2.75% |
| Mortality | Various rates based on RP-2000 mortality tables as described in the June 30 actuarial valuation. |
| Actuarial experience study | July 1, 2011 to April 30, 2014 |
| 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 0.20%.

[(2)] Contribution "credits" are applied to the County of San Mateo (the County) and the San Mateo County Mosquito & Vector Control District (the District) contributions rates. These rates reflect supplemental contributions by the County and the District, which are tracked separately in the County and District Supplemental Contribution Accounts. Contributions in a given year are amortized as a level percentage of pay over a 15-year closed period.

## SCHEDULE OF SENSITIVITY ANALYSIS

*June 30, 2016 (Dollars in Thousands)*

| | 1% Decrease (6.20%) | Current Discount Rate (7.20%) | 1% Increase (8.20%) |
|---|---|---|---|
| **Total pension liability** | $4,840,673 | $4,254,142 | $3,771,714 |
| **Less: Fiduciary net position** | (3,541,388) | (3,541,388) | (3,541,388) |
| **Net pension liability** | $1,299,285 | $ 712,754 | $ 230,326 |

## Note 7: Funded Status and Funding Progress

The funding status was established using the entry age normal cost method and based on various selected actuarial economic and demographic assumptions, including an investment rate of return of 7.00%, inflation rate of 2.75%, and general wage increase of 3.25%. According to the latest actuarial valuation as of June 30, 2016, the plan was 83.1% funded (the ratio of plan assets to plan liabilities) with the actuarial value of plan assets at $3.6 billion and the actuarial accrued liability at $4.4 billion. The difference between these amounts represents the UAAL, which was $738 million, or 156% of $472 million in the annual covered payroll.

The actuarial value of assets is determined such that 20% of the investment gains and losses in a given year are recognized annually for the next five years. Thus, such investment gains and losses are fully recognized after five years. In addition, SamCERA adopts a “corridor” approach under which the actuarial value of assets cannot be less than 80% or greater than 120% of the fair value.

Beginning with the June 30, 2008 actuarial valuation, SamCERA converted to a closed 15-years layered amortization method. The UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers. Details of the funding progress, annual required contribution for employers and members, and the latest actuarial valuation are presented in the Actuarial Section of this report.

## RESERVES REQUIRED FOR REPORTING PURPOSES BY THE CERL

*June 30, 2016*

| | |
|---|---|
| **Valuation Reserves** | |
| Member Deposit Reserve | $ 679,245,500 |
| Employer Advance Reserve | 751,265,520 |
| County Supplemental Contribution Account | 85,235,512 |
| District Supplemental Contribution Account | 1,593,122 |
| Retired Member Reserve | 966,121,611 |
| COLA Reserve | 1,213,653,695 |
| Subtotal - Valuation Reserves | 3,697,114,960 |
| **Non-Valuation Reserves** | |
| Contigency Reserve | 36,613,393 |
| Unallocated Earnings (Losses) Reserve | (72,299,960) |
| Subtotal - Non-Valuation Reserves | (35,686,567) |
| **Market Stabilization Account** | (120,039,896) |
| **Total Reserves** | $ 3,541,388,497 |

## Note 8: Plan Reserves

Plan reserves (components of net position) are established to account for resources accumulated from employer contributions, member contributions, and investment income after satisfying all expenses. The plan reserves do not represent the present value of assets needed, as determined by the actuarial valuation, to satisfy retirement as well as other benefits when they become due.

SamCERA uses three different types of accounts to record the plan reserves: the valuation reserve, the non-valuation reserve, and the market stabilization account. The plan reserves as of June 30, 2016, are presented in the table below.

### Valuation Reserves

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

**Member Deposit Reserve** represents funding provided by active and inactive (deferred) members. Additions include member contributions and interest credited. Deductions include refunds to members and transfers to Retired Member Reserve at the time a member retires.

**Employer Advance Reserve** represents funding provided by employers for future retirement payments to active and inactive (deferred) members. Additions include employer contributions and interest credited. Deductions include lump-sum death benefit payments to members' survivors, supplementary disability payments, and transfers to the Retired Member Reserve at the time a member retires. When a member elects to receive a refund of member contributions upon termination, the balance in this reserve account will not be affected since the employers' contribution rates are based on an actuarial assumption that take into account the expected termination rate for members.

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

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

**Retired Member Reserve** represents funding set aside for retirement benefits. Additions include transfers from the Member Deposit Reserve and the Employers' Advance Reserve (both made at the time a member retires) as well as interest credited. Deductions include payments to retired members, beneficiaries, and survivors.

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

### Non-Valuation Reserves

The Board established two non-valuation reserve accounts: Contingency Reserve and

Unallocated Earnings/Losses Reserve. The balance in these non-valuation reserve accounts are not used to determine employers' statutory contribution rates.

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

The Board adopted an *Interest Crediting Policy* stipulating that interest to the valuation reserves should be assessed at the actuarial interest rate. The interest crediting policy acknowledges that actual earnings may be greater or less than the actuarial interest rate. When there are insufficient allocable earnings to cover interest credited to the reserves specified in the interest crediting policy, the funding in the Contingency Reserve may be used to cover the shortage. However, in no event may the Contingency Reserve be allowed to drop lower than one percent of the actuarial value of assets.

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

SamCERA semi-annually updates reserve balances as of December 31 and June 30 each year to reflect interest credited as specified in Article 5 of the CERL (Semi-Annual Interest Crediting). The amount of "net earnings" to be distributed for each semi-annual period is based on the actuarial smoothing process described later.

To the extent that net earnings are available, interest is credited to all components of reserves (except the Member Deposit Reserve) at the actuarial assumed interest rate semi-annually in a prescribed sequence. The Member Deposit Reserve is credited at the lesser of the actuarial smoothed earnings rate or the actuarial assumed interest rate pursuant to the Board's interest crediting policy. The rate credited cannot be less than zero.

Earnings from the five-year smoothing process were mostly sufficient to provide interest credits to the valuation reserves at the actuarial assumed rate in effect during the year, which was 3.625% semi-annually. The actuarial smoothed rates of return were 3.30% and 3.01% at December 31, 2015, and June 30, 2016, respectively.

**Unallocated Earnings/Losses Reserve** is established to account for periods when actual earnings do not equal the actuarial interest rate. The Board adopted a *Five-year Actuarial Smoothing Policy* to value actuarial assets and calculate the UAAL. The smoothing process operates semi-annually (with calculation periods ending December 31 and June 30) to spread the difference between actual and expected market return over five years (or ten successive semi-annual periods). This smoothing process affects the net investment income reported on the statement of changes in fiduciary net position.

For the fiscal year ended June 30, 2016, smoothed earnings of $25.4 million were distributed to the Unallocated Earnings/ Losses Reserve, which increased the balance in this account to a negative $72.3 million from a negative $46.9 million.

### Market Stabilization Account

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

The balance in this account, arising from a *Five-year Actuarial Smoothing Policy*, represents the difference between (1) the aggregate amount initially deferred (smoothed) from the ten most recent semi-annual periods and (2) the aggregate amount subsequently recognized for semi-annual interest crediting from the same ten periods. Deferred investment earnings/losses are amortized over five years in accordance with a schedule established by the actuary. At June 30, 2016, the Market Stabilization Account had a negative balance of $120 million.

## Note 9: Administrative Expenses

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

The budget-to-actual analysis of administrative expenses for the fiscal year ended June 30, 2016, is presented in the tables below.

### ADMINISTRATIVE EXPENSES FOR THE FISCAL YEAR ENDED JUNE 30, 2016, COMPARED TO ACTUARIAL ACCRUED LIABILITY AS OF JUNE 30, 2014

*(Dollars in Thousands)*

| | | | |
|---|---|---|---|
| Actuarial Accrued Liability (AAL) as of 6/30/14 | $ | **3,797,042** | (a) |
| Maximum Allowed for Administrative Expense (AAL*0.21%) | $ | **7,974** | (b) |
| Operating Budget for Administrative Expense | $ | **6,615** | (c) |
| Actual Administrative Expense | $ | **5,962** | (d) |
| Excess of Allowed over Actual Administrative Expense | $ | **2,012** | =(b) - (d) |
| Excess of Budgeted over Actual Administrative Expense | $ | **653** | =(c) - (d) |
| Actual Administrative Expense as a Percentage of Actuarial Accrued Liability as | | **0.16%** | = (d)/(a) |

### SAMCERA'S ADMINISTRATIVE EXPENSES, BUDGET VS. ACTUAL

*For the Fiscal Year Ended June 30, 2016*

| | Budget | Actual | Under Budget | % of Budget Remaining |
|---|---|---|---|---|
| Salaries and benefits | $ 4,846,317 | $ 4,526,016 | $ 320,301 | 7% |
| Services and supplies | 1,768,268 | 1,435,786 | 332,482 | 19% |
| **Total expenses** | **$ 6,614,585** | **$ 5,961,802** | **$ 652,783** | **10%** |

SamCERA has a policy in place to monitor compliance with the Government Code. SamCERA's administrative expenses for the reporting period amounted to 0.16% of accrued actuarial liability at June 30, 2014, (the latest information available when preparing the administrative budget for fiscal year 2016). Information technology is excluded from this limit.

The overall salaries and expenses for the fiscal year 2016 were closely in line with the budget. The overall expenses for services and supplies were 19% below the budget. Major reasons include the following:

- Petitions for disability benefits requiring independent medical examinations were much less than anticipated.
- Some but not all requested training sessions and conferences were attended.
- SamCERA did not need to hire a consultant to assist in preparing a new Tax Determination Letter as planned.

## Note 10: Information Technology Expenses

The budget-to-actual analysis of technology expenses for the fiscal year ended June 30, 2016, is presented in the table below.

Pursuant to Government Code Section 31580.2 of the CERL, expenses for computer software, computer hardware, and computer technology consulting services in support of these computer products are not subject to the mandated limit of 0.21% discussed earlier. As a result, SamCERA prepares a separate information technology budget since this Government Code was implemented in fiscal year 2012.

For the fiscal year 2016, the overall Information Technology (IT) expenses were below the budget due primarily to the following:

- Purchase of property and equipment was much less than anticipated.
- Certain IT projects as well as research and development efforts were postponed since IT resources were supporting the implementation of a new pension administration software system.

## Note 11: Risk Management

SamCERA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; injuries to employees; and natural disasters. Such risks are managed by SamCERA through its participation with the County's self-

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

*For the Fiscal Year Ended June 30, 2016*

| | Budget | Actual | Under Budget | % of Budget Remaining |
|---|---|---|---|---|
| Property and equipment | $ 100,000 | $ 30,580 | $ 69,420 | 69% |
| Information technology infrastructure | 1,558,815 | 683,767 | 875,048 | 56% |
| Research and Development | 100,000 | - | 100,000 | 100% |
| Capital asset | 3,500,000 | - | 3,500,000 | (1) |
| **Total expenses** | **$ 5,258,815** | **$ 714,347** | **$ 4,544,468** | (1) |

(1) SamCERA incurred a total of $1,956,076 in capital expenses during fiscal year 2016. This amount was capitalized and reported as capital assets on the Statement of Fiduciary Net Position for financial reporting purposes.

insurance program and commercial insurance policies.

SamCERA is covered by the County's self-insurance program for general liability and workers' compensation with coverage up to $1 million per occurrence. Additional coverage for various types of risks are provided through the County's commercial insurance carriers in accordance with the terms set forth in individual insurance policies. Pursuant to a Memorandum of Understanding between SamCERA and the County, SamCERA pays a pro-rata share of total insurance cost incurred by the County based on the employee count. Settled claims have not exceeded the insurance coverage in the past three fiscal years.

The Board members and senior staff purchase separate Fiduciary Liability coverage for actual or alleged breach of fiduciary duties through a policy provided by AIG Nation Union Fire Insurance Company of Pittsburgh, Pennsylvania. The coverage is limited to $10 million in the aggregate for all loss combined (including defense costs).

## Note 12: Related Party Transactions

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

## Note 13: Commitments

At June 30, 2016, SamCERA had a total "uncalled capital" of $214 million, with $134 million in private equity investments, $57.3 million in private real asset investments, and $22.7 million in real estate investments. SamCERA is still in the process of building out its private equity and private real asset portfolios and intends to make additional capital commitments over the next three to five years.

SamCERA is also in the process of replacing its existing pension administration software system. The new system is estimated to cost about $9.1 million and is expected to be in operation around January 2017. The remaining capital committed for this project was approximately $4.0 million.

## Note 14: Contingent Liability

SamCERA is subject to legal proceedings and claims arising from the normal course of its business. Currently, no such actions are adjudicated or reported.

## Note 15: New Accounting and Financial Reporting Standards

### GASB Statement No. 72

In March 2015, GASB issued Statement No. 72, *Fair Value Measurement and Application*. This Statement requires state and local governments to use specific valuation techniques to measure the fair value of assets and liabilities that are appropriate to the circumstances. SamCERA implemented this Statement in fiscal year 2016.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. GASB Statement No. 72 establishes a fair value hierarchy according to the three distinct types of input to develop the fair value measurements.

- Level 1 reflects measurements based on quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date.
- Level 2 reflects measurements based on inputs, other than quoted prices, that are observable for an asset or a liability, either directly or indirectly.
- Level 3 reflects measurements based on unobservable inputs for an asset or a liability.

GASB Statement No. 72 also expands disclosures regarding the fair value hierarchy and valuation techniques that are used for the fair value measurements. Overall, GASB Statement No. 72 has no material impact on SamCERA's basic financial statements.

### GASB Statement No. 82

In April 2016, GASB issued Statement No. 82, *Pension Issues,* to address a few concerns raised under Statements No. 67, 68, and 73 regarding the financial reporting for local governmental employers and pension plans.

The Statement provides additional guidance for the following: (1) the presentation of payroll-related measures in the Required Supplementary Information section, (2) the treatment of deviations from the actuarial standards of practice when selecting actuarial assumptions, and (3) the classification of member contributions (i.e. "pick-up" contributions) for reporting purposes.

This Statement improves financial reporting by enhancing consistency in the application of financial reporting requirements for certain pension issues. SamCERA elected the early application of this Statement in fiscal year 2016.

# REQUIRED SUPPLEMENTARY INFORMATION

## SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS [1]

*For the Fiscal Years Ended June 30*

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

| | 2016 | 2015 | 2014 |
|---|---|---|---|
| **Total Pension Liability** | | | |
| Service cost | $ 96,308,679 | $ 90,955,831 | $ 87,512,515 |
| Interest on total pension liability | 290,843,506 | 272,953,777 | 265,430,896 |
| Effect of assumption changes or inputs | 85,538,873 | - | 37,853,852 |
| Effect of economic/demographic gains (losses) | 17,875,272 | 50,655,233 | (31,415,241) |
| Benefit payments and refund of contributions | (182,863,698) | (171,466,218) | (162,556,107) |
| Net change in total pension liability | 307,702,632 | 243,098,623 | 196,825,915 |
| Total pension liability, beginning | 3,946,439,845 | 3,703,341,222 | 3,506,515,307 |
| Total pension liability, ending (a) | $ 4,254,142,477 | $ 3,946,439,845 | $ 3,703,341,222 |
| **Fiduciary Net Position** | | | |
| Employer contributions | $ 191,094,488 | $ 180,704,280 | $ 202,877,362 |
| Member contributions | 56,068,706 | 48,011,698 | 46,593,698 |
| Investment income net of investment expenses | 29,299,764 | 111,630,036 | 482,663,965 |
| Benefit payments and refund of contributions | (182,863,698) | (171,466,218) | (162,556,107) |
| Administrative and other non-investment expenses | (6,687,091) | (6,097,422) | (5,710,296) |
| Net change in plan fiduciary net position | 86,912,169 | 162,782,374 | 563,868,622 |
| Fiduciary net position, beginning | 3,454,476,328 | 3,291,693,954 | 2,727,825,332 |
| Fiduciary net position, ending (b) | $ 3,541,388,497 | $ 3,454,476,328 | $ 3,291,693,954 |
| Net pension liability, ending = (a) - (b) | $ 712,753,980 | $ 491,963,517 | $ 411,647,268 |
| Fiduciary net position as a % of total pension liability | 83.25% | 87.53% | 88.88% |
| Covered payroll [2] | $ 472,384,955 | $ 439,017,764 | $ 416,273,731 |
| Net pension liability as a % of covered payroll | 150.88% | 112.06% | 98.89% |

[1] Trend Information: This schedule will ultimately show information for ten years. Additional years will be displayed as they become available prospectively.

[2] In accordance with Statement No. 82 of the Governmental Accounting Standards Board (GASB), Covered Employee Payroll is the payroll on which contributions are based. SamCERA has elected early application of this Statement. Thus, these amounts may be different than shown in fiscal year ended 2015 and earlier reports.

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

### Last Ten Fiscal Years

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

| | | | | | As a % of Covered Payroll | | |
|---|---|---|---|---|---|---|---|
| **Fiscal Year Ended June 30** | **Actuarially Determined Contribution** | **Actual Employer Contribution** | **Contribution Deficiency (Excess)** | **Covered Payroll [4]** | **Actuarially Determined Contribution** | **Actual Employer Contribution** | |
| 2007 | $ 100,549,570 | $ 100,549,570 | $ - | $ 400,654,774 | 25.10% | 25.10% | |
| 2008 | 105,339,570 | 105,339,570 | - | 411,293,295 | 25.61% | 25.61% | |
| 2009 | 106,123,055 | 106,123,055 | - | 433,668,170 | 24.47% | 24.47% | |
| 2010 | 106,265,329 | 106,265,329 | - | 434,295,179 | 24.47% | 24.47% | |
| 2011 | 150,474,872 | 150,474,872 | - | 427,041,368 | 35.24% | 35.24% | |
| 2012 | 139,406,807 | 150,949,791 | (11,542,984) | 418,915,989 | 33.28% | 36.03% | 1 |
| 2013 | 131,293,846 | 144,308,171 | (13,014,325) | 404,360,891 | 32.47% | 35.69% | 1 |
| 2014 | 152,877,362 | 202,877,362 | (50,000,000) | 416,273,731 | 36.73% | 48.74% | 2 |
| 2015 | 169,814,170 | 180,704,280 | (10,890,110) | 439,017,764 | 38.68% | 41.16% | 2 |
| 2016 | 170,046,059 | 191,094,488 | (21,048,429) | 472,384,955 | 36.00% | 40.45% | 2,3, |

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

2 In 2014, the Board of Supervisors implemented a policy to eliminate the County UAAL by 2023. Contributions in excess of the Actuarially Determined Contribution are related to that policy unless noted otherwise.

3 In October 2015, the San Mateo County Mosquito & Vector Control District contributed $1.5 million more than as actuarially determined contribution.

4 In accordance with GASB Statement No. 82, Covered Employee Payroll is the payroll on which contributions are based. SamCERA has elected early application of this Statement and updated the covered payroll column to show pensionable payroll for the last ten fiscal years.

## SCHEDULE OF INVESTMENT RETURNS [3]

### *For the Fiscal Years Ended June 30*

The money-weighted rate of return measures investment performance, net of investment expenses, adjusted for the changing amounts actually invested.

| | **2016** | **2015** | **2014** |
|---|---|---|---|
| Annual money-weighted rate of return, net of investment expenses[1] | 0.50%[2] | 3.37%[2] | 17.22% |

(1) The calculation of SamCERA's money-weighted rate of return, net of investment expenses, was provided by SamCERA's investment consultant, Verus Investments.

(2) Investment return was much lower than the prior year due to market conditions , which were affected by numerous global concerns throughout the year.

(3) Trend Information: This schedule will ultimately show information for ten years. Additional years will be displayed as they become available prospectively.

# NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION

## Actuarial Valuation Methods and Assumptions

The employer statutory contribution rates for the fiscal year ended June 30, 2016, are those calculated in the actuarial valuation as of June 30, 2014. Details of actuarial methods and assumptions selected for the actuarial valuation as of June 30, 2014, are summarized in the table below.

## Changes in Assumptions

On June 7, 2016, the Retirement Board adopted new economic assumptions effective with the June 30, 2016 valuation. To reflect changes in market conditions, the investment return rate was adjusted from 7.25% to 7.00%, the Consumer Price Index was adjusted from 3.00% to 2.75%, and the general wage increase was adjusted from 3.50% to 3.25%.

