

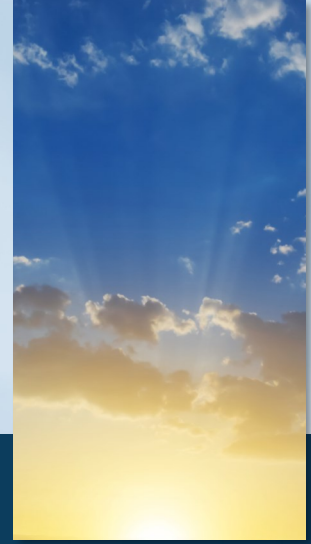
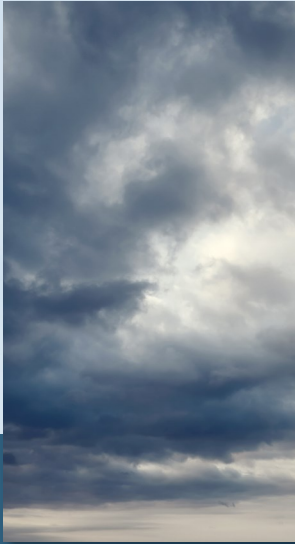


2020

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2020

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



LIGHTING THE WAY FORWARD

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

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

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

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

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

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

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

SamCERA Staff

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

San Mateo County Employees' Retirement Association

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

COMPREHENSIVE ANNUAL FINANCIAL REPORT

Fiscal Year Ended June 30, 2020

Scott Hood

Chief Executive Officer

Michael Coultrip

Chief Investment Officer

Tat-Ling Chow

Finance Officer

SamCERA

100 Marine Parkway, Suite 125

Redwood City, California 94065

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INTRODUCTORY SECTION



Board of Retirement

San Mateo County Employees' Retirement Association

Dear Trustees:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the San Mateo County Employees' Retirement Association (SamCERA) for the fiscal year ended June 30, 2020. This report is intended to provide an overview of SamCERA's financial, investment, and actuarial status as of that date.



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

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

Authority, Responsibilities & Duties

The San Mateo County (the County) Board of Supervisors established retirement benefits for County employees effective July 1, 1944, as prescribed by the provisions of Government Code Section 31450 et seq., also known as California's County Employees Retirement Law of 1937 (the CERL). SamCERA is responsible for providing retirement, disability, and death benefits to its eligible members and beneficiaries in accordance with the CERL, the California Public Employees' Pension Reform Act of 2013 (PEPRA - Government Code Section 7522 et seq.), and other applicable statutes, regulations and case laws.

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

The Board consists of nine Trustees and two alternates. Four positions are appointed by the Board of Supervisors. Four Trustees are elected from their respective membership: two from the General Members, one from the Safety Members, and one from the Retiree Members. The County Treasurer is a member of the Board by virtue of the publicly elected office; all other Trustees serve for a term of three years. In addition, there is one elected Safety Member Alternate and one elected Retiree Member Alternate. The officers for the Board for fiscal year 2019-20 were: Kurt Hoefler, Chair; Al David, Vice Chair; and Robert Raw, Secretary. Other members of the Board were: Sandie Arnott, Katherine O'Malley, Eric Tashman, Benedict J. Bowler, Mark Battey, and Paul Hackleman. Alternate Trustees were Susan Lee and Alma Salas.

The Board has adopted the Regulations of the Board of Retirement, and among other policies, its Mission & Goals; Investment Policy Statement; Conflict of Interest Code; and Code of Conduct, which reflect the Board's guiding policies. The Board annually adopts an operating budget for the administration of SamCERA, which is discussed in the Financial Section beginning on page 30. A breakdown of the budget allotment versus actual expenses is presented on pages 72-74. In addition, the Board has authorized the execution of contracts for the professional services of an actuary, an investment consultant, investment managers, a global custodian, a financial auditor, and a medical advisor delegated by the County Health Officer to help the Board fulfill its duties. The Board's primary professional consultants are highlighted in the organizational chart on page 24.

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

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

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

Financial

The certified public accounting firm of Brown Armstrong Accountancy Corporation provides financial audit services to SamCERA. The objective of this financial audit is to ensure that SamCERA's financial statements are presented in conformity with GAAP and are free of material misstatements. Internal controls are reviewed to ensure that SamCERA has sufficient controls in place to ensure reliable financial reporting and to safeguard its assets. SamCERA's financial statements in the Financial Section are prepared on the accrual basis of accounting. Member and employer contributions are recognized in the period which contributions are due. Benefits and refunds are recognized when due and payable in accordance with plan terms. Investments are reported at fair value.

Investments

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

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

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

Actuarial

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

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

Plan Funding Status

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

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

Supplemental Contributions

In 2013, a Memorandum of Understanding (MOU) was established between the County and SamCERA in which the County was committed to accelerate the pay down of its UAAL by making supplemental contributions. The contributions paid above the statutorily required contribution rate, along with the earnings in the County's Supplemental Contribution Account (CSCA), overall have grown to approximately \$174.5 million as of June 30, 2020. Furthermore, the County is committed to continue making supplemental contributions over the next three years. In September of 2015, the District also entered into an MOU with SamCERA to make supplemental contributions to pay down its UAAL. The overall contributions and earnings in the District's Supplemental Contribution Account is approximately \$1.5 million as of June 30, 2020.

Cost of Living Adjustment

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

Information Technology

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

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

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

Strategic Planning

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

change, giving the opportunity to employ a more thoughtful, intentional planning approach that is aimed at achieving the newly adopted goals and objectives. Moving forward, SamCERA will continue to pursue its three major goals described below, all of which are derived from and consistent with SamCERA's mission statement:

ASSET MANAGEMENT GOAL

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

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

CUSTOMER SERVICES GOAL

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

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

OPERATIONS GOAL

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

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

Certificate of Achievement and Acknowledgements

For the twenty-third consecutive year, the Government Finance Officers Association (GFOA) has awarded SamCERA its Certificate of Achievement for Excellence in Financial Reporting. This award was in recognition of SamCERA's CAFR for the fiscal year ended June 30, 2019. The certificate is reproduced on page 19. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

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

Additionally, the Public Pension Coordinating Council (the Council) presented SamCERA with its Public Pension Standards Award for 2019. This award recognizes that SamCERA has met professional standards for plan funding and administration as set forth in the Public Pension Standards of the Council. The standards judge retirement systems on their Funding Adequacy, Comprehensive Benefit Program, Actuarial Valuation, Independent Audit, Investments and Communications. The award is reproduced on page 20.

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

Acknowledgments

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

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

Respectfully submitted,



Scott Hood
Chief Executive Officer

October 19, 2020

GFOA CERTIFICATE OF ACHIEVEMENT



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

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

For its Comprehensive Annual
Financial Report
For the Fiscal Year Ended

June 30, 2019

Christopher P. Morrill

Executive Director/CEO

PPCC PUBLIC PENSION STANDARDS AWARD



Public Pension Coordinating Council

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

Presented to

San Mateo County Employees' Retirement Association

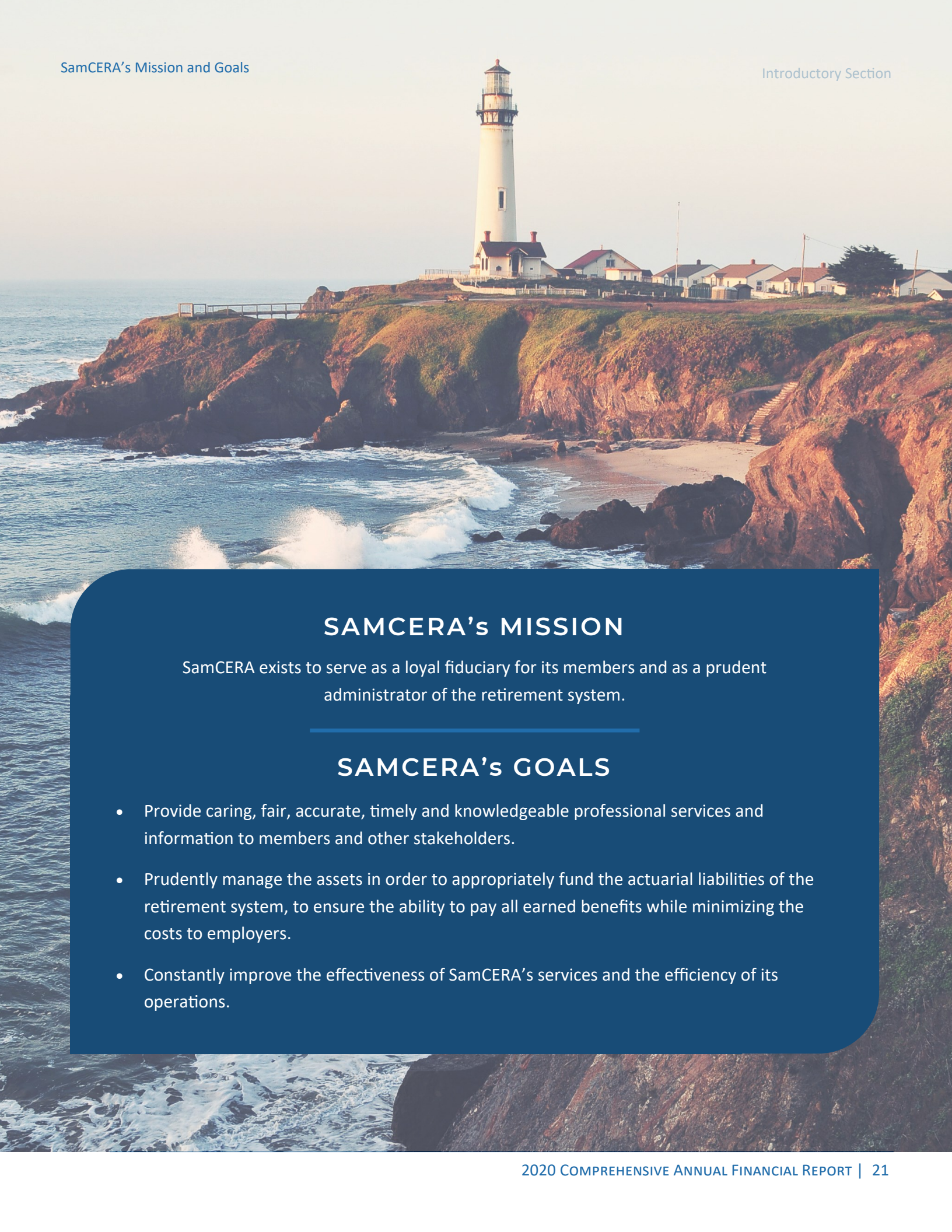
In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

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

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

Alan H. Winkle
Program Administrator



SAMCERA's MISSION

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

SAMCERA's GOALS

- Provide caring, fair, accurate, timely and knowledgeable professional services and information to members and other stakeholders.
- Prudently manage the assets in order to appropriately fund the actuarial liabilities of the retirement system, to ensure the ability to pay all earned benefits while minimizing the costs to employers.
- Constantly improve the effectiveness of SamCERA's services and the efficiency of its operations.

BOARD OF RETIREMENT

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

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



KURT HOEFER

Board Chair

Appointed by the Board
of Supervisors
Ninth Member



AL DAVID

Vice Chair

Elected by the General Members
Third Member



ROBERT RAW

Secretary

Elected by the Safety Members
Seventh Member



SANDIE ARNOTT

Board Member

Ex Officio per the 1937 Act
First Member



KATHERINE O'MALLEY

Board Member

Elected by the General Members
Second Member



ERIC TASHMAN

Board Member

Appointed by the Board of
Supervisors
Fourth Member



BENEDICT J. BOWLER

Board Member

Appointed by the Board of
Supervisors
Fifth Member



MARK BATTEY

Board Member

Appointed by the Board of
Supervisors
Sixth Member



PAUL HACKLEMAN

Board Member

Elected by the Retired
Members
Eighth Member



ALMA SALAS

Board Member

Elected by the Retired
Members
Retiree Alternate

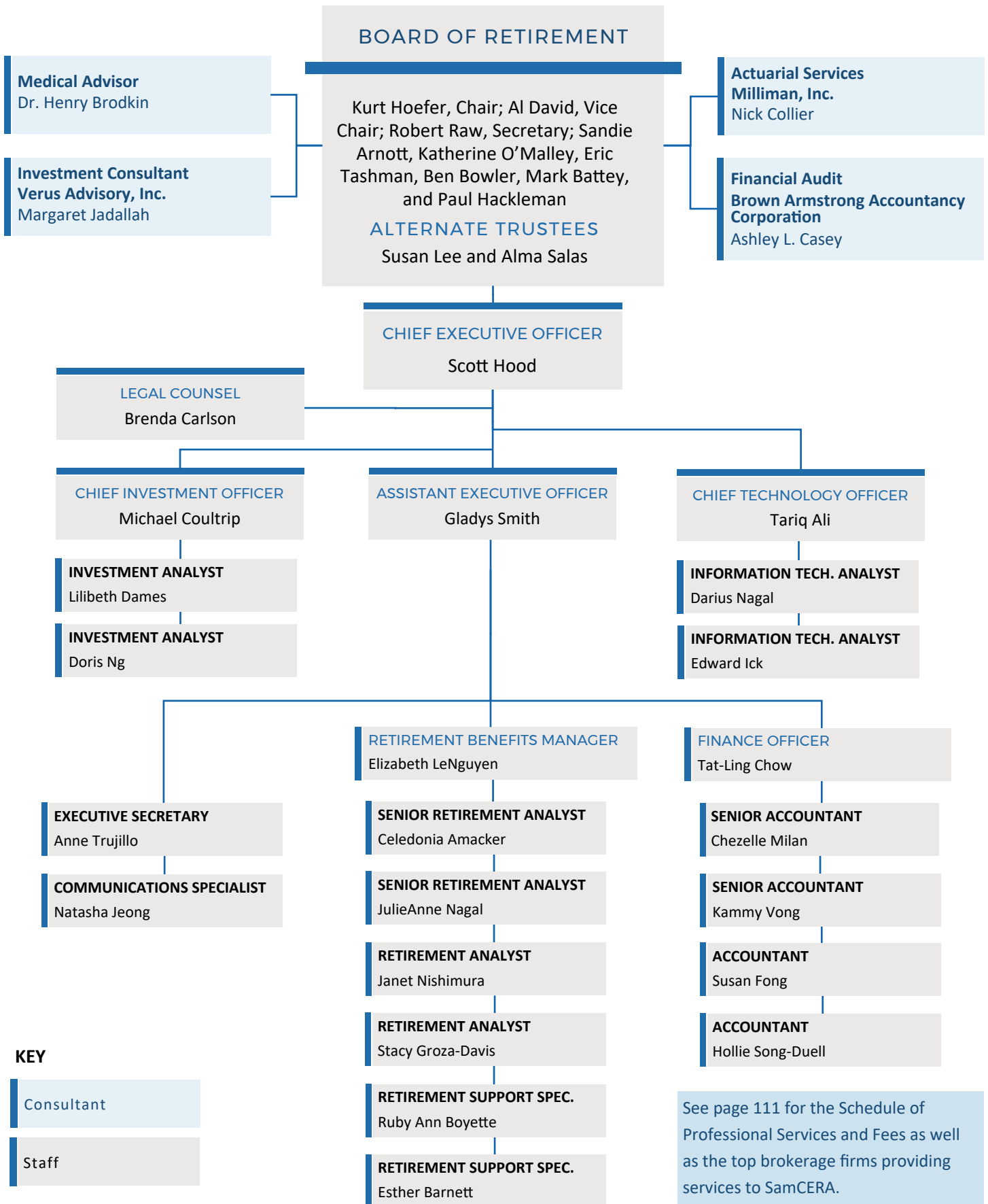


SUSAN LEE

Board Member

Elected by the Safety
Members
Safety Alternate

Organizational Chart



KEY

- Consultant
- Staff

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

LIST OF PROFESSIONAL CONSULTANTS

(Other Than Investment Professionals)

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



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FINANCIAL SECTION





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

BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

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

Report on the Basic Financial Statements and Other Information

We have audited the accompanying Statement of Fiduciary Net Position of the San Mateo County Employees' Retirement Association (SamCERA), a pension trust fund of the County of San Mateo, as of June 30, 2020; the Statement of Changes in Fiduciary Net Position for the fiscal year then ended; and the related notes to the basic financial statements, which collectively comprise SamCERA's basic financial statements as listed in the table of contents. We have also audited the Schedule of Cost Sharing Employer Allocations and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan totals for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense excluding that attributable to employer-paid member contributions (specified column totals) as of and for the fiscal year ended June 30, 2020, listed as other information in the table of contents.

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

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

Auditor's Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the basic financial statements and other information. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the basic financial statements and other information, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to SamCERA's preparation and fair presentation of the basic financial statements and other information in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of SamCERA's internal control.

Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the basic financial statements and other information.

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

Opinions

In our opinion, the basic financial statements and the other information referred to above present fairly, in all material respects, the fiduciary net position of SamCERA as of June 30, 2020; its changes in fiduciary net position for the fiscal year then ended; the Schedule of Cost Sharing Employer Allocations; and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan totals for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense excluding that attributable to employer-paid member contributions (specified column totals) as of and for the fiscal year ended June 30, 2020, in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

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

Supplementary Information

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

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

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

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 19, 2020, on our consideration of SamCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of SamCERA's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering SamCERA's internal control over financial reporting and compliance.


Report on Summarized Comparative Information

We have previously audited SamCERA's June 30, 2019, financial statements, and our report dated October 21, 2019, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2019, is consistent in all material respects, with the audited financial statements from which it has been derived.

Restrictions on Use

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

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

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

Bakersfield, California
October 19, 2020

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

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

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

Financial Highlights

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

Overview of Financial Statements

The following discussion and analysis serve as an introduction and overview of SamCERA's basic financial statements. The basic financial statements and required disclosures are prepared in accordance with the accounting principles and reporting standards prescribed by the Governmental Accounting Standards Board (GASB).

Basic Financial Statements

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

The *Statement of Fiduciary Net Position* is a snapshot of account balances at fiscal year-end. This statement discloses the assets available for future pension benefits to retirees and their eligible beneficiaries as well as outstanding liabilities as of June 30, 2020. The difference between assets and liabilities is reported as "Net Position Restricted for Pensions," which represents funds available to pay pension benefits. Over time, increases and decreases in Net Position Restricted for Pensions may serve as an indicator of whether SamCERA's financial position is improving or declining. This statement can be found on page 42 of this report.

The *Statement of Changes in Fiduciary Net Position* provides information about the financial activities during the reporting period that increased or decreased the Net Position Restricted for Pensions. Member and employer contributions are recognized in the period in which contributions are due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with plan terms. Investment income is recognized when earned, and expenses are recognized when incurred. The net appreciation (or depreciation) in the fair value of investments is recorded as an increase (or a decrease) to investment income, which includes both realized and unrealized gains and losses on investments based upon investment valuations. This statement can be found on page 43 of this report.

Notes to the Basic Financial Statements

Notes to the Basic Financial Statements are an integral part of the basic financial statements and provide additional information that is essential to obtain a thorough understanding of the data provided in the basic financial statements. The notes also provide detailed information of key policies and activities during the reporting period. Notes to the Basic Financial Statements can be found on pages 44-75 of this report.

Required Supplementary Information

Required Supplementary Information presents information that GASB requires to accompany the basic financial statements. Such information is an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. In addition to the Management's Discussion and Analysis, Required Supplementary Information consists of schedules discussed below and can be found on pages 76-81.

- Schedule of Changes in Net Pension Liability and Related Ratios of Participating Employers – displays changes in net pension liability of all participating employers.
- Schedule of Employer Contributions – helps readers determine if plan sponsors are meeting actuarially determined contributions over a period of time.
- Schedule of Investment Returns – shows the annual “time-weighted rate of return” and the annual “money-weighted rate of return” of the investment portfolio.
- Notes to the Required Supplementary Information – disclose additional details in relation to the required supplementary information presented.

Supplementary Information

Supplementary Information includes several schedules detailing administrative, information technology and investment expenses, as well as payments to consultants (for fees paid to outside professionals other than investment advisors). *Supplementary Information* and the accompanying notes can be found on pages 82-84 of this report.

Other Information

Other Information consists of two schedules pertaining to GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – an Amendment of GASB Statement No. 27*. The two schedules include the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan and the Schedule of Cost Sharing Employer Allocations.

Under GASB Statement No. 68, plan sponsors are required to report Net Pension Liability on their balance sheets and changes in Net Pension Liability on their operating statements as pension expenses, deferred inflows of resources, and deferred outflows of resources. *Other Information* can be found on pages 85-87 of this report.

