



San Bernardino County Employees'
Retirement Association

2019

COMPREHENSIVE

ANNUAL

FINANCIAL

REPORT

A MULTIPLE-EMPLOYER PENSION TRUST FUND | SAN BERNARDINO, CA
FOR THE YEARS ENDED JUNE 30, 2019 AND 2018

INVESTED IN YOUR FUTURE.



2019

COMPREHENSIVE ANNUAL FINANCIAL REPORT

A Multiple-Employer Pension Trust Fund
San Bernardino, California
For the Years Ended June 30, 2019 and 2018

Debby Cherney

Chief Executive Officer

Amy McInerny, CPA

Chief Financial Officer



San Bernardino County Employees'
Retirement Association