## ACTUARIAL VALUATION AS OF JUNE 30, 2014 (FOR FUNDING PURPOSES)

| | |
|---|---|
| VALUATION DATE | June 30, 2014 |
| ACTUARIAL COST METHOD | Entry Age Normal |
| AMORTIZATION METHOD | Level Percent of Payroll |
| AMORTIZATION PERIOD | UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers which are determined annually. |
| ASSET VALUATION METHOD | 5-year smoothed recognition of asset gains and losses (determined as the difference of the actual fair value to the expected fair value), which cannot vary more than 20% from the fair value. |
| ACTUARIAL ASSUMPTIONS: | |
| INVESTMENT RATE OF RETURN | 7.25%, net of pension plan investment and administrative expenses |
| INFLATION RATE (CPI) | 3.00% |
| GENERAL WAGE INCREASE | 3.50% |
| COST OF LIVING ADJUSTMENT | 3.00% for general and safety members in Plan 1; 2.90% for probation members in Plan 1; 2.65% for all members in Plan 2; 1.90% for all members in Plans 4, 5, and 7; and 1.90% for all safety and probation members in Plan 6. |
| DEMOGRAPHIC ASSUMPTIONS: | |
| SALARY INCREASE DUE TO SERVICE | See June 30, 2014 actuarial valuation report for details. |
| RETIREMENT | See June 30, 2014 actuarial valuation report for details. |
| DISABILITY | See June 30, 2014 actuarial valuation report for details. |
| MORTALITY | See June 30, 2014 actuarial valuation report for details. |

# Other Supplementary Information

## Schedule of Administrative Expenses

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

### Schedule of Administrative Expenses

*For the Fiscal Year Ended June 30, 2016*

| | |
|---|---|
| **Salaries & Benefits** | |
| Salaries | $ 2,985,998 |
| Benefits | 1,540,018 |
| Total Salaries & Benefits | 4,526,016 |
| **Services & Supplies** | |
| Board Expenses | 6,200 |
| Insurance | 64,200 |
| Medical Evaluation | 8,550 |
| Member Education | 62,173 |
| Education & Conference | 107,136 |
| Transportation & Lodging | 83,141 |
| Property & Equipment | 25,739 |
| General Office Supplies | 23,644 |
| Postage, Printing & Copying | 50,347 |
| Leased Facilities | 568,044 |
| County Services | 381,080 |
| Audit Services | 50,401 |
| Other Administration | 5,131 |
| Total Services & Supplies | 1,435,786 |
| **Total Administrative Expenses** | **$ 5,961,802** |

## Schedule of Information Technology Expenses

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

### Schedule of Information Technology Expenses

*For the Fiscal Year Ended June 30, 2016*

| | |
|---|---|
| Property and Equipment | $ 30,580 |
| Information Technology Infrastructure | 683,767 |
| **Total Information Technology Expenses** | **$ 714,347** |

## Schedule of Investment Expenses

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

### SCHEDULE OF INVESTMENT EXPENSES

*For the Fiscal Year Ended June 30, 2016*

| | | |
|---|---|---|
| **Investment Management Fees (by Asset Class)** | | |
| Equity | $ | 5,909,782 |
| Fixed Income | | 2,624,191 |
| Alternatives | | 7,574,137 |
| Risk Parity | | 963,317 |
| Inflation Hedge | | 3,569,299 |
| Cash | | 150,647 |
| Total Investment Management Fees | | 20,791,373 |
| **Other Investment Expenses** | | |
| Investment Consultant | | 450,000 |
| Actuarial Consulting | | 90,000 |
| Master Custodian | | 325,316 |
| Other Professional Services | | 23,036 |
| Total Other Investment Expenses | | 888,352 |
| Other Investment Related Expense | | 10,399,645 |
| Interest Paid on Prepaid Contribution | | 2,709,839 |
| **Total Investment Expenses** | **$** | **34,789,209** |

## Schedule of Payments to Consultants (for fees paid to outside professionals other than investment advisors)

The schedule of payments to consultants provides information on fees paid to outside professionals other than investment advisors (itemized by individual or firm). Fees paid to investment professionals can be found in the investment section of this report.

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

*For the Fiscal Year Ended June 30, 2016*

| | |
|---|---|
| CUSTODIAN SERVICES | |
| Northern Trust Corporation | $ 325,316 |
| ACTUARIAL CONSULTANT EXPENSE | |
| Milliman, and Segal Consulting | 90,000 |
| AUDIT SERVIICES [1] | |
| Brown Armstrong Accountancy Corporation | 50,401 |
| OTHER PROFESSIONAL FEES | |
| eVestment | 23,036 |
| **Total Payment to Consultants** | **$488,753** |

[1] Audit fees were included in administrative expenses whereas remaining items were reported under investment expenses.

## NOTES TO THE OTHER SUPPLEMENTARY INFORMATION

### Administrative Services Budget

The passage of Assembly Bill 609 in October 2010 changed the County Employees' Retirement Law of 1937's (the CERL) system administration expense limit from 23 basis points of total assets to 21 basis points of Accrued Actuarial Liabilities.

### Information Technology Budget

Pursuant to the CERL, expenses for computer software, computer hardware, and computer technology consulting services in support of these computer products shall not be considered a cost of administration of the retirement system. SamCERA's information technology expenses are separately accounted for since fiscal year 2011-12.

### Professional Services Budget

SamCERA's professional services budget is funded by investment earnings or SamCERA's assets as prescribed by Government Code §31596.1 below.

Government Code §31596.1 states that "The expenses of investing its moneys shall be borne solely by the system. The following types of expenses shall not be considered a cost of administration of the retirement system, but shall be considered a reduction in earnings from those investments or a charge against the assets of the retirement system as determined by the board:

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

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

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

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

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

## OTHER INFORMATION

### SCHEDULE OF EMPLOYER PENSION AMOUNTS ALLOCATED BY COST SHARING PLAN (GASB STATEMENT NO. 68)

| | | 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 | 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 | $685,811,879 | $ 43,003,948 | $151,105,633 | $ 80,413,595 | $ 2,443,405 | $276,966,581 | $ 12,091,098 | $ - | $ 532,206 | $ 12,623,304 | $124,457,289 | $ 898,302 | $ 125,355,591 |
| San Mateo County Superior Court | 24,661,288 | 1,546,390 | 5,433,647 | 2,891,613 | - | 9,871,650 | 434,787 | - | 3,158,790 | 3,593,577 | 4,475,392 | (1,220,555) | 3,254,837 |
| San Mateo County Mosquito & Vector Control District | 2,280,813 | 143,019 | 502,534 | 267,432 | 1,247,591 | 2,160,576 | 40,212 | - | - | 40,212 | 413,909 | 322,253 | 736,162 |
| Total | | $44,693,357 | | $ 83,572,640 | $ 3,690,996 | $288,998,807 | $ 12,566,097 | $ - | $3,690,996 | $ 16,257,093 | $129,346,590 | $ - | $ 129,346,590 |

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

| | Fiscal Year Ended June 30, 2016 | | | |
|---|---|---|---|---|
| Employer | Actual Employer Contributions | Actuarially Determined Contributions | Employer Allocation Percentage (1) | Net Pension Liability |
| County of San Mateo | $ 183,155,682 | $ 163,617,682 | 96.22% | $ 685,811,879 |
| San Mateo County Superior Court | 5,883,993 | 5,883,993 | 3.46% | 24,661,288 |
| San Mateo County Mosquito & Vector Control District | 2,054,813 | 544,384 | 0.32% | 2,280,813 |
| **Total** | **$ 191,094,488** | **$ 170,046,059** | **100.00%** | **$ 712,753,980** |

| | Fiscal Year Ended June 30, 2015 | | | |
|---|---|---|---|---|
| Employer | Actual Employer Contributions | Actuarially Determined Contributions | Employer Allocation Percentage (1) | Net Pension Liability |
| County of San Mateo | $ 174,263,295 | $ 163,373,185 | 96.21% | $ 473,318,100 |
| San Mateo County Superior Court | 5,914,688 | 5,914,688 | 3.48% | 17,120,330 |
| San Mateo County Mosquito & Vector Control District | 526,297 | 526,297 | 0.31% | 1,525,087 |
| **Total** | **$ 180,704,280** | **$ 169,814,170** | **100.00%** | **$ 491,963,517** |

| | Fiscal Year Ended June 30, 2014 | | | |
|---|---|---|---|---|
| Employer | Actual Employer Contributions | Actuarially Determined Contributions | Employer Allocation Percentage (1) | Net Pension Liability |
| County of San Mateo | $ 196,708,770 | $ 146,708,770 | 95.97% | $ 395,057,883 |
| San Mateo County Superior Court | 5,704,224 | 5,704,224 | 3.73% | 15,354,443 |
| San Mateo County Mosquito & Vector Control District | 464,368 | 464,368 | 0.30% | 1,234,942 |
| **Total** | **$ 202,877,362** | **$ 152,877,362** | **100.00%** | **$ 411,647,268** |

(1) Employer allocation percentage is based on statutory (actuarially determined) contributions.

## NOTES TO THE OTHER INFORMATION

### Basis of Presentation and Basis of Accounting

Employers participating in SamCERA are required to report pension information in their financial statements for fiscal periods beginning on or after June 15, 2014, in accordance with Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions - an Amendment of GASB Statement No. 27*. The Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan and Schedule of Cost Sharing Employer Allocations, along with SamCERA's audited financial statements, the GASB Statement No. 67 Actuarial Valuation as of June 30, 2016, and the GASB Statement No. 68

Actuarial Valuation Based on a June 30, 2016 Measurement Date for Employer Reporting as of June 30, 2017, prepared by SamCERA's independent actuary, provide the required information for financial reporting related to SamCERA that employers may use in their financial statements.

The accompanying schedule was prepared by SamCERA's independent actuary and was derived from information provided by SamCERA in accordance with accounting principles generally accepted in the United States of America as applicable to governmental organizations.

### Use of Estimates in the Preparation of the Schedules

The preparation of these schedules in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain amounts and disclosures. Actual results could differ from those estimates.

### Amortization of Deferred Outflows and Deferred Inflows of Resources

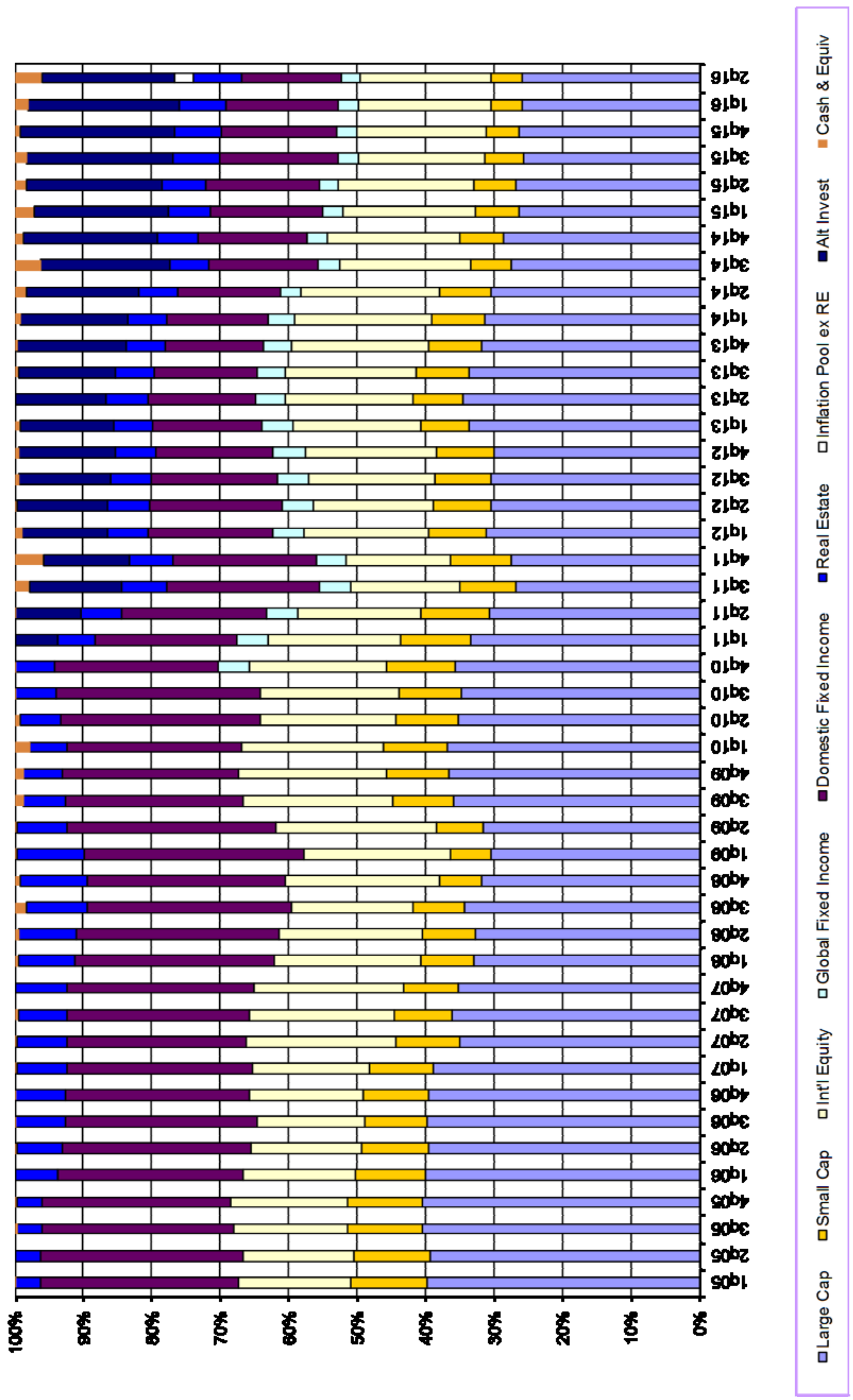
The difference between projected and actual investment earnings on pension plan investments is amortized over 5 years on a straight-line basis. One-fifth was recognized in pension expense during the measurement period, and the remaining difference between projected and actual investment earnings on pension plan investments at June 30, 2016, is to be amortized over the remaining periods.

The changes in assumptions and differences between expected and actual experience are recognized over the average of the expected remaining service lives of all employees that are provided with pensions through SamCERA (active and inactive employees) determined as of June 30, 2015 (the beginning of the measurement period ending June 30, 2016) and is 5 years. Prior period changes of assumptions and differences between expected and actual experience are continued to be recognized based on the expected remaining service lives of all employees calculated as of those prior measurement dates.

In addition, the net effect of the change in the employer's proportionate share of the collective net pension liability and collective deferred outflows of resources and deferred inflows of resources is also recognized over the average expected remain service lives of all employees noted above. The difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ending on June 30, 2016 is recognized over the same period as noted above. The Schedule of Pension Amounts by Employer does not reflect contributions made to SamCERA subsequent to the measurement date as defined in GASB Statement No. 68 Paragraphs 54, 55, and 57. Appropriate treatment of such amounts is the responsibility of the employers.

# INVESTMENT
# SECTION

ACTUAL HISTORICAL QUARTERLY ASSET ALLOCATION ENDED JUNE 30, 2016



## CHIEF INVESTMENT OFFICER'S REPORT

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 San Mateo County Employees' Retirement Association's (SamCERA) investment team, I am pleased to report on the pension fund's investments and portfolio performance for the period ended June 30, 2016. This data was compiled by SamCERA's investment staff, its investment consultant, Verus Investments (formerly known as Strategic Investment Solutions), and its custodian bank Northern Trust Corporation. All return figures are presented net of investment management fees and time-weighted, and are calculated by SamCERA's investment consultant, Verus Investments.

### Portfolio Performance

The net portfolio market value as of June 30, 2016, increased to $3.54 billion, as the net combination of contributions (primarily) and net portfolio appreciation (secondarily), less total deductions (i.e. benefits paid, administrative expense, etc.), added approximately $87 million to the pension fund.

SamCERA's portfolio returned 0.7% net of investment management fees (1.0% before deducting for investment management fees) for the fiscal year ended June 30, 2016, underperforming SamCERA's policy benchmark return by 30 basis points (0.30%). While slightly trailing SamCERA's policy benchmark, these fiscal-year results are strong relative to SamCERA's peers, and are above median among large (greater than $1 billion in assets) public pension plans.

Three of SamCERA's asset class composites were positive on the year. For the second year running, real estate was SamCERA's best performing asset class composite this fiscal year, up 11 percent. The strong performance was a continuation from the last few years as investors, thirsty for yield generating assets, continued to push up commercial property market prices, especially in high-quality core assets for prime locations in gateway cities. Risk parity (up 5.7%) and fixed income (up 2.4%) were also positive contributors to the fund's absolute performance. Two composites were flat to slightly negative, with domestic equity up 0.7%, and alternatives down 0.7%. One composite was moderately negative, with international equity down 6.8%.

## Market Review

As was the case last year, the absolute level of returns disappointed this current fiscal year. Overall volatility of returns was much higher across global stock, bond, currency, and commodity markets this year as the global markets dealt with a myriad of concerns throughout the year, including global growth concerns, falling commodity prices, concerns of a hard landing in China, financial repression from negative interest rates in Japan and parts of the European Union, continued heightened geopolitical concerns, and the fallout from the Brexit vote in the U.K.

Similar to last year, U.S. equities generally provided better returns, albeit at lower levels compared to last year, than most of the major world equity markets, as economic activity in the U.S. was low but generally positive. The Russell 3000 Index, a general broad basket of U.S. stocks, returned 2.1% during the year. However, this positive performance was limited to only large-capitalization companies, as smaller-capitalization companies, as measured by the Russell 2000 Index, were lower by 6.7%. Large-capitalization stocks in the U.S. (as measured by the Russell 1000 Index) were higher by 2.9%. Given the concerns over future growth prospects, higher volatility, and suppressed interest rates, defensive and "bond proxy" sectors generally performed extremely well, with utilities, telecommunications, and consumer staples all higher by over 15%, while more cyclical sectors were generally negative on the year (energy, financials, materials).

While the broad U.S. equity market (as measured by the Russell 3000 Index) was up 2.1% on the year, the broad developed international equity market and emerging equity market, as measured by the Morgan Stanley Capital Investment Europe, Australasia, and Far East Index (MSCI EAFE) and MSCI Emerging Markets Index, were down 10.2% and 12.1%, respectively, as these markets felt the full brunt of the global growth concerns and heightened geopolitical concerns. In addition, commodities, as measured by the Bloomberg Commodity Index, were down 13.3%.

The global bond market rallied given the global growth and geopolitical concerns previously discussed. Given this backdrop, U.S. interest rates generally decreased over the year (providing positive performance – as lower rates generally result in higher bond prices), except at the short-end of the yield curve. In essence, the yield curve flattened with slightly higher near-term rates, but much lower longer-term rates. Most major bond indices had various levels of positive performance on the year, with longer-maturity bonds outperforming shorter-maturity bonds.

With this as a backdrop, SamCERA continues to focus on balancing risk and further diversifies the portfolio. Even though broad diversification away from large-capitalization U.S. equities and U.S. Government bonds negatively impacted the portfolio this past year, we remain steadfast in the long-term benefits of diversifying the portfolio across fixed income credit, international equity, emerging markets (stocks and bonds), and inflation-sensitive assets. Going forward, we expect this additional diversification will help the portfolio balance out the potential risks over the longer-term.

## Portfolio Changes

During the year, SamCERA tweaked its asset allocation policy by modestly reducing public equity exposure by a total of 3%, and reallocating 1% each to Opportunistic Credit, Real Estate, and Hedge Fund/ Absolute Return. These minor changes are expected to modestly decrease equity risk while slightly rebalancing towards yield and absolute return. SamCERA implemented this new asset allocation by investing in three new strategies: 1) committing $35 million to a direct lending manager, 2) committing $30 million to a value-add real estate manager, and 3) investing $35 million with a multi-strategy absolute return manager.

In addition to the asset allocation changes above, towards the end of the fiscal year SamCERA changed the makeup of its asset class composites by forming a new "Inflation Hedge" category. SamCERA had inflation assets sprinkled across its portfolio in fixed income, alternatives, and real estate. Forming a dedicated Inflation Hedge category allows SamCERA to better manage the plan and monitor its inflation exposures in one place. The Inflation Hedge composite was formed by renaming Real Estate and certain sub-asset classes under "Inflation Hedge," such as TIPs from fixed income, and adding commodities, private real assets, and two energy-related private equity funds from alternatives. Please refer to page 47 to see SamCERA's current asset allocation policy breakdown along the new asset class composites.

Subsequent to fiscal-year end, SamCERA's Board of Retirement (the Board) approved a new liquid real asset pool strategy as part of the Inflation Hedge category. It will be funded from SamCERA's commodity allocation, and be a passive allocation to commodities, natural resource listed equities, and infrastructure listed equities.

For the year, SamCERA made commitments to one new private equity partnership, totaling $10 million. This brings the total commitments for the private equity program to $313.5 million across venture capital, buyouts, and special situations.

SamCERA also made commitments worth $40 million to two new partnerships in its private real asset category, bringing the total commitments to $100 million.

During the year, the plan maintained its asset allocation discipline by continuing to actively rebalance the portfolio to its long-term policy asset allocation portfolio weights. Asset allocation and risk diversification continue to be of primary focus as the plan navigates the market volatility going forward.