Financial Analysis

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

Analysis of Fiduciary Net Position

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

STATEMENT OF FIDUCIARY NET POSITION

As of June 30 (Dollars In Thousands)

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

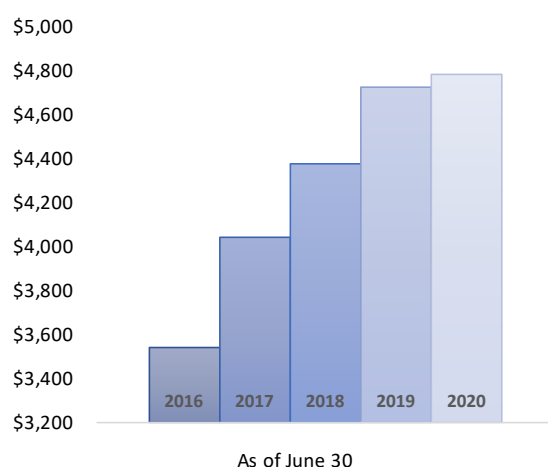
Assets. SamCERA's total assets increased by \$128 million, or 3%. Significant changes over the year include the following:

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

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

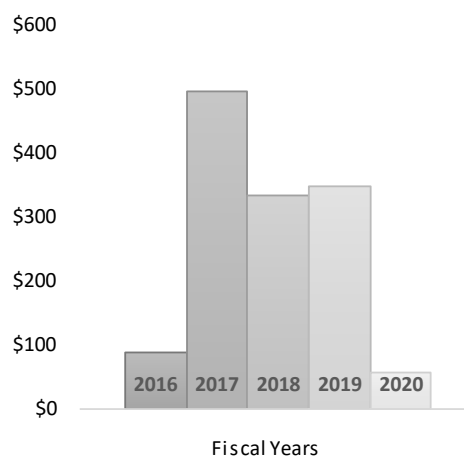
SAMCERA’S FIDUCIARY NET POSITION

As of June 30 (Dollars In Millions)



CHANGES IN SAMCERA’S FIDUCIARY NET POSITION

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



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

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

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

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

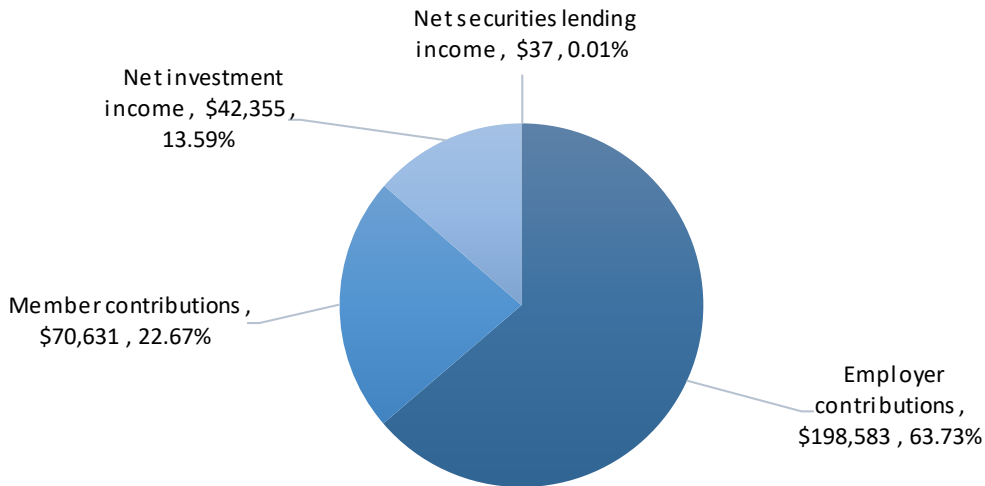
Additions. Total additions to the Retirement Fund for the fiscal year were \$312 million, which was \$273 million, or 47%, lower than last fiscal year. Significant changes are discussed below.

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

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

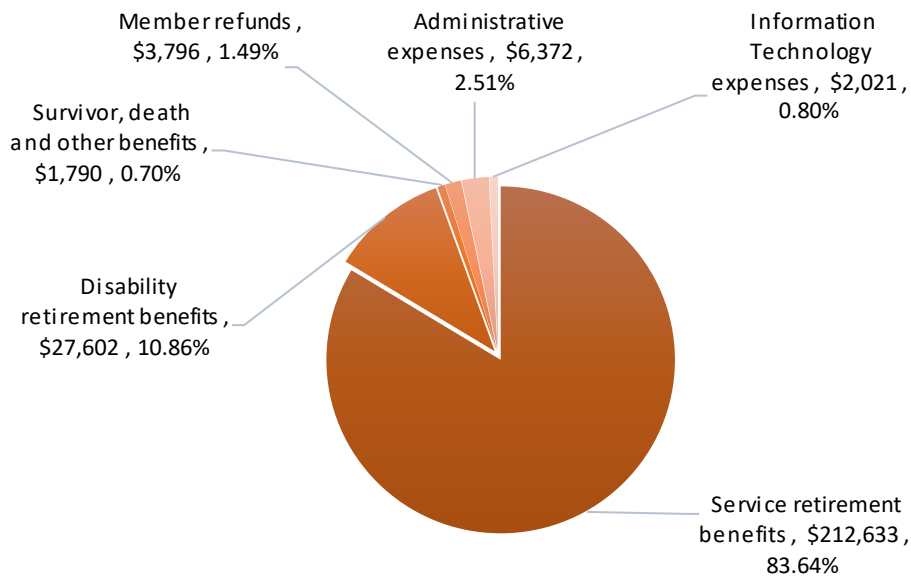
ADDITIONS TO FIDUCIARY NET POSITION

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



DEDUCTIONS FROM FIDUCIARY NET POSITION

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



Actuarial Valuation

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

In the actuarial valuation, the actuary uses several assumptions with regards to SamCERA's members (such as their life expectancy, projected salary increases, and the age at which members may retire) to determine the assets, liabilities, and future contribution requirements. The economic and demographic assumptions selected are used to project, as closely as possible, the actuarial cost of the plan. The projection permits an orderly method for setting aside contributions today to provide benefits in the future and to maintain equity among generations of members.

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

Triennial Experience Study

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

Plan Assets, Liabilities, and Funded Ratio

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

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

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

Requests for Information

This financial report is designed to provide SamCERA's Board of Retirement, employers, members, investment managers, and any interested parties with a general overview of SamCERA's financial position and to show accountability for the funds received. Additional information is available on SamCERA's website at www.samcera.org. Questions concerning any information provided in this report or requests for additional financial information should be addressed to:

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

STATEMENT OF FIDUCIARY NET POSITION

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

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

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

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

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

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

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

NOTES TO THE BASIC FINANCIAL STATEMENTS

Note 1: Plan Description

The San Mateo County Employees' Retirement Association (SamCERA) is an independent public employee retirement system with its own governing board. Therefore, it is not subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

SamCERA is governed by the California Constitution; the County Employees Retirement Law of 1937 (the CERL - a component of the California Government Code); the California Public Employees' Pension Reform Act of 2013 (PEPRA); and the regulations, procedures and policies adopted by the Board of Retirement (the Board). The Board is responsible for governing the retirement system. SamCERA's management is responsible for overseeing daily operations and other crucial functions such as maintaining adequate internal controls and preparing financial statements.

General

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

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

- (1) solely in the interest of, and for the exclusive purpose of, providing economic benefits to participants and their beneficiaries;
- (2) with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character with like objectives; and
- (3) diversify the investments of the plan to minimize the risk of loss and to maximize the rate of return unless, under the circumstances, it is clearly prudent not to do so.

Pension Plans

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

Pension Plan Membership

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

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

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

Benefit Provisions

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

BENEFIT PLANS

As of June 30, 2020

		<u>General Member</u>	<u>Probation Member</u>	<u>Safety Member</u>
Plan 1	Hire Date	On or before 7/5/80	On or before 7/5/80	On or before 7/5/80
	Benefit factor	2%@55.5	3%@50	3%@50
	Maximum COLA	5%	3%	5%
	FAC Period	Highest 1 year	Highest 1 year	Highest 1 year
	Eligibility for Service Retirement	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 20 years of service.	Age 50 with 10 years of service; any age with 20 years of service.
Plan 2	Hire Date	7/6/80 - 7/12/97	7/6/80 - 7/12/97	7/6/80 - 7/12/97
	Benefit factor	2%@55.5	3%@50	3%@50
	Maximum COLA	3%	3%	3%
	FAC Period	Highest 1 year	Highest 1 year	Highest 1 year
	Eligibility for Service Retirement	Age 50 with 10 years of service; any age with 30 years of service; or age 70 regardless of years of service.	Age 50 with 10 years of service; any age with 20 years of service.	Age 50 with 10 years of service; any age with 20 years of service.
Plan 3	Hire Date	On or before 12/22/12, a non-contributory plan.	Not applicable	Not applicable
		(After five years of service, Plan 3 members can elect membership under the open contributory plan. Members currently working in a contributory plan with Plan 3 service may purchase an upgrade of their Plan 3 service. Plan 3 closed effective December 23, 2012.)		
		(If retirement occurs prior to age 65, benefit amount will be adjusted by an actuarial equivalent factor.)		
	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	

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

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

BENEFIT PLANS (CONTINUED)

As of June 30, 2020

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

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

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

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

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

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

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

Cost of Living Adjustments (COLA). COLA increases are applied to all eligible retirement and death benefits, effective April 1. As of April 1 of each year, the Board will adjust the retirement benefits in accordance with changes in the Consumer Price Index (CPI) from the previous January 1 to the current January 1, to the nearest one-half of one percent. The COLA is based on information from the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers in the San Francisco, Oakland, and San Jose Bay Area. The increase is capped at 5% for General and Safety members in Plan 1; 3% for Probation members in Plan 1 and all members in Plan 2; and 2% for members in Plans 4, 5, 6, and 7. Plan 3 has no COLA.

Note 2: Summary of Significant Accounting Policies

Basis of Accounting

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

Recognition of Contributions, Benefits, and Refunds

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

Investment Policy and Valuation

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

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

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

SamCERA records investment transactions on the trade date. Investments are reported at fair value, which represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Governmental Accounting Standards Board (GASB) establishes a fair value hierarchy based on the following three distinct types of input to develop the fair value measurements.

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

The valuation technique for each type of investment is as follows:

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

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

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

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

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

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

Foreign Currency Transactions

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

Securities Lending Activity

Securities lending transactions are short-term collateralized loans of SamCERA's securities for the purpose of generating additional investment income. For each securities lending transaction, SamCERA receives either cash collateral or non-cash collateral. The underlying securities out on loan are reported on SamCERA's Statement of Fiduciary Net Position as if the lending transaction had not occurred. In accordance with GASB Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions*, cash collateral held (or any security that can be sold or pledged without a borrower default) is separately reported on the Statement of Fiduciary Net Position among the current assets. A corresponding liability of an equal amount (the obligation to return the cash collateral) is reported simultaneously. Non-cash collateral held that cannot be sold or pledged without a borrower default is not reported on the Statement of Fiduciary Net Position nor is there a corresponding liability reported on this statement.

Income from Investments

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

Receivables

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

Capital Assets

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

Estimates

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

Reclassifications

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

Subsequent Events

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

New GASB Statement Implementation

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

Note 3: Funding Policy

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

The CERL establishes the basic contribution obligations for employers and members to the pension plan. The employer and member contribution rates adopted by the Board are based on recommendations from an independent actuary in accordance with membership type (General, Safety, and Probation) and the plan in which a member belongs. Employer contribution rates for each plan are determined pursuant to Government Code Section 31453 of the CERL, using the entry age normal cost method based upon a level percentage of projected payroll. These rates include an estimated amount necessary to finance benefits earned by members during the current year (normal cost) and an amount to amortize the unfunded actuarial accrued liability (UAAL). Under the current funding method, the June 30, 2008 UAAL is amortized over a fixed period ending June 30, 2023. Changes in the UAAL in

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

In determining both employer and member contribution rates, assumptions are made about future events that may affect the amount and timing of benefits to be paid and assets to be accumulated. Methods and assumptions used to determine contribution rates are discussed in the Required Supplementary Information and the Actuarial Sections. The actuarial valuation of plan assets and liabilities is normally carried out as of June 30 of each year. The contribution rates as determined at June 30, 2020, are subject to “one year” deferral. Thus, the new contribution rates from the June 2020 valuation are effective on July 1, 2021. Based on the 2020 valuation, assuming all assumptions are being met, the Retirement Fund is expected to be fully funded by fiscal year 2034.

Note 4: Member Contributions

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

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

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

Note 5: Employer Contributions

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

EMPLOYER STATUTORY CONTRIBUTION RATES AS A PERCENTAGE OF COVERED PAYROLL

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

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

SCHEDULE OF EMPLOYER CONTRIBUTIONS

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

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

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

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

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

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

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

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

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

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

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

In September 2015, the District entered an agreement with SamCERA to pay down its UAAL with a single payment of \$1.5 million in addition to its statutory contribution for fiscal year 2016. This amount was remitted to SamCERA on October 29, 2015. SamCERA established a new account, the District Supplemental Contribution Account (DSCA), to separately account for the District's supplemental contributions.

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

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

Note 6: Deposits and Investments

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

Deposits

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

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

SamCERA maintains cash deposits to support its investment activities and operational needs. As of June 30, 2020, \$18.0 million of cash was held in a pooled short-term investment fund with the Northern Trust Corporation, \$24.2 million in the investment pool with the County Treasurer, and \$32.6 million with SamCERA's stock distribution broker, Merrill Lynch. Cash held by investment managers at year-end amounted to \$33.2 million, which is swept daily into a pooled short-term investment fund managed by the Northern Trust Corporation. Cash held with the Northern Trust Corporation in the amount of \$1,661,680 is uninsured and uncollateralized. Thus, this amount is subject to custodial credit risk. SamCERA does not have a general policy addressing custodial credit risk. The fair value of SamCERA's position in the pool is the same as the value of the pool shares.

The participation in the County investment pool is voluntary. The County investment pool is not registered with the Securities and Exchange Commission as an investment company. In accordance with Article 6 Section 27131 of the California Government Code, the County Board of Supervisors established an eight-member County Treasury Oversight Committee to oversee the management of public funds in the County investment pool. Pool participants can withdraw no more than 12.5% of their deposits per month, based on the month-end balance of the prior month. All requests for withdrawal must be made in writing to the County Treasurer at least 24 hours in advance.

Investments

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

Investment Policy. The Investment Policy is strategized to reduce risk through a prudent diversification of the investment portfolio across a broad selection of distinct asset classes. The Board undertakes an in-depth asset-liability study every three to five years. In October 2019, the Board completed its most recent asset-liability study. The Board approved a new target asset allocation, which will be implemented in multiple phases and is expected to be completed by the end of 2020.

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

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

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

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

LONG-TERM EXPECTED REAL RATE OF RETURN

As of June 30, 2020

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

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

Investment Risk

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

Each investment manager, whom we hold a separately managed account with, is required to follow the “manager standard of care” to act prudently and solely in the best interest of SamCERA. Each investment manager, whom we hold a commingled fund investment with, is required to follow its fiduciary duties with respect to the Fund. The guidelines require the investment return performance of each manager be compared with the performance of a relative passive market index over specific periods. SamCERA’s investment consultant and staff constantly monitor the performance of all investment managers for compliance with respective guidelines.

Interest Rate Risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration is the measure of the price sensitivity of a fixed income portfolio to changes in interest rates, and calculated as the weighted average time to receive a bond’s coupon and principal payments. The longer the duration of the portfolio, the greater its price sensitivity to changes in interest rates. SamCERA has investments in twelve external investment pools and two fixed income portfolios containing debt securities. SamCERA does not have a formal policy that limits investment duration as a means of managing its exposure to fair value losses arising from increasing interest rates. Interest rate risk for the fixed income portfolios is displayed in the table below.

INTEREST RATE RISK ANALYSIS

As of June 30, 2020

Commingled Fixed Income Portfolio	Fair Value	Weighted Average Maturity (Years)	Effective Duration (Years)
Opportunistic Credit Funds ⁽¹⁾	\$ 460,656,716	6.83	3.02
BlackRock Intermediate Government Bond	153,638,396	4.05	3.83
Fidelity Institutional Asset Management	254,181,629	8.33	5.64
Western Asset Management	167,628,874	7.37	3.26
Total	\$ 1,036,105,615		

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

INTEREST RATE RISK ANALYSIS (CONTINUED)

As of June 30, 2020

<u>Separate Account Fixed Income Portfolio</u> ⁽¹⁾	<u>Fair Value</u>	<u>Weighted Average Maturity (Years)</u>	<u>Effective Duration (Years)</u>
Asset Backed Securities	\$ 65,656,523	18.29	1.57
Commercial Mortgage Backed	30,326,894	26.77	1.03
Corporate Bonds	64,862,036	10.98	7.76
Government Agencies	2,514,657	11.59	8.72
Government Bonds	104,545,000	15.15	12.19
Government Mortgage Backed Securities	119,394,927	20.86	5.11
Government Commercial Mortgage Backed	2,138,150	7.10	3.25
Municipal Bonds	1,179,482	13.43	8.92
Non-government Backed CMOs	8,088,426	33.51	5.51
Total	\$ 398,706,095		

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

Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. SamCERA's Investment Policy seeks to maintain a diversified portfolio of fixed income instruments to obtain the highest total return for the fund at an acceptable level of risk within the asset class. The quality of SamCERA's investments in bonds as of June 30, 2020, is summarized in the table on the right.

Custodial Credit Risk – Investment. The custodial credit risk is the risk that, in the event of the failure of a counterparty to a transaction, SamCERA will not be able to recover the value of investments or collateral securities that are in the possession of an outside party. Under the investment guidelines for each investment manager, managed investments must be held in the name of SamCERA. The master custodian may rely on sub-custodians. As of June 30, 2020, SamCERA had no investments that were exposed to custodial credit risk.

Concentration of Credit Risk. This risk is the risk of loss attributed to the magnitude of SamCERA's investment in a single issuer of securities. Investments issued or explicitly guaranteed by the U.S. Government and commingled investments are excluded from the concentration of credit risk analysis. As of June 30, 2020, SamCERA does not have investments in a single issuer with five percent or more of SamCERA's fiduciary net position.

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

As of June 30, 2020

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

Foreign Currency Risk. Foreign currency risk is the risk that changes in the exchange rates will adversely affect the fair value of an investment or deposit. In its Investment Policy, SamCERA allows forward currency contracts and currency futures as defensive currency hedging to mitigate foreign currency risk on the portfolio. International equity and global bond managers are permitted to invest in authorized countries. The table below indicates the magnitude of risk for each foreign currency denominated in U.S. dollars. Foreign investments held within commingled fund vehicles are excluded from analysis below.

FOREIGN CURRENCY RISK ANALYSIS

As of June 30, 2020

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

Derivatives

Derivatives are financial instruments that are connected to a specific financial instrument, indicator or commodity, and through which specific financial risks can be traded in financial markets in their own right. The value of a derivative derives from the price of an underlying item, such as an asset or index. Derivatives are used for a number of purposes (such as risk management, hedging, and arbitrage between markets), and are usually settled by net payments of cash. SamCERA currently employs external investment managers to manage its assets as permitted by the California Government Code and SamCERA's Investment Policy. Specific managers hold investments in swaps, options, futures, forward settlement contracts, and warrants and enter into forward foreign currency exchange security contracts within fixed income financial instruments.

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

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

INVESTMENT DERIVATIVES

As of June 30, 2020

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

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

Foreign Currency Risk – Derivatives. Foreign currency contracts are subject to foreign currency risk as the value of deposits or investments denominated in foreign currency may be adversely affected by changes in foreign exchange rates. Foreign currency contracts include forward contracts and spot contracts. *Currency forward contracts* are derivatives and generally serve to hedge or offset the impact of foreign currency exchange rate fluctuations. *Spot contracts* are agreements to buy or sell a certain amount of foreign currency at the current market rate for settlement in two business days. Spot contracts are generally used when SamCERA is required to make or receive payments in a foreign currency. SamCERA does not have a formal policy on foreign currency risk.

Custodial Credit Risk – Derivatives. As of June 30, 2020, SamCERA's derivatives were not subject to custodial credit risk. However, they are subject to other risks.

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

To minimize credit risk exposure, SamCERA's investment managers continuously monitor credit ratings of counterparties. Should there be a counterparty failure, SamCERA would be exposed to the loss of the fair value of derivatives that are in asset positions and any collateral provided to the counterparty, net of the effect of applicable netting arrangements. SamCERA does not have a general policy with respect to netting arrangements or collateral requirements. In the event of bankruptcy or default by the counterparty, netting arrangements legally provide SamCERA with a right of offset.

Securities Lending Activity

SamCERA is authorized by its Investment Policy and state law to participate in a securities lending program. Securities lending transactions are short-term collateralized loans of SamCERA's securities for the purpose of generating additional investment income. SamCERA has a securities lending agreement in place that authorizes its securities lending agent to lend SamCERA's securities to broker-dealers and banks pursuant to a loan agreement. For each type of security loaned, SamCERA receives cash or non-cash collateral. SamCERA invests the cash and receives earnings on it in exchange for paying a loan rebate fee to the borrower. In the case of non-cash collateral, the borrower pays SamCERA a loan premium.

For the fiscal year ended June 30, 2020, on behalf of SamCERA, the securities lending agent lent SamCERA's securities to borrowers under the securities lending agreement. In return, SamCERA received cash and obligations issued or guaranteed by the U.S. government, or its agencies or instrumentalities. Borrowers were required to deliver collateral for each loan equal to (1) loaned securities denominated in U.S. dollars or sovereign debt issued by foreign governments, with a margin of at least 102% of the fair value of the loaned securities; and (2) loaned securities not denominated in U.S. dollars, or whose primary trading market was not located in the United States, with a margin of at least 105% of the fair value of the loaned securities. In addition, borrowers were required to maintain the designated margin percentage of collateral on a daily basis.

SamCERA imposes the following restrictions on the loans that the securities lending agent makes on SamCERA's behalf:

- Borrower must have a long-term credit rating of either "A" from Standard and Poor's (S&P) or "A2" from Moody's Investors Service (Moody's). For split-rated borrowers, the higher rating shall prevail if not the same rating, with the lower rating having a minimum long-term credit rating of either "A-" from S&P or "A3" from Moody's.
- The maximum allowable amount of assets on loan to any single borrower shall not be greater than \$3 million.
- The maximum total amount of program assets on loan shall not be greater than \$10 million.

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

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

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

Securities Lending Collateral Interest Rate Risk. Cash collateral from loans of securities are invested in the Fund. The Fund’s average effective duration is restricted to 90 days or less. As of June 30, 2020, the Fund had an interest rate sensitivity of 38 days.

Fair Value Measurement

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

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

FAIR VALUE MEASUREMENT

As of June 30, 2020

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

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

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

INVESTMENTS MEASURED AT NET ASSET VALUE (NAV)

As of June 30, 2020

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

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

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

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

(4) **Private Equity and Real Asset Funds.** This type includes twenty-four private equity funds, investing primarily in Buyout Funds, Venture Capital, and Debt/Special Situations. This type also includes ten Private Real Asset funds, investing in infrastructure, mining finance, solar, energy, and farmland. The fair values of these funds have been determined using net asset values one quarter in arrears plus current quarter cash flows. These funds are not eligible for redemption. Distributions are received as underlying investments with the funds are liquidated, which on average can occur over the span of 5 to 10 years.