Respectfully Submitted,

Michael R Coultrip

Michael Coultrip
Chief Investment Officer
October 18, 2016

## Investment Consultant's Report on Investment Activities

Verus

October 18, 2016

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

**Dear Board Members:**

Fiscal year 2016 ended June 30 was a period marked by volatility throughout the year, despite flat returns for U.S. pension plans for the fiscal year end masking the volatility. The fiscal year was characterized by the outperformance of U.S. financial markets relative to the rest of the world. U.S. equity markets were resilient and managed positive returns, while international developed and emerging markets experienced significant losses. Concerns over slowing global growth and the uncertainty of central bank stimulus contributed to a volatile global equity market. The U.S. fixed income market saw positive returns as yields fell significantly, despite the Fed raising interest rates 25 basis points in December. The yield curve also flattened dramatically over the period and long duration strategies enjoyed strong performance. Additional interest rate increases were put on hold as the Fed continued to assess global growth concerns, the health of the labor market, and low inflation expectations.

Meanwhile, the European Central Bank and Bank of Japan continued to pursue aggressive monetary stimulus programs to combat anemic growth and low inflation. Both central banks expanded their asset purchase programs in addition to implementing a negative interest rate policy that charges commercial banks a fee on excess deposits. These monetary stimulus programs helped suppress international sovereign bond yields to all-time lows, including a large portion of bonds that trade at negative yields. The fiscal year ended with the surprise outcome of the United Kingdom voting to leave the European Union. The decision initially jolted global financial markets, but they mostly recovered shortly after.

The U.S. equity market (Russell 3000) returned a modest 2.1% during the fiscal year. Large cap equities (Russell 1000) greatly outperformed small cap equities (Russell 2000) as the benchmarks returned 2.9% and -6.7%, respectively. Style tilts in the large cap space performed similarly. The Russell 1000 Growth returned 3.0% and the Russell 1000 Value returned 2.9%. International equities underperformed in both developed and emerging markets. Developed equities as measured by the Morgan Stanley Capital International Europe, Australasia and Far East Index (MSCI EAFE) returned -10.2%, while emerging equities as measured by the Morgan Stanley Capital International Emerging

333 Bush Street, Suite 2000, San Francisco, California 94104 415-362-3484 verusinvestments.com

Verus

Markets Index (MSCI EM) returned -12.1%. In the fixed income market, the Barclays Aggregate index returned 6.0%.

**PLAN INVESTMENT RESULTS**

The San Mateo County Employees' Retirement Association's (SamCERA) total Plan returned 0.7% net of fees for the fiscal year ended 2016. The total Plan slightly underperformed its policy index which returned 1.0% for this time period. For the fiscal year, the total Plan ranked in the top 26th percentile for Public Fund Defined Benefit Plans greater than $1 billion.

The U.S. Equity portfolio underperformed its U.S. equity policy benchmark by 40 basis points during the fiscal year net of fees (0.7% versus 1.1% respectively), which placed it in the 45th percentile of the universe. Within the U.S. Equity asset class, the large cap managers as a group slightly underperformed the Russell 1000 Index by 30 basis points. The Small Cap composite returned -8.2% versus the Russell 2000 Index at -6.7%). The Small Cap portfolio was recently restructured, which resulted in changes to the manager line up (see asset allocation and manager structure section for more details).

During the fiscal year, the International Equity Composite beat its benchmark on a relative basis by 2.4%, returning -6.8% net of fees compared to -9.2% for the Morgan Stanley Capital International ex-United States Investable Market Indexes (MSCI ACWI ex-US IMI); this result ranked in the 13th percentile of the peer universe. All of the Association's international managers outperformed their respective benchmarks on a relative basis during the fiscal year. Baillie Gifford and Mondrian were the two largest contributors to performance on a relative basis.

During fiscal year 2016, the Plan's Total Fixed Income Composite net return of 2.4% lagged its Blended Fixed Income benchmark return of 5.8%. The opportunistic credit and global fixed income components of the portfolio were the biggest detractors from returns in the fixed income portfolio. Angelo Gordon's Opportunistic Whole Loan (OWL) Fund owns some loans that are underperforming relative to expectations and has reduced the fund's return expectations. Brigade's Opportunistic Credit strategy lagged over the past fiscal year because of its early exposure to retail lower-rated credit. SamCERA's global bond manager Franklin Templeton underperformed due to its short duration positioning and emerging markets debt exposure.

After several years of lackluster performance, SamCERA's Risk Parity component of the portfolio outperformed its benchmark (5.7% net of fees versus 3.9% for the 60% Russell 3000/40% Barclays Aggregate blended benchmark). PanAgora outperformed the benchmark by a full 8% for the fiscal year.

SamCERA's Alternatives portfolio, comprised of Private Equity and Absolute Return strategies, slightly underperformed for the year ended June 30, 2016 (-0.7% versus -0.5% for the composite benchmark). After several years of strong outperformance, the Private Equity portfolio trailed the Russell 3000 + 3% Index because of its energy exposure, primarily through Sheridan. The Absolute Return composite

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was up 6.9% compared to 4.3% for London Interbank Offered Rate (LIBOR) + 4%, ranking in the 1st percentile among its peer group.

Over the fiscal year, SamCERA's Real Estate component provided a strong absolute return of 11%, slightly shy of the National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity (NCREIF ODCE) Index (11.8%). Private Real Assets provided returns meaningfully above Consumer Price Index (CPI) + 5%. The Plan's Commodities manager SSARIS closed in May with assets reallocated to a broader inflation pool.

**ASSET ALLOCATION AND MANAGER STRUCTURE**

SamCERA has added a broader liquid pool mandate with State Street Global Advisors (SSGA), comprised of 1/3 Commodities/1/3 Natural Resources/1/3 Infrastructure, to replace its dedicated Commodities manager. The liquid pool is a better proxy to real assets, and has a more favorable expected return for the risk assumed than commodities alone. Two small cap managers (The Boston Company and Chartwell) were replaced recently with one core style manager Quantitative Management Associates (QMA) to simplify the manager line up and reduce tracking error in small cap. SamCERA continues to build out its private markets and real assets portfolios.

SamCERA is currently reviewing its asset allocation as part of an asset-liability study that utilizes a recently reduced assumed return of 7.0%. The incremental reduction of equity beta risk and an increased recognition of inflation risk to the portfolio are elements of the study. The Plan will continue to seek to diversify its risks in order to produce the highest possible returns in a cost effective and prudent manner.

In summary, SamCERA continues to take advantage of investment opportunities as they evolve, while adhering to a well thought out strategic plan. Verus believes that SamCERA has constructed a diversified portfolio that will continue to serve its participants well.

Sincerely,

Margaret Jadallah

Margaret S. Jadallah

NOTE: Returns for periods greater than one year are annualized. Monthly return calculations are time-weighted, and market value based. The performance calculation methodology is consistent with the Chartered Financial Analyst Institute (CFAI) Global Investment Performance Standards®.

## INVESTMENT PHILOSOPHY, OBJECTIVES, AND POLICY

SamCERA's Investment Policy sets forth the Board of Retirement's (the Board) investment philosophy, from which the following extracts have been drawn. The full policy may be viewed on SamCERA's website at www.samcera.org.

### Investment Beliefs

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

- Strategic asset allocation is the primary driver of portfolio risk and return.
- SamCERA should have a long-term horizon and not be tempted to deviate from its long-term plan in response to short-term volatility.
- Everything else being equal, simplicity is preferred over complexity.
- For those asset classes evidencing market efficiencies, the manager structure may favor the employment of passive strategies.
- Diversification is fundamental.
- There is no single definition of risk. There are various measures of 'risk' that can be used for various purposes.
- The portfolio should be diversified across many risk dimensions/timeframes.
- SamCERA should not pursue investments that will not adequately compensate it for the risks that those investments bring.
- Costs matter.

### Investment Objectives

The Board shall develop an investment program, consistent with the Investment Beliefs and General Investment Policies in order to meet the following objectives:

A. Generate risk-adjusted returns that exceed the Asset Allocation Policy Benchmark (as defined in Section 6.0 of the Investment Policy) on a net-of-fee basis over five-year rolling periods.

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

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

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

### Investment Policy

The Investment Policy of the Board of Retirement pursues an investment strategy which reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes.

Consistent with the Investment Beliefs, the Board's investment policy is to:

A. Achieve long-term risk-adjusted returns consistent with its fiduciary duty.

B. Pursue an investment strategy that reduces the volatility of returns through prudent diversification of the investment portfolio across a broad selection of distinct asset classes, as provided for in Section 6.0 of the Investment Policy.

C. Further diversify other risks, including extreme events, liquidity, and leverage by looking beyond traditional asset class definitions by utilizing multiple lenses on portfolio risks.

D. Adopt an asset allocation target to guide the structure of the investment portfolio, as provided for in Section 6.0 of the Investment Policy, and reevaluate on an annual basis.

E. Reevaluate the asset-liability study every three to five years.

F. Delegate full discretion, including whether to include environmental, social, and governance factors, if such factors have a direct relationship to the economic and financial value of an investment, when analyzing the financial merits of competing investment choices on behalf of SamCERA, to each investment manager to the extent authorized in their Investment Management Agreement (IMA).

G. Adopt objectives that encourage investment managers to maximize their performance, within acceptable risk parameters, relative to their individual investment style benchmark.

H. Refrain from drastically shifting asset class allocations over short time spans, unless it is in the Fund's best interest to do so.

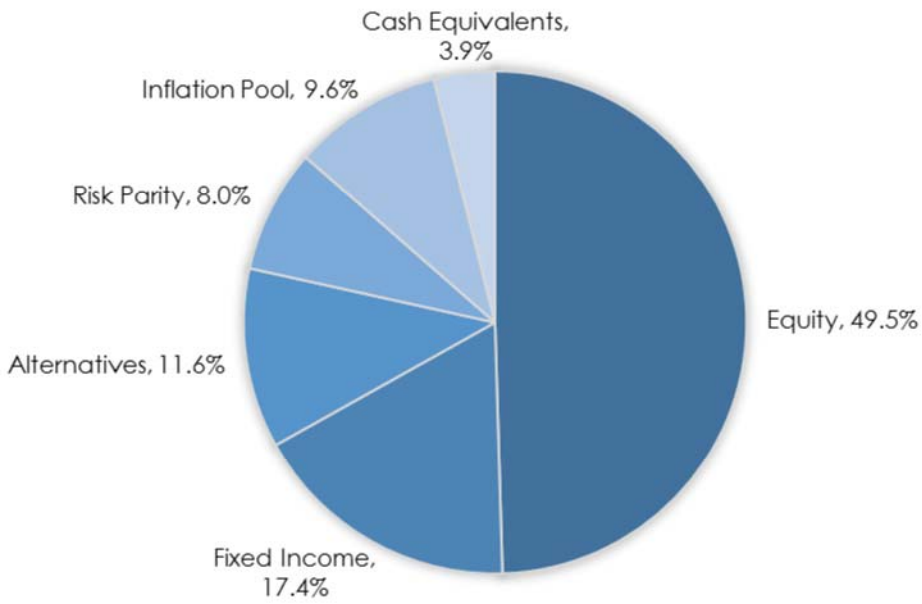
I. Rebalance the portfolio in accordance to the Rebalancing Policy set forth in Section 7.0 of the Investment Policy.

## ASSET ALLOCATION

### ASSET ALLOCATION AS A PERCENTAGE OF FAIR VALUE (JUNE 30, 2016)

| ASSET CLASS | Target | Actual |
|---|---|---|
| Equity | 48.0% | 49.5% |
| Fixed Income | 18.0% | 17.4% |
| Alternatives | 12.0% | 11.6% |
| Risk Parity | 8.0% | 8.0% |
| Inflation Hedge | 14.0% | 9.6% |
| Cash Equivalents | 0.0% | 3.9% |
| Total | 100.0% | 100.0% |

## ACTUAL ASSET ALLOCATION (JUNE 30, 2016)



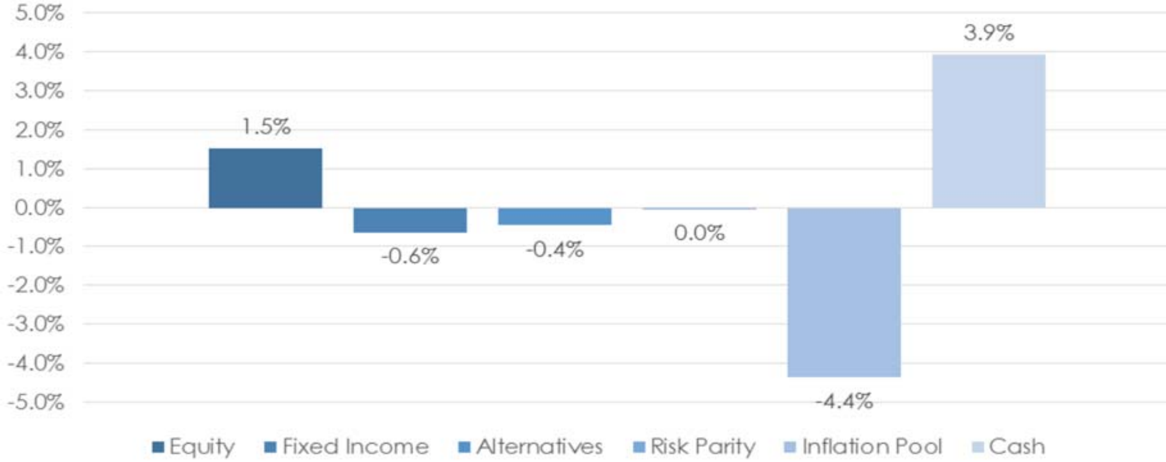

## ASSETS UNDER MANAGEMENT (JUNE 30, 2016)

| ASSET CLASS | Assets Under Management |
|---|---|
| Equity | $ 1,723,373,856 |
| Fixed Income | 610,607,729 |
| Alternatives | 404,376,940 |
| Risk Parity | 280,336,352 |
| Inflation Hedge | 349,680,120 |
| Total Net Portfolio Value | $ 3,368,374,997 |

| RECONCILIATION TO STATEMENT OF FIDUCIARY NET POSITION | |
|---|---|
| Total Net Portfolio Value | $ 3,368,374,997 |
| Cash Equivalents | 244,723,779 |
| Investments receivable | 22,635,357 |
| Prepaid Expense | 7,669 |
| Net Capital Assets | 5,162,123 |
| Investment and other payables | (99,515,428) |
| Fiduciary Net Position as of June 30, 2016 | $ 3,541,388,497 |

## PERCENT OF DEVIATION FROM ASSET ALLOCATION

*As of June 30, 2016*




## BENCHMARKS (JUNE 30, 2016)

| **Asset Class** | **Policy Benchmark** |
|---|---|
| EQUITY BENCHMARK | 50% Russell 1000, 41.7% Morgan Stanley Capital International ex-United States Investable Market Indexes (MSCI ex-US IMI), 8.3% Russell 2000 |
| Domestic Equity Benchmark | 85.7% Russell 1000, 14.3% Russell 2000 |
| International Equity Benchmark | MSCI ACWI ex US IMI |
| FIXED INCOME BENCHMARK | 55.5% Barclays Aggregate (BA), 27.8% BA Intermediate High Yield (HY), 16.7% Barclays Multiverse |
| Domestic Fixed Income Benchmark | 66.7% Barclays Aggregate, 33.3% BA Intermediate HY |
| Global Fixed Income Benchmark | Barclays Multiverse |
| ALTERNATIVES BENCHMARK | 58.3% Russell 3000 + 3%, 41.7% London Interbank Offered Rate (LIBOR) + 4% |
| Private Equity Benchmark | Russell 3000 + 3% |
| Hedge Funds/Absolute Return Benchmark | LIBOR + 4% |
| RISK PARITY BENCHMARK | 60% Russell 3000, 40% Barclays Aggregate |
| INFLATION HEDGE BENCHMARK | 50% National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity (NCREIF ODCE), 21.4% Bloomberg Commodity, 14.3% Consumer Price Index (CPI) + 5%, 14.3% Barclays Treasury Inflation Protected Securities (TIPS) |
| Real Estate Benchmark | NCREIF ODCE |
| Private Real Asset Benchmark | CPI + 5% |
| Liquid Pool Benchmark | 60% Bloomberg Commodities, 40% Barclays TIPS |
| CASH EQUIVALENTS BENCHMARK | 91-day Treasury-Bills |

## SCHEDULE OF PORTFOLIO RETURNS

*Performance as of June 30, 2016, Net of Fees*

| | Total Time Weighted Rate of Return | | |
|---|---|---|---|
| **Asset Class** | **One Year** | **Three Years** | **Five Years** |
| EQUITY | **-2.20%** | **7.40%** | **7.40%** |
| Equity Benchmark | -3.20% | 7.20% | 7.30% |
| Domestic Equity | 0.70% | 10.10% | 10.50% |
| Domestic Equity Benchmark | 1.10% | 10.70% | 11.20% |
| International Equity | -6.80% | 2.70% | 1.30% |
| International Equity Benchmark | -9.20% | 2.00% | 0.80% |
| FIXED INCOME | **2.40%** | **3.40%** | **4.30%** |
| Fixed Income Benchmark | 5.80% | 3.80% | 3.50% |
| Domestic Fixed Income | 3.50% | 3.90% | 4.60% |
| Domestic Fixed Income Benchmark | 5.30% | 3.90% | 3.90% |
| Global Fixed Income | -3.40% | 0.60% | 2.60% |
| Global Fixed Income Benchmark | 8.60% | 2.80% | 1.90% |
| ALTERNATIVES | **-0.70%** | **5.40%** | **4.10%** |
| Alternatives Benchmark | -0.30% | 5.70% | 6.50% |
| Private Equity | 3.50% | 15.60% | 9.70% |
| Private Equity Benchmark | 5.10% | 14.10% | 14.60% |
| Hedge Funds/Absolute Return | 6.90% | 6.70% | 5.00% |
| Hedge Funds/Absolute Return Benchmark | 4.30% | 4.20% | 4.20% |
| RISK PARITY | **5.70%** | **7.30%** | **5.90%** |
| Risk Parity Benchmark | 3.90% | 8.40% | 8.60% |
| INFLATION HEDGE (1) | * | * | * |
| Inflation Hedge Benchmark | * | * | * |
| Real Estate (2) | 11.00% | 12.50% | 11.80% |
| Real Estate Benchmark | 11.80% | 13.00% | 12.70% |
| Private Real Asset (3) | 38.50% | * | * |
| Private Real Asset Benchmark | 6.40% | * | * |
| Liquid Pool (4) | * | * | * |
| Liquid Pool Benchmark | * | * | * |
| CASH EQUIVALENTS | **1.40%** | **0.80%** | **0.70%** |
| Cash Equivalents Benchmark | | | |
| **TOTAL** | **0.70%** | **7.00%** | **6.70%** |
| Policy Benchmark | 1.00% | 7.00% | 7.00% |

(1) The creation of a dedicated Inflation Hedge asset class was effective April 1, 2016.
(2) Prior to April 1, 2016, Real Estate assets were allocated to SamCERA's allocation to a dedicated Real Estate asset class.
(3) Prior to April 1, 2016, Private Real Assets were allocated as part SamCERA's allocation to Alternatives.
(4) The creation of a dedicated Inflation Pool was effective April 1, 2016.
*Return information is not available.
Return calculations were prepared using a time-weighted rate of return, net of fees, in accordance with the Global Investment Performance Standards.

## SCHEDULE OF TOP TEN EQUITIES AND FIXED INCOME SECURITIES

*As of June 30, 2016*

### *Top 10 Equity Securities* [1]

| Shares | Company Name | Ticker | Stock Exchange | | Fair Value |
|---|---|---|---|---|---|
| 171,401 | UNILEVER PLC ORD GBP0.031111 | ULVR | London | $ | 8,200,521 |
| 104,302 | NESTLE SA CHF0.10 (REGD) | NESN | Swiss Exchange | | 8,045,879 |
| 508,235 | UTD O/S BANK NPV | UOVEY | Singapore | | 6,955,709 |
| 66,141 | COCHLEAR LTD NPV | COH | Australia | | 5,971,391 |
| 71,571 | SALESFORCE COM INC COM STK | CRM | New York | | 5,683,453 |
| 106,012 | NOVO-NORDISK AS DKK0.2 SER'B' | NOVOB | Copenhagen | | 5,668,812 |
| 259,277 | GLAXOSMITHKLINE ORD GBP0.25 | GSK | London | | 5,561,221 |
| 7,342 | AMAZON COM INC | AMZN | NASDAQ | | 5,254,082 |
| 267,226 | ABB LTD CHF0.12 (REGD) | ABBN | Swiss Exchange | | 5,244,674 |
| 747,215 | IBERDROLA SA EUR0.75 | IBE | Madrid | | 5,052,931 |
| | | | **Total Top 10 Equities** | **$** | **61,638,673** |

(1) Securities owned in commingled vehicles are not included in this schedule. A complete list of portfolio holdings is available upon request.