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

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

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

Note 7: Pension Disclosures

Employer Net Pension Liability

GASB Statement No. 67, *Financial Reporting for Pension Plans – an Amendment of GASB Statement No. 25*, requires public pension plans to disclose the employer net pension liability information. The net pension liability of all participating employers was determined based upon plan assets as of the measurement date at June 30, 2020.

For financial reporting purposes, the net pension liability is measured as the total pension liability less the amount of the pension fiduciary net position. The total pension liability represents the present value of projected benefit payments (using the discount rate of 6.67% discussed later) to be provided through the pension plan to active, inactive, and retired members (or their beneficiaries) based on those members' past periods of services.

Actuarial Methods and Assumptions

Each year SamCERA engages an independent actuarial consulting firm to perform an annual actuarial valuation in accordance with requirements under GASB Statement No. 67. In the valuation, the actuary employs generally accepted actuarial methods and assumptions to determine the total pension liability, the plan fiduciary net position, and the employers' net pension liability. Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. The actuarially determined

amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations, which reflect a long-term perspective, are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point.

Discount Rate

The discount rate used to measure the total pension liability as of June 30, 2020 was 6.67%. The projection of cash flows used to determine the discount rate assumed both employer and member contributions will be made at rates equal to the actuarially determined contribution rates.

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

Sensitivity Analysis

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

SCHEDULE OF SENSITIVITY ANALYSIS

As of June 30, 2020

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

SCHEDULE OF EMPLOYER NET PENSION LIABILITY

As of June 30, 2020

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

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

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

Discount rate	6.67%
Long-term expected rate of return, net of expenses	6.50%

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

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

Amortization of Unfunded Actuarial Accrued Liability (UAAL) ⁽²⁾ UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers that are determined annually ("layer" amortization).

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

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

Note 8: Plan Reserves

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

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

RESERVES REQUIRED BY THE CERL FOR REPORTING PURPOSES

As of June 30, 2020

Valuation Reserves

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

Non-Valuation Reserves

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

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

The valuation reserves are made up of the following:

Member Reserve represents funding provided by active and inactive (deferred) members. Additions include member contributions and interest credited. Deductions include refunds to members and transfers to the Retiree Reserve when a member retires.

Employer Advance Reserve represents funding provided by employers for future retirement payments to active and inactive members. Additions include employer contributions and interest credited. Deductions include lump-sum death benefit payments to members'

survivors, supplementary disability payments, and transfers to the Retiree Reserve when a member retires. If a member elects to receive a refund of member contributions upon termination, the balance in this reserve account will not be affected since the employers' contribution rates are based on an actuarial assumption that takes into account the expected termination rate for members.

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

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

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

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

Non-Valuation Reserves

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

Contingency Reserve is established to meet the reserve requirement under Section 31592 of the CERL that at least one percent of the fund's actuarial value of assets be kept as reserves against future earning deficiencies, investment losses, and other contingencies.

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

Market Stabilization Account

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

The balance in this account, arising from a *Five-year Actuarial Smoothing Policy*, represents the difference between (1) the aggregate amount initially deferred (or smoothed) from the

ten most recent semi-annual periods and (2) the aggregate amount subsequently recognized for semi-annual interest crediting from the same ten periods. Deferred investment earnings/losses are amortized over five years in accordance with a schedule established by the actuary. The balance in the Market Stabilization Account was negative \$258 million as of June 30, 2020.

Interest Crediting

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

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

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

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

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

When allocable earnings are insufficient to cover interest credits to the reserves specified discussed earlier, the funding in the Contingency Reserve may be used to cover the shortage. However, in no event may the Contingency Reserve be allowed to drop below one percent of the actuarial value of assets.

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

Note 9: Administrative Expenses

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

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

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

(Dollars in Thousands)

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

Actual Administrative Expenses as a Percentage of

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

SAMCERA’S ADMINISTRATIVE EXPENSES, BUDGET VS. ACTUAL

For the Fiscal Year Ended June 30, 2020

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

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

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

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

Note 10: Information Technology Expenses

Pursuant to Government Code Section 31580.2 of the CERL, expenses for computer software, computer hardware, and computer technology consulting services in support of these computer products are not subject to the mandated limit of 0.21% discussed earlier. As a result, SamCERA prepares a separate information technology budget starting with fiscal year 2012 when this code was enacted. The table below presents the budget-to-actual analysis of technology expenses for the fiscal year ended June 30, 2020.

SAMCERA'S INFORMATION TECHNOLOGY EXPENSES, BUDGET VS. ACTUAL

For the Fiscal Year Ended June 30, 2020

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

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

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

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

Note 11: Risk Management

SamCERA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; injuries to employees; and natural disasters. Such risks are managed by SamCERA through its participation with the County's self-insurance program and commercial insurance policies. SamCERA is covered by the County's self-insurance program for general liability and workers' compensation. Additional coverage for various types of risks are provided through the County's commercial insurance carriers in accordance with the terms set forth in individual insurance policies. Pursuant to a Memorandum of Understanding between SamCERA and the County, SamCERA pays a pro-rata share of total insurance cost incurred by the County based on employee count.

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

Note 12: Related Party Transactions

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

Note 13: Commitments

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

Note 14: Contingent Liability

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

REQUIRED SUPPLEMENTARY INFORMATION

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

This schedule displays the components of the total pension liability, the fiduciary net position, and the net pension liability of all participating employers, which were determined in conformity with the requirements prescribed by Governmental Accounting Standards Board (GASB) Statement No. 67. This schedule will ultimately show information for ten years.

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

Note: *Changes of assumptions.*

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

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

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

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

For the Fiscal Years Ended June 30	2016	2015	2014
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 technology expenses	(6,687,091)	(6,097,422)	(5,710,296)
Net change in plan fiduciary net position	86,912,169	162,782,374	563,868,622
Fiduciary net position, beginning	3,454,476,328	3,291,693,954	2,727,825,332
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	\$ 472,384,955	\$ 439,017,764	\$ 416,273,731
Net pension liability as a % of covered payroll	150.88%	112.06%	98.89%

Note: *Change of assumptions.*

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

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

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Last Ten Fiscal Years

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

Fiscal Year Ended June 30	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll ¹	As a % of Covered Payroll	
					Actuarially Determined Contribution	Actual Employer Contribution
2011	\$ 150,474,872	\$ 150,474,872	\$ -	\$ 427,041,368	35.24%	35.24%
2012	139,406,807	150,949,791	(11,542,984)	418,915,989	33.28%	36.03% ²
2013	131,293,846	144,308,171	(13,014,325)	404,360,891	32.47%	35.69% ²
2014	152,877,362	202,877,362	(50,000,000)	416,273,731	36.73%	48.74% ³
2015	169,814,170	180,704,280	(10,890,110)	439,017,764	38.68%	41.16% ³
2016	170,046,059	191,094,488	(21,048,429)	472,384,955	36.00%	40.45% ^{3,4}
2017	164,877,135	198,727,135	(33,850,000)	510,132,014	32.32%	38.96% ^{3,4}
2018	179,626,584	207,256,713	(27,630,129)	535,937,622	33.52%	38.67% ³
2019	194,830,054	245,498,411	(50,668,357)	554,734,196	35.12%	44.26% ^{3,5}
2020	198,582,998	198,582,998	-	593,295,084	33.47%	33.47%

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

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

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

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

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

SCHEDULE OF INVESTMENT RETURNS

For the Fiscal Years Ended June 30

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

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

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

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

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

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION

Actuarial Valuation Methods and Assumptions

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

Changes in Assumptions

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

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

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

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

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

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

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

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

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

Valuation Date	June 30, 2018
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	6.75%, net of pension plan investment and administrative expenses
Inflation rate (CPI)	2.50%
General wage increase	3.00%
Demographic Assumptions	
Salary increases due to service	See June 30, 2018 actuarial valuation report for details.
Retirement	See June 30, 2018 actuarial valuation report for details.
Disablement	See June 30, 2018 actuarial valuation report for details.
Mortality	See June 30, 2018 actuarial valuation report for details.

SUPPLEMENTARY INFORMATION

SCHEDULE OF ADMINISTRATIVE EXPENSES

For the Fiscal Year Ended June 30, 2020

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

Salaries & Benefits

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

Services & Supplies

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

Total Administrative Expenses	<u>\$ 6,371,363</u>
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SCHEDULE OF INFORMATION TECHNOLOGY EXPENSES

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

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

SCHEDULE OF INVESTMENT EXPENSES

For the Fiscal Year Ended June 30, 2020

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

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

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

SCHEDULE OF PAYMENTS TO CONSULTANTS (OTHER THAN INVESTMENT ADVISORS)

For the Fiscal Year Ended June 30, 2020

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

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

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

NOTES TO THE SUPPLEMENTARY INFORMATION

Administrative Services Budget

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

Information Technology Budget

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

Professional Services Budget

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

Government Code §31596.1 states the following:

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

- (a) The costs, as approved by the board, of actuarial valuations and services rendered pursuant to §31453.
- (b) The compensation of any bank or trust company performing custodial services.
- (c) When an investment is made in deeds of trust and mortgages, the fees stipulated in any agreement entered into with a bank or mortgage service company to service such deeds of trust and mortgages.
- (d) Any fees stipulated in an agreement entered into with investment counsel for consulting or management services in connection with the administration of the board's investment program, including the system's participation in any form of investment pools managed by a third party or parties.
- (e) The compensation to an attorney for services rendered pursuant to §31607 or legal representation rendered pursuant to §31529.1."

OTHER INFORMATION

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

As of June 30, 2020

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

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

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

Note: Employer allocation percentage (or proportionate share) is based on Actuarially Determined Contributions.

NOTES TO THE OTHER INFORMATION**Basis of Presentation and Basis of Accounting**

Employers participating in SamCERA are required to report pension information in their financial statements for fiscal periods beginning on or after June 15, 2014, in accordance with Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions — an Amendment of GASB Statement No. 27*.

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

Use of Estimates in the Preparation of the Documents

The preparation of the above documents, in conformity with GAAP, requires management to make estimates and assumptions that affect certain amounts and disclosures. However, actual results could differ from those estimates.

Amortization of Deferred Outflows and Deferred Inflows of Resources

The difference between projected and actual investment earnings on pension plan investments is amortized over five years on a straight-line basis. One-fifth was recognized in

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

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

Prior period changes of assumptions and differences between expected and actual experience are continued to be recognized based on the expected remaining service lives of all employees calculated as of those prior measurement dates.

The net effect of the change in the employer's proportionate share of the collective net pension liability and collective deferred outflows of resources and deferred inflows of resources is recognized over the average expected remaining service lives of all employees that are provided with pensions through the pension plan determined as of the beginning of the measurement period.

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

The Schedule of Pension Amounts by Employer does not reflect contributions made to SamCERA subsequent to the measurement date as defined in GASB Statement No. 68 Paragraphs 54, 55, and 57. Appropriate treatment of such amounts is the responsibility of the employers.

INVESTMENT SECTION



Board of Retirement
San Mateo County Employees' Retirement Association

Dear Trustees:

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



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

Portfolio Performance

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

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

Return/Risk Measure

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

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

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

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

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

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

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

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

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

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

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

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

Market Review

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

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

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

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

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

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

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

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

The broad international equity market had negative returns during the fiscal year. The developed international market, as measured by the MSCI EAFE, was down -5.1%, while emerging market equity, as measured by the MSCI Emerging Markets Index, returned -3.4%. As previously mentioned, the U.S. Federal Reserve lowered short-term interest rates five times during the fiscal year, initially to help offset the uncertainty created from the trade war with China, and then later due to the impacts from the COVID-19 pandemic. The target Fed Funds Rate range is now between 0.00 to 0.25%, down from 2.25 to 2.50% at the beginning of the fiscal year. Longer-term interest rates also precipitously decreased during the year. The 10-year U.S. Treasury yield decreased 1.34% during the fiscal year, ending at 0.66%, down from the 2.0% rate at the beginning of the year. These lower interest rates helped high quality fixed income have strong fiscal-year returns.

The broad U.S. bond market (as measured by the Bloomberg Barclays Aggregate Index) returned 8.7% on the year, while long-duration Treasuries returned 25.4%. High yield bonds ended flat on the year, as wider high yield spreads offset the positive impact of lower interest rates.

Portfolio Activities / Changes

For the year, SamCERA made no new commitments to private equity partnerships. SamCERA has \$457.5 million in total commitments in its private equity program across venture capital, buyouts, and special situations.

SamCERA made a commitment worth \$30 million to one new partnership in its private real asset category, bringing the total commitments to \$234.8 million.

SamCERA completed its asset liability study in the fourth quarter of 2019 and, as part of this process, the Board approved a new asset allocation policy. In the first half of 2020, SamCERA began implementing the new policy in multiple phases and expects to complete the transition to the new policy by the end of 2020. The new policy eliminated the 8% allocation to Risk Parity and reduced Inflation Hedge by 3%, while Diversifying assets increased by 8% and Growth assets increased by 3%. The table below compares the new policy to the old policy. The new policy will be in effect from July 1, 2020.

The largest change in the new policy is the removal of risk parity and a resulting increase in the allocation to core fixed income from 14% to 21%. SamCERA added two new strategies to implement this increased core fixed income exposure. First, DoubleLine Securitized Income was added. This is a securitized core strategy that is expected to provide a higher yield with a slightly lower interest rate sensitivity compared to the Bloomberg Barclays Aggregate Index, along with diversification to SamCERA's existing core fixed income managers. The second strategy added was NISA Core Bond. This is a risk-controlled, high quality core fixed income strategy that exhibits a duration profile in-line with the benchmark and has a low correlation to our current core fixed income managers.

Asset Allocation Policy (Old vs. New)

	Old Policy	New Policy
Growth	52%	55%
Public Equity	37%	39%
Private Equity	6%	6%
Opportunistic Cred	9%	10%
Diversifying	20%	28%
Core Fixed Income	14%	21%
Absolute Return	6%	6%
Liquidity	0%	1%
Inflation Hedge	20%	17%
Real Estate	10%	10%
Private Real Assets	4%	3%
Public Real Assets	6%	4%
Risk Parity	8%	0%

The allocation to absolute return is unchanged in the new policy, but SamCERA further diversified the manager risk within the absolute return program by adding two additional strategies. Graham Quantitative Global Macro, a directional long/short strategy across multiple asset classes, and PIMCO MAARS, an alternative risk premia strategy, were added during the fiscal year.

SamCERA also added U.S. TIPS to its public real assets portfolio, and now has equal allocation to U.S. TIPS, commodities, global listed natural resources equities, and global listed infrastructure equities. SamCERA's risk parity allocation contained TIPS as part of its inflation allocation. With the removal of risk parity from SamCERA's policy mix as part of the latest asset liability study, adding TIPS to public real assets will reduce the equity sensitivity of the

public real assets portfolio while providing better diversification within the broader inflation hedge program and a more direct hedge against potential inflation for the plan.

Lastly, SamCERA simplified its international equity manager structure by 1) Removing the dedicated emerging markets manager, 2) Changing the current passive MSCI EAFE mandate to one that includes both developed and emerging markets exposure (MSCI ACWI ex-US IMI), and 3) Repositioning the proceeds from the dedicated emerging markets allocation so that the allocation across Baillie Gifford, Mondrian, and Blackrock ACWI ex-US IMI are similar. These changes reduced the number of international equity managers from four to three, while better aligning the portfolio to the international equity policy benchmark, which is the MSCI ACWI ex-US IMI index.

Conclusion

Given the immense uncertainty caused by the COVID-19 pandemic, the Investment Team's goal remains steadfast: To provide an attractive risk-adjusted return stream on the investment portfolio to support the financial retirement of the County's employees and retirees. Given the plethora of potential risks, from policy mistakes, the pandemic itself, the increased Fed balance sheet, larger fiscal deficits/debt, higher potential inflationary pressures, asset price bubbles, and of course election year uncertainty, "balance" will be key to successfully navigating the future. SamCERA continues to keep a balanced risk posture without relying too much on any single asset, strategy, or return stream.

We will also strive to balance our long-term investment time horizon with thoughtful assessment of more shorter-term opportunities. We will balance seeking return (offense) with lowering risk/capital preservation (defense). We will balance portfolio income and portfolio capital appreciation. And as always, we will use our long-term investment policy to guide us through these dynamic times.

Respectfully Submitted,



Michael Coultrip
Chief Investment Officer
September 13, 2020

INVESTMENT CONSULTANT'S REPORT ON INVESTMENT ACTIVITIES



September 17, 2020

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

Dear Board Members:

Market Environment

During the latter half of calendar year 2019, global economies generally exhibited moderate and positive economic growth, inflation remained mild, central bank policies were accommodative to further growth, labor markets had fully recovered from the Global Financial Crisis, and economic surprises were few. Risk assets delivered robust performance during the second half of the year.

Investors' main concerns in the market appeared to be around troubled U.S.-Chinese relations, the resulting trade conflict which could interrupt economic progress and corporate profits, and even the potential for military conflict. However, the relationship between the two superpowers was seemingly on a more conciliatory track. A series of meetings between the U.S. and Chinese officials culminated in a "phase one" deal addressing agricultural trade, intellectual property protections, and some loose agreements on how China would manage its currency.

In early 2020, the calm and relatively stable environment began to shift. A novel coronavirus, and the disease it causes (COVID-19), began spreading through Wuhan, the capital of China's Hubei province. Containment efforts were ineffective, and the virus continued to spread. The sudden impact of this global pandemic on economic activity and markets was unprecedented. One of the most immediate effects of the forced closure of businesses around the world was an unparalleled shock to the global labor market. In the United States, approximately 10 million workers applied for unemployment benefits in the last two weeks of March alone. The unemployment rate rose from a 50-year low of 3.5% in February to 14.7% in April—the worst level since the Great Depression.

Investor sentiment, which had been strong in the second half of 2019, fell severely in March and April as equity markets sold-off and workers (most prominently within the leisure and hospitality sectors) were told not to come to work. Consumers exercised a notable degree of fiscal conservatism, paying down their credit card bills and paring back their spending. Retail sales generally plunged and then recovered. Household savings rates jumped as high as 33% as spending slowed and government support replaced lost income.

U.S. real GDP contracted sharply during the second quarter, falling at a 32.9% annualized rate, and was down 9.5% over the twelve-month period ended on June 30th. The slowdown consisted of decreased consumer spending, exports, inventory investment, fixed investment, as well as state and local government expenditures. Federal government spending partly offset the deceleration. While significant, this shock to the economy was in line with revised forecasts.

The size and pace of the shutdowns resulted in central bank intervention on a massive scale. The U.S. Federal Reserve Bank cut its target range for overnight loans between banks to near-zero and dusted off a variety of liquidity facilities left over from the Global Financial Crisis to help calm markets. The

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Federal Reserve's balance sheet swelled from around \$4.7 trillion to \$7.2 trillion between the end of March and the beginning of June as the New York Fed's trading desk purchased massive amounts of U.S. Treasuries and mortgage-backed securities. Additionally, the Fed opened facilities allowing it to buy corporate debt through exchange traded funds.

The European Central Bank elected not to push rates further into negative territory as the pandemic hit. Instead, the ECB put together a €750 billion asset purchase program, which was eventually boosted in June to €1.35 trillion. The package will allow the ECB to keep borrowing costs low by buying bonds across jurisdictions until June 2021, or until it believes the crisis is over.

U.S. Equity

U.S. stocks led risk assets higher during the first half of the fiscal year, with the S&P 500 Index returning 10.9% over the six months ending in December. As COVID-19 began to course through the U.S. in the first quarter of calendar-year 2020, the index plunged 33.8% between February 19th and March 23rd before rebounding strongly in the second quarter. Due to the nature of the crisis, investors piled into mega-cap technology stocks, which powered the rise in both the S&P 500 and NASDAQ 100 indices. By the end of the fiscal year on June 30th the S&P 500 had reached 3,100—placing the index within 10% of the February high water mark of 3,386.

After this roller-coaster ride of historical proportions, the S&P 500 Index finished the fiscal year with a respectable 7.5% full-period return, outperforming both developed and emerging market equities (in USD terms).

International Equity

By contrast, international developed market equities lagged behind US stocks during the first half of the fiscal year, with the MSCI World ex US Index posting a 6.9% return. The index then fell further than did the S&P 500 during the first quarter of 2020, and rebounded less strongly in the second quarter, thus finishing the fiscal year in negative territory (-5.4%, in USD terms).

Similarly, the MSCI Emerging Markets Index returned -3.4% over the full fiscal year. China (MSCI China Index +13.1%) supported emerging market equity performance substantially, likely due to having moved into the recovery phase relatively quickly. Additionally, massive intervention from the People's Bank of China and the tech-concentration of the Chinese equity universe provided further support. More broadly, the Asian segment of the emerging markets complex (MSCI EM Asia +4.9%) diverged materially from the Latin American component (MSCI EM Latin America -32.5%). While some of the divergence was driven by differences in sector composition, Latin American emerging markets faced much more significant currency depreciation relative to the dollar—an important story during the first half of the year. The J.P. Morgan Emerging Market Currency Index, a basket of ten emerging market currencies, depreciated roughly -14% relative to the dollar, presenting material headwinds for U.S. investors in emerging market equities.

Fixed Income

Bonds rallied for much of the fiscal year, and ten-year Treasury yields fell from 2.01% to 0.66%, establishing fresh all-time closing lows of 0.54% along the way. Holding duration in portfolios provided a significant downside ballast during the crisis. The Bloomberg Barclays Long Duration Treasury Index returned 25.4%, topping the fixed income performance table over the one-year period. The rally in European sovereign bonds was more muted, as yields had less room to fall and the ECB preferred not to push their main deposit rate below -0.50%. Japanese government bonds largely moved sideways as the Bank of Japan left its yield curve control policy unchanged and

continued to manage 10-year Japanese government bond yields within 20 basis points of its 0.00% target.