### *Top 10 Fixed Income Securities* [1]

| Security | Coupon | S&P Rating | Maturity | | Fair Value |
|---|---|---|---|---|---|
| US Treasury Note | 0.125 | AA+ | 1/15/2022 | $ | 11,833,024 |
| US Treasury Bond | 1.750 | AA+ | 1/15/2028 | | 7,929,709 |
| US Treasury Note | 0.125 | AA+ | 1/15/2023 | | 6,842,696 |
| US Treasury Bond | 2.375 | AA+ | 1/15/2025 | | 6,334,011 |
| US Treasury Note | 1.250 | AA+ | 7/15/2020 | | 6,040,908 |
| US Treasury Note | 0.125 | AA+ | 7/15/2022 | | 5,797,182 |
| US Treasury Note | 0.250 | AA+ | 1/15/2025 | | 5,588,356 |
| US Treasury Bond | 1.375 | AA+ | 2/15/2044 | | 5,013,297 |
| US Treasury Note | 0.125 | AA+ | 4/15/2018 | | 3,728,358 |
| US Treasury Bond | 1.010 | AA+ | 2/15/2046 | | 2,981,064 |
| | | | **Total Top 10 Fixed Income** | **$** | **62,088,605** |

(1) Securities owned in commingled vehicles are not included in this schedule. A complete list of portfolio holdings is available upon request.

## SCHEDULE OF PROFESSIONAL SERVICES AND FEES

*For the Fiscal Years Ended June 30*

| | 2016 | 2015 |
|---|---|---|
| INVESTMENT MANAGEMENT FEES | | |
| Equity | $ 5,909,782 | $ 6,830,128 |
| Fixed Income | 2,624,191 | 4,134,652 |
| Alternatives | 7,574,137 | 6,113,253 |
| Risk Parity | 963,317 | 1,000,164 |
| Inflation Hedge | 3,569,299 | 1,587,447 |
| Cash | 150,647 | 166,657 |
| **Total Investment Management Fees** | $ 20,791,373 | $ 19,832,301 |
| OTHER INVESTMENT EXPENSES | | |
| Investment Consultant | $ 450,000 | $ 444,597 |
| Actuarial Consulting | 90,000 | 217,102 |
| Master Custodian | 325,316 | 311,990 |
| Other Professional Services | 23,036 | 18,130 |
| **Total Other Investment Expenses** | $ 888,352 | $ 991,819 |

## TOP 10 BROKER COMMISSIONS

*Commission per Share Traded, For the Fiscal Year Ended June 30, 2016*

| Brokerage Firm | Commission | Number of Shares Traded | Commission per share |
|---|---|---|---|
| Liquidnet Inc | $ 78,252 | 2,215,360 | $ 0.04 |
| Goldman Sachs & Company | 44,770 | 2,703,312 | 0.02 |
| Abel Noser Corp | 39,232 | 1,036,945 | 0.04 |
| JP Morgan Securities LLC 57079 | 28,194 | 805,157 | 0.04 |
| Raymond James | 18,114 | 469,917 | 0.04 |
| Stifel Nicolaus and Company | 17,602 | 471,651 | 0.04 |
| Instinet | 16,619 | 589,872 | 0.03 |
| Merrill Lynch Pierce Fenner & Smith | 14,596 | 739,531 | 0.02 |
| Jefferies & Company | 13,997 | 476,495 | 0.03 |
| RBC Dain Rauscher | 13,129 | 370,618 | 0.04 |
| All Other Brokerage Firms | 219,415 | 565,215,178 | 0.01 |
| **Total** | **$ 503,920** | **575,094,036** | **$ 0.01** |

# ACTUARIAL
# SECTION

Milliman

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October 18, 2016

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

Dear Members of the Board:

SamCERA's basic financial goal is to establish contributions which fully fund the System's liabilities and which, as a percentage of payroll, remain level for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

SamCERA measures its funded status as the ratio of the actuarial value of valuation assets over the actuarial accrued liabilities. The funded status based on the past three actuarial valuations is shown below:

| Valuation Date | Funded Ratio |
|---|---|
| June 30, 2014 | 78.8% |
| June 30, 2015 | 82.6% |
| June 30, 2016 | 83.1% |

The funded ratio increased in the last year primarily due to contributions in excess of the value of benefits, although this was mostly offset by changes in the economic assumptions effective June 30, 2016 and recognition of a net asset loss under the asset smoothing method.

It is our opinion that SamCERA continues in sound financial condition as of June 30, 2016 and will continue to remain in sound financial condition provided that employer contributions are made based on the current funding policy and the valuation is based on reasonable assumptions. To be in a "sound financial condition," we believe the plan should be projected to reach or exceed a 100% funded ratio in 30 years or less. SamCERA meets this criteria. Under SamCERA's funding policy, the employer's contributions are set equal to the net employer normal cost rate plus the amortization payment of any Unfunded Actuarial Accrued Liability (UAAL). The amortization of the initial UAAL as of June 30, 2008 is funded over a closed 15-year period ending June 30, 2023. The amortization of any subsequent changes in the UAAL is funded over separate closed 15-year layers which are determined annually. It should be noted that the 2016 valuation results defer a net market loss on assets. Thus, the funded ratio is expected to be lower once those market losses are reflected in the 2017 and later valuations, assuming future investment earnings are equal to the assumed rate. However, it is the County's intent to make contributions in excess of those required under the funding policy. This, combined with SamCERA's short amortization period, is expected to increase the funded status in the future.

The June 30, 2016 valuation results are based on the membership data and the asset information provided by SamCERA. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

The valuation is also based on our understanding of SamCERA's current benefit provisions and the actuarial assumptions which were reviewed and adopted by the Board. The actuarial assumptions were last reviewed and adopted by the Board in 2016. New economic assumptions for funding purposes were adopted in June 2016. Demographic assumptions were adopted in July 2014, based on the triennial investigation of experience study report as of April 30, 2014 and re-adopted in June 2015 and June 2016. The assumptions and methods used for financial reporting under GASB 67 are the same as the funding assumptions and methods with the following exceptions:

Milliman

Board of Retirement
October 18, 2016
Page 2

1. The discount rate and investment return assumption of 7.20% differs from the funding valuation due to the addition of an administrative expense load of 0.20%.
2. The asset valuation method is fair market value.

The actuarial computations presented in the valuation report are for purposes of determining the recommended funding amounts for SamCERA consistent with our understanding of its funding requirements and goals. The liabilities are determined by using the entry age normal funding method. The actuarial assets are determined by using a five-year smoothed recognition method of asset gains and losses, determined as the difference of the actual market value to the expected market value. The actuarial assets are restricted to not vary more than 20% from the market value. We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement No. 67 and No. 68 for fulfilling financial accounting requirements. Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements as presented in the valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Our valuation report and this letter have been prepared exclusively for SamCERA for a specific and limited purpose. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. It is a complex, technical analysis that assumes a high level of knowledge concerning SamCERA's operations, and uses SamCERA's data, which Milliman has not audited. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

Milliman provided the following schedules and exhibits for use in the actuarial section:

1. Rate of separation from actuarial service
2. Employer contribution rates as a percentage of covered payroll
3. Summary of significant actuarial statistics and measures
4. Solvency test
5. Schedule of funding progress
6. History of employer Statutory Contribution Rates
7. Demographic activity of retirees and beneficiaries
8. Actuarial analysis of financial experience
9. Summary of active member valuation data
10. Schedule of average monthly salary of active members
11. Participating employers and active members
12. Summary of retired and inactive member benefits

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

We certify that the June 30, 2016 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Sincerely,

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

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

NJC/CJG/nlo

## ACTUARIAL VALUATION

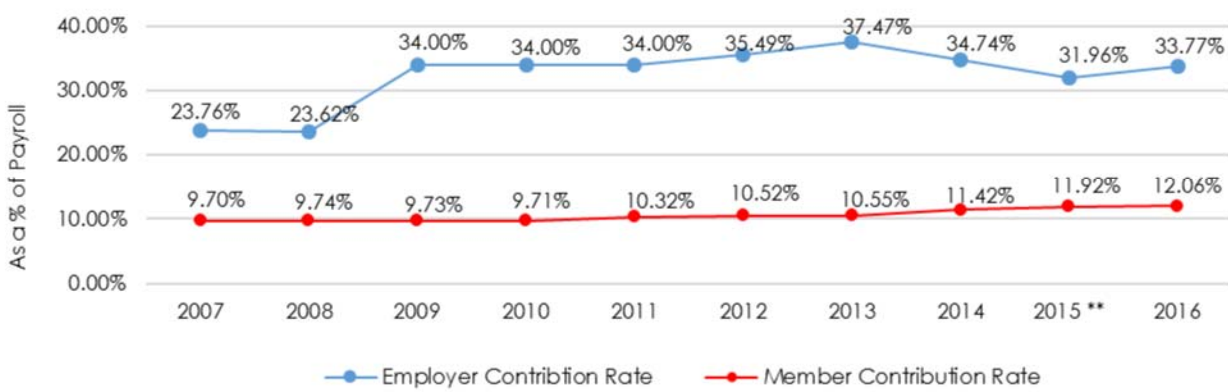
### Introduction

San Mateo County Employees' Retirement Association (SamCERA) provides basic retirement, disability, and death benefits based on a defined formula using final average compensation, years of service, and age of the member to calculate pension benefits. Details of the pension and plan provisions are provided in the Notes to the Basic Financial Statements (Note 1) in the Financial Section.

The County Employees' Retirement Law of 1937 establishes the basic obligations for employers and members to the pension plan. The Board of Retirement (the Board) is responsible for establishing and maintaining the funding policy by adopting contribution rates recommended by its actuary in accordance with the membership type and the plan in which a member belongs.

### EMPLOYER AND MEMBER CONTRIBUTION RATES*

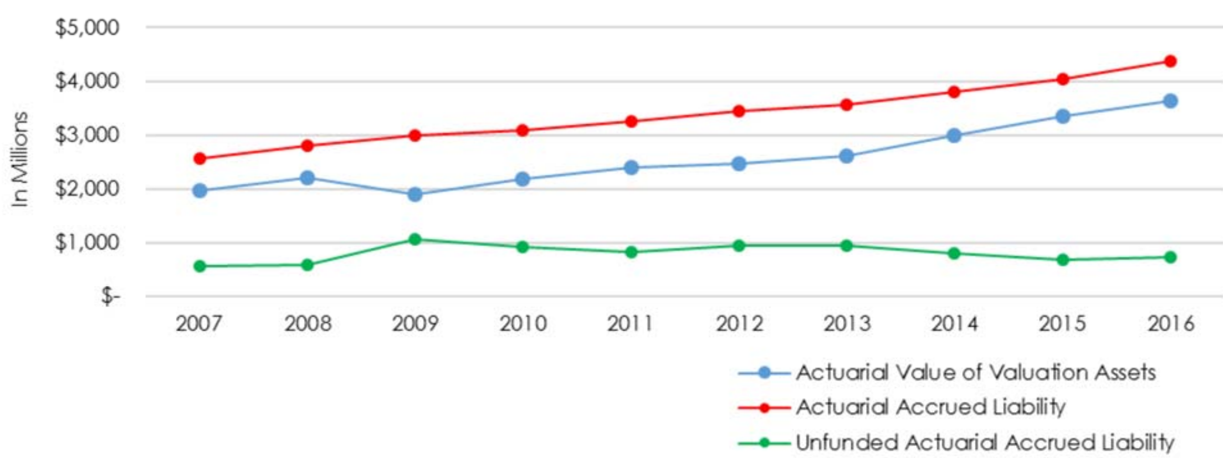
*Determined at June 30*




* The contribution rates determined as of the valuation date will become effective a year later. For example, the contribution rates determined as of June 30, 2016, will become effective on July 1, 2017.

** The June 30, 2015 Statutory Contribution Rate reflects changes in member rates negotiated subsequent to the 2015 valuation report. The 2015 Statutory Contribution Rate calculated in the 2015 valuation report was 32.35%.

### ACTUARIAL VALUATION



## Fund Objective

The funding objective is to establish contribution rates which, over time, will remain as a level percentage of payroll. Details for the 10 year schedule of actuarially determined and actual contributions can be found in the Financial Section under the Required Supplementary Information.

## Valuation Policy

Each year, SamCERA engages an independent actuarial firm to perform an annual actuarial valuation as of June 30. The actuarial valuation is used to calculate the value of future benefits, assess the funded status, and determine contribution rates for both employers and employees. The contribution rates calculated at each year-end as of June 30 are subject to a "one year" deferral. Thus, the new contribution rates calculated in the valuation at June 30, 2016, will be effective on July 1, 2017. In the actuarial valuation, the actuary applies specific actuarial methods and assumptions to project as closely as possible present contributions to meet future benefit obligations.

## Contributions

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

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

## Actuarial Cost Method

The entry age normal cost method is selected for the annual actuarial valuation. Under this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual projected compensation between entry age and assumed retirement age. The portion of this actuarial present value allocated to the valuation year is commonly called the normal cost (the actuarial value of benefits accruing for the present year). The portion not provided for at the valuation date represents the UAAL.

The entry age normal cost method is used for both funding and financial reporting purposes. This method was selected for funding purposes because it provides a relatively level normal cost rate as a percentage of pay (assuming no changes in assumptions or benefits) from year to year. In addition, Governmental Accounting Standards Board (GASB) Statement No. 67 requires that this method be used for financial reporting purposes.

Between the funding and financial reporting valuations, the only difference in assumptions is the investment return assumption. The assumed investment return for funding is 7.00%, net of both investment and administrative expense; whereas the assumed investment return for financial reporting is 7.20%, net of investment expenses only. For financial reporting purposes, GASB Statements No. 67 and No. 68 require that the investment return assumption be gross of administrative expenses.

## Amortization Method

Contributions are initially applied toward the normal cost. If the plan is less than 100% funded, the remainder is applied toward the UAAL. The UAAL represents the difference between the actuarial accrued liability (AAL) and the actuarial value of assets (AVA). The UAAL is amortized using the "Level Percent of Payroll" amortization method.

The UAAL as of June 30, 2008, is amortized over a closed 15-year period as a level percentage of the projected salaries of present and future members of SamCERA over the remaining period from the valuation date. This is commonly referred to as a closed amortization method. Actuarial gains and losses after the June 30, 2008, valuation are amortized over new closed 15-year periods from their respective valuation

## ACTUARIAL METHODS AND ASSUMPTIONS

| | |
|---|---|
| VALUATION DATE | June 30, 2016 |
| ACTUARIAL COST METHOD | Entry Age Normal |
| ACTUARIAL EXPERIENCE STUDY | July 1, 2011 to April 30, 2014 |
| AMORTIZATION METHOD | Level percentage of projected payroll |
| AMORTIZATION PERIOD | UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers which are determined annually. |
| ASSET VALUATION METHOD | 5-year smoothed recognition of asset gains and losses (determined as the difference of the actual fair value to the expected fair value), which cannot vary more than 20% from the fair value. |
| ACTUARIAL ASSUMPTIONS | |
| Economic assumptions: | |
| Investment rate of return | 7.00% |
| Inflation rate (CPI) | 2.75% |
| General wage increase | 3.25% |
| Cost of living adjustment | 2.75% for all members in Plan 1; 2.65% for all members in Plan2; 1.90% for all members in Plans 4, 5, and 7; and 1.90% for all safety and probation members in Plan 6. |
| Demographic assumptions: | |
| Salary increases due to service | The total expected increase in salary represents the increase due to promotions and longevity, adjusted for an assumed 3.25% per annum increase in the general wage level of the membership. |
| Mortality | Rates are primarily based on RP-2000 mortality tables. See the valuation report as of June 30, 2016, for details. |
| Retirement | See the valuation report as of June 30, 2016, for details. |
| Disablement | See the valuation report as of June 30, 2016, for details. |
| Other terminations of employment | See the valuation report as of June 30, 2016, for details. |
| Refund of contributions on vested termination | See the valuation report as of June 30, 2016, for details. |

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

dates (commonly referred to as 15-year layered amortization).

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

## Actuarial Asset Valuation Method

The actuarial asset valuation method used is a 5-year smoothed recognition method with a 20% corridor. This method takes into account appreciation as well as depreciation in investments to smooth asset values by averaging the excess of the actual over the expected income, on a fair value basis, over a five year period. The smoothed asset value is subject to a 20% corridor, or within 20% of the actual asset value.

## Actuarial Assumptions

Economic and demographic assumptions are used to determine future contribution requirements. The demographic assumptions utilize the information from the latest Experience Study from July 1, 2011, to April 30, 2014. The assumptions selected are used to estimate the actuarial cost of the pension plan and determine the present contributions necessary to meet the pension benefits in the future.

The actuarial assumptions used in the valuation are intended to estimate the future experience of SamCERA's members and SamCERA's earnings in areas that may affect the projected benefit flow and anticipated investment earning. Any variations in future experience from these assumptions will result in corresponding changes in the estimated costs of SamCERA's benefits. The assumptions will next be reviewed in detail in 2017 as part of the triennial investigation.

### Key Economic Assumptions

**Investment Rate of Return.** The future investment earnings of SamCERA's assets are accrued at an annual rate of 7.00%, compounded annually, net of both investment and administrative expenses. This rate was 0.25% lower than the previous assumption and was effective June 30, 2016.

**Inflation Rate.** The assumed rate of inflation selected for the 2016 valuation is 2.75%.

**Projected Salary Increase.** The assumed rate of annual salary increase selected for the 2016 valuation is 3.25%.

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

### Key Demographic Assumptions

**Salary Increases due to Service.** The expected annual increase in salary assumption includes an expected annual increase of 3.25% due to increases in the general wage level of membership, and expected annual increases due to promotion and longevity which vary depending on a member's years of service.

**Retired Mortality Rate.** The same postretirement mortality rates are used in the valuation for active members, retired members, and beneficiaries. Beneficiary mortality is assumed to be the same as for healthy members. Beneficiaries are assumed to be of the opposite sex and have the same mortality as General members. The rates of retired mortality were adopted June 30, 2011 and re-adopted June 30, 2014.

**Retired Mortality Rates – Other Than Disabled Members**

- General Males: RP-2000 Healthy Combined Mortality Table for Males with adjustment for White Collar workers. Ages are set back three years.

- Safety Males: Same as General.

- General Females: RP-2000 Healthy Combined Mortality Table for Females with adjustment for White Collar workers. Ages are set back three years.

- Safety Females: Same as General.

**Retired Mortality Rates –Disabled Members**

- General Males: Average of RP-2000 Healthy Combined Mortality Table for Males with adjustment for White Collar workers and the RP-2000 Disabled Annuitant Mortality Table for Males, both set back three years.

- Safety Males: RP-2000 Healthy Combined Mortality Table for Males with adjustment for White Collar workers (minimum is 1.0%).

- General Females: Average of RP-2000 Healthy Combined Mortality Table for Females with adjustment for White Collar workers and the RP-2000 Disabled Annuitant Mortality Table for Females, both set back three years.

- Safety Females: RP-2000 Healthy Combined Mortality Table for Females with adjustment for White Collar workers (minimum is 0.4%).

**Separation from Active Status.** The probabilities of termination of employment due to the causes stated below are presented on page 101.

- Service retirement: Member retires after meeting age and service requirements for reasons other than disability.

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

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

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

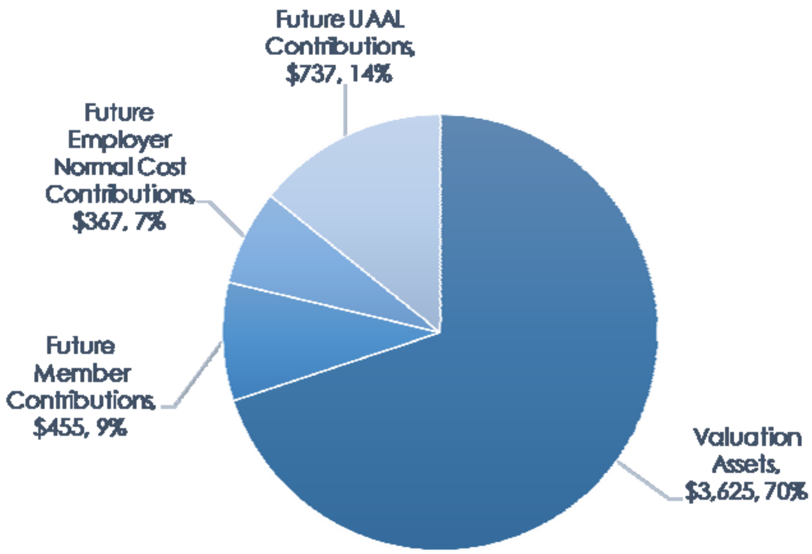
- Service death: Member dies before retirement; death is service related.