Credit spreads jumped considerably in the first quarter of 2020, leading to poor performance in credit over the quarter. On March 23rd, the option-adjusted spreads of the Bloomberg Barclays Aggregate Corporate and Corporate High Yield indices topped out at 3.73% and 11.00%, respectively. From a sector perspective, stress in the energy market exacerbated the blowout in spreads as concerns over the crude oil outlook worked their way into debt pricing. In the second quarter, however, as corporate credit facilities announced by the Fed in March became operational, spreads fell—back down to 6.26% for high yield credit and 1.50% for investment grade credit—resulting in a performance comeback. Over the fiscal year, investment-grade credit posted performance of 9.5% while high-yield credit underperformed, returning 0.0%.

Local-currency denominated emerging market debt (J.P. Morgan GBI-EM Global Diversified Index - 2.8%) underperformed risky U.S. credit, while dollar-denominated emerging market debt (J.P. Morgan EMBI Global Diversified Index +0.8%) fared slightly better.

PLAN INVESTMENT RESULTS

The San Mateo County Employees' Retirement Association (the Association) total Plan returned -0.2% net of fees for the fiscal year ended 6/30/20. The total Plan underperformed its policy index which returned 1.6% for this time period. For the fiscal year, the total Plan ranked in the 79th percentile for Public Fund Defined Benefit Plans greater than \$1 billion. SamCERA has positioned itself as a more conservative Plan than most of the peer group, most notably by having lower equity exposure in the portfolio. The biggest positive drivers of fiscal year performance for the Plan on an absolute basis came from Private Equity followed by Core Fixed Income. Public Real Assets and Absolute Return investments were the notable detractors for the fiscal year.

The U.S. Equity portfolio underperformed its U.S. equity policy benchmark on a net of fee basis during the fiscal year (2.3% versus 6.5% for the composite benchmark, respectively), which placed it in the 65th percentile of the peer universe. Within U.S. Equity, SamCERA's low volatility large cap managers and quantitative, factor-based small cap manager underperformed their respective benchmarks and detracted the most within the asset class. During a year where the value factor continued to underperform significantly, the quantitative small cap manager experienced ongoing stylistic headwinds. Similarly, during a fiscal year where sector performance diverged tremendously with information technology outpacing all other sectors at 35.9% for the fiscal year return, the low volatility approach which underweights technology in its portfolio underperformed the broad benchmark. On the positive side, SamCERA's passive Russell 1000 manager matched the benchmark and ranked in the top quartile during the fiscal year.

During the fiscal year, the International Equity Composite outperformed its composite benchmark on a relative basis, returning -1.6% net of fees compared to -3.1% for the MSCI ACWI ex-US IMI Index (50% hedged). This result ranked in the 28th percentile of the peer group. There was a large divergence between absolute performance for the Plan's active international growth manager and international value manager (12.3% vs. -12.9% for the fiscal year, respectively) due to the ongoing dispersion between growth and value returns, but both managers exceeded their benchmarks over this time period. The Plan's emerging markets portfolio underperformed its benchmark significantly for the fiscal year (-12.8% vs. -3.0% for the MSCI Emerging Markets Index) because of the manager's structural underweight to China which hurt returns as the Chinese market rebounded more quickly than most countries post-COVID. Following the fiscal year, the Plan terminated its dedicated emerging markets

manager and instead added emerging markets as a component of its passive international mandate (MSCI ACWI ex-US IMI Index) and across its active managers.

For the fiscal year, the Plan's Total Fixed Income Composite net return of 4.4% lagged the Blended Fixed Income benchmark return of 6.4% during a period where higher quality fixed income outperformed lower quality fixed income on an absolute basis (fiscal year returns of 7.7% for core fixed income, -2.0% for opportunistic fixed income and 1.3% for private credit). On a relative basis, SamCERA's managers in the core fixed income composite outperformed their respective benchmarks. But the composite underperformed the Bloomberg Barclays Aggregate Index (BB Agg) due to more defensive positioning compared to the BB Agg. The Plan added to core fixed income as a result of its asset-liability study, and SamCERA hired a securitized manager and an additional core bond manager during the fiscal year. Within opportunistic fixed income, its securitized and flexible credit managers were positive contributors, whereas its global fixed income and high yield corporate focused managers detracted. During the second half of the fiscal year, SamCERA added an opportunistic fixed income manager that invests in dislocation opportunities. Private credit was ahead of its benchmark for the fiscal year (1.3% vs. -6.1% for the Cliffwater Direct Lending Index). SamCERA continued to add to its private credit portfolio during the fiscal year.

SamCERA's Risk Parity component of the portfolio underperformed its benchmark during the fiscal year (-5.0% net of fees versus 4.6% for the 60% MSCI World/40% Bloomberg Barclays Global Aggregate blended benchmark). Following SamCERA's asset-liability study, the Plan decided to eliminate risk parity from the portfolio with the transition completed around the end of the fiscal year.

SamCERA's Alternatives portfolio, comprised of Private Equity and Absolute Return strategies, outperformed for the year ended June 30, 2020 (2.5% versus 0.0% for the composite benchmark). The Private Equity portfolio outperformed on a time-weighted basis (16.0%) versus the Russell 3000 + 3% 1 quarter lagged index (-6.1%). The Absolute Return composite returned -12.7% compared to 5.4% for London Interbank Offered Rate (LIBOR) + 4%. Over the fiscal year, SamCERA terminated an alternative beta manager that had been underperforming significantly and added two absolute return managers with the goal of improving performance and diversifying the manager structure. In the coming fiscal year, the Plan will continue to incrementally add to this part of the portfolio.

Over the fiscal year, SamCERA's Inflation Hedge portfolio, comprised of real estate, private real assets, a liquid real asset pool (publicly listed infrastructure, commodities, natural resources, and now TIPS) returned -10.5% compared to -6.7% for the blended Inflation Hedge index. The Real Estate component provided a positive return of 2.4% for the fiscal year which was ahead of the National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity (NCREIF ODCE) Index (2.2%). The Plan continues to diversify its real estate exposure. The liquid real asset pool, a liquid proxy used as a funding vehicle for private real assets declined significantly during the fiscal year (-25.4% vs. -15.3% for the blended benchmark). SamCERA's midstream energy manager was a significant detractor that was ultimately terminated over the fiscal year. During the fiscal year, the Plan eliminated its discreet TIPS portfolio and added it as a component of the liquid pool. Over the period, private real assets declined -8.1% which was ahead of its benchmark on a relative basis (-24.8%).

ASSET ALLOCATION AND MANAGER STRUCTURE

Over the fiscal year ended 6/30/20, the Plan reaffirmed its actuarial rate of return to 6.5%. SamCERA completed an asset-liability study during the period with the goal of continuing to reduce equity volatility while maintaining a portfolio structure designed to provide long-term sustainability. The

resulting asset allocation eliminated Risk Parity and reduced Inflation Hedge by 3%. Diversifying assets increased by 8% and Growth assets increased by 3%.

In summary, SamCERA continues to follow an investment strategy focused on balance and the importance of risk-adjusted returns. By design, the portfolio has return-seeking and capital preservation elements to ensure Plan sustainability and meet its future obligations. The Plan is preparing for its maturing demographics and, for that reason, is increasingly cognizant about volatility reduction and cash flow improvement. We remain confident in the direction of the portfolio given SamCERA's unique objectives, fiscal strength and well-designed investment strategy.

Sincerely,



Margaret S. Jadallah

INVESTMENT PHILOSOPHY, OBJECTIVES, POLICY, AND ALLOCATION

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

Investment Beliefs

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

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

Investment Objectives

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

- A. Generate risk-adjusted returns that exceed the Asset Allocation Policy Benchmark (as defined in Section 6.0 of the Investment Policy) on a net-of-fee basis over five-year rolling periods.
- B. Achieve a fund return that meets or exceeds the long-term forecast of capital market returns for the asset allocation portfolio benchmark over multiple economic cycles (e.g., 15-20 years).

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

Investment Policy

The Investment Policy of the Board pursues an investment strategy which reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. Consistent with the Investment Beliefs, the Board's investment policy is to:

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

INVESTMENT SUMMARY

The investment summary reports the fair value and the percentage of the portfolio’s total fair value for each major type of investment.

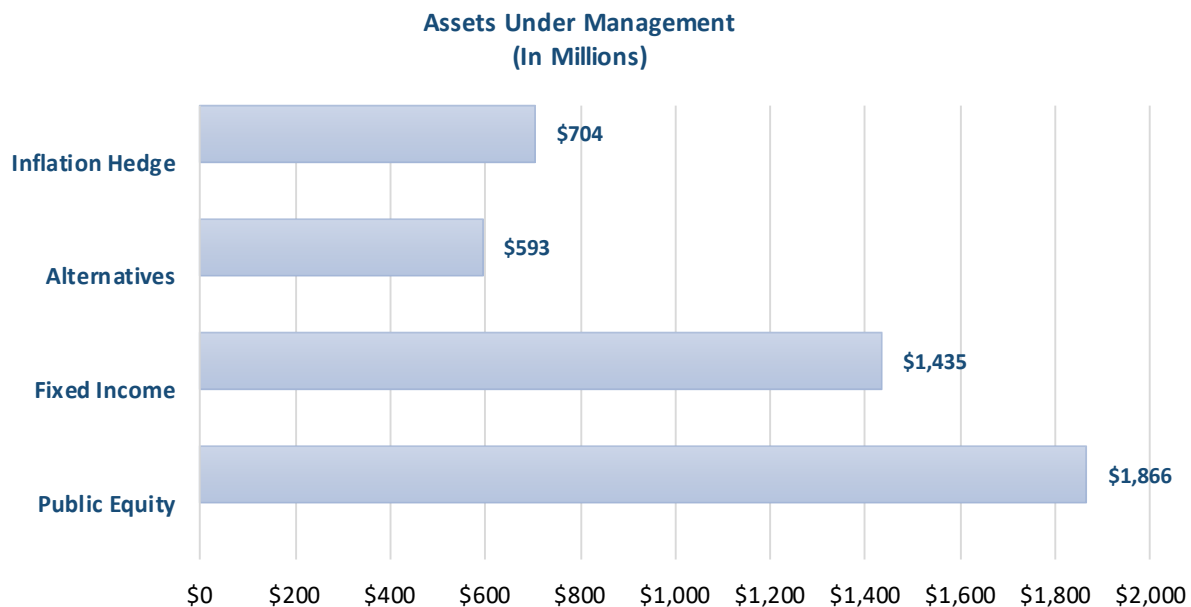
INVESTMENT SUMMARY

As of June 30, 2020

ASSET CLASS	Assets Under Management
Public Equity	\$ 1,866,264,297
Fixed Income	1,434,811,710
Alternatives	593,379,227
Inflation Hedge	704,360,824
Total Net Portfolio Value	<u>\$ 4,598,816,058</u>

RECONCILIATION TO STATEMENT OF FIDUCIARY NET POSITION

Total Net Portfolio Value	\$ 4,598,816,058
Cash Equivalents	164,508,785
Receivables	95,960,277
Capital Assets, Net of Depreciation	5,209,398
Payables	(83,992,205)
Fiduciary Net Position as of June 30, 2020	<u>\$ 4,780,502,313</u>



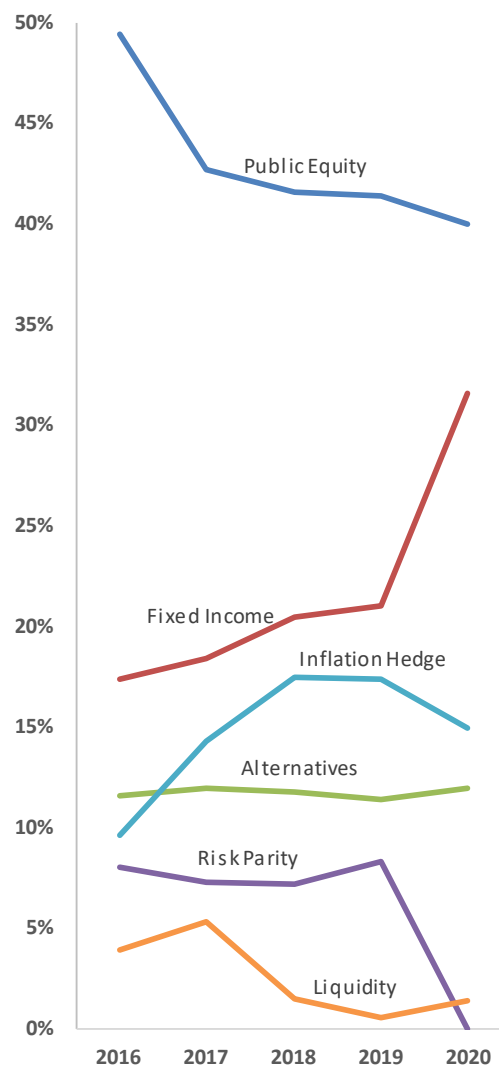
ASSET ALLOCATION

ASSETS ALLOCATION AS A PERCENTAGE OF FAIR VALUE

As of June 30, 2020

Asset Class	Target Policy as of June 30, 2020	New Policy Effective July 1,	Actual as of June 30, 2020
Public Equity	40%	39%	40.0%
Fixed Income	26%	31%	31.6%
Alternatives	12%	12%	12.0%
Inflation Hedge	17%	17%	15.0%
Liquidity	1%	1%	1.4%
Risk Parity	4%	0%	0.0%
Total	100%	100%	100%

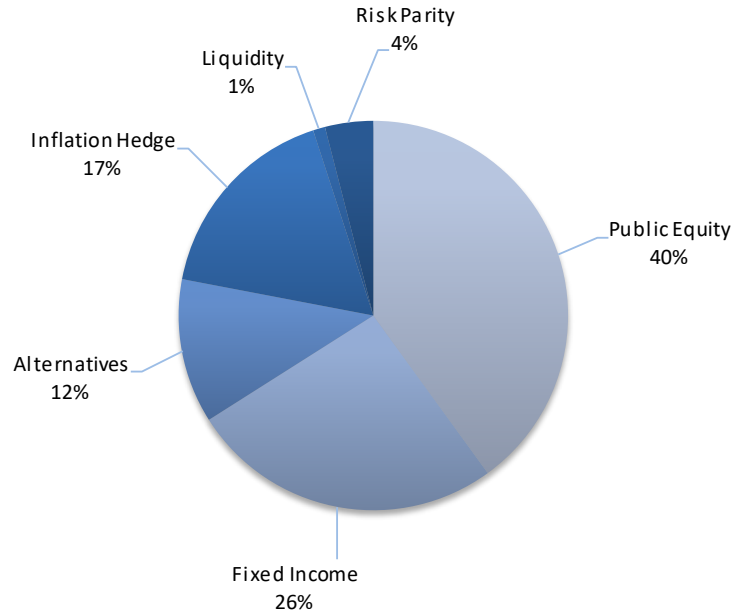
Investment	Target Policy as of June 30, 2020	New Policy Effective July 1, 2020	Actual as of June 30, 2020
Growth	54%	55%	57.2%
Public Equity	40%	39%	40.0%
Private Equity	6%	6%	6.4%
Opportunistic Credit	8%	10%	10.8%
Diversifying	25%	28%	27.8%
Core Fixed Income	18%	21%	20.8%
Absolute Return	6%	6%	5.6%
Liquidity	1%	1%	1.4%
Inflation Hedge	17%	17%	15.0%
Real Estate	9%	10%	9.1%
Private Real Assets	2%	3%	1.9%
Public Real Assets	6%	4%	4.0%
Risk Parity	4%	0%	0.0%
Total	100%	100%	100%



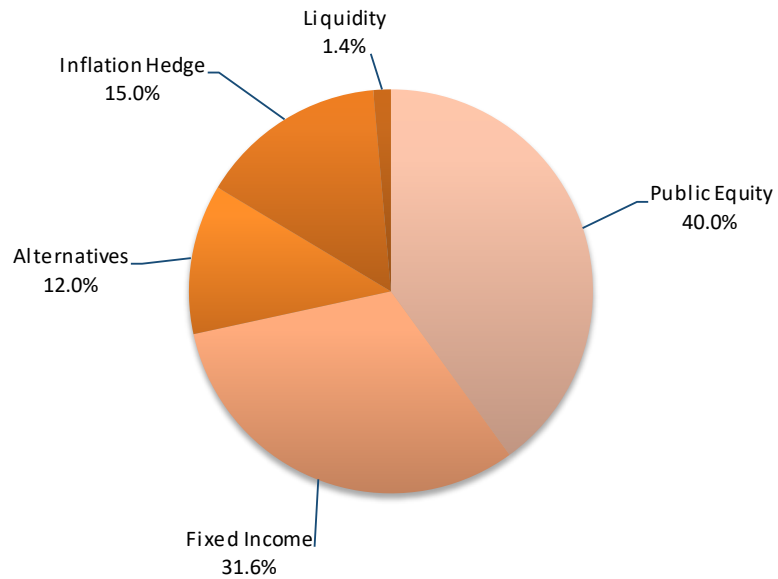
Note 1: The target allocation as of June 30, 2020, reflects an “interim” policy allocation, the portion of the newly adopted allocation that has already been implemented.

Note 2: The actual asset allocation figures presented in this section reflect the fair value and economic exposure of the plan as of fiscal year-end, and include the allocation effects of the cash overlay and currency hedge programs. There may be differences between these figures and the fair values presented in the Statement of Net Fiduciary Position due to timing and the allocation effects of the cash overlay and currency hedge programs.

Asset Allocation (Target Policy)
As of June 30, 2020

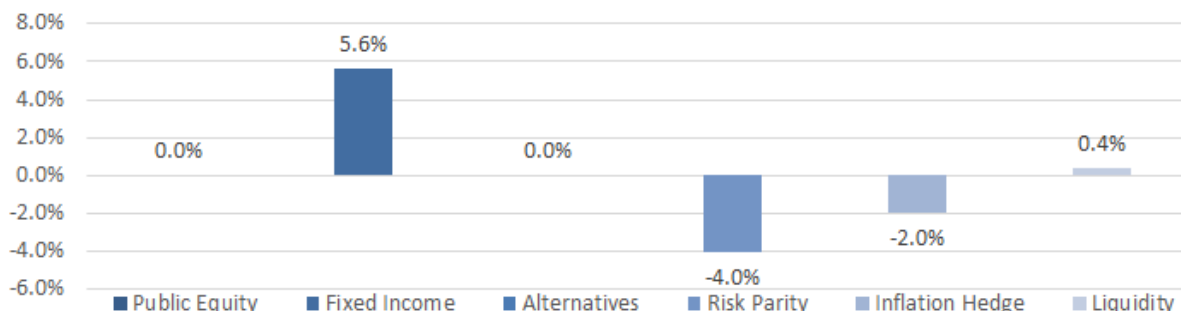


Actual Asset Allocation
As of June 30, 2020



PERCENT OF DEVIATION FROM ASSET ALLOCATION

As of June 30, 2020



BENCHMARKS

As of June 30, 2020

Asset Class	Policy Benchmark
Public Equity	
Domestic Equity	55% Russell 3000
International Equity	22.5% Morgan Stanley Capital International ex-United States Investable Market Indexes (MSCI ex-US IMI)
	22.5% Morgan Stanley Capital International ex-United States Investable Market Indexes (MSCI ex-US IMI) 100% Hedged
Fixed Income	
Domestic Fixed Income	69.2% Bloomberg Barclays Aggregate (BBgBarc)
Opportunistic Credit	30.8% BBgBarc Intermediate High Yield (HY)
Alternatives	
Private Equity	50% Russell 3000 + 3% (1-quarter lag)
Hedge Funds/Absolute Return	50% London Interbank Offered Rate (LIBOR) + 4%
Risk Parity ⁽¹⁾	
	60% Morgan Stanley Capital International World
	40% BBgBarc Global Aggregate
Inflation Hedge	
Real Estate	52.94% National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity (NCREIF ODCE)
Private Real Asset	11.77% Blend: 50% Standard & Poor (S&P) Global Large-MidCap Commodity and Resource + 50% S&P Global Infrastructure + 2% (1-quarter lag)
Public Real Asset	8.83% Bloomberg Roll Select Commodity
	8.82% Standard & Poor (S&P) Global Large-MidCap Commodity and Resource
	8.82% S&P Global Infrastructure
	8.82% Barclays Treasury Inflation Protected Securities (TIPS)
Cash Equivalents	
	91-day Treasury-Bills

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

SCHEDULE OF PORTFOLIO RETURNS

Performance as of June 30, Net of Fees

Asset Class	Total Time-Weighted Rate of Return ⁽⁷⁾		
	One Year	Three Years	Five Years
Public Equity	0.5%	5.3%	6.3%
Public Equity Benchmark	2.1%	6.2%	6.8%
Domestic Equity	2.3%	8.1%	8.5%
Domestic Equity Benchmark	6.5%	10.0%	9.9%
International Equity	-1.6%	2.1%	3.3%
International Equity Benchmark	-3.1%	1.6%	2.9%
Fixed Income	4.4%	4.0%	4.3%
Fixed Income Benchmark	6.4%	4.9%	4.5%
Core Fixed Income	7.7%	4.7%	4.4%
Core Fixed Income Benchmark	8.7%	5.3%	4.3%
Opportunistic Credit	-2.0%	2.8%	4.6%
Opportunistic Credit Benchmark	3.2%	4.3%	5.1%
Alternatives	2.5%	3.3%	5.1%
Alternatives Benchmark	0.0%	6.4%	6.5%
Private Equity ⁽¹⁾	16.9%	13.7%	14.4%
Private Equity Benchmark	-6.1%	6.0%	8.8%
Hedge Funds/Absolute Return	-12.7%	-7.5%	-2.4%
Hedge Funds/Absolute Return Benchmark	5.4%	5.8%	5.3%
Risk Parity ⁽²⁾	-5.0%	3.9%	4.3%
Risk Parity Benchmark	4.6%	6.4%	6.9%
Inflation Hedge ⁽³⁾	-10.5%	-0.7%	*
Inflation Hedge Benchmark	-6.7%	1.6%	*
Real Estate ⁽⁴⁾	2.4%	5.7%	7.3%
Real Estate Benchmark	2.2%	5.7%	7.3%
Private Real Asset ⁽⁵⁾	-8.1%	-6.7%	2.9%
Private Real Asset Benchmark	-24.8%	-6.2%	-1.6%
Public Real Assets ⁽⁶⁾	-25.4%	-6.6%	*
Public Real Assets Benchmark	-15.3%	-2.0%	*
Cash Equivalents	0.9%	1.1%	1.1%
Cash Equivalents Benchmark	1.3%	1.7%	1.1%
Total	-0.2%	3.9%	4.9%
Policy Benchmark	1.6%	5.3%	5.9%

(1) The 1-year Private Equity return does not include \$32 million in stock distributions received towards the end of the fiscal year.