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

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

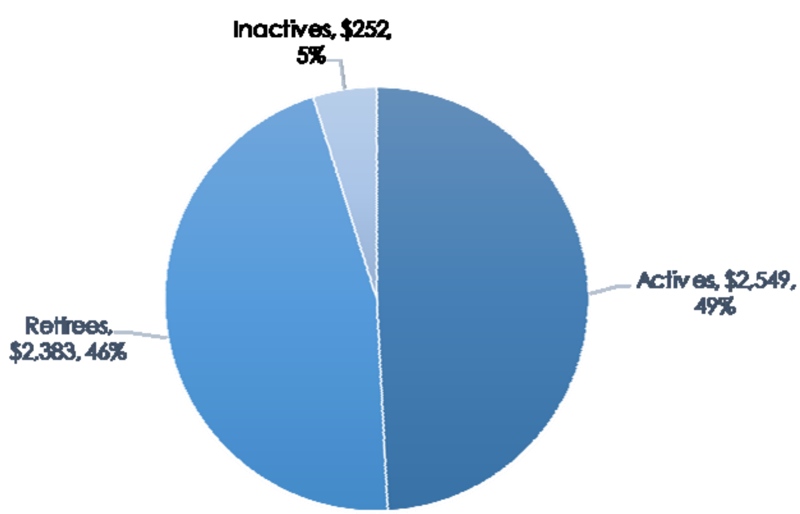
## ACTUARIAL VALUATION - SAMCERA'S RESOURCES AT JUNE 30, 2016 (DOLLARS IIN MILLIONS)

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




## ACTUARIAL VALUATION - SAMCERA'S LIABILITIES AT JUNE 30, 2016 (DOLLARS IN MILLIONS)

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



## Valuation Assets

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

### APPLICABLE VALUATION ASSETS (JUNE 30)


### EMPLOYER CONTRIBUTION RATES FOR ALL PLANS COMBINED AS A PERCENTAGE OF COVERED PAYROLL

| | Fiscal Year Beginning | | |
|---|---|---|---|
| | July 1, 2017[2] | July 1, 2016[1] | Change |
| Gross Normal Cost | 22.31% | 21.95% | 0.36% |
| Less: Member Contributions | (12.06)% | (11.92)% | (0.14)% |
| Employer Normal Cost | 10.25% | 10.03% | 0.22% |
| UAAL Amortization | 23.52% | 21.93% | 1.59% |
| **Total Contribution Rate** | **33.77%** | **31.96%** | **1.81%** |

(1) Contribution rates for fiscal year beginning July 1, 2016, reflects all valuation addendums subsequent to the 2015 valuation.

(2) The total employer rate of 33.77% is the aggregate rate for all employers. For the fiscal year beginning July 1, 2017, employer rates by employer are as follows:

a) The County contribution rate is 33.91% of pay.

b) The Court contribution rate is 30.44% of pay.

c) The District contribution rate is 24.52% of pay.

## SUMMARY OF SIGNIFICANT ACTUARIAL STATISTICS AND MEASURES

| | June 30, 2016 | June 30, 2015 | Relative Change |
|---|---|---|---|
| **ACTIVE MEMBERS** | | | |
| Number of Members | 5,187 | 5,095 | 1.8 % |
| Average Age | 45.4 | 45.5 | (0.2)% |
| Average Credited Service | 10.8 | 11.0 | (1.8)% |
| Covered Compensation (In Thousands) [(1)] | $472,385 | $439,018 | 7.1 % |
| Average Monthly Salary | $7,933 | $7,567 | 4.8 % |
| **RETIRED MEMBERS** | | | |
| Number of Members | | | |
| Service Retirement | 3,749 | 3,628 | 3.3 % |
| Disability Retirement | 454 | 442 | 2.7 % |
| Beneficiaries | 545 | 568 | (4.0) % |
| Average Age | 71.0 | 71.3 | (0.4) % |
| Actual Retiree Benefits Paid (In Thousands) | $179,497 | $168,109 | 6.8 % |
| Average Monthly Pension | $3,268 | $3,160 | 3.4 % |
| **NUMBER OF INACTIVE MEMBERS** | 1,486 | 1,384 | 7.4 % |
| **ASSETS** | | | |
| Fair Value of Fund (In Thousands) | $3,541,388 | $3,454,476 | 2.5 % |
| Return on Fair Value | 0.7% | 3.5% | (2.8) % |
| Valuation Assets (In Thousands) | $3,624,726 | $3,343,550 | 8.4 % |
| Return on Valuation Assets | 6.4% | 9.7% | (3.3) % |
| **LIABILITY VALUES (IN THOUSANDS)** | | | |
| Actuarial Accrued Liability | $4,362,296 | $4,045,786 | 7.8 % |
| Unfunded Actuarial Accrued Liability | $737,570 | $702,236 | 5.0 % |
| Deferred Asset (Gains) / Losses | $119,951 | ($77,153) | (2.6) % |
| **FUNDED RATIO** | | | |
| Based on Valuation Assets | 83.1% | 82.6% | 0.5 % |

[(1)] In accordance with Statement No. 82 of the Governmental Accounting Standards Board (GASB), Covered Employee Payroll is the payroll on which contributions are based. SamCERA has elected early application of this Statement. Thus, these amounts may be different than shown in fiscal year ended 2015 and earlier reports.

## RATE OF SEPARATION FROM ACTIVE SERVICE

| Years of Service | Other Terminations | | Age | Disability | | Death while Active | | Service Retirement |
|---|---|---|---|---|---|---|---|---|
| | Ordinary | Vested | | Ordinary | Service | Ordinary | Service | |
| **General Plans 1, 2, 4, 5 & 7 Male Members** | | | | | | | | |
| 0 | 0.1300 | 0.0000 | 20 | 0.0003 | 0.0004 | 0.0003 | 0.0000 | 0.0000 |
| 5 | 0.0285 | 0.0348 | 30 | 0.0004 | 0.0005 | 0.0004 | 0.0000 | 0.0000 |
| 10 | 0.0172 | 0.0238 | 40 | 0.0008 | 0.0011 | 0.0009 | 0.0000 | 0.0000 |
| 15 | 0.0099 | 0.0191 | 50 | 0.0013 | 0.0019 | 0.0017 | 0.0000 | 0.0500 |
| 20 | 0.0040 | 0.0150 | 60 | 0.0018 | 0.0027 | 0.0036 | 0.0000 | 0.1500 |
| 30 & Above | 0.0000 | 0.0000 | 70 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 |
| **General Plans 1, 2, 4, 5 & 7 Female Members** | | | | | | | | |
| 0 | 0.1200 | 0.0000 | 20 | 0.0003 | 0.0004 | 0.0002 | 0.0000 | 0.0000 |
| 5 | 0.0285 | 0.0348 | 30 | 0.0003 | 0.0004 | 0.0002 | 0.0000 | 0.0000 |
| 10 | 0.0153 | 0.0212 | 40 | 0.0006 | 0.0008 | 0.0006 | 0.0000 | 0.0000 |
| 15 | 0.0088 | 0.0172 | 50 | 0.0020 | 0.0029 | 0.0013 | 0.0000 | 0.0400 |
| 20 | 0.0040 | 0.0150 | 60 | 0.0032 | 0.0048 | 0.0030 | 0.0000 | 0.1500 |
| 30 & Above | 0.0000 | 0.0000 | 70 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 |
| **General Plan 3 Male Members** | | | | | | | | |
| 0 | 0.1300 | 0.0000 | 20 | 0.0000 | 0.0000 | 0.0003 | 0.0000 | 0.0000 |
| 5 | 0.0285 | 0.0348 | 30 | 0.0000 | 0.0000 | 0.0004 | 0.0000 | 0.0000 |
| 10 | 0.0172 | 0.0238 | 40 | 0.0000 | 0.0000 | 0.0009 | 0.0000 | 0.0000 |
| 15 | 0.0099 | 0.0191 | 50 | 0.0000 | 0.0000 | 0.0017 | 0.0000 | 0.0000 |
| 20 | 0.0040 | 0.0150 | 60 | 0.0000 | 0.0000 | 0.0036 | 0.0000 | 0.0300 |
| 30 & Above | 0.0000 | 0.0000 | 70 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 |
| **General Plan 3 Female Members** | | | | | | | | |
| 0 | 0.1200 | 0.0000 | 20 | 0.0000 | 0.0000 | 0.0002 | 0.0000 | 0.0000 |
| 5 | 0.0285 | 0.0348 | 30 | 0.0000 | 0.0000 | 0.0002 | 0.0000 | 0.0000 |
| 10 | 0.0153 | 0.0212 | 40 | 0.0000 | 0.0000 | 0.0006 | 0.0000 | 0.0000 |
| 15 | 0.0088 | 0.0172 | 50 | 0.0000 | 0.0000 | 0.0013 | 0.0000 | 0.0000 |
| 20 | 0.0040 | 0.0150 | 60 | 0.0000 | 0.0000 | 0.0030 | 0.0000 | 0.0400 |
| 30 & Above | 0.0000 | 0.0000 | 70 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 |
| **Safety and Probation Plans 1, 2 & 4 Male Members** | | | | | | | | |
| 0 | 0.0700 | 0.0000 | 20 | 0.0000 | 0.0017 | 0.0003 | 0.0010 | 0.0000 |
| 5 | 0.0082 | 0.0151 | 30 | 0.0000 | 0.0020 | 0.0004 | 0.0010 | 0.0000 |
| 10 | 0.0050 | 0.0105 | 40 | 0.0000 | 0.0031 | 0.0009 | 0.0010 | 0.0000 |
| 15 | 0.0016 | 0.0094 | 50 | 0.0000 | 0.0058 | 0.0017 | 0.0010 | 0.1500 |
| 20 & Above | 0.0000 | 0.0000 | 60 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 |
| **Safety and Probation Plans1, 2 & 4 Female Members** | | | | | | | | |
| 0 | 0.0700 | 0.0000 | 20 | 0.0000 | 0.0017 | 0.0002 | 0.0010 | 0.0000 |
| 5 | 0.0082 | 0.0151 | 30 | 0.0000 | 0.0020 | 0.0002 | 0.0010 | 0.0000 |
| 10 | 0.0050 | 0.0105 | 40 | 0.0000 | 0.0031 | 0.0006 | 0.0010 | 0.0000 |
| 15 | 0.0016 | 0.0094 | 50 | 0.0000 | 0.0058 | 0.0013 | 0.0010 | 0.1500 |
| 20 & Above | 0.0000 | 0.0000 | 60 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 |
| **Safety and Probation Plan 5, 6 & 7 Male Members** | | | | | | | | |
| 0 | 0.0700 | 0.0000 | 20 | 0.0000 | 0.0017 | 0.0003 | 0.0010 | 0.0000 |
| 5 | 0.0082 | 0.0151 | 30 | 0.0000 | 0.0020 | 0.0004 | 0.0010 | 0.0000 |
| 10 | 0.0050 | 0.0105 | 40 | 0.0000 | 0.0031 | 0.0009 | 0.0010 | 0.0000 |
| 15 | 0.0016 | 0.0094 | 50 | 0.0000 | 0.0058 | 0.0017 | 0.0010 | 0.0500 |
| 20 & Above | 0.0000 | 0.0000 | 60 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 |
| **Safety and Probation Plans 5, 6 & 7 Female Members** | | | | | | | | |
| 0 | 0.0700 | 0.0000 | 20 | 0.0000 | 0.0017 | 0.0002 | 0.0010 | 0.0000 |
| 5 | 0.0082 | 0.0151 | 30 | 0.0000 | 0.0020 | 0.0002 | 0.0010 | 0.0000 |
| 10 | 0.0050 | 0.0105 | 40 | 0.0000 | 0.0031 | 0.0006 | 0.0010 | 0.0000 |
| 15 | 0.0016 | 0.0094 | 50 | 0.0000 | 0.0058 | 0.0013 | 0.0010 | 0.0500 |
| 20 & Above | 0.0000 | 0.0000 | 60 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 |

## SOLVENCY TEST

*(Dollars in Thousands)*

| | | Actuarial Accrued Liabilities for | | | Portion of Actuarial Accrued Liabilities Covered by Assets | | |
|---|---|---|---|---|---|---|---|
| Actuarial Valuation Date (as of June 30) | Valuation Assets | Active Member Contributions (A) | Retirees and Beneficiaries[1] (B) | Active Members (Employer Financed Portion) (C) | (A) | (B) | (C) |
| 2007 | $ 1,976,731 | $ 359,484 | $1,348,013 | $ 848,007 | 100% | 100% | 32% |
| 2008 | 2,218,937 | 385,300 | 1,550,875 | 870,047 | 100% | 100% | 32% |
| 2009 | 1,909,679 | 412,147 | 1,670,547 | 905,018 | 100% | 90% | 0% |
| 2010 | 2,179,076 | 449,355 | 1,745,146 | 903,952 | 100% | 99% | 0% |
| 2011 | 2,405,140 | 485,126 | 1,866,219 | 895,382 | 100% | 100% | 6% |
| 2012 | 2,480,271 | 498,569 | 2,022,791 | 921,193 | 100% | 98% | 0% |
| 2013 | 2,618,639 | 534,276 | 2,157,590 | 880,884 | 100% | 97% | 0% |
| 2014 | 2,993,187 | 584,080 | 2,285,328 | 927,634 | 100% | 100% | 13% |
| 2015 | 3,343,550 | 628,287 | 2,451,544 | 965,955 | 100% | 100% | 27% |
| 2016 | 3,624,726 | 679,246 | 2,635,409 | 1,047,641 | 100% | 100% | 30% |

(1) Includes inactive members.

## SCHEDULE OF FUNDING PROGRESS

*(Dollars in Thousands)*

| | (a) | (b) | (b-a) | (a/b) | (c) | [(b-a)/c] |
|---|---|---|---|---|---|---|
| Actuarial Valuation Date (as of June 30) | Actuarial Value of Valuation Assets | Actuarial Accrued Liability | Unfunded Actuarial Accrued Liability | Funded Ratio | Covered Payroll [1] | UAAL as a Percentage of Covered Payroll |
| 2007 | $ 1,976,731 | $ 2,555,504 | $ 578,773 | 77.4% | $ 400,655 | 144.46% |
| 2008 | 2,218,937 | 2,806,222 | 587,285 | 79.1% | 411,293 | 142.79% |
| 2009 | 1,909,679 | 2,987,712 | 1,078,033 | 63.9% | 433,668 | 248.58% |
| 2010 | 2,179,076 | 3,098,453 | 919,377 | 70.3% | 434,295 | 211.69% |
| 2011 | 2,405,140 | 3,246,727 | 841,587 | 74.1% | 427,041 | 197.07% |
| 2012 | 2,480,271 | 3,442,553 | 926,282 | 72.0% | 418,916 | 229.71% |
| 2013 | 2,618,639 | 3,572,750 | 954,111 | 73.3% | 404,361 | 235.96% |
| 2014 | 2,993,187 | 3,797,042 | 803,855 | 78.8% | 416,274 | 193.11% |
| 2015 | 3,343,550 | 4,045,786 | 702,236 | 82.6% | 439,018 | 159.96% |
| 2016 | 3,624,726 | 4,362,296 | 737,570 | 83.1% | 472,385 | 156.14% |

(1) In accordance with GASB Statement No. 82, Covered Employee Payroll is the payroll on which contributions are based. SamCERA has elected early application of this Statement and updated the covered payroll column to show pensionable payroll for the last ten fiscal years.

## MEMBER CONTRIBUTION RATES: GENERAL

| | | 7/1/2016 | 7/1/2015 | Change |
|---|---|---|---|---|
| **General Members (No COLA share) – County and Court[1]** | | | | |
| Plan 1 & Plan 2 | Age 25 | n/a | 9.34% | n/a |
| | 35 | n/a | 10.60% | n/a |
| | 45 | n/a | 12.13% | n/a |
| Plan 4 | Age 25 | n/a | 9.10% | n/a |
| | 35 | n/a | 10.31% | n/a |
| | 45 | n/a | 11.74% | n/a |
| **General Members (50% COLA share) – County and Court[2]** | | | | |
| Plan 1 | Age 25 | 11.82% | 11.82% | 0.00% |
| | 35 | 13.58% | 13.58% | 0.00% |
| | 45 | 15.71% | 15.71% | 0.00% |
| Plan 2 | Age 25 | 11.47% | 11.47% | 0.00% |
| | 35 | 13.16% | 13.16% | 0.00% |
| | 45 | 15.20% | 15.20% | 0.00% |
| Plan 4 | Age 25 | 10.50% | 10.50% | 0.00% |
| | 35 | 11.99% | 11.99% | 0.00% |
| | 45 | 13.75% | 13.75% | 0.00% |
| Plan 5 | Age 25 | 6.40% | 6.40% | 0.00% |
| | 35 | 7.68% | 7.68% | 0.00% |
| | 45 | 9.22% | 9.22% | 0.00% |
| Plan 7 [3] | All Ages | 7.91% | 7.91% | 0.00% |
| **General Members – San Mateo County Mosquito and Vector Control District (No COLA share) [4]** | | | | |
| Plan 1 & Plan 2 | Age 25 | 6.34% | 6.34% | 0.00% |
| | 35 | 7.60% | 7.60% | 0.00% |
| | 45 | 9.13% | 9.13% | 0.00% |
| Plan 4 | Age 25 | 6.10% | 6.10% | 0.00% |
| | 35 | 7.31% | 7.31% | 0.00% |
| | 45 | 8.74% | 8.74% | 0.00% |
| Plan 7 [3] | All Ages | 7.35% | 7.35% | 0.00% |

(1) In fiscal year 2017 99.6% of members in a contributory plan pay 50% of COLA.

(2) Rates for Plans 1, 2, and 4 include 3% Cost Share and 50% COLA Share. The 50% COLA Share is implemented for all bargaining units and management in fiscal year 2017 except for Court Interpreters and the County Board of Supervisors.

(3) Rates for non Deputy Sheriff in Plans 1, 2, and 4 include 5% Cost Share. Rates for Plan 5 include 4% Cost Share. Actual Cost Share for Deputy Sheriffs varies as follows: members below age 45 with less than 5 years of service pay 3%, between 5 and 15 years of service 3.5%, and over 15 years of service 4.5%. Members at age 45 and above, regardless of years of service, pay 4.5% Cost Share. Rates for Plans 1, 2, and 4 have zero COLA Share. Rates for Plans 5 and 6 include 50% COLA Cost.

(4) Members in this category do not pay toward Cost Share and COLA Share.

## MEMBER CONTRIBUTION RATES (CONTINUED): SAFETY AND PROBATION

| | | 7/1/2016 | 7/1/2015 | Change |
|---|---|---|---|---|
| **Safety Non-Managers** [5] [6] | | | | |
| Plan 1 & Pan 2 | Age 25 | 18.62% | 13.62% | 5.00% |
| | 35 | 21.35% | 15.35% | 6.00% |
| | 45 | 24.26% | 17.19% | 7.07% |
| Plan 4 | Age 25 | 16.11% | 13.29% | 2.82% |
| | 35 | 18.33% | 14.95% | 3.38% |
| | 45 | 21.52% | 16.52% | 5.00% |
| Plan 5 | Age 25 | 14.84% | 14.84% | 0.00% |
| | 35 | 17.01% | 17.01% | 0.00% |
| | 45 | 19.06% | 19.06% | 0.00% |
| Plan 6 | Age 25 | 10.62% | 10.62% | 0.00% |
| | 35 | 12.75% | 12.75% | 0.00% |
| | 45 | 14.76% | 14.76% | 0.00% |
| Plan [3] | All Ages | 13.59% | 13.59% | 0.00% |
| **Safety Managers (50% COLA share)** [7] | | | | |
| Plan 1 & Plan 2 | Age 25 | 18.62% | 18.62% | 0.00% |
| | 35 | 21.35% | 21.35% | 0.00% |
| | 45 | 24.26% | 24.26% | 0.00% |
| Plan 4 | Age 25 | 16.11% | 16.11% | 0.00% |
| | 35 | 18.33% | 18.33% | 0.00% |
| | 45 | 20.43% | 20.43% | 0.00% |
| Plan 5 | Age 25 | 14.84% | 14.84% | 0.00% |
| | 35 | 17.01% | 17.01% | 0.00% |
| | 45 | 19.06% | 19.06% | 0.00% |
| Plan 6 | Age 25 | 10.62% | 10.62% | 0.00% |
| | 35 | 12.75% | 12.75% | 0.00% |
| | 45 | 14.76% | 14.76% | 0.00% |
| Plan 7 [3] | All Ages | 13.59% | 13.59% | 0.00% |
| **Probation Non-Managers** [8] | | | | |
| Plan 1 & Plan 2 | Age 25 | 16.78% | 12.73% | 4.05% |
| | 35 | 19.44% | 14.57% | 4.87% |
| | 45 | 22.27% | 16.54% | 5.73% |
| Plan 4 | Age 25 | 14.55% | 11.51% | 3.04% |
| | 35 | 16.76% | 13.11% | 3.65% |
| | 45 | 18.85% | 14.62% | 4.23% |
| Plan 5 | Age 25 | 14.35% | 12.69% | 1.66% |
| | 35 | 16.53% | 14.54% | 1.99% |
| | 45 | 18.58% | 16.27% | 2.31% |
| Plan 6 | Age 25 | 10.50% | 8.84% | 1.66% |
| | 35 | 12.60% | 10.61% | 1.99% |
| | 45 | 14.59% | 12.28% | 2.31% |
| Plan 7 [3] | All Ages | 12.91% | 12.91% | 0.00% |
| **Probation Managers (50% COLA share)** [9] | | | | |
| Plan 1 & Plan 2 | Age 25 | 17.12% | 17.12% | 0.00% |
| | 35 | 19.85% | 19.85% | 0.00% |
| | 45 | 22.76% | 22.76% | 0.00% |
| Plan 4 | Age 25 | 14.61% | 14.61% | 0.00% |
| | 35 | 16.83% | 16.83% | 0.00% |
| | 45 | 18.93% | 18.93% | 0.00% |
| Plan 5 | Age 25 | 14.34% | 14.34% | 0.00% |
| | 35 | 16.51% | 16.51% | 0.00% |
| | 45 | 18.56% | 18.56% | 0.00% |
| Plan 6 | Age 25 | 10.62% | 10.62% | 0.00% |
| | 35 | 12.75% | 12.75% | 0.00% |
| | 45 | 14.76% | 14.76% | 0.00% |
| Plan 7 [3] | All Ages | 12.91% | 12.91% | 0.00% |

[3] Rates for non Deputy Sheriff in Plans 1, 2, and 4 include 5% Cost Share. Rates for Plan 5 include 4% Cost Share. Actual Cost Share for Deputy Sheriffs varies as follows: members below age 45 with less than 5 years of service pay 3%, between 5 and 15 years of service 3.5%, and over 15 years of service 4.5%. Members at age 45 and above, regardless of years of service, pay 4.5% Cost Share. Rates for Plans 1, 2, and 4 have zero COLA Share. Rates for Plans 5 and 6 include 50% COLA Cost.

[5] Rates for non Deputy Sheriff in Plans 1, 2, and 4 include 5% Cost Share. Rates for Plan 5 include 4% Cost Share. Actual Cost Share for Deputy Sheriffs varies as follows: members below age 45 with less than 5 years of service pay 3%, between 5 and 15 years of service 3.5%, and over 15 years of service 4.5%. Members at age 45 and above, regardless of years of service, pay 4.5% Cost Share.

[6] All plans include 50% COLA cost.

[7] Rates for Plans 1, 2, 4 and 5 include 5% Cost Share and 50% COLA Share. Rates for Plan 6 include zero Cost Share and 50% COLA Share.

[8] Rates for Plans 1, 2, 4, and 5 include 3.5% Cost Share. Rates in Plan 6 have zero Cost Share. Fiscal year 2017 rates for all plans include 50% COLA Share. Fiscal year 2016 rates for Plans 1, 2, and 4 include 25% COLA Cost, and rates for Plans 5 and 6 50% COLA Cost.

[9] Rates for Plans 1, 2, 4, and 5 include 3.5% Cost Share. Rates in Plans 6 and 7 have zero Cost Share. Effective 7/5/15, all members in this category pay 50% COLA Cost.

## HISTORY OF EMPLOYER STATUTORY CONTRIBUTION RATES(1) - GENERAL

| Valuation Year | General Members (County & Court) | | | General Members (Nurses & UAPD) (3) | | | General Members (SMCM&VCD) (2) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Normal | UAAL | Total | Normal | UAAL | Total | Normal | UAAL | Total |
| **2007** | 10.19% | 9.46% | 19.65% | Same as County General | | | 8.50% | 7.76% | 16.26% |
| **2008** | 10.16% | 9.81% | 19.97% | Same as County General | | | 8.55% | 8.04% | 16.59% |
| **2009** | 10.11% | 18.40% | 28.51% | Same as County General | | | 8.25% | 15.09% | 23.34% |
| **2010** | 10.05% | 16.35% | 26.40% | Same as County General | | | 11.70% | 16.35% | 28.05% |
| **2011** | 9.71% | 16.41% | 26.12% | 8.70% | 16.41% | 25.11% | 11.97% | 16.41% | 28.38% |
| **2012** | 9.98% | 20.17% | 30.15% | 8.96% | 20.17% | 29.13% | 11.68% | 20.17% | 31.85% |
| **2013** | 9.74% | 22.35% | 32.09% | 8.92% | 22.35% | 31.27% | 11.70% | 22.35% | 34.05% |
| **2014** | 10.12% | 20.27% | 30.39% | 9.14% | 20.21% | 29.35% | 11.72% | 21.16% | 32.88% |

| | General Members (County) (5) | | | General Members (Court) (5) | | | General Members (SMCM&VCD) (2) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Normal | UAAL | Total | Normal | UAAL | Total | Normal | UAAL | Total |
| **2015 (7)** | 8.67% | 18.37% | 27.04% | 9.04% | 19.54% | 28.58% | 11.75% | 19.54% | 31.29% |
| **2016** | 8.91% | 19.81% | 28.72% | 9.14% | 21.30% | 30.44% | 12.02% | 12.50% | 24.52% |

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

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

(3)Beginning with the 2011 actuarial valuation, Plans 1, 2, and 4 members of the California Nurses Association contribute 25% of the cost of COLA, in addition to current member rates and cost sharing. Beginning with the 2013 actuarial valuation, Plans 1, 2, and 4 members of the Union of American Physicians and Dentists contribute 25% of the cost of COLA, in addition to current member rates and cost sharing. In 2011 and 2012 these members contributed the same as County General members.

(5) Beginning with the 2015 actuarial valuation, Plans 1, 2, and 4 members of the Union of American Physicians and Dentists or the California Nurses Association contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. As a result of having similar COLA share to other County groups, those members have been aggregated with all County groups.

(7) Effective with the first pay period after June 30, 2016, all members (except those with benefits negotiated under Court Interpreters and Board of Supervisors bargaining units, and SMCM&VCD members) contribute 50% of the cost of COLA. In addition to current member rates and cost sharing. Additionally, pick-up contributions are discontinued for members with benefits negotiated under the Probation and Detention Association bargaining unit. Contribution rates for the 2015 valuation year reflect these changes.

## HISTORY OF EMPLOYER STATUTORY CONTRIBUTION RATES[1] - SAFETY AND PROBATION

| Valuation Year | Safety Members | | | Probation Members (excluding Managers) [4] | | | Probation Members (Managers) [6] | | |
|---|---|---|---|---|---|---|---|---|---|
| | Normal | UAAL | Total | Normal | UAAL | Total | Normal | UAAL | Total |
| **2007** | 19.94% | 29.32% | 49.26% | 20.83% | 14.06% | 34.89% | Same as Probation (excluding Managers) | | |
| **2008** | 19.32% | 27.31% | 46.63% | 20.05% | 12.81% | 32.86% | Same as Probation (excluding Managers) | | |
| **2009** | 19.21% | 51.83% | 71.04% | 19.92% | 23.84% | 43.76% | Same as Probation (excluding Managers) | | |
| **2010** | 19.01% | 44.50% | 63.51% | 19.85% | 21.62% | 41.47% | Same as Probation (excluding Managers) | | |
| **2011** | 18.87% | 41.75% | 60.62% | 19.50% | 22.30% | 41.80% | Same as Probation (excluding Managers) | | |
| **2012** | 19.05% | 48.51% | 67.56% | 19.99% | 26.71% | 46.70% | Same as Probation (excluding Managers) | | |
| **2013** | 18.51% | 50.33% | 68.84% | 18.33% | 29.32% | 47.65% | 17.85% | 29.32% | 47.17% |
| **2014** | 18.99% | 46.48% | 65.47% | 18.92% | 28.09% | 47.01% | 18.79% | 28.09% | 46.88% |
| **2015 [7]** | 15.14% | 43.58% | 58.72% | 15.31% | 26.77% | 42.08% | 17.23% | 26.77% | 44.00% |
| **2016** | 16.31% | 44.25% | 60.56% | 15.94% | 31.72% | 47.66% | Same as Probation (excluding Managers) | | |

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

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

[6] Beginning with the 2015 actuarial valuation, Probation members (Managers) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing.

[7] Effective with the first pay period after June 30, 2016, all members (except those with benefits negotiated under Court Interpreters and Board of Supervisors bargaining units, and SMCM&VCD members) contribute 50% of the cost of COLA. In addition to current member rates and cost sharing. Additionally, pick-up contributions are discontinued for members with benefits negotiated under the Probation and Detention Association bargaining unit. Contribution rates for the 2015 valuation year reflect these changes.

## DEMOGRAPHIC ACTIVITY OF RETIREES AND BENEFICIARIES

*(Dollars in Thousands)*

| | | Added to Rolls[1] | | Removed from Rolls | | Rolls End of Year | | |
|---|---|---|---|---|---|---|---|---|
| Fiscal Year Ended June 30 | No. | Annual Benefits | No. | Annual Benefits | No. | Total Retiree Payroll | % Increase in Payroll | Average Monthly Benefits |
| **2007** | 155 | $ N/A | 74 | $ N/A | 3,694 | $ 98,790 | 8.6 | $ 2,229 |
| **2008** | 218 | N/A | 70 | N/A | 3,842 | 109,616 | 11.0 | 2,378 |
| **2009** | 159 | 12,717 | 66 | 3,281 | 3,935 | 119,052 | 8.6 | 2,521 |
| **2010** | 163 | 9,076 | 96 | 3,240 | 4,002 | 124,888 | 4.9 | 2,601 |
| **2011** [2] | 209 | 12,703 | 64 | 2,916 | 4,147 | 134,675 | 7.8 | 2,706 |
| **2012** | 218 | 14,379 | 90 | 4,209 | 4,275 | 144,845 | 7.6 | 2,823 |
| **2013** | 186 | 13,024 | 63 | 3,095 | 4,398 | 154,774 | 6.9 | 2,933 |
| **2014** | 203 | 12,474 | 83 | 3,479 | 4,518 | 163,769 | 5.8 | 3,021 |
| **2015** | 213 | 16,290 | 93 | 4,179 | 4,638 | 175,880 | 7.4 | 3,160 |
| **2016** | 233 | 15,347 | 123 | 5,030 | 4,748 | 186,197 | 5.9 | 3,268 |

N/A - not applicable

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

[2] Revised figures from the June 30, 2011 valuation.

## ACTUARIAL ANALYSIS OF FINANCIAL EXPERIENCE

*(Dollars in Thousands)*

| | Change In Unfunded Actuarial Accrued Liability (UAAL) | | | | |
|---|---|---|---|---|---|
| **Summary of (Gains) / Losses** | **2016** | **2015** | **2014** | **2013** | **2012** |
| UAAL, beginning of year | $ 702,236 | $ 803,855 | $ 954,111 | $ 962,282 | $ 841,587 |
| Expected change in UAAL | (96,454) | (76,018) | (88,525) | (34,535) | (39,621) |
| Salary (gains) losses | 24,707 | 39,129 | (15,884) | (59,411) | (45,526) |
| Retiree COLA greater (less) than expected | (6,275) | 3,648 | (15,603) | (8,606) | (11,756) |
| Asset (gains) losses | 27,821 | (74,068) | (88,035) | 93,999 | 171,268 |
| Change due to assumption changes | 89,364 | - | 59,345 | - | 36,443 |
| Miscellaneous experience | (3,829) | 5,690 | (1,554) | 382 | 9,887 |
| **UAAL, end of year** | **$ 737,570** | **$ 702,236** | **$ 803,855** | **$ 954,111** | **$ 962,282** |

## SUMMARY OF ACTIVE MEMBER VALUATION DATA

| Valuation Date June 30 | No. of Members | | Annual Salary | Average Annual Salary | % Change Average Salary |
|---|---|---|---|---|---|
| **2007** | General | 4,767 | $ 346,319,017 | $ 72,649 | 7.1% |
| | Safety | 443 | 45,386,411 | 102,452 | 5.9% |
| | Probation | 329 | 24,364,268 | 74,056 | 5.3% |
| | **Total** | **5,539** | **416,069,696** | **75,116** | **6.9%** |
| **2008** | General | 4,743 | 353,518,525 | 74,535 | 2.6% |
| | Safety | 432 | 46,326,906 | 107,238 | 4.7% |
| | Probation | 325 | 24,741,003 | 76,126 | 2.8% |
| | **Total** | **5,500** | **424,586,434** | **77,198** | **2.8%** |
| **2009** | General | 4,777 | 370,760,830 | 77,614 | 4.1% |
| | Safety | 436 | 48,120,081 | 110,367 | 2.9% |
| | Probation | 330 | 26,270,802 | 79,608 | 4.6% |
| | **Total** | **5,543** | **445,151,713** | **80,309** | **4.0%** |
| **2010** | General | 4,609 | 363,305,740 | 78,825 | 1.6% |
| | Safety | 425 | 48,576,912 | 114,299 | 3.6% |
| | Probation | 313 | 25,247,595 | 80,663 | 1.3% |
| | **Total** | **5,347** | **437,130,247** | **81,752** | **1.8%** |
| **2011** | General | 4,494 | 355,876,715 | 79,189 | 0.5% |
| | Safety | 446 | 52,073,940 | 116,758 | 2.2% |
| | Probation | 305 | 24,591,392 | 80,628 | 0.0% |
| | **Total** | **5,245** | **432,542,047** | **82,468** | **0.9%** |
| **2012** | General | 4,361 | 351,965,689 | 80,708 | 1.9% |
| | Safety | 435 | 51,129,267 | 117,539 | 0.7% |
| | Probation | 299 | 24,554,583 | 82,122 | 1.9% |
| | **Total** | **5,095** | **427,649,539** | **83,935** | **1.8%** |
| **2013** | General | 4,173 | 338,595,633 | 81,140 | 0.5% |
| | Safety | 452 | 52,233,510 | 115,561 | -1.7% |
| | Probation | 292 | 23,722,165 | 81,240 | -1.1% |
| | **Total** | **4,917** | **414,551,308** | **84,310** | **0.4%** |
| **2014** | General | 4,272 | 352,918,558 | 82,612 | 1.8% |
| | Safety | 452 | 52,974,475 | 117,200 | 1.4% |
| | Probation | 280 | 23,514,343 | 83,980 | 3.4% |
| | **Total** | **5,004** | **429,407,376** | **85,813** | **1.8%** |
| **2015** | General | 4,334 | 382,303,295 | 88,210 | 6.8% |
| | Safety | 479 | 55,917,864 | 116,739 | -0.4% |
| | Probation | 282 | 24,418,977 | 86,592 | 3.1% |
| | **Total** | **5,095** | **462,640,136** | **90,803** | **5.8%** |
| **2016** | General | 4,421 | 408,191,518 | 92,330 | 4.7% |
| | Safety | 495 | 61,564,028 | 124,372 | 6.5% |
| | Probation | 271 | 24,034,819 | 88,689 | 2.4% |
| | **Total** | **5,187** | **493,790,365** | **95,198** | **4.8%** |

## SCHEDULE OF AVERAGE MONTHLY SALARY OF ACTIVE MEMBERS

*(By Plan and Membership Type)*

| | | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|---|
| GENERAL | Plan 1 | $9,945 | $9,235 | $8,617 | $8,104 | $7,843 |
| | Plan 2 | 8,636 | 8,186 | 7,584 | 7,355 | 7,340 |
| | Plan 3 | 7,173 | 6,747 | 6,300 | 6,254 | 6,138 |
| | Plan 4 | 7,807 | 7,386 | 6,873 | 6,662 | 6,580 |
| | Plan 5 | 8,485 | 7,735 | 6,912 | 6,418 | 5,799 |
| | Plan 7 | 6,714 | 6,315 | 5,721 | 5,433 | N/A |
| | Average Monthly Salary - General Plan | 7,694 | 7,351 | 6,884 | 6,762 | 6,726 |
| SAFETY | Plan 1 | 15,810 | 14,712 | 14,091 | 13,185 | 12,624 |
| | Plan 2 | 12,505 | 11,545 | 11,191 | 10,935 | 10,892 |
| | Plan 4 | 10,729 | 9,919 | 9,581 | 9,402 | 9,351 |
| | Plan 5 | 9,940 | 9,145 | 8,958 | 8,699 | 9,667 |
| | Plan 6 | 16,793 | 16,010 | 14,381 | 12,374 | N/A |
| | Plan 7 | 7,538 | 6,701 | 7,011 | 6,695 | N/A |
| | Average Monthly Salary - Safety Plan | 10,364 | 9,728 | 9,767 | 9,630 | 9,795 |
| PROBATION | Plan 1 | 7,261 | 7,038 | 6,874 | 6,618 | 6,618 |
| | Plan 2 | 8,349 | 8,012 | 7,699 | 7,445 | 7,454 |
| | Plan 4 | 7,454 | 7,267 | 6,922 | 6,622 | 6,686 |
| | Plan 5 | 6,429 | 6,106 | 5,916 | 5,242 | 4,949 |
| | Plan 6 | 6,259 | 5,739 | 5,216 | 4,808 | 5,239 |
| | Plan 7 | 5,962 | 5,684 | 5,807 | 7,742 | 5,239 |
| | Average Monthly Salary - Probation Plan | 7,391 | 7,216 | 6,998 | 6,770 | 6,844 |
| | **Average Monthly Salary (All Plans)** | **$7,933** | **$7,567** | **$7,151** | **$7,026** | **$6,995** |

## PARTICIPATING EMPLOYERS AND ACTIVE MEMBERS

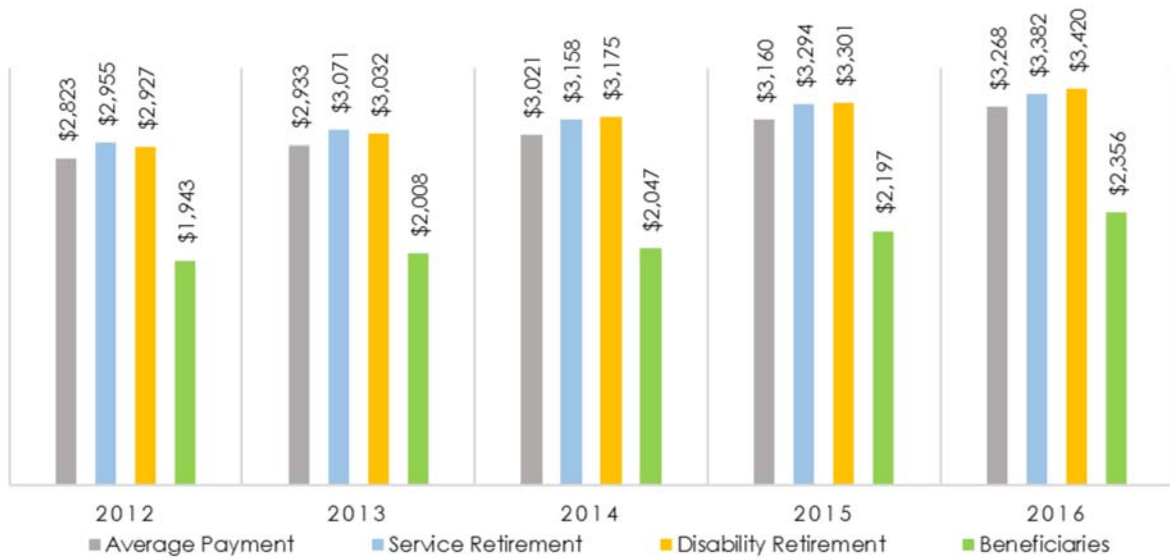
| | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|
| COUNTY OF SAN MATEO | | | | | |
| General Members | 4,170 | 4,092 | 4,014 | 3,906 | 4,078 |
| Safety Members | 495 | 479 | 452 | 452 | 435 |
| Probation Members | 271 | 282 | 280 | 292 | 299 |
| Subtotal | 4,936 | 4,853 | 4,746 | 4,650 | 4,812 |
| SAN MATEO COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT | | | | | |
| General Members | 20 | 20 | 19 | 18 | 15 |
| SAN MATEO COUNTY SUPERIOR COURT | | | | | |
| General Members | 231 | 222 | 239 | 249 | 268 |
| **Total Active Membership** | **5,187** | **5,095** | **5,004** | **4,917** | **5,095** |