(2) The Board of Retirement approved the removal of the target allocation to Risk Parity at its October 29, 2019 board meeting.

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

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

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

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

(7) Return calculations were prepared using a time-weighted rate of return, net of fees, in accordance with the Global Investment Performance Standards.

* Return information is not available.

SCHEDULE OF TOP TEN EQUITIES ⁽¹⁾

As of June 30, 2020

Shares	Company Name	Fair Value
179,394	Microsoft Corp	\$ 26,805,074
97,975	Apple Inc	26,241,733
10,157	Amazon	20,573,300
57,524	Facebook Inc	9,590,324
7,189	Alphabet Inc Class A	7,485,320
7,099	Alphabet Inc Class C	7,368,540
63,159	Johnson & Johnson	6,521,308
46,691	Berkshire Hathaway Inc	6,119,520
40,447	Visa Inc	5,736,664
58,368	Procter & Gamble	5,124,179
	Total Top 10 Equities	<u>\$ 121,565,962</u>

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

SCHEDULE OF TOP TEN FIXED INCOME SECURITIES ⁽¹⁾

As of June 30, 2020

Security	Coupon	Maturity	Fair Value
US Treasury	1.250	5/15/2050	\$ 22,247,794
US Treasury	2.000	2/15/2050	9,018,720
Federal Home Ln Mtg Corp Pool	3.000	12/1/2046	5,750,879
FNMA Pool	2.440	3/1/2032	5,649,619
FNMA REMIC TR 2018-64	3.000	9/25/2048	4,849,190
US Treasury	2.250	4/15/2022	4,552,739
Nationstar Home FL TG RT	0.455	9/25/2036	4,431,689
FNMA Pool	2.510	11/1/2034	4,357,831
FNMA Pool	2.450	10/1/2029	4,295,891
FNMA Pool	2.500	5/1/2040	4,135,768
	Total Top 10 Fixed Income		<u>\$ 69,290,120</u>

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

LIST OF INVESTMENT MANAGERS

As of June 30, 2020

GROWTH

Domestic Equity

BlackRock
DE Shaw
Quantitative Management Associates
Acadian Asset Management
PanAgora Asset Management

International Equity

Baillie Gifford
BlackRock
Mondrian Investment Partners

Private Equity

ABRY Partners
Altas Partners
Angeles Equity Partners
Bernhard Capital Partners
CapVest Equity Partners
Catalyst Fund
Cevian Capital
Emergence Capital Partners
General Catalyst Partners
Great Hill Partners
JLL Partners
New Enterprise Associates
Oak Hill Advisors
Sycamore Partners
TCW
Third Rock Ventures
Warburg Pincus

Opportunistic Credit

Angelo Gordon
Beach Point Capital Management
BlackRock
Brigade Capital Management
Franklin Templeton
PIMCO
Tennenbaum Capital Partners
White Oak

DIVERSIFYING

Fixed Income

BlackRock
DoubleLine Capital
Fidelity Institutional Asset Management
NISA Investment Advisors
Western Asset Management

Absolute Return

Aberdeen Standard Investments
Graham Capital Management
PIMCO

INFLATION HEDGE

Public Real Assets

State Street Global Advisors

Real Estate

Harrison Street
Invesco
PGIM

Private Real Assets

Blue Road Capital
Brookfield
CIM Group
EnCap Investments
EQT Fund Management
EverStream Energy Capital Management
LS Power
Quantum Energy Partners
Taurus Funds Management

CASH OVERLAY AND CURRENCY HEDGE

Parametric Portfolio Associates

SCHEDULE OF PROFESSIONAL SERVICES AND FEES

For the Fiscal Year Ended June 30, 2020

	Management Fees	Fair Value
ASSETS UNDER MANAGEMENT		
Public Equity	\$ 3,970,230	\$ 1,866,264,297
Fixed Income	5,109,760	1,434,811,710
Alternatives	3,344,410	593,379,226
Risk Parity	1,057,423	-
Inflation Hedge	4,137,511	704,360,824
Cash Overlay and Currency Hedge	276,020	54,095,321
Total	\$ 17,895,354	\$ 4,652,911,378
OTHER INVESTMENT EXPENSES		
Investment Consultant	\$ 494,241	
Actuarial Consulting	178,108	
Master Custodian	352,364	
Other Professional Services	65,072	
Total	\$ 1,089,785	

TOP 10 BROKER COMMISSIONS

Commission per Share Traded, For the Fiscal Year Ended June 30, 2020

Brokerage Firm	Amount of Commission	Number of Shares Traded	Commission per share
Morgan Stanley	\$ 44,983	1,126,176	0.04
BOFA Securities, Inc	41,094	1,097,613	0.04
Raymond James & Associates, Inc	26,726	668,163	0.04
JP Morgan Securities LLC/JPMC	22,613	4,318,494	0.01
RBC Capital Markets, LLC	14,726	30,491,820	0.00
Cantor Fitzgerald	12,410	310,264	0.04
Goldman Sachs & Co	10,479	680,226	0.02
Stifel, Nicolaus & Co	7,280	182,009	0.04
Merrill Lynch International	6,490	1,850,383	0.00
UBS AG London	4,957	642,379	0.01
All Other Brokerage Firms	91,527	2,525,575,137	0.00
Total	\$ 283,285	2,566,942,664	0.00

ACTUARIAL SECTION



ACTUARY'S CERTIFICATION



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 Suite 3800
 Seattle, WA 98101-2605
 USA
 Tel +1 206 624 7940
 milliman.com

October 7, 2020

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

Dear Members of the Board:

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

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

Valuation Date	Funded Ratio
June 30, 2018	87.5%
June 30, 2019	85.8%
June 30, 2020	86.4%

The funded ratio increased in the last year due primarily to employer contributions to amortize the Unfunded Actuarial Accrued Liability (UAAL). This increase was partially offset by demographic experience different than assumed, the recognition of deferred investment losses, and salary and payroll increases greater than assumed.

It is our opinion that SamCERA continues in sound financial condition as of June 30, 2020 and will continue to remain in sound financial condition provided that employer contributions are made based on the current funding policy and the valuation is based on reasonable assumptions. Under SamCERA's funding policy, the statutory employer's contributions are set equal to the employer normal cost rate plus the amortization payment of any UAAL. The amortization of the initial UAAL as of June 30, 2008 is funded over a closed 15-year period ending June 30, 2023. The amortization of subsequent changes in the UAAL is funded over separate closed 15-year layers that are determined annually. This funding policy is projected to result in the funded ratio continuing to increase towards 100% over the next several years.

The June 30, 2020 valuation results are based on the membership data and the asset information provided by SamCERA. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

The valuation is also based on our understanding of SamCERA's current benefit provisions and the actuarial assumptions that were reviewed and adopted by the Board. The economic and demographic assumptions were last reviewed in detail in the triennial investigation of experience study as of April 30, 2020 and adopted by the Board at its meeting on July 28, 2020.

This work product was prepared solely for SamCERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



The assumptions and methods used for financial reporting under GASB 67 are the same as the funding assumptions and methods with the following exceptions:

1. The discount rate and investment return assumption of 6.67% differs from the funding valuation due to the addition of an administrative expense load of 0.17%.
2. The asset valuation method is fair market value.

The actuarial computations presented in the valuation report are for purposes of determining the recommended funding amounts for SamCERA consistent with our understanding of its funding requirements and goals. The liabilities are determined using the entry age normal funding method. The actuarial value of assets used in the funding valuation is equal to the market value of assets with a five-year (10 six-month periods) recognition of the difference between expected and actual investment returns. Effective June 30, 2018 all deferred gains and losses were combined into a single amount and recognized over a five-year (10 six-month) period. Beginning with the six-month period immediately following June 30, 2018, offsetting of current period gains or losses against prior period gains or losses occur. The actuarial value of assets is restricted to vary no more than 20% from the market value. We believe the actuarial assumptions and methods are internally consistent and reasonable for their intended purpose. We further believe they meet the parameters of Governmental Accounting Standards Board Statement No. 67 and No. 68 for fulfilling financial accounting requirements. Nevertheless, the emerging costs, and future actuarial measurements, will vary from those presented in our valuation and GASB report due to many factors, including experience differing from that anticipated by the actuarial assumptions. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

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

Milliman provided the following schedules and exhibits for use in the notes to the financial statements, required supplementary information, other information, actuarial, and statistical sections.

1. Rate of separation from service
2. Employer contribution rates as a percentage of covered payroll
3. Summary of significant actuarial statistics and measures
4. Solvency test
5. Schedule of funding progress
6. History of employer Statutory Contribution Rates
7. Demographic activity of retirees and beneficiaries
8. Actuarial analysis of financial experience
9. Summary of active member valuation data
10. Schedule of average monthly salary of active members
11. Participating employers and active members
12. Schedule of employer net pension liability
13. Schedule of changes in net pension liability and related ratios of participating employers
14. Schedule of employer pension amounts allocated by cost sharing plan
15. Schedule of cost sharing employer allocations

This work product was prepared solely for SamCERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



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

We certify that the assumptions and methods used for funding and financial reporting purposes in the June 30, 2020 funding and GASB valuations meet the parameters set by Actuarial Standards of Practice promulgated by the Actuarial Standards Board (ASB). We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Sincerely,

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

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

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

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

This work product was prepared solely for SamCERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

ACTUARIAL VALUATION

Introduction

San Mateo County Employees' Retirement Association (SamCERA) is a cost-sharing multiple-employer, defined benefit plan providing basic service retirement, disability, and survivor benefits to participating members. Details of the pension plan provisions are provided in the Financial Section under the Notes to the Basic Financial Statements (Note 1). Pension benefits are basically determined by a defined formula using final average compensation, years of service, and age of the member.

Funding Policy

The County Employees' Retirement Law of 1937 establishes the basic obligations for employers and members to the pension plan. The Board of Retirement (the Board) is responsible for establishing and maintaining the funding policy by adopting contribution rates recommended by its actuary through the annual valuation of SamCERA's assets and liabilities. The contribution rates adopted by the Board are subsequently transmitted, in the form of a recommendation, to the San Mateo County's Board of Supervisors for adoption.

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

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

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

Valuation Objective

The purpose of the annual valuation is to determine employer and member contribution rates (as a level percentage of payroll) that are needed to pay all expected future benefits not funded by the current assets. Details for the ten year schedule of actuarially determined and actual contributions can be found in the Financial Section under the Required Supplementary Information.

Valuation Policy

SamCERA engages an independent actuary consulting firm to perform an annual valuation of the retirement fund as of June 30. The actuarial valuation calculates the value of future benefits, assesses the funded status, and establishes contribution rates for participating employers and members. The actuary applies specific actuarial methods and assumptions to project as closely as possible present contributions to meet future benefit obligations in accordance with prevailing Actuarial Standard of Practice. The recommended contribution rates, after adoption, will be subject to a “one year” deferral. Thus, the new contribution rates determined in the June 30, 2020 valuation will become effective on July 1, 2021.

In addition to the annual valuation, SamCERA’s actuary reviews the reasonableness of the demographic and economic actuarial assumptions every three years (commonly referred to as an Experience Study). This review compares the actual experience during the preceding three years to the assumed experience according to the actuarial assumptions. Based on this review, the actuary recommends changes in the assumptions or methods that will better project benefits and liabilities.

Actuarial Cost Method

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

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

Between the funding and financial reporting valuations, the only difference in assumptions is the investment return assumption. The assumed investment return for funding is 6.50%, net of both investment and administrative expenses; whereas the assumed investment return for financial reporting is 6.67%, net of investment expenses only. For financial reporting purposes, GASB Statements No. 67 and No. 68 require that the investment return assumption be gross of administrative expenses.

Amortization Method

Contributions are initially applied toward the normal cost. Excess contributions are applied toward the UAAL if the fund is not fully funded. The UAAL represents the difference between

the actuarial accrued liability (AAL) and the actuarial value of assets (AVA). The UAAL is amortized using the “Level Percent of Payroll” amortization method.

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

Actuarial Asset Valuation Method

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

All deferred gains and losses are combined into a single amount to be recognized over a 5-year (10 six-month) period. Gains or losses of the current period will be used to offset any unrecognized gains or losses from prior periods, to the extent possible, in the order of oldest to most recent. Any remaining gain or loss for the period is recognized over a 5-year (10 six-month) period.

Assets used to calculate the preliminary UAAL contribution rates exclude the values of the County Supplemental Contribution Account (CSCA) and the District Supplemental Contribution Account (DSCA). Balances in these two accounts are separately tracked and systematically recognized to reduce the statutory contribution rates. The balance in the CSCA is amortized using a similar closed amortization method described above to determine the offset amounts towards the County’s UAAL rate. The balance in the DSDA is amortized over five years effective June 30, 2018, with the offset amounts towards the District’s UAAL rate. Any future layers are amortized over new five-year periods, and the total DSCA offset amount in a given year is limited to the District’s UAAL rate.

Actuarial Assumptions

The annual valuation uses two sets of assumptions: economic and demographic. The assumptions selected are used to estimate the actuarial cost of the pension plan and to determine the present contributions necessary to meet the pension benefits in the future.

- Economic assumptions are generally evaluated and revised annually based on the latest information available.
- Demographic assumptions utilize the information from the latest “Investigation of Experience” study conducted by an independent auditing actuary every three years (Triennial Experience Study). This study reviews both economic and demographic data with in-depth examination of the experience of the membership for the past three years.

The actuary also uses these assumptions to estimate the future experience of SamCERA's members and SamCERA's earnings in areas that may affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from these assumptions will result in corresponding changes in the estimated costs of SamCERA's benefits.

In July 2019, the Board accepted the actuary's recommendation reducing the investment return assumption to 6.50% for the June 30, 2019 valuation, compared to the 6.75% used in the June 30, 2018 valuation.

In June 2020, the Board adopted the actuary's recommendation using the same economic assumptions previously adopted in July 2019 for the June 30, 2020 valuation. The assumptions include: general wage increase, investment return, and price inflation.

Key Economic Assumptions

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

Investment Return. The future investment earnings of SamCERA's assets are accrued at an annual rate of 6.50% compounded annually (3.25% per six-month period), net of both investment and administrative expenses.

Consumer Price Index Inflation. The assumed rate of inflation is 2.50%.

General Wage Increase. The projected payroll increase is 3.00%.

Key Demographic Assumptions

Salary Increases due to Service. The projected annual increase in the salary assumption is due to promotion and longevity, which varies depending on a member's years of service, adjusted for the assumed 3.00% annual increase in the general wage.

Retirement. The retirement rates vary by age. All General members at age 75 and all Safety members at 65 are assumed to retire immediately. Additionally, when a member's benefit is equal to or greater than the 100% of compensation limit, the member is also assumed to retire immediately.

Mortality for Active and Service Retired Members

- Mortality rates for all active members are projected using the MP-2014 Ultimate Projection Scale and mortality improvement scale developed for this specific group.
- Mortality rates for all retired members, except for those retired on disability are projected using the MP-2014 Ultimate Projection Scale and mortality improvement scale developed for this specific group.

Mortality for Retired Disabled Members

- Mortality rates for all retired, disabled members are projected using the MP-2014 Ultimate Projection Scale and mortality improvement scale developed for this specific group.

Mortality for Deferred Member

- Mortality rates for all deferred members are projected using the same method as the retired members other than disabled members.

Separation from Active Status. The probabilities of termination of employment due to the causes stated below are presented on pages 123-124. Each rate shown on these pages represents the probability that a member will separate from service at each age due to a particular reason. For example, a rate of 0.0300 for a member's service retirement at age 50 assumes that 30 out of 1,000 members who are age 50 will retire at that age.

Separation from active status can be due to one of the following reasons:

- Service Retirement: Member retires after meeting age and service requirements for reasons other than disability.
- Withdrawal: Member terminates employment and elects a refund of member contributions, or a deferred vested retirement benefit.
- Service Disability: Member receives disability retirement; disability is service related.
- Ordinary Disability: Member receives disability retirement; disability is not service related.
- Service Death: Member dies before retirement; death is service related.
- Ordinary Death: Member dies before retirement; death is not service related.

ACTUARIAL METHODS AND ASSUMPTIONS (FOR FUNDING PURPOSES)

VALUATION DATE	June 30, 2020
ACTUARIAL COST METHOD	Entry Age Normal Cost
ACTUARIAL EXPERIENCE STUDY	July 1, 2017 to April 30, 2020
AMORTIZATION METHOD	Level percentage of projected payroll
AMORTIZATION PERIOD	UAAL as of June 30, 2008, is amortized over a closed 15-year period ending June 30, 2023. Subsequent changes in the UAAL are amortized over separate closed 15-year layers that are determined annually.
ASSET VALUATION METHOD	5-year smoothed recognition of asset gains and losses (determined as the difference of the actual fair value to the expected fair value), which cannot vary more than 20% from the fair value.
ACTUARIAL ASSUMPTIONS	
Economic assumptions:	
General wage increases	3.00%
Investment rate of return	6.50%
Growth in Active membership	0.00%
CPI-U inflation	2.25%
CPI inflation	2.50%
Demographic assumptions:	
Salary increases due to service	See 2020 actuarial valuation report for details
Retirement from active service	See 2020 actuarial valuation report for details
Disability from active service	See 2020 actuarial valuation report for details
Mortality for active members prior to termination	See 2020 actuarial valuation report for details
Other terminations of employment	See 2020 actuarial valuation report for details
Probability of refund of contributions upon vested information	See 2020 actuarial valuation report for details
Mortality for active members after termination and service retired members	See 2020 actuarial valuation report for details
Mortality for members retired for disability	See 2020 actuarial valuation report for details
Mortality for beneficiaries	See 2020 actuarial valuation report for details

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

RATE OF SEPARATION FROM ACTIVE SERVICE - ALL PLANS

Years of Service	Other Terminations		Age	Disability		Death while Active		Service Retirement
	Ordinary ¹	Vested		Ordinary	Service	Ordinary	Service	
General Plan 1, 2, & 4 Male Members								
0	0.15000	0.00000	20	0.00020	0.00036	0.00037	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00036	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00066	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00149	0.00000	0.03000
20	0.00285	0.01615	60	0.00169	0.00313	0.00319	0.00000	0.15000
30 & Above	0.00000	0.00000	75	N/A	N/A	N/A	N/A	1.00000
General Plan 1, 2, & 4 Female Members								
0	0.15000	0.00000	20	0.00020	0.00036	0.00013	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00015	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00036	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00083	0.00000	0.03000
20	0.00285	0.01615	60	0.00169	0.00313	0.00186	0.00000	0.15000
30 & Above	0.00000	0.00000	75	N/A	N/A	N/A	N/A	1.00000
General Plan 3 Male Members								
0	0.15000	0.00000	20	0.00000	0.00000	0.00037	0.00000	0.00000
5	0.06700	0.00000	30	0.00000	0.00000	0.00036	0.00000	0.00000
10	0.00000	0.04100	40	0.00000	0.00000	0.00066	0.00000	0.00000
15	0.00000	0.02900	50	0.00000	0.00000	0.00149	0.00000	0.00000
20	0.00000	0.01900	60	0.00000	0.00000	0.00319	0.00000	0.03000
30 & Above	0.00000	0.01000	75	N/A	N/A	N/A	N/A	1.00000
General Plan 3 Female Members								
0	0.15000	0.00000	20	0.00000	0.00000	0.00013	0.00000	0.00000
5	0.06700	0.00000	30	0.00000	0.00000	0.00015	0.00000	0.00000
10	0.00000	0.04100	40	0.00000	0.00000	0.00036	0.00000	0.00000
15	0.00000	0.02900	50	0.00000	0.00000	0.00083	0.00000	0.00000
20	0.00000	0.01900	60	0.00000	0.00000	0.00186	0.00000	0.04000
30 & Above	0.00000	0.01000	75	N/A	N/A	N/A	N/A	1.00000
General Plan 5 Male Members								
0	0.15000	0.00000	20	0.00020	0.00036	0.00037	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00036	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00066	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00149	0.00000	0.02400
20	0.00285	0.01615	60	0.00169	0.00313	0.00319	0.00000	0.12000
30 & Above	0.00000	0.00000	75	N/A	N/A	N/A	N/A	1.00000
General Plan 5 Female Members								
0	0.15000	0.00000	20	0.00020	0.00036	0.00013	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00015	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00036	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00083	0.00000	0.02400
20	0.00285	0.01615	60	0.00169	0.00313	0.00186	0.00000	0.12000
30 & Above	0.00000	0.00000	75	N/A	N/A	N/A	N/A	1.00000
General Plan 7 Male Members								
0	0.15000	0.00000	20	0.00020	0.00036	0.00037	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00036	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00066	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00149	0.00000	0.02400
20	0.00285	0.01615	60	0.00169	0.00313	0.00319	0.00000	0.12000
30 & Above	0.00000	0.01000	75	N/A	N/A	N/A	N/A	1.00000

¹ Non-vested and/or refund of contributions.

RATE OF SEPARATION FROM ACTIVE SERVICE - ALL PLANS (CONTINUED)

Years of Service	Other Terminations		Age	Disability		Death while Active		Service Retirement
	Ordinary ¹	Vested		Ordinary	Service	Ordinary	Service	
General Plan 7 Female Members								
0	0.15000	0.00000	20	0.00020	0.00036	0.00013	0.00000	0.00000
5	0.01742	0.04958	30	0.00024	0.00044	0.00015	0.00000	0.00000
10	0.01025	0.03075	40	0.00054	0.00099	0.00036	0.00000	0.00000
15	0.00667	0.02233	50	0.00108	0.00202	0.00083	0.00000	0.02400
20	0.00285	0.01615	60	0.00169	0.00313	0.00186	0.00000	0.12000
30 & Above	0.00000	0.01000	75	N/A	N/A	N/A	N/A	1.00000
Safety and Probation Plan 1, 2 & 4 Male Members								
0	0.10000	0.00000	20	0.00000	0.00150	0.00041	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00041	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00059	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00120	0.00010	0.22500
20 & Above	0.00000	0.00000	65	N/A	N/A	N/A	N/A	1.00000
Safety and Probation Plan 1, 2 & 4 Female Members								
0	0.10000	0.00000	20	0.00000	0.00150	0.00016	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00027	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00049	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00091	0.00010	0.22500
20 & Above	0.00000	0.00000	65	N/A	N/A	N/A	N/A	1.00000
Safety and Probation Plan 5 & 6 Male Members								
0	0.10000	0.00000	20	0.00000	0.00150	0.00041	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00041	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00059	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00120	0.00010	0.18000
20 & Above	0.00000	0.00000	65	N/A	N/A	N/A	N/A	1.00000
Safety and Probation Plan 5 & 6 Female Members								
0	0.10000	0.00000	20	0.00000	0.00150	0.00016	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00027	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00049	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00091	0.00010	0.18000
20 & Above	0.00000	0.00000	65	N/A	N/A	N/A	N/A	1.00000
Safety and Probation Plan 7 Male Members								
0	0.10000	0.00000	20	0.00000	0.00150	0.00041	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00041	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00059	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00120	0.00010	0.18000
20 & Above	0.00000	0.00500	65	N/A	N/A	N/A	N/A	1.00000
Safety and Probation Plan 7 Female Members								
0	0.10000	0.00000	20	0.00000	0.00150	0.00016	0.00010	0.00000
5	0.00780	0.02220	30	0.00000	0.00170	0.00027	0.00010	0.00000
10	0.00408	0.01292	40	0.00000	0.00370	0.00049	0.00010	0.00000
15	0.00160	0.00840	50	0.00000	0.00750	0.00091	0.00010	0.18000
20 & Above	0.00000	0.00500	65	N/A	N/A	N/A	N/A	1.00000

¹ Non-vested and/or refund of contributions.

SUMMARY OF SIGNIFICANT ACTUARIAL STATISTICS AND MEASURES

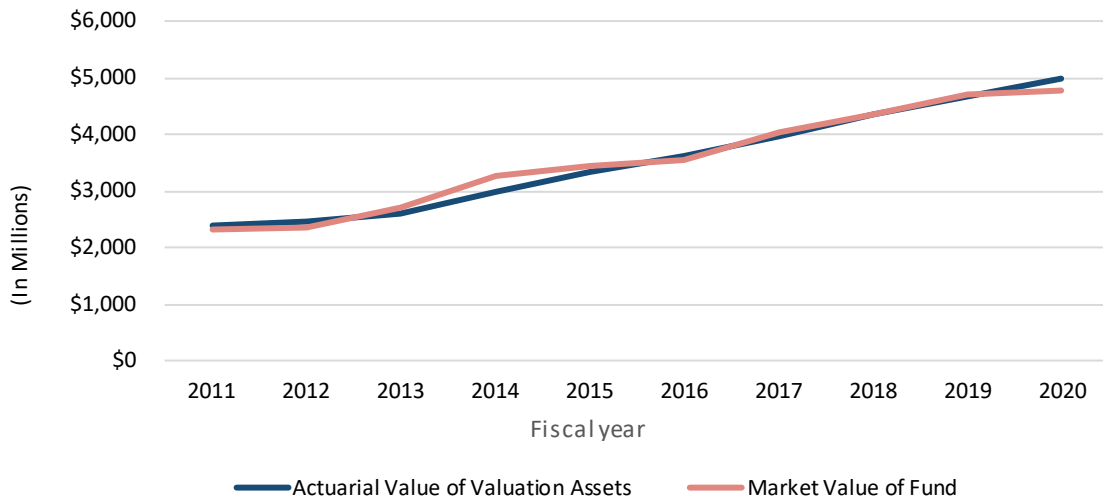
	June 30, 2020	June 30, 2019	Relative Change
Active Members			
Number of Members	5,400	5,377	0.4%
Average Age	45.0	45.1	(0.2)%
Average Credited Service	10.3	10.4	(1.0)%
Total Active Covered Payroll (\$ in Thousands)	\$593,295	\$554,734	7.0%
Average Monthly Salary	\$9,176	\$8,873	3.4%
Retired Members			
Number of Members			
Service Retirement	4,292	4,133	3.8%
Disability Retirement	506	487	3.9%
Beneficiaries	656	605	8.4%
Average Age	71.3	71.2	0.1%
Actual Retiree Benefits Paid (\$ in Thousands)	\$242,025	\$223,614	8.2%
Average Monthly Pension	\$3,865	\$3,731	3.6%
Number of Inactive Members	1,882	1,767	6.5%
Assets			
Market Value of Fund (\$ in Thousands)	\$4,780,502	\$4,723,110	1.2%
Return on Market Value	0.9%	6.2%	
Valuation Assets (\$ in Thousands)	\$4,998,316	\$4,685,502	6.7%
Return on Valuation Assets	6.2%	5.6%	
Liability Values (\$ in Thousands)			
Actuarial Accrued Liability	\$5,786,054	\$5,459,978	6.0%
Unfunded Actuarial Accrued Liability	\$787,738	\$774,476	1.7%
Deferred Asset (Gains) / Losses	\$268,302	\$9,720	
Funded Ratio			
Based on valuation assets	86.4%	85.8%	0.6%

Valuation Assets

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

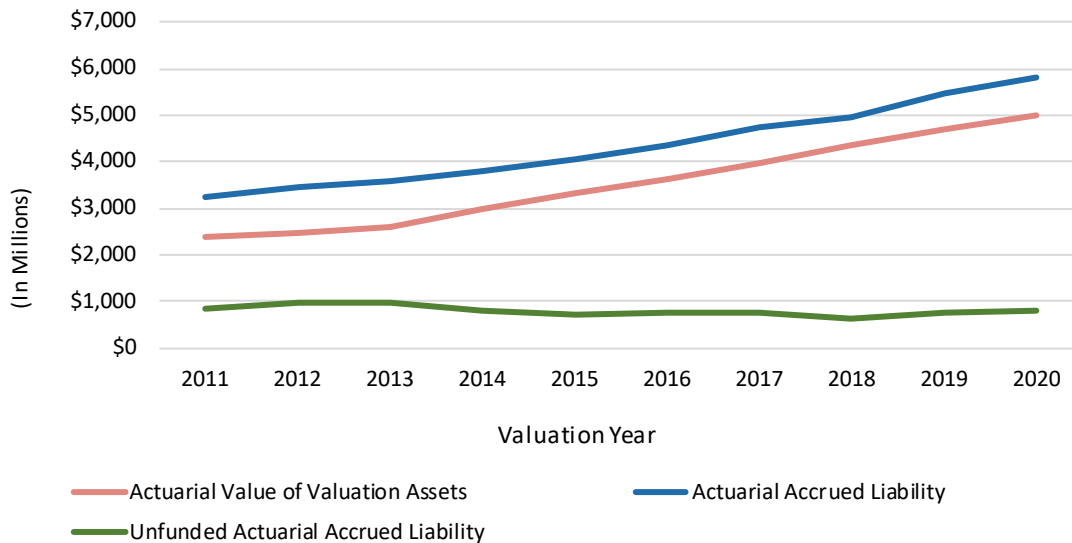
APPLICABLE VALUATION ASSETS

As of June 30



ACTUARIAL VALUATION

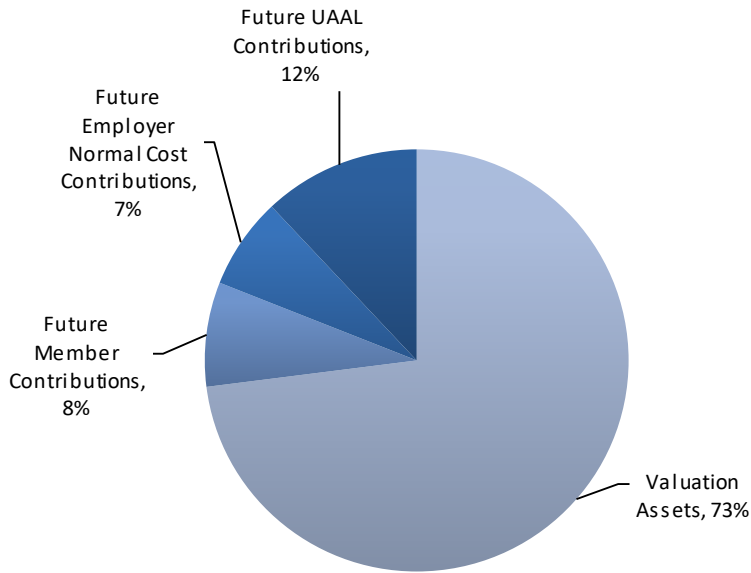
As of June 30



ACTUARIAL VALUATION—SAMCERA'S RESOURCES

As of June 30, 2020

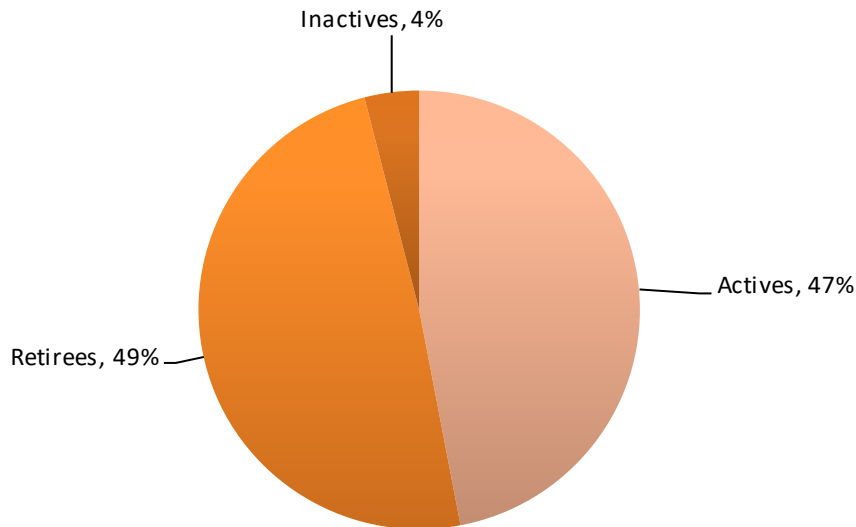
SamCERA's resources equal the actuarial assets plus the expected future contributions by both the employers and members.



ACTUARIAL VALUATION—SAMCERA'S LIABILITIES

As of June 30, 2020

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



SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Valuation Date As of June 30,	Number of Active Members		Annual Salary	Annual Average Salary	Percentage Change in Annual Average Salary
2020	General	4,655	\$496,992,584	\$106,765	3.2%
	Safety	522	72,724,015	139,318	4.2%
	Probation	223	24,856,263	111,463	7.0%
	Total	5,400	\$594,572,862	\$110,106	3.4%
2019	General	4,610	\$476,944,186	\$103,459	6.1%
	Safety	530	70,890,519	133,756	1.7%
	Probation	237	24,680,991	104,139	3.6%
	Total	5,377	\$572,515,696	\$106,475	5.5%
2018	General	4,603	\$448,931,595	\$97,530	3.3%
	Safety	508	66,799,289	131,495	1.6%
	Probation	256	25,741,800	100,554	4.0%
	Total	5,367	\$541,472,684	\$100,889	3.1%
2017	General	4,560	\$430,613,886	\$94,433	2.3%
	Safety	503	65,105,116	129,434	4.1%
	Probation	274	26,503,623	96,729	9.1%
	Total	5,337	\$522,222,625	\$97,849	2.8%
2016	General	4,421	\$408,191,518	\$92,330	4.7%
	Safety	495	61,564,028	124,372	6.5%
	Probation	271	24,034,819	88,689	2.4%
	Total	5,187	\$493,790,365	\$95,198	4.8%
2015	General	4,334	\$382,303,295	\$88,210	6.8%
	Safety	479	55,917,864	116,739	-0.4%
	Probation	282	24,418,977	86,592	3.1%
	Total	5,095	\$462,640,136	\$90,803	5.8%
2014	General	4,272	\$352,918,558	\$82,612	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%
2013	General	4,173	\$338,595,633	\$81,140	0.5%
	Safety	452	52,233,510	115,561	-1.7%
	Probation	292	23,722,165	81,240	-1.1%
	Total	4,917	\$414,551,308	\$84,310	0.4%
2012	General	4,361	\$351,965,689	\$80,708	1.9%
	Safety	435	51,129,267	117,539	0.7%
	Probation	299	24,554,583	82,122	1.9%
	Total	5,095	\$427,649,539	\$83,935	1.8%
2011	General	4,494	\$355,876,715	\$79,189	0.5%
	Safety	446	52,073,940	116,758	2.2%
	Probation	305	24,591,392	80,628	0.0%
	Total	5,245	\$432,542,047	\$82,468	0.9%

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

FUNDED LIABILITIES BY TYPE

(Dollars in Thousands)

Actuarial Valuation Date as of June 30,	Valuation Assets	Actuarial Accrued Liabilities			Portion of Actuarial Accrued Liabilities Covered by Assets		
		Active Member Contributions (A)	Retirees and Beneficiaries ⁽¹⁾ (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
2011	\$2,405,140	\$485,126	\$1,866,219	\$895,382	100%	100%	6%
2012	2,480,271	498,569	2,022,791	921,193	100%	98%	0%
2013	2,618,639	534,276	2,157,590	880,884	100%	97%	0%
2014	2,993,187	584,080	2,285,328	927,634	100%	100%	13%
2015	3,343,550	628,287	2,451,544	965,955	100%	100%	27%
2016	3,624,726	679,246	2,635,409	1,047,641	100%	100%	30%
2017	3,976,717	735,102	2,811,651	1,173,097	100%	100%	37%
2018	4,351,502	783,887	3,032,813	1,153,835	100%	100%	46%
2019	4,685,502	769,137	3,369,094	1,321,747	100%	100%	41%
2020	4,998,316	858,906	3,609,214	1,317,934	100%	100%	40%

⁽¹⁾ Includes inactive members**SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM THE ROLLS**

Fiscal Year Ended June 30,	Added to Rolls ⁽¹⁾		Removed from Rolls		Rolls at Year-End			
	Number	Annual Benefits (in Thousands)	Number	Annual Benefits (in Thousands)	Number	Total Retiree Payroll (in Thousands)	% Increase in Payroll	Average Monthly Benefits
2011 ⁽²⁾	209	\$12,703	64	\$2,916	4,147	\$134,675	7.8	\$2,706
2012	218	14,379	90	4,209	4,275	144,845	7.6	2,823
2013	186	13,024	63	3,095	4,398	154,774	6.9	2,933
2014	203	12,474	83	3,479	4,518	163,769	5.8	3,021
2015	213	16,290	93	4,179	4,638	175,880	7.4	3,160
2016	233	15,347	123	5,030	4,748	186,197	5.9	3,268
2017	310	16,738	102	3,867	4,956	199,068	6.9	3,347
2018	315	21,360	162	5,242	5,109	215,186	8.1	3,510
2019	306	24,547	190	5,769	5,225	233,964	8.7	3,731
2020	362	23,862	133	4,862	5,454	252,963	8.1	3,865

⁽¹⁾ Amount added to rolls includes COLAs granted in year to continuing retirees and beneficiaries.⁽²⁾ Revised from June 30, 2011 valuation for corrections.

ACTUARIAL ANALYSIS OF FINANCIAL EXPERIENCE

As of June 30 (Dollars in Thousands)

Summary of (Gains) / Losses	Change in Liability					
	2020	2019	2018	2017	2016	2015
Unfunded Liability as of July 1	\$ 774,476	\$ 619,033	\$ 743,133	\$ 737,570	\$ 702,236	\$ 803,855
Expected Change in Unfunded Actuarial						
Accrued Liability	(85,527)	(153,261)	(109,756)	(110,404)	(96,454)	(76,018)
Salary (Gain) / Loss	25,190	50,472	10,401	27,685	24,707	39,129
Retiree COLA more / (less) than Expected	18,992	21,749	12,203	7,050	(6,275)	3,648
Asset (Gain) / Loss	15,884	46,909	(42,796)	(28,286)	27,821	(74,068)
Change due to Assumption Changes	11,593	173,944	-	133,221	89,364	-
Miscellaneous Experience	27,129	15,630	5,848	(23,703)	(3,829)	5,690
Unfunded Liability as of June 30	\$ 787,737	\$ 774,476	\$ 619,033	\$ 743,133	\$ 737,570	\$ 702,236

Note: The above information became available since fiscal year 2015.

SCHEDULE OF FUNDING PROGRESS

(Dollars in Thousands)

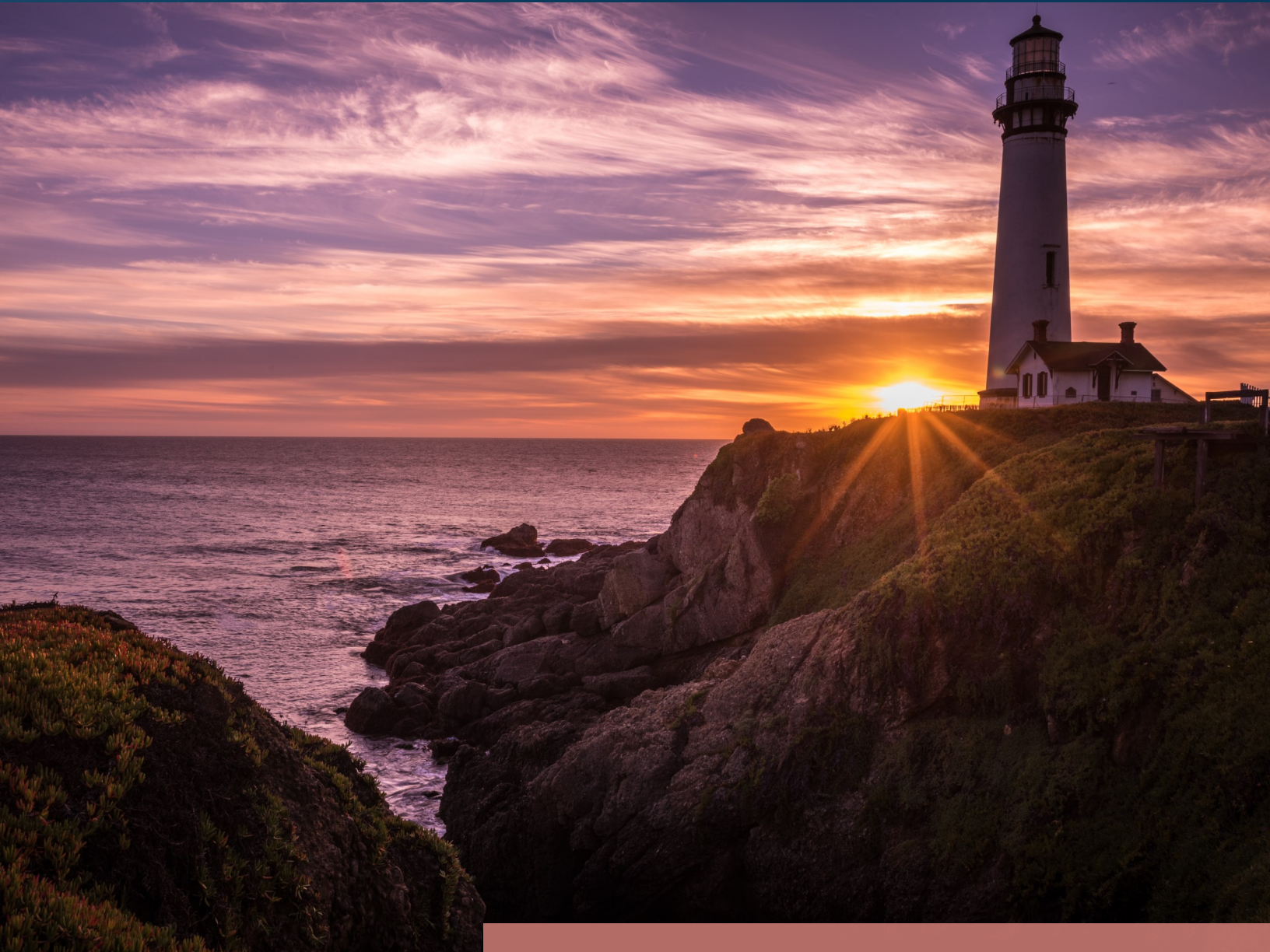
This schedule provides information about the funding progress of the pension plan.