## SUMMARY OF RETIRED AND INACTIVE MEMBER BENEFITS

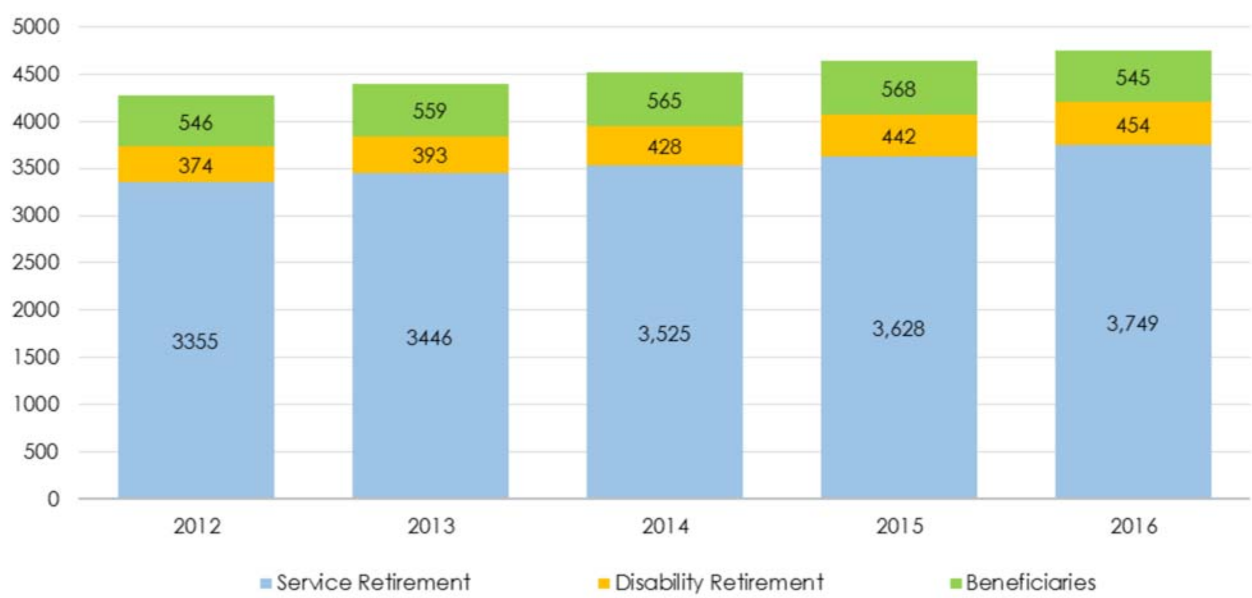
| | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|
| SERVICE RETIREMENT | | | | | |
| Number | 3,749 | 3,628 | 3,525 | 3,446 | 3,355 |
| **Annual Benfefits** | | | | | |
| Basic Only | $119,212,000 | $112,557,000 | $105,556,000 | $100,411,000 | $ 94,234,000 |
| COLA | 32,949,000 | 30,835,000 | 28,027,000 | 26,594,000 | 24,748,000 |
| Total | $152,161,000 | $143,392,000 | $133,583,000 | $127,005,000 | $118,982,000 |
| Average Monthly Payment | $ 3,382 | $ 3,294 | $ 3,158 | $ 3,071 | $ 2,955 |
| DISABILITY RETIREMENT | | | | | |
| Number | 454 | 442 | 428 | 393 | 374 |
| **Annual Benefits** | | | | | |
| Basic Only | $ 14,040,000 | $ 13,303,000 | $ 12,508,000 | $ 10,733,000 | $ 9,909,000 |
| COLA | 4,590,000 | 4,208,000 | 3,800,000 | 3,564,000 | 3,225,000 |
| Total | $ 18,630,000 | $ 17,511,000 | $ 16,308,000 | $ 14,297,000 | $ 13,134,000 |
| Average Monthly Payment | $ 3,420 | $ 3,301 | $ 3,175 | $ 3,032 | $ 2,927 |
| BENEFICIARIES | | | | | |
| Number | 545 | 568 | 565 | 559 | 546 |
| **Annual Benefits** | | | | | |
| Basic Only | $ 8,944,000 | $ 8,610,000 | $ 7,986,000 | $ 7,668,000 | $ 7,235,000 |
| COLA | 6,462,000 | 6,367,000 | 5,892,000 | 5,804,000 | 5,494,000 |
| Total | $ 15,406,000 | $ 14,977,000 | $ 13,878,000 | $ 13,472,000 | $ 12,729,000 |
| Average Monthly Payment | $ 2,356 | $ 2,197 | $ 2,047 | $ 2,008 | $ 1,943 |
| TOTAL RETIRED MEMBERS | | | | | |
| Number | 4,748 | 4,638 | 4,518 | 4,398 | 4,275 |
| **Annual Benefits** | | | | | |
| Basic Only | $ 142,196,000 | $134,470,000 | $126,050,000 | $118,812,000 | $111,378,000 |
| COLA | 44,001,000 | 41,410,000 | 37,719,000 | 35,962,000 | 33,467,000 |
| Total | $ 186,197,000 | $175,880,000 | $163,769,000 | $154,774,000 | $144,845,000 |
| Average Monthly Payment | $ 3,268 | $ 3,160 | $ 3,021 | $ 2,933 | $ 2,823 |
| INACTIVE MEMBERS | 1,486 | 1,384 | 1,304 | 1,306 | 1,212 |

The data in the table above originates from PensionGold, SamCERA's retirement benefit administration system.

## AVERAGE MONTHLY RETIREE BENEFIT PAYMENT




## NUMBER OF RETIREES BY CATEGORY



# STATISTICAL SECTION

## THE STATISTICAL SECTION

### Introduction

This section provides detailed information for a more thorough understanding of the financial statements, note disclosures, and required supplementary information. Most of the information in this section is compiled by SamCERA's actuary based on information from the pension administration system.

### CHANGE IN FIDUCIARY NET POSITION

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

| | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|
| **Additions** | | | | | |
| Employer Contributions | $191,094 | $180,704 | $202,877 | $144,308 | $150,950 |
| Member Contributions | 56,069 | 48,012 | 46,594 | 55,408 | 49,687 |
| Total Contributions | **247,163** | **228,716** | **249,471** | **199,716** | **200,637** |
| Investment Income (Loss), Net of Expenses | 24,112 | 111,320 | 482,050 | 326,983 | (11,024) |
| Securities Lending Income | 278 | 310 | 435 | 622 | 721 |
| Miscellaneous Additions (Deductions) | 4,910 | - | 179 | 160 | 29 |
| Total Additions | **276,463** | **340,346** | **732,135** | **527,481** | **190,363** |
| **Deductions** | | | | | |
| Retiree Benefits | 179,498 | 168,109 | 159,342 | 149,266 | 139,208 |
| Member Refunds | 3,366 | 3,357 | 3,214 | 5,750 | 3,627 |
| Administrative Expenses | 5,962 | 5,350 | 4,914 | 4,260 | 4,708 |
| Information Technology Expenses (1) | 714 | 629 | 731 | 654 | 325 |
| Other Expenses | 11 | 119 | 65 | 29 | (33) |
| Total Deductions | **189,551** | **177,564** | **168,266** | **159,959** | **147,835** |
| **Change in Fiduciary Net Position** | **$86,912** | **$162,782** | **$563,869** | **$367,522** | **$42,528** |

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

## Change in Fiduciary Net Position (Continued)

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

| | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|
| **Additions** | | | | | |
| Employer Contributions | $150,475 | $106,265 | $106,123 | $105,340 | $100,550 |
| Member Contributions | 49,013 | 50,319 | 50,372 | 60,111 | 42,696 |
| Total Contributions | **199,488** | **156,584** | **156,495** | **165,451** | **143,246** |
| Investment Income (Loss), Net of Expenses | 437,654 | 195,412 | (457,309) | (177,923) | 298,260 |
| Securities Lending Income | 530 | 743 | 1,631 | 1,699 | 0 |
| Miscellaneous Additions | 73 | 41 | (16) | 181 | 26 |
| Total Additions (Deductions) | **637,745** | **352,780** | **(299,199)** | **(10,592)** | **441,532** |
| **Deductions** | | | | | |
| Retiree Benefits | 129,835 | 122,141 | 113,991 | 103,970 | 94,788 |
| Member Refunds | 2,474 | 2,736 | 2,795 | 3,075 | 2,244 |
| Administrative Expenses | 3,547 | 3,373 | 3,287 | 3,231 | 2,582 |
| Other Expenses | 10 | 33 | 67 | 8 | 201 |
| Total Deductions | **135,866** | **128,283** | **120,140** | **110,284** | **99,815** |
| **Change in Fiduciary Net Position** | **$501,879** | **$224,497** | **$(419,339)** | **$(120,876)** | **$341,717** |

## SCHEDULE OF ADDITIONS TO FIDUCIARY NET POSITION BY SOURCE

*(Dollars in Thousands)*

| Fiscal Year Ended June 30 | Employee Contributions | Employer Contributions | Investment Income/(Loss) | Other | Total Additions |
|---|---|---|---|---|---|
| 2007 | $42,696 | $100,550 | $298,260 | $26 | $441,532 |
| 2008 | 60,111 | 105,340 | (177,923) | 1,880 | (10,592) |
| 2009 | 50,372 | 106,123 | (457,309) | 1,615 | (299,199) |
| 2010 | 50,319 | 106,265 | 195,412 | 784 | 352,780 |
| 2011 | 49,013 | 150,475 | 437,654 | 603 | 637,745 |
| 2012 | 49,687 | 150,950 | (11,024) | 750 | 190,363 |
| 2013 | 55,408 | 144,308 | 326,983 | 782 | 527,481 |
| 2014 | 46,594 | 202,877 | 482,050 | 614 | 732,135 |
| 2015 | 48,012 | 180,704 | 111,320 | 310 | 340,346 |
| 2016 | 56,069 | 191,094 | 24,112 | 5,188 | 276,463 |

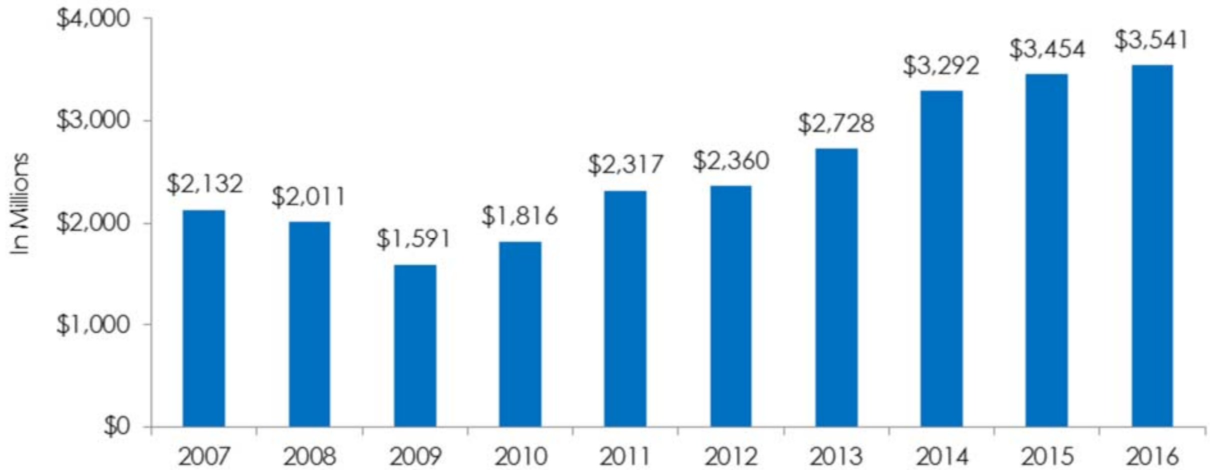
## SCHEDULE OF DEDUCTIONS FROM FIDUCIARY NET POSITION BY TYPE

*(Dollars in Thousands)*

| Fiscal Year Ended June 30 | Retirement Benefits | Member Refunds | Administrative Expenses [1] | Information Technology Expenses | Other Expenses | Total Deductions |
|---|---|---|---|---|---|---|
| 2007 | $ 94,788 | $ 2,244 | $ 2,582 | $ - | $ 201 | $ 99,815 |
| 2008 | 103,970 | 3,075 | 3,231 | - | 8 | 110,284 |
| 2009 | 113,991 | 2,795 | 3,287 | - | 67 | 120,140 |
| 2010 | 122,141 | 2,736 | 3,373 | - | 33 | 128,283 |
| 2011 | 129,835 | 2,474 | 3,547 | - | 10 | 135,866 |
| 2012 | 139,208 | 3,627 | 4,708 | 325 | (33) | 147,835 |
| 2013 | 149,266 | 5,750 | 4,260 | 654 | 29 | 159,959 |
| 2014 | 159,342 | 3,214 | 4,914 | 731 | 65 | 168,266 |
| 2015 | 168,109 | 3,357 | 5,350 | 629 | 119 | 177,564 |
| 2016 | 179,498 | 3,366 | 5,962 | 714 | 11 | 189,551 |

[1] Administrative expenses for investments were classified as investment expenses in fiscal years 2007-2011. Effective 6/30/2012 these expenses are included as administrative expenses.

## TOTAL FIDUCIARY NET POSITION (AS OF JUNE 30)




## SCHEDULE OF EMPLOYER CONTRIBUTIONS

*(Dollars in Thousands)*

| Fiscal Year Ended June 30 | Actuarially Required Contributions (ARC) | Actual Contributions Received [1] | Contributions Made as a % of ARC |
|---|---|---|---|
| 2007 | $ 100,550 | $ 100,550 | 100% |
| 2008 | 105,340 | 105,340 | 100% |
| 2009 | 106,123 | 106,123 | 100% |
| 2010 | 106,265 | 106,265 | 100% |
| 2011 | 150,475 | 150,475 | 100% |
| 2012 | 139,407 | 150,950 | 108% |
| 2013 | 131,294 | 144,308 | 110% |
| 2014 | 152,877 | 202,877 | 133% |
| 2015 | 169,814 | 180,704 | 106% |
| 2016 | 170,046 | 191,094 [2] | 112% |

[1] The County of San Mateo (the County) made additional contributions to accelerate the pay down of UAAL during fiscal year 2012 through fiscal year 2016.

[2] The County and the San Mateo County Mosquito and Vector Control District contributed supplemental contributions of $19.5 million and $1.5 million, respectively, to accelerate the pay down of UAAL.

## SUMMARY OF RETIRED BENEFITS, REFUNDS, AND INACTIVE MEMBERS

| RETIRED MEMBERS | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|
| Service Retirement | | | | | |
| Number | 3,749 | 3,628 | 3,525 | 3,446 | 3,355 |
| Annual Benefits: | | | | | |
| Basic Only | $119,212,000 | $112,557,000 | $105,556,000 | $100,411,000 | $94,234,000 |
| COLA | 32,949,000 | 30,835,000 | 28,027,000 | 26,594,000 | 24,748,000 |
| Total | $152,161,000 | $143,392,000 | $133,583,000 | $127,005,000 | $118,982,000 |
| Average Monthly Payment | $3,382 | $3,294 | $3,158 | $3,071 | $2,955 |
| Disability Retirement | | | | | |
| Number | 454 | 442 | 428 | 393 | 374 |
| Annual Benefits: | | | | | |
| Basic Only | $14,040,000 | $13,303,000 | $12,508,000 | $10,733,000 | $9,909,000 |
| COLA | 4,590,000 | 4,208,000 | 3,800,000 | 3,564,000 | 3,225,000 |
| Total | $18,630,000 | $17,511,000 | $16,308,000 | $14,297,000 | $13,134,000 |
| Average Monthly Payment | $3,420 | $3,301 | $3,175 | $3,032 | $2,927 |
| Beneficiaries | | | | | |
| Number | 545 | 568 | 565 | 559 | 546 |
| Annual Benefits: | | | | | |
| Basic Only | $8,944,000 | $8,610,000 | $7,986,000 | $7,668,000 | $7,235,000 |
| COLA | 6,462,000 | 6,367,000 | 5,892,000 | 5,804,000 | 5,494,000 |
| Total | $15,406,000 | $14,977,000 | $13,878,000 | $13,472,000 | $12,729,000 |
| Average Monthly Payment | $2,356 | $2,197 | $2,047 | $2,008 | $1,943 |
| **TOTAL RETIRED MEMBERS** | | | | | |
| Number | 4,748 | 4,638 | 4,518 | 4,398 | 4,275 |
| Annual Benefits: | | | | | |
| Basic Only | $142,196,000 | $134,470,000 | $126,050,000 | $118,812,000 | $111,378,000 |
| COLA | 44,001,000 | 41,410,000 | 37,719,000 | 35,962,000 | 33,467,000 |
| Total | $186,197,000 | $175,880,000 | $163,769,000 | $154,774,000 | $144,845,000 |
| Average Monthly Payment | $3,268 | $3,160 | $3,021 | $2,933 | $2,823 |
| **REFUND** (1) | | | | | |
| General | $2,991,126 | $3,011,758 | $3,396,690 | $5,161,430 | $3,399,163 |
| Safety and Probation | 375,311 | 345,253 | 155,265 | 588,346 | 228,329 |
| Total | $3,366,437 | $3,357,011 | $3,551,955 | $5,749,776 | $3,627,492 |
| **INACTIVE MEMBERS** | 1,486 | 1,384 | 1,304 | 1,306 | 1,212 |

The data in the table above originates from Pension Gold, SamCERA's retirement benefit administration system. The total payroll above differs from the actual payroll due to a last month projection used by the actuary.

(1) Refund by type is not available prior to fiscal year 2009-10.

## SUMMARY OF RETIRED BENEFITS, REFUNDS, AND INACTIVE MEMBERS (CONTINUED)

| RETIRED MEMBERS | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|
| **Service Retirement** | | | | | |
| Number | 3,242 | 3,108 | 3,032 | 2,958 | 2,835 |
| Annual Benefits: | | | | | |
| Basic Only | $87,254,000 | $79,007,000 | $73,038,000 | $66,704,000 | $59,687,000 |
| COLA | 23,212,000 | 22,542,000 | 22,964,000 | 21,289,000 | 19,382,000 |
| Total | $110,466,000 | $101,549,000 | $96,002,000 | $87,993,000 | $79,069,000 |
| Average Monthly Payment | $2,839 | $2,723 | $2,639 | $2,479 | $2,324 |
| **Disability Retirement** | | | | | |
| Number | 370 | 365 | 369 | 361 | 351 |
| Annual Benefits: | | | | | |
| Basic Only | $9,414,000 | $8,988,000 | $8,722,000 | $8,214,000 | $7,571,000 |
| COLA | 3,005,000 | 2,926,000 | 3,070,000 | 2,847,000 | 2,569,000 |
| Total | $12,419,000 | $11,914,000 | $11,792,000 | $11,061,000 | $10,140,000 |
| Average Monthly Payment | $2,797 | $2,720 | $2,663 | $2,553 | $2,407 |
| **Beneficiaries** | | | | | |
| Number | 535 | 529 | 534 | 523 | 508 |
| Annual Benefits: | | | | | |
| Basic Only | $6,672,000 | $6,309,000 | $6,052,000 | $5,757,000 | $5,220,000 |
| COLA | 5,118,000 | 5,116,000 | 5,206,000 | 4,805,000 | 4,361,000 |
| Total | $11,790,000 | $11,425,000 | $11,258,000 | $10,562,000 | $9,581,000 |
| Average Monthly Payment | $1,836 | $1,800 | $1,757 | $1,683 | $1,572 |
| **TOTAL RETIRED MEMBERS** | | | | | |
| Number | 4,147 | 4,002 | 3,935 | 3,842 | 3,694 |
| Annual Benefits: | | | | | |
| Basic Only | $103,340,000 | $94,304,000 | $87,812,000 | $80,675,000 | $72,478,000 |
| COLA | 31,335,000 | 30,584,000 | 31,240,000 | 28,941,000 | 26,312,000 |
| Total | $134,675,000 | $124,888,000 | $119,052,000 | $109,616,000 | $98,790,000 |
| Average Monthly Payment | $2,706 | $2,601 | $2,521 | $2,378 | $2,229 |
| **REFUND** (1) | | | | | |
| General | $2,379,790 | $2,623,439 | N/A | N/A | N/A |
| Safety and Probation | 94,655 | 112,586 | N/A | N/A | N/A |
| Total | $2,474,445 | $2,736,025 | $2,794,916 | $3,074,453 | $2,243,677 |
| **INACTIVE MEMBERS** | 1,190 | 1,207 | 1,230 | 1,225 | 1,151 |

The data in the table above originates from Pension Gold, SamCERA's retirement benefit administration system. The total payroll above differs from the actual payroll due to a last month projection used by the actuary.

(1) Refund by type is not available prior to fiscal year 2009-10.