Actuarial Valuation Date as of June 30,	(a) Actuarial Value of Valuation Assets	(b) Actuarial Accrued Liability	(b-a) Unfunded Actuarial Liability (UAAL)	(a/b) Funded Ratio	(c) Covered Payroll	[(b-a)/c] UAAL as a Percentage of Covered Payroll
2011	\$2,405,140	\$3,246,727	\$841,587	74.1%	\$427,041	197.07%
2012	2,480,271	3,442,553	962,282	72.0%	418,916	229.71%
2013	2,618,639	3,572,750	954,111	73.3%	404,361	235.96%
2014	2,993,187	3,797,042	803,855	78.8%	416,274	193.11%
2015	3,343,550	4,045,786	702,236	82.6%	439,018	159.96%
2016	3,624,726	4,362,296	737,570	83.1%	472,385	156.14%
2017	3,976,717	4,719,850	743,133	84.3%	510,132	145.67%
2018	4,351,502	4,970,535	619,033	87.5%	535,938	115.50%
2019	4,685,502	5,459,978	774,476	85.8%	554,734	139.61%
2020	4,998,316	5,786,054	787,738	86.4%	593,295	132.77%

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

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STATISTICAL SECTION



STATISTICAL SECTION

Introduction

This section presents historical information for the past ten fiscal years about SamCERA's finances and operations. Some of the information in this section is compiled by SamCERA's actuary based on the information provided by SamCERA.

CHANGES IN FIDUCIARY NET POSITION

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

	2020	2019	2018	2017	2016
Additions					
Employer Contributions	\$198,583	\$194,830	\$179,627	\$164,877	\$170,046
Employer Supplemental Contributions	0	50,668	27,630	33,850	21,048
Member Contributions	70,631	67,696	64,204	62,160	56,069
Total Contributions	269,214	313,194	271,461	260,887	247,163
Investment Income (Loss), net of Expenses	42,355	271,625	280,076	436,603	24,112
Securities Lending Income	37	66	43	46	278
Miscellaneous Additions	-	-	27	27	4,910
Total Additions	311,606	584,885	551,607	697,563	276,463
Deductions					
Retiree Benefits	242,025	223,614	204,728	190,364	179,498
Member Refunds	3,796	3,571	4,326	2,876	3,366
Administrative Expenses	6,372	6,057	5,849	5,983	5,962
Information Technology Expenses	2,021	2,495	1,444	996	714
Other Expenses	-	-	-	30	11
Total Deductions	254,214	235,737	216,347	200,249	189,551
Changes in Pension Plan Net Position	\$57,392	\$349,148	\$335,260	\$497,314	\$86,912

Note: Miscellaneous additions reported in fiscal year 2019 were reclassified and reported as part of investment income.

CHANGES IN FIDUCIARY NET POSITION (CONTINUED)

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

	2015	2014	2013	2012	2011
Additions					
Employer Contributions	\$169,814	152,877	131,294	139,407	\$150,475
Employer Supplemental Contributions	10,890	50,000	13,014	11,543	-
Member Contributions	48,012	46,594	55,408	49,687	49,013
Total Contributions	228,716	249,471	199,716	200,637	199,488
Investment Income (Loss), net of Expenses	111,320	482,050	326,983	(11,024)	437,654
Securities Lending Income	310	435	622	721	530
Miscellaneous Additions	-	179	160	29	73
Total Additions	340,346	732,135	527,481	190,363	637,745
Deductions					
Retiree Benefits	168,109	159,342	149,266	139,208	129,835
Member Refunds	3,357	3,214	5,750	3,627	2,474
Administrative Expenses	5,350	4,914	4,260	4,675	3,547
Information Technology Expenses ⁽¹⁾	629	731	654	325	-
Other Expenses	119	65	29	-	10
Total Deductions	177,564	168,266	159,959	147,835	135,866
Changes in Pension Plan Net Position	\$162,782	\$563,869	\$367,522	\$42,528	\$501,879

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

SCHEDULE OF ADDITIONS TO FIDUCIARY NET POSITION BY SOURCE

(Dollars in Thousands)

Fiscal Year Ended June 30	Employee Contributions	Employer Contributions	Investment Income (Loss)	Other	Total Additions
2011	\$49,013	\$150,475	\$437,654	\$603	\$637,745
2012	49,687	150,950	(11,024)	750	190,363
2013	55,408	144,308	326,983	782	527,481
2014	46,594	202,877	482,050	614	732,135
2015	48,012	180,704	111,320	310	340,346
2016	56,069	191,094	24,112	5,188	276,463
2017	62,160	198,727	436,603	73	697,563
2018	64,204	207,257	280,076	70	551,607
2019	67,696	245,498	271,625	66	584,885
2020	70,631	198,583	42,355	37	311,606

Note: Other additions reported in fiscal year 2019 were reclassified and reported as part of investment income.

SCHEDULE OF DEDUCTIONS FROM FIDUCIARY NET POSITION BY TYPE

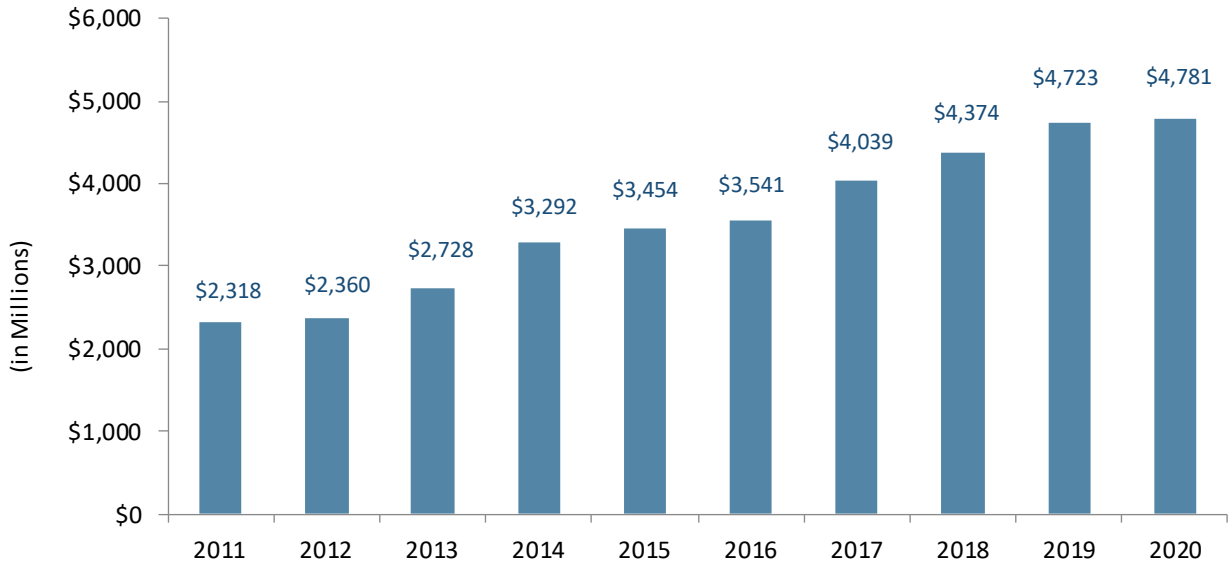
(Dollars in Thousands)

Fiscal Year Ended June 30	Retirement and Other Benefits	Member Refunds	Administrative Expenses⁽¹⁾	Information Technology Expenses	Other Expenses	Total Deductions
2011	\$129,835	\$2,474	\$3,547	\$ -	\$10	\$135,866
2012	139,208	3,627	4,675	325	-	147,835
2013	149,266	5,750	4,260	654	29	159,959
2014	159,342	3,214	4,914	731	65	168,266
2015	168,109	3,357	5,350	629	119	177,564
2016	179,498	3,366	5,962	714	11	189,551
2017	190,364	2,876	5,983	996	30	200,249
2018	204,728	4,326	5,849	1,444	-	216,347
2019	223,614	3,571	6,057	2,495	-	235,737
2020	242,025	3,796	6,372	2,021	-	254,214

⁽¹⁾ Administrative expenses related to investments were classified as investment expenses prior to fiscal year 2012. Effective June 30, 2012, such expenses are reported as administrative expenses.

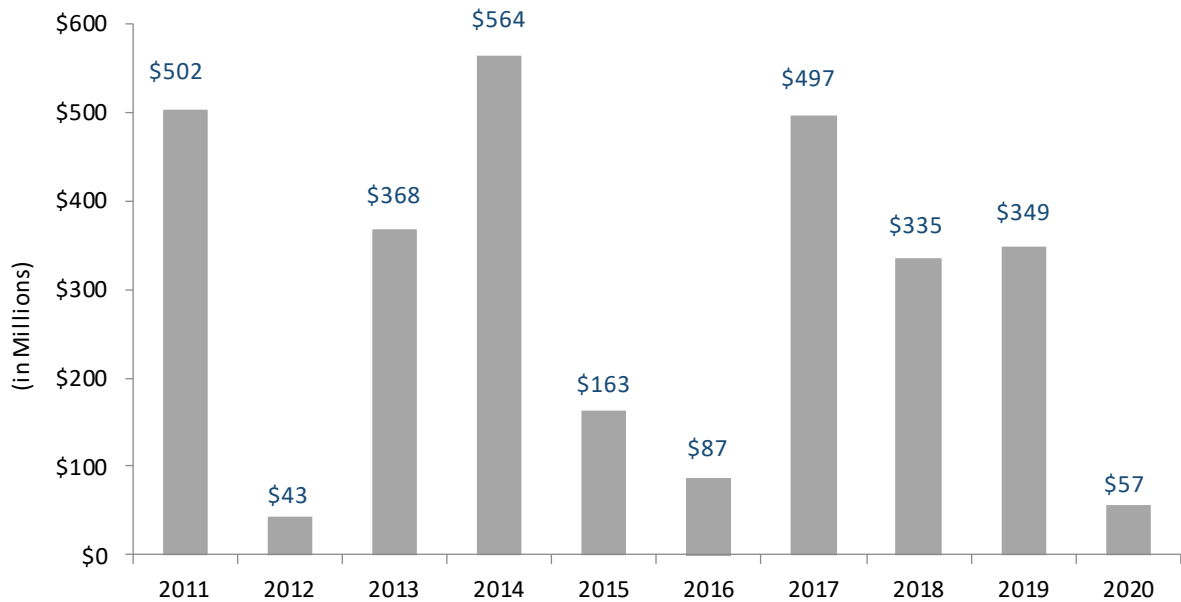
TOTAL FIDUCIARY NET POSITION

As of June 30



CHANGES IN FIDUCIARY NET POSITION

For the Fiscal Years Ended June 30



SUMMARY OF RETIRED BENEFITS, REFUNDS, AND INACTIVE MEMBERS

	2020	2019	2018	2017
RETIRED MEMBERS				
Service Retirement ⁽¹⁾				
Number	4,906	4,697	4,604	4,458
Annual Benefit	\$212,632,929	\$196,874,097	\$179,880,342	\$166,975,634
Average Monthly Payment	\$3,612	\$3,493	\$3,256	\$3,121
Survivor				
Number	34	30	29	27
Annual Benefit	\$958,068	\$982,715	\$781,459	\$661,162
Average Monthly Payment	\$2,348	\$2,730	\$2,246	\$2,041
Death				
Number	4	7	4	1
Annual Benefit	\$295,630	\$249,751	\$194,927	\$26,646
Average Monthly Payment	\$6,159	\$2,973	\$4,061	\$2,221
Other Benefits				
Number	4	4	-	1
Annual Benefit	\$536,331	\$295,600	\$0	\$11,138
Average Monthly Payment	\$11,174	\$6,158	\$0	\$928
Disability Retirement				
Number	506	487	472	469
Annual Benefit	\$27,601,908	\$25,211,881	\$23,872,145	\$22,689,813
Average Monthly Payment	\$4,546	\$4,314	\$4,215	\$4,032
Total Retired Members				
Number	5,454	5,225	5,109	4,956
Annual Benefit	\$242,024,866	\$223,614,044	\$204,728,873	\$190,364,393
Average Monthly Payment	\$3,698	\$3,566	\$3,339	\$3,201
REFUND				
General	\$3,177,699	\$3,478,748	\$3,252,941	\$2,511,145
Safety	\$618,577	\$92,331	\$1,072,789	\$364,742
Total Refund	\$3,796,276	\$3,571,079	\$4,325,730	\$2,875,887
INACTIVE MEMBERS				
	1,882	1,767	1,666	1,487

⁽¹⁾ Included beneficiaries.

Note - This schedule is prepared by SamCERA based on the actual benefits disbursed.

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

	2016	2015	2014	2013
RETIRED MEMBERS				
Service Retirement ⁽¹⁾				
Number	4,257	4,160	4,052	3,965
Annual Benefit	\$157,513,099	\$147,266,945	\$139,036,410	\$131,638,612
Average Monthly Payment	\$3,083	\$2,950	\$2,859	\$2,767
Survivor				
Number	27	29	30	31
Annual Benefit	\$652,711	\$661,222	\$654,972	\$649,930
Average Monthly Payment	\$2,015	\$1,900	\$1,819	\$1,747
Death				
Number	5	3	1	1
Annual Benefit	\$82,444	\$90,635	\$13,633	\$39,265
Average Monthly Payment	\$1,374	\$2,518	\$1,136	\$3,272
Other Benefits				
Number	5	4	7	8
Annual Benefit	\$158,478	\$51,734	\$370,340	\$232,593
Average Monthly Payment	\$2,641	\$1,078	\$4,409	\$2,423
Disability Retirement				
Number	454	442	428	393
Annual Benefit	\$21,090,529	\$20,038,671	\$19,266,623	\$16,705,247
Average Monthly Payment	\$3,871	\$3,778	\$3,751	\$3,542
Total Retired Members				
Number	4,748	4,638	4,518	4,398
Annual Benefit	\$179,497,261	\$168,109,207	\$159,341,978	\$149,265,647
Average Monthly Payment	\$3,150	\$3,021	\$2,939	\$2,828
REFUND				
General	\$2,991,126	\$3,011,758	\$3,058,864	\$5,161,430
Safety	\$375,311	\$345,253	\$155,265	\$588,346
Total Refund	\$3,366,437	\$3,357,011	\$3,214,129	\$5,749,776
INACTIVE MEMBERS				
	1,486	1,384	1,304	1,306

⁽¹⁾ Included beneficiaries.

Note 1 - This schedule is prepared by SamCERA based on the actual benefits disbursed.

Note 2 - Data prior to fiscal year 2013 is not available.

SCHEDULE OF AVERAGE PENSION BENEFIT PAYMENTS

	Years of Service Credit						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
7/1/2019 - 6/30/2020							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$394	\$1,450	\$2,633	\$3,875	\$5,190	\$7,485	\$8,072
Average Final Compensation	\$9,677	\$9,801	\$8,672	\$9,005	\$9,905	\$11,042	\$10,001
Number of Retirees	12	33	45	40	37	35	56
Beneficiaries							
Average Monthly Gross Benefit	\$1,244	\$1,954	\$1,796	\$3,080	\$3,058	\$5,083	\$7,308
Average Final Compensation	\$2,624	\$5,459	\$6,047	\$9,860	\$5,807	\$7,574	\$9,557
Number of Beneficiaries	6	3	6	9	5	5	5
7/1/2018 - 6/30/2019							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$425	\$1,564	\$2,484	\$4,013	\$5,002	\$7,792	\$8,675
Average Final Compensation	\$10,219	\$9,667	\$8,886	\$8,901	\$8,823	\$11,094	\$10,494
Number of Retirees	11	37	49	44	45	42	32
Beneficiaries							
Average Monthly Gross Benefit	\$1,218	\$1,828	\$1,174	\$134	\$2,052	\$3,757	\$6,841
Average Final Compensation	\$2,906	\$9,453	\$5,924	\$6,644	\$3,854	\$4,246	\$8,249
Number of Beneficiaries	11	4	5	1	2	5	5
7/1/2017 - 6/30/2018							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$613	\$1,327	\$2,192	\$3,541	\$5,616	\$6,728	\$8,213
Average Final Compensation	\$9,353	\$8,032	\$7,419	\$8,210	\$9,470	\$9,686	\$9,792
Number of Retirees	12	33	57	41	35	38	41
Beneficiaries							
Average Monthly Gross Benefit	\$1,962	\$1,460	\$1,455	\$1,861	\$2,640	\$6,712	\$4,033
Average Final Compensation	\$4,880	\$8,022	\$5,806	\$6,311	\$6,057	\$6,777	\$5,995
Number of Beneficiaries	13	10	9	5	6	8	7
7/1/2016 - 6/30/2017							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$388	\$1,429	\$2,264	\$3,155	\$5,501	\$6,533	\$6,902
Average Final Compensation	\$6,313	\$6,428	\$7,311	\$7,237	\$9,197	\$9,440	\$8,334
Number of Retirees	13	35	47	37	37	32	33
Beneficiaries							
Average Monthly Gross Benefit	\$1,197	\$574	\$1,665	\$2,916	\$1,299	\$0	\$0
Average Final Compensation	\$2,152	\$3,564	\$2,251	\$3,852	\$3,474	\$0	\$0
Number of Beneficiaries	8	6	5	1	1	0	0
7/1/2015 - 6/30/2016							
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 Retirees	16	47	56	54	26	28	21
Beneficiaries							
Average Monthly Gross Benefit	\$1,732	\$1,038	\$1,368	\$1,361	\$3,304	\$3,036	\$3,554
Average Final Compensation	N/A	\$3,434	\$4,173	\$3,756	\$5,429	\$4,972	\$5,372
Number of Beneficiaries	14	9	5	2	4	7	7

SCHEDULE OF AVERAGE PENSION BENEFIT PAYMENTS (CONTINUED)

	Years of Service Credit						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
7/1/2014 - 6/30/2015							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$564	\$1,479	\$2,538	\$3,755	\$4,264	\$7,245	\$6,140
Average Final Compensation	\$4,191	\$6,262	\$7,158	\$8,074	\$7,548	\$9,423	\$7,752
Number of Retirees	21	35	52	35	20	38	31
Beneficiaries							
Average Monthly Gross Benefit	\$1,753	\$1,193	\$1,120	\$2,380	\$2,147	\$4,633	\$6,036
Average Final Compensation	N/A	\$3,587	\$3,867	\$6,994	\$4,521	\$8,971	\$8,071
Number of Beneficiaries	11	3	3	6	5	5	6
7/1/2013 - 6/30/2014							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$1,608	\$1,758	\$2,384	\$3,351	\$4,613	\$6,349	\$6,713
Average Final Compensation	\$6,920	\$6,729	\$6,570	\$7,614	\$7,740	\$9,292	\$7,528
Number of Retirees	16	61	49	40	32	13	18
Beneficiaries							
Average Monthly Gross Benefit	\$891	\$660	\$1,898	\$946	\$4,457	\$3,550	\$6,239
Average Final Compensation	N/A	\$6,305	\$5,433	\$2,906	\$7,872	\$5,504	\$6,611
Number of Beneficiaries	10	3	6	5	3	2	2
7/1/2012 - 6/30/2013							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$643	\$1,330	\$2,513	\$3,516	\$5,226	\$6,672	\$7,309
Average Final Compensation	\$5,234	\$5,831	\$7,321	\$7,344	\$8,135	\$8,458	\$7,818
Number of Retirees	16	39	59	21	30	24	20
Beneficiaries							
Average Monthly Gross Benefit	\$1,434	\$1,747	\$1,494	\$1,500	\$1,321	\$5,182	\$4,166
Average Final Compensation	\$589	\$5,140	\$5,255	\$4,536	\$3,446	\$7,516	\$6,039
Number of Beneficiaries	16	2	6	4	3	1	4
7/1/2011 - 6/30/2012							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$897	\$1,427	\$2,328	\$3,597	\$5,175	\$5,611	\$7,527
Average Final Compensation	\$4,235	\$5,896	\$6,667	\$7,228	\$7,812	\$7,344	\$7,763
Number of Retirees	19	37	47	25	47	32	29
Beneficiaries							
Average Monthly Gross Benefit	\$1,789	\$736	\$2,382	\$2,390	\$1,658	\$4,347	\$4,878
Average Final Compensation	N/A	\$3,913	\$5,200	\$5,818	\$4,338	\$6,102	\$6,464
Number of Beneficiaries	16	1	5	4	5	3	4
7/1/2010 - 6/30/2011							
Retirees - Service and Disabilities							
Average Monthly Gross Benefit	\$577	\$1,190	\$2,112	\$3,770	\$4,881	\$6,452	\$8,122
Average Final Compensation	\$3,207	\$6,268	\$5,895	\$7,761	\$7,562	\$8,466	\$8,322
Number of Retirees	16	25	52	29	52	26	25
Beneficiaries							
Average Monthly Gross Benefit	\$1,190	\$1,407	\$1,333	\$2,101	\$2,082	\$1,951	\$8,657
Average Final Compensation	N/A	\$6,549	\$4,186	\$5,178	\$5,772	\$4,457	\$7,765
Number of Beneficiaries	12	1	6	3	6	1	1

Distribution of Retired Members by Age and Retirement Years - All Plans Combined

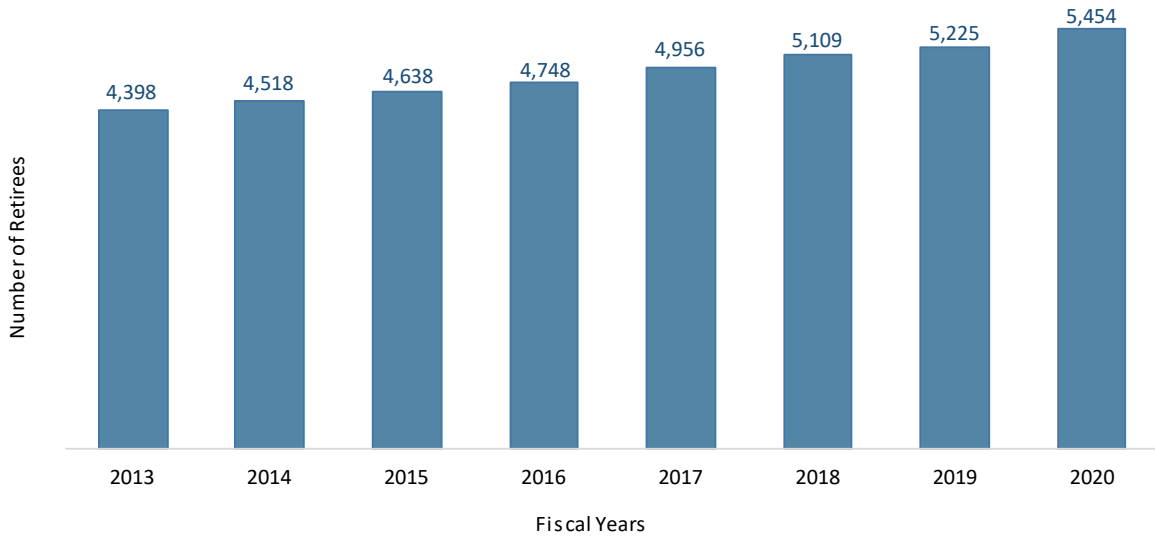
DISTRIBUTION OF RETIRED MEMBERS BY AGE AND RETIREMENT YEAR - ALL PLANS COMBINED

As of June 30, 2020

Age	Retirement Year								Total Count
	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	
Under 35	-	-	-	-	1	4	2	-	7
35-39	-	-	1	1	-	2	3	1	8
40-44	-	-	-	-	1	6	14	-	21
45-49	-	-	-	-	9	7	23	3	42
50-54	-	-	2	7	8	13	130	27	187
55-59	-	-	6	10	18	89	249	29	401
60-64	-	1	11	17	72	200	347	66	714
65-69	-	6	10	75	196	336	374	22	1,019
70-74	7	16	84	169	309	329	191	10	1,115
75-79	10	50	132	200	266	130	62	7	857
80-84	31	85	103	127	73	35	21	4	479
85-89	43	62	97	37	26	26	18	3	312
90-94	77	45	34	9	5	7	11	1	189
95-99	48	9	12	7	4	2	6	1	89
100 & Over	8	1	3	-	-	1	1	-	14
Total Count	224	275	495	659	988	1,187	1,452	174	5,454

NUMBER OF RETIREES AND BENEFICIARIES RECEIVING BENEFITS

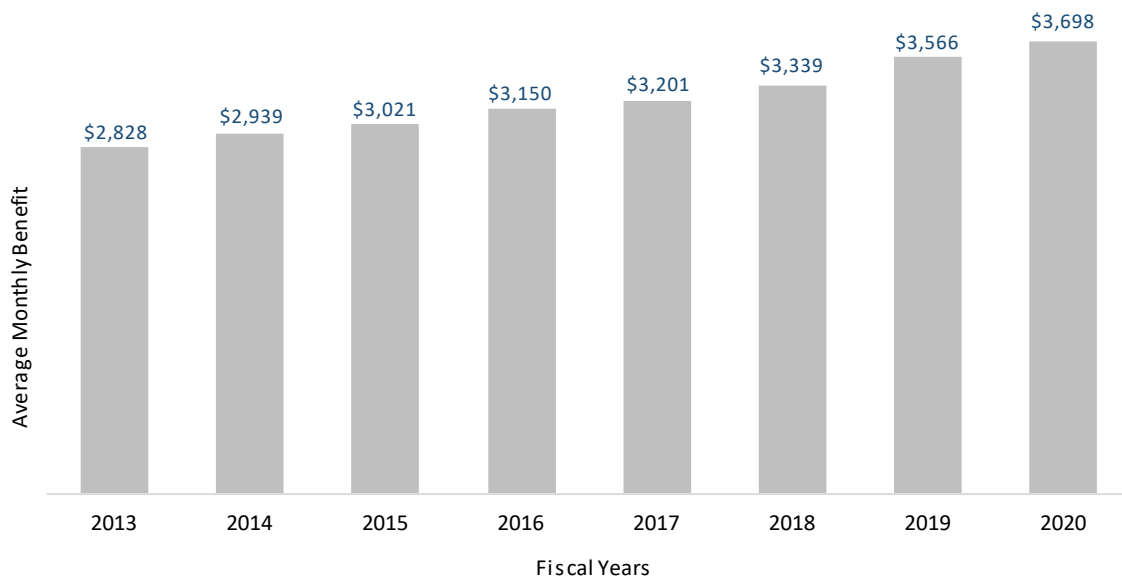
As of June 30



Note: Information prior to fiscal year 2013 is not available.

AVERAGE MONTHLY BENEFIT TO RETIREES AND BENEFICIARIES

For the Fiscal Years Ended June 30



Note: Information prior to fiscal year 2013 is not available.

SCHEDULE OF AVERAGE MONTHLY SALARY OF ACTIVE MEMBERS

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

	2020	2019	2018	2017	2016
General Plan 1	\$11,102	\$9,793	\$10,121	\$11,305	\$9,945
General Plan 2	10,665	10,088	9,526	8,994	8,636
General Plan 3	8,221	7,872	7,462	7,484	7,173
General Plan 4	9,671	9,302	8,534	8,134	7,807
General Plan 5	10,635	10,180	9,672	8,980	8,485
General Plan 7	7,726	7,395	6,974	6,737	6,714
Average Monthly Salary for General Plan	8,897	8,622	8,128	7,869	7,694
Safety Plan 1	0	0	0	14,434	15,810
Safety Plan 2	15,125	14,197	13,607	13,528	12,505
Safety Plan 4	13,204	12,391	11,894	11,381	10,729
Safety Plan 5	12,367	11,708	11,349	10,544	9,940
Safety Plan 6	0	0	0	0	16,793
Safety Plan 7	9,581	9,030	8,747	8,356	7,538
Average Monthly Salary for Safety Plan	11,610	11,146	10,958	10,786	10,364
Probation 1	0	0	0	7,722	7,261
Probation 2	10,174	9,908	9,061	9,069	8,349
Probation 4	9,827	9,103	8,714	8,270	7,454
Probation 5	9,343	8,587	8,219	7,612	6,429
Probation 6	0	0	0	7,347	6,259
Probation 7	7,598	6,973	6,676	6,121	5,962
Average Monthly Salary for Probation Plan	9,289	8,678	8,379	8,061	7,391
Average Monthly Salary for All Plans	\$9,176	\$8,873	\$8,407	\$8,154	\$7,933

SCHEDULE OF AVERAGE MONTHLY SALARY OF ACTIVE MEMBERS (CONTINUED)

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

	2015	2014	2013	2012	2011
General Plan 1	\$9,235	\$8,617	\$8,104	\$7,843	\$7,630
General Plan 2	8,186	7,584	7,355	7,340	7,208
General Plan 3	6,747	6,300	6,254	6,138	5,968
General Plan 4	7,386	6,873	6,662	6,580	6,398
General Plan 5	7,735	6,912	6,418	5,799	N/A
General Plan 7	6,315	5,721	5,433	N/A	N/A
Average Monthly Salary for General Plan	7,351	6,884	6,762	6,726	6,599
Safety Plan 1	14,712	14,091	13,185	12,624	12,073
Safety Plan 2	11,545	11,191	10,935	10,892	10,789
Safety Plan 4	9,919	9,581	9,402	9,351	9,230
Safety Plan 5	9,145	8,958	8,699	9,667	N/A
Safety Plan 6	16,010	14,381	12,374	N/A	N/A
Safety Plan 7	6,701	7,011	6,695	N/A	N/A
Average Monthly Salary for Safety Plan	9,728	9,767	9,630	9,795	9,730
Probation 1	7,038	6,874	6,618	6,618	7,533
Probation 2	8,012	7,699	7,445	7,454	7,349
Probation 4	7,267	6,922	6,622	6,686	6,505
Probation 5	6,106	5,916	5,242	4,949	N/A
Probation 6	5,739	5,216	4,808	5,239	N/A
Probation 7	5,684	5,807	7,742	5,239	N/A
Average Monthly Salary for Probation Plan	7,216	6,998	6,770	6,844	6,719
Average Monthly Salary for All Plans	\$7,567	\$7,151	\$7,026	\$6,995	\$6,872

SCHEDULE OF ACTIVE MEMBERS AND PARTICIPATING EMPLOYERS

As of June 30

	2020	2019	2018	2017	2016
COUNTY OF SAN MATEO					
General Members	4,379	4,350	4,343	4,303	4,170
Safety Members	522	530	508	503	495
Probation Members	223	237	256	274	271
Subtotal	5,124	5,117	5,107	5,080	4,936
SAN MATEO COUNTY SUPERIOR COURT					
General Members	256	240	239	237	231
SAN MATEO COUNTY MOSQUITO & VECTOR CONTROL DISTRICT					
General Members	20	20	21	20	20
Total Active Membership	5,400	5,377	5,367	5,337	5,187
Percentage of Membership by Employer					
County of San Mateo	94.89%	95.17%	95.16%	95.18%	95.16%
San Mateo County Superior Court	4.74%	4.46%	4.45%	4.45%	4.45%
San Mateo County Mosquito and Vector Control District	0.37%	0.37%	0.39%	0.37%	0.39%
Total Percentage of Membership	100.00%	100.00%	100.00%	100.00%	100.00%

SCHEDULE OF ACTIVE MEMBERS AND PARTICIPATING EMPLOYERS (CONTINUED)

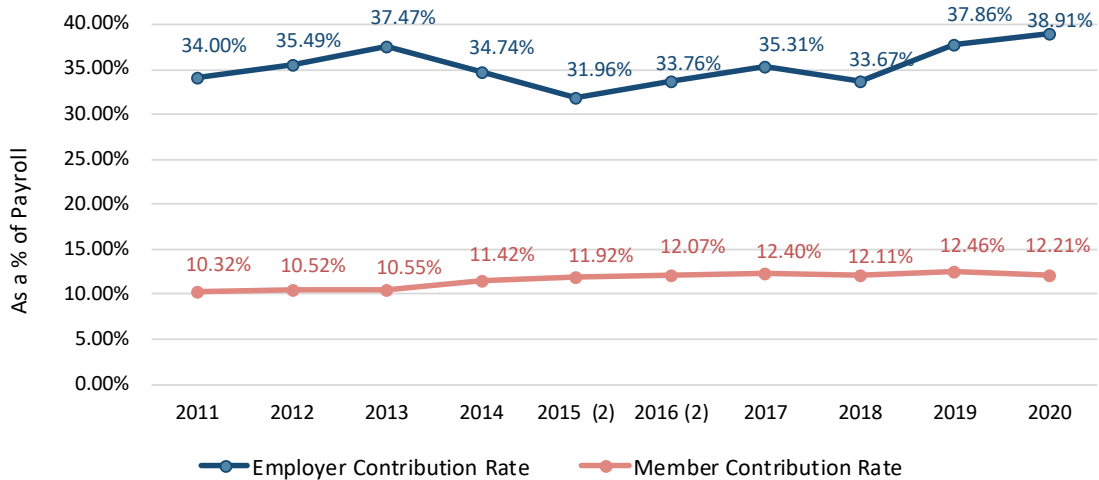
As of June 30

	2015	2014	2013	2012	2011
COUNTY OF SAN MATEO					
General Members	4,092	4,014	3,906	4,078	4,476
Safety Members	479	452	452	435	446
Probation Members	282	280	292	299	305
Subtotal	4,853	4,746	4,650	4,812	5,227
SAN MATEO COUNTY SUPERIOR COURT					
General Members	222	239	249	268	N/A
SAN MATEO COUNTY MOSQUITO & VECTOR CONTROL DISTRICT					
General Members	20	19	18	15	18
Total Active Membership	5,095	5,004	4,917	5,095	5,245
Percentage of Membership by Employer					
County of San Mateo	95.25%	94.84%	94.57%	94.45%	99.66%
San Mateo County Superior Court	4.36%	4.78%	5.06%	5.26%	N/A
San Mateo County Mosquito and Vector Control District	0.39%	0.38%	0.37%	0.29%	0.34%
Total Percentage of Membership	100.00%	100.00%	100.00%	100.00%	100.00%

Note: San Mateo County Superior Court was once a unit of the County of San Mateo, but was separated and became a unit of the State of California in fiscal year 2012.

EMPLOYER AND MEMBER CONTRIBUTION RATES ⁽¹⁾

Determined at June 30



⁽¹⁾ The contribution rates determined as of the valuation date will become effective a year later. For example, the contribution rates determined as of June 30, 2020, will become effective on July 1, 2021.

⁽²⁾ The Statutory Contribution Rates reflect changes in member rates negotiated subsequent to the 2015 and the 2016 valuations.

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

Employer Statutory Contribution Rate	Fiscal Year Beginning		Change
	July 1, 2021	July 1, 2020	
Gross Normal Cost	23.11%	23.73%	(0.62)%
Less: Member Contributions	(12.21)%	(12.46)%	0.25%
Employer Normal Cost	10.90%	11.27%	(0.37)%
UAAL Amortization	28.01%	26.59%	1.42%
Total Employer Statutory Contribution Rate	38.91%	37.86%	1.05%
Statutory Contribution Rate by Employer			
County of San Mateo	39.14%	38.06%	1.08%
San Mateo County Superior Court	35.85%	35.22%	0.63%
San Mateo County Mosquito & Vector Control District	12.76%	12.58%	0.18%

Notes:

- Detailed contribution rates by plan are reported on the 2020 actuarial valuation report.
- The Total Employer Statutory Contribution Rate of 38.91% is the aggregate rate for all employers.

HISTORY OF EMPLOYER STATUTORY CONTRIBUTION RATES

Valuation Date	General Members (County & Court)			General Members (Nurses & UAPD)			General Members (District)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
June 30									
2011	9.71%	16.41%	26.12%	8.70%	16.41%	25.11%	11.97%	16.41%	28.38%
2012	9.98%	20.17%	30.15%	8.96%	20.17%	29.13%	11.68%	20.17%	31.85%
2013	9.74%	22.35%	32.09%	8.92%	22.35%	31.27%	11.70%	22.35%	34.05%
2014	10.12%	20.27%	30.39%	9.14%	20.21%	29.35%	11.72%	21.16%	32.88%

Valuation Date	General Members (County)			General Members (Court)			General Members (District)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
June 30									
2015	8.67%	18.37%	27.04%	9.04%	19.54%	28.58%	11.75%	19.54%	31.29%
2016	8.91%	19.81%	28.72%	9.09%	21.30%	30.39%	12.02%	12.50%	24.52%
2017	9.58%	20.55%	30.13%	9.65%	22.58%	32.23%	12.32%	12.37%	24.69%
2018	9.22%	19.32%	28.54%	9.27%	21.76%	31.03%	12.13%	0.00%	12.13%
2019	9.93%	22.18%	32.11%	10.01%	25.21%	35.22%	12.58%	0.00%	12.58%
2020	9.57%	23.22%	32.79%	9.63%	26.22%	35.85%	12.37%	0.39%	12.76%

Notes:

1. Contribution rates shown are those calculated in the corresponding actuarial valuation. In some cases, actual contributions were higher.
2. Beginning with the 2010 actuarial valuation, the Mosquito and Vector Control District adopted the same benefit formula and member contribution rates as Plan 1, 2 and 4 General County members (excluding cost sharing and COLA sharing on member rates).
3. Beginning with the 2011 actuarial valuation, Plan 1, 2, and 4 members of the California Nurses Association (CNA) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
4. Beginning with the 2012 actuarial valuation, Plan 1, 2, and 4 Probation members (excluding Managers) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
5. Beginning with the 2013 actuarial valuation, Plan 1, 2, and 4 members of the Union of American Physicians & Dentists (UAPD) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing. In 2011 and 2012, these members contributed the same as County General members.
6. Beginning with the 2015 actuarial valuation, Plan 1, 2, and 4 members of the UAPD and the CNA, and Probation members (Managers) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing.
7. Effective with the first pay period after June 30, 2016, all members (except those with benefits negotiated under Court Interpreters and Board of Supervisors bargaining units, and District members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. Additionally, pick-up contributions are discontinued for members with benefits negotiated under the PDA bargaining unit.
8. Effective October 2016, all members (except those with benefits negotiated under Board of Supervisors bargaining unit, and District members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. This is reflected in 2016 values.
9. Effective July 1, 2018, the Board of Supervisors contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. Additionally, pick-up contributions were eliminated.

HISTORY OF EMPLOYER STATUTORY CONTRIBUTION RATES (CONTINUED)

Valuation Date	Safety Member			Probation Members (excluding Managers)			Probation Members (Managers)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
June 30									
2011	18.87%	41.75%	60.62%	19.50%	22.30%	41.80%	Same as Probation (exclude Managers)		
2012	19.05%	48.51%	67.56%	19.99%	26.71%	46.70%	Same as Probation (exclude Managers)		
2013	18.51%	50.33%	68.84%	18.33%	29.32%	47.65%	17.85%	29.32%	47.17%
2014	18.99%	46.48%	65.47%	18.92%	28.09%	47.01%	18.79%	28.09%	46.88%
2015	15.14%	43.58%	58.72%	15.31%	26.77%	42.08%	17.23%	26.77%	44.00%
2016	16.31%	44.25%	60.56%	15.94%	31.72%	47.66%	Same as Probation (exclude Managers)		
2017	17.28%	45.57%	62.85%	17.42%	32.87%	50.29%	Same as Probation (exclude Managers)		
2018	16.98%	44.68%	61.66%	16.95%	32.88%	49.83%	Same as Probation (exclude Managers)		
2019	18.02%	50.87%	68.89%	17.97%	42.55%	60.52%	Same as Probation (exclude Managers)		
2020	17.57%	54.42%	71.99%	18.30%	47.68%	65.98%	Same as Probation (exclude Managers)		

Notes:

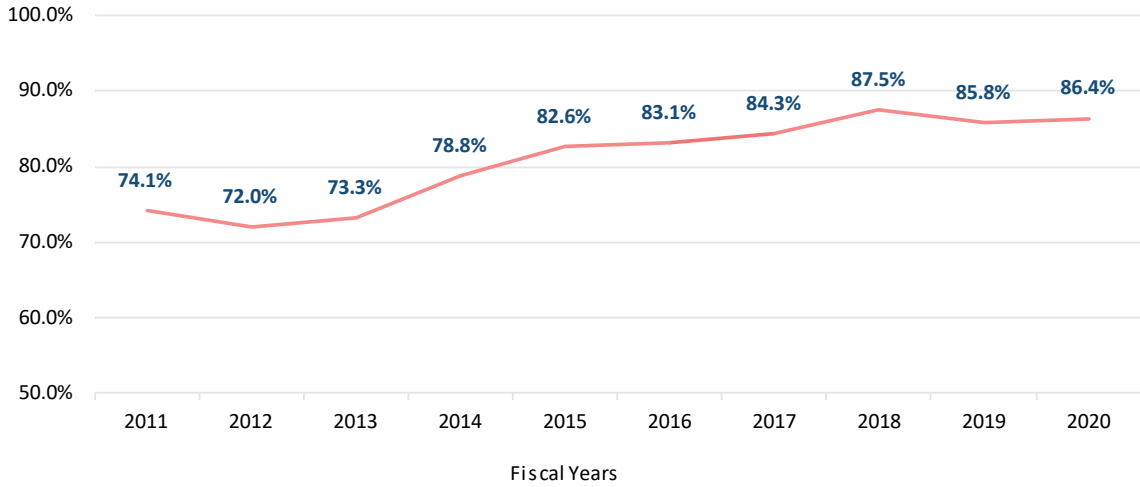
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COMPLIANCE SECTION



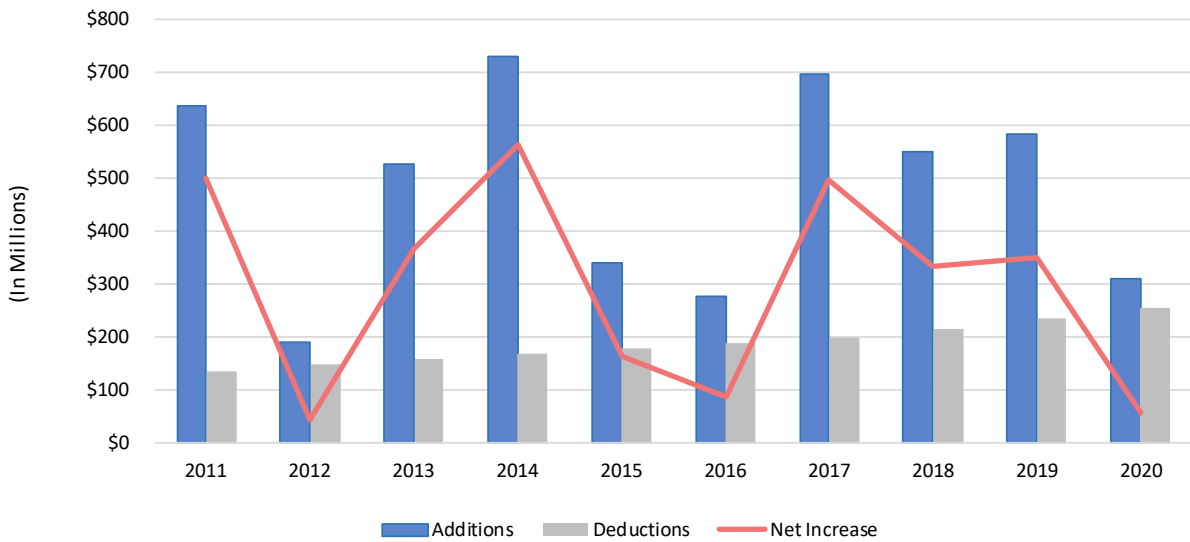
SAMCERA'S FUNDED RATIO

As of June 30



ADDITIONS TO AND DEDUCTIONS FROM SAMCERA'S NET POSITION

For the Fiscal Years Ended June 30





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Certified Public Accountants

BROWN ARMSTRONG

Certified Public Accountants

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

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

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the basic financial statements and other information (financial statements) of the San Mateo County Employees' Retirement Association (SamCERA) as of and for the fiscal year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise SamCERA's basic financial statements, and have issued our report thereon dated October 19, 2020.

Internal Control Over Financial Reporting

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

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

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


Compliance and Other Matters

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

Purpose of this Report

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

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

A handwritten signature in blue ink that reads "Brown Armstrong Accountancy Corporation". The signature is written in a cursive style.

Bakersfield, California
October 19, 2020

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