## SCHEDULE OF AVERAGE PENSION BENEFIT PAYMENTS

| Retirement Date | Years of Service Credit | | | | | | |
|---|---|---|---|---|---|---|---|
| **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 Retires | 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 | $552 | $1,448 | $2,487 | $3,669 | $4,161 | $7,067 | $5,993 |
| Average Final Compensation | $4,191 | $6,262 | $7,158 | $8,074 | $7,548 | $9,423 | $7,751 |
| Number of Retires | 21 | 35 | 52 | 35 | 20 | 38 | 31 |
| Beneficiaries | | | | | | | |
| Average Monthly Gross Benefit | $1,581 | $1,165 | $1,094 | $2,144 | $2,095 | $4,520 | $5,888 |
| Average Final Compensation | N/A | $3,587 | $3,867 | $6,360 | $4,521 | $8,971 | $8,071 |
| Number of Retires | 13 | 3 | 3 | 7 | 5 | 5 | 6 |
| **7/1/2013 - 6/30/2014** | **0 - 4** | **5 - 9** | **10 - 14** | **15 - 19** | **20 - 24** | **25 - 29** | **30+** |
| Retirees - Service and Disabilities | | | | | | | |
| Average Monthly Gross Benefit | $1,576 | $1,713 | $2,297 | $3,274 | $4,502 | $6,202 | $6,551 |
| Average Final Compensation | $6,920 | $6,729 | $6,555 | $7,614 | $7,740 | $9,292 | $7,528 |
| Number of Retires | 16 | 61 | 50 | 40 | 32 | 13 | 18 |
| Beneficiaries | | | | | | | |
| Average Monthly Gross Benefit | $869 | $647 | $1,855 | $895 | $4,348 | $3,463 | $6,087 |
| Average Final Compensation | N/A | $6,305 | $5,433 | $2,913 | $7,872 | $5,504 | $6,611 |
| Number of Retires | 10 | 3 | 6 | 6 | 3 | 2 | 2 |
| **7/1/2012 - 6/30/2013** | **0 - 4** | **5 - 9** | **10 - 14** | **15 - 19** | **20 - 24** | **25 - 29** | **30+** |
| Retirees - Service and Disabilities | | | | | | | |
| Average Monthly Gross Benefit | $629 | $1,302 | $2,461 | $3,433 | $5,100 | $6,413 | $7,133 |
| Average Final Compensation | $5,234 | $5,831 | $7,321 | $7,344 | $8,135 | $8,317 | $7,818 |
| Number of Retires | 16 | 39 | 59 | 21 | 30 | 25 | 20 |
| Beneficiaries | | | | | | | |
| Average Monthly Gross Benefit | $1,343 | $1,709 | $1,457 | $1,463 | $1,289 | $5,056 | $4,064 |
| Average Final Compensation | $552 | $5,140 | $5,255 | $4,536 | $3,446 | $7,516 | $6,039 |
| Number of Retires | 16 | 2 | 6 | 4 | 3 | 1 | 4 |
| **7/1/2011 - 6/30/2012** | **0 - 4** | **5 - 9** | **10 - 14** | **15 - 19** | **20 - 24** | **25 - 29** | **30+** |
| Retirees - Service and Disabilities | | | | | | | |
| Average Monthly Gross Benefit | $878 | $1,393 | $2,208 | $3,510 | $5,050 | $5,476 | $7,346 |
| Average Final Compensation | $4,235 | $5,843 | $6,667 | $7,228 | $7,812 | $7,344 | $7,766 |
| Number of Retires | 19 | 38 | 47 | 25 | 47 | 32 | 29 |
| Beneficiaries | | | | | | | |
| Average Monthly Gross Benefit | $1,746 | $712 | $2,329 | $2,332 | $881 | $4,241 | $4,722 |
| Average Final Compensation | N/A | $3,913 | $5,200 | $5,818 | $2,937 | $6,102 | $7,184 |
| Number of Retires | 16 | 1 | 5 | 4 | 4 | 3 | 5 |

## Schedule of Average Pension Benefit Payments (Continued)

| Retirement Date | Years of Service Credit | | | | | | |
|---|---|---|---|---|---|---|---|
| **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 | $565 | $1,166 | $2,067 | $3,679 | $4,767 | $6,300 | $7,897 |
| Average Final Compensation | $3,207 | $6,268 | $5,895 | $7,761 | $7,562 | $8,466 | $8,303 |
| Number of Retires | 16 | 25 | 52 | 29 | 52 | 26 | 26 |
| Beneficiaries | | | | | | | |
| Average Monthly Gross Benefit | $1,106 | $1,373 | $1,207 | $2,050 | $2,039 | $3,272 | $8,446 |
| Average Final Compensation | N/A | $6,549 | $4,186 | $5,178 | $5,772 | $5,278 | $7,765 |
| Number of Retires | 13 | 1 | 7 | 3 | 6 | 2 | 1 |
| **7/1/2009 - 6/30/2010** | **0 - 4** | **5 - 9** | **10 - 14** | **15 - 19** | **20 - 24** | **25 - 29** | **30+** |
| Retirees - Service and Disabilities | | | | | | | |
| Average Monthly Gross Benefit | $855 | $1,232 | $2,061 | $3,838 | $4,965 | $6,024 | $7,366 |
| Average Final Compensation | $2,619 | $5,409 | $5,803 | $7,587 | $7,827 | $7,818 | $8,081 |
| Number of Retires | 9 | 36 | 33 | 16 | 41 | 19 | 24 |
| Beneficiaries | | | | | | | |
| Average Monthly Gross Benefit | $699 | $2,616 | $1,452 | $1,142 | $2,248 | $3,895 | $4,305 |
| Average Final Compensation | N/A | $7,316 | $5,457 | $3,874 | $5,546 | $5,457 | $5,166 |
| Number of Retires | 9 | 4 | 2 | 2 | 3 | 1 | 4 |
| **7/1/2008 - 6/30/2009** | **0 - 4** | **5 - 9** | **10 - 14** | **15 - 19** | **20 - 24** | **25 - 29** | **30+** |
| Retirees - Service and Disabilities | | | | | | | |
| Average Monthly Gross Benefit | $1,508 | $1,447 | $2,318 | $2,120 | $4,873 | $6,046 | $8,801 |
| Average Final Compensation | $3,654 | $4,581 | $6,562 | $6,798 | $7,646 | $7,141 | $9,061 |
| Number of Retires | 7 | 34 | 26 | 29 | 23 | 17 | 32 |
| Beneficiaries | | | | | | | |
| Average Monthly Gross Benefit | $2,809 | $631 | $1,323 | $978 | $1,552 | $4,030 | $3,546 |
| Average Final Compensation | N/A | $3,744 | $5,068 | $3,840 | $6,395 | $6,099 | $4,661 |
| Number of Retires | 12 | 3 | 6 | 3 | 3 | 1 | 1 |
| **7/1/2007 - 6/30/2008** | **0 - 4** | **5 - 9** | **10 - 14** | **15 - 19** | **20 - 24** | **25 - 29** | **30+** |
| Retirees - Service and Disabilities | | | | | | | |
| Average Monthly Gross Benefit | $544 | $1,610 | $2,386 | $3,516 | $3,831 | $5,177 | $7,270 |
| Average Final Compensation | $5,406 | $5,639 | $5,922 | $7,012 | $6,179 | $6,596 | $7,641 |
| Number of Retires | 12 | 29 | 23 | 25 | 47 | 35 | 38 |
| Beneficiaries | | | | | | | |
| Average Monthly Gross Benefit | $2,070 | $1,057 | $1,912 | $3,199 | $1,438 | $3,822 | $5,636 |
| Average Final Compensation | N/A | $4,433 | $7,617 | $6,701 | $5,149 | $9,472 | $6,757 |
| Number of Retires | 14 | 2 | 1 | 2 | 3 | 3 | 3 |
| **7/1/2006 - 6/30/2007** | **0 - 4** | **5 - 9** | **10 - 14** | **15 - 19** | **20 - 24** | **25 - 29** | **30+** |
| Retirees - Service and Disabilities | | | | | | | |
| Average Monthly Gross Benefit | $1,143 | $1,814 | $1,986 | $2,902 | $3,957 | $6,793 | $8,367 |
| Average Final Compensation | $3,705 | $7,601 | $5,323 | $5,870 | $6,703 | $8,390 | $7,788 |
| Number of Retires | 9 | 15 | 31 | 29 | 24 | 25 | 24 |
| Beneficiaries | | | | | | | |
| Average Monthly Gross Benefit | $2,034 | $626 | $1,289 | $1,559 | $3,545 | $3,720 | $4,039 |
| Average Final Compensation | $2,053 | $3,608 | $3,961 | $5,028 | $7,164 | $4,056 | $5,016 |
| Number of Retires | 9 | 1 | 5 | 5 | 2 | 2 | 2 |

## Schedule of Average Monthly Salary of Active Members

*(by Plan and Membership Type)*

| | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|
| General Plan 1 | $9,945 | $9,235 | $8,617 | $8,104 | $7,843 |
| General Plan 2 | 8,636 | 8,186 | 7,584 | 7,355 | 7,340 |
| General Plan 3 | 7,173 | 6,747 | 6,300 | 6,254 | 6,138 |
| General Plan 4 | 7,807 | 7,386 | 6,873 | 6,662 | 6,580 |
| General Plan 5 | 8,485 | 7,735 | 6,912 | 6,418 | 5,799 |
| General Plan 7 | 6,714 | 6,315 | 5,721 | 5,433 | N/A |
| Average Monthly Salary for General Plan | 7,694 | 7,351 | 6,884 | 6,762 | 6,726 |
| Safety Plan 1 | 15,810 | 14,712 | 14,091 | 13,185 | 12,624 |
| Safety Plan 2 | 12,505 | 11,545 | 11,191 | 10,935 | 10,892 |
| Safety Plan 4 | 10,729 | 9,919 | 9,581 | 9,402 | 9,351 |
| Safety Plan 5 | 9,940 | 9,145 | 8,958 | 8,699 | 9,667 |
| Safety Plan 6 | 16,793 | 16,010 | 14,381 | 12,374 | N/A |
| Safety Plan 7 | 7,538 | 6,701 | 7,011 | 6,695 | N/A |
| Average Monthly Salary for Safety Plan | 10,364 | 9,728 | 9,767 | 9,630 | 9,795 |
| Probation Plan 1 | 7,261 | 7,038 | 6,874 | 6,618 | 6,618 |
| Probation Plan 2 | 8,349 | 8,012 | 7,699 | 7,445 | 7,454 |
| Probation Plan 4 | 7,454 | 7,267 | 6,922 | 6,622 | 6,686 |
| Probation Plan 5 | 6,429 | 6,106 | 5,916 | 5,242 | 4,949 |
| Probation Plan 6 | 6,259 | 5,739 | 5,216 | 4,808 | 5,239 |
| Probation Plan 7 | 5,962 | 5,684 | 5,807 | 7,742 | 5,239 |
| Average Monthly Salary for Probation Plan | 7,391 | 7,216 | 6,998 | 6,770 | 6,844 |
| **Average Monthly Salary for All Plans** | **7,933** | **7,567** | **7,151** | **7,026** | **6,995** |

## Schedule of Average Monthly Salary of Active Members (Continued)

*(by Plan and Membership Type)*

| | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|
| General Plan 1 | $7,630 | $7,543 | $7,534 | $7,252 | $7,175 |
| General Plan 2 | 7,208 | 7,193 | 7,120 | 6,872 | 6,688 |
| General Plan 3 | 5,968 | 5,818 | 5,791 | 5,619 | 5,287 |
| General Plan 4 | 6,398 | 6,348 | 6,212 | 5,914 | 5,714 |
| General Plan 5 | N/A | N/A | N/A | N/A | N/A |
| General Plan 7 | N/A | N/A | N/A | N/A | N/A |
| Average Monthly Salary for General Plan | 6,599 | 6,569 | 6,468 | 6,211 | 6,054 |
| Safety Plan 1 | 12,073 | 11,578 | 10,889 | 11,113 | 10,212 |
| Safety Plan 2 | 10,789 | 10,548 | 10,135 | 9,612 | 9,299 |
| Safety Plan 4 | 9,230 | 8,931 | 8,610 | 8,349 | 7,882 |
| Safety Plan 5 | N/A | N/A | N/A | N/A | N/A |
| Safety Plan 6 | N/A | N/A | N/A | N/A | N/A |
| Safety Plan 7 | N/A | N/A | N/A | N/A | N/A |
| Average Monthly Salary for Safety Plan | 9,730 | 9,525 | 9,197 | 8,937 | 8,538 |
| Probation Plan 1 | 7,533 | 8,922 | 9,751 | 9,791 | 8,522 |
| Probation Plan 2 | 7,349 | 7,393 | 7,341 | 6,960 | 6,899 |
| Probation Plan 4 | 6,505 | 6,456 | 6,291 | 5,978 | 5,766 |
| Probation Plan 5 | N/A | N/A | N/A | N/A | N/A |
| Probation Plan 6 | N/A | N/A | N/A | N/A | N/A |
| Probation Plan 7 | N/A | N/A | N/A | N/A | N/A |
| Average Monthly Salary for Probation Plan | 6,719 | 6,722 | 6,634 | 6,344 | 6,171 |
| **Average Monthly Salary for All Plans** | **6,872** | **6,813** | **6,692** | **6,433** | **6,260** |

## SCHEDULE OF PARTICIPATING EMPLOYERS AND ACTIVE MEMBERS

| | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|
| COUNTY OF SAN MATEO [1] | | | | | |
| General Members | 4,170 | 4,092 | 4,014 | 3,906 | 4,078 |
| Safety Members | 495 | 479 | 452 | 452 | 435 |
| Safety/Probation Members | 271 | 282 | 280 | 292 | 299 |
| Total | 4,936 | 4,853 | 4,746 | 4,650 | 4,812 |
| SAN MATEO COUNTY SUPERIOR COURT [1] | | | | | |
| General Members Total | 231 | 222 | 239 | 249 | 268 |
| SAN MATEO COUNTY MOSQUITO & VECTOR CONTROL DISTRICT | | | | | |
| General Members Total | 20 | 20 | 19 | 18 | 15 |
| **Total Active Membership** | **5,187** | **5,095** | **5,004** | **4,917** | **5,095** |

**Percentage of Membership by Employer**

| | | | | | |
|---|---|---|---|---|---|
| County of San Mateo | 95.16% | 95.25% | 94.84% | 94.57% | 94.45% |
| San Mateo County Superior Court | 4.45% | 4.36% | 4.78% | 5.06% | 5.26% |
| San Mateo County Mosquito and Vector Control District | 0.39% | 0.39% | 0.38% | 0.37% | 0.29% |
| Total: | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |

## SCHEDULE OF PARTICIPATING EMPLOYERS AND ACTIVE MEMBERS (CONTINUED)

| | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|
| COUNTY OF SAN MATEO [1] | | | | | |
| General Members | 4,476 | 4,589 | 4,758 | 4,718 | 4,742 |
| Safety Members | 446 | 425 | 436 | 432 | 443 |
| Safety/Probation Members | 305 | 313 | 330 | 325 | 329 |
| Total | 5,227 | 5,327 | 5,524 | 5,475 | 5,514 |
| SAN MATEO COUNTY SUPERIOR COURT [1] | | | | | |
| General Members Total | N/A | N/A | N/A | N/A | N/A |
| SAN MATEO COUNTY MOSQUITO & VECTOR CONTROL DISTRICT | | | | | |
| General Members Total | 18 | 20 | 19 | 25 | 25 |
| **Total Active Membership** | **5,245** | **5,347** | **5,543** | **5,500** | **5,539** |

**Percentage of Membership by Employer**

| | | | | | |
|---|---|---|---|---|---|
| County of San Mateo | 99.66% | 99.63% | 99.66% | 99.55% | 99.55% |
| San Mateo County Superior Court | N/A | N/A | N/A | N/A | N/A |
| San Mateo County Mosquito and Vector Control District | 0.34% | 0.37% | 0.34% | 0.45% | 0.45% |
| Total: | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |

[1] Prior to fiscal year 2012, membership counts of the San Mateo County Superior Court were combined with and reported under the County of San Mateo.

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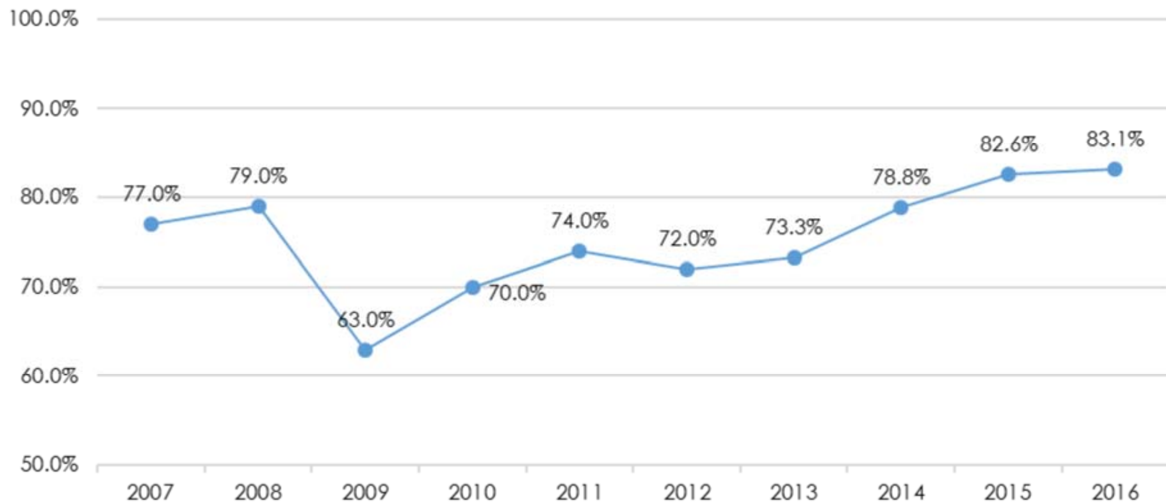
# COMPLIANCE SECTION

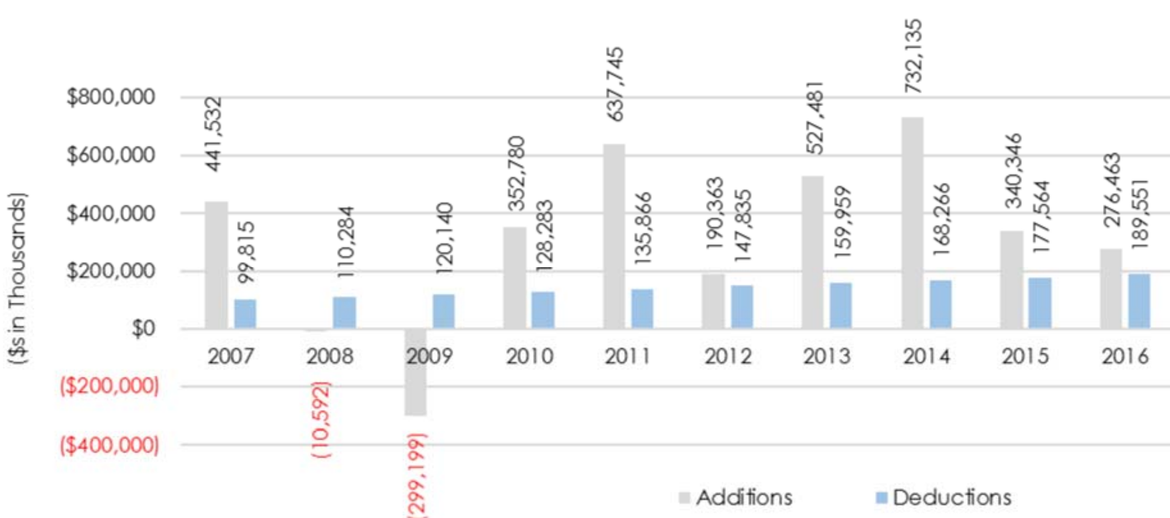
## SAMCERA'S FUNDED RATIO

*As of June 30*




## ADDITIONS TO AND DEDUCTIONS FROM SAMCERA'S NET POSITON

*For the Fiscal Years Ended June 30*



BROWN ARMSTRONG
CERTIFIED PUBLIC ACCOUNTANTS

# BROWN ARMSTRONG

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

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

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

**<u>Significant Audit Findings</u>**

*Qualitative Aspects of Accounting Practices*

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

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

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

1

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

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

- The disclosures for deposits and investments in Notes 2 and 5 to the financial statements, Summary of Significant Accounting Policies and Deposits and Investment Disclosures, respectively, were derived from SamCERA's investment policy. Management's estimate of the fair value of investments was derived by various methods as detailed in the notes.

- Additionally, the disclosures related to the funding policies, net pension liability, and actuarial methods and assumptions in Note 1, Plan Description, Note 6, Pension Disclosures, and Note 7, Funded Status and Funding Progress, were derived from actuarial valuations, which involved estimates of the value of reported amounts and probabilities about the occurrence of future events far into the future.

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

*Difficulties Encountered in Performing the Audit*
We encountered no significant difficulties in dealing with management in performing and completing our audit.

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

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

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

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

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

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

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

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

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

**Restriction on Use**

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

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 18, 2016

## Order Information

You can find this report on SamCERA's website, www.samcera.org.

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www.samcera.org

SamCERA

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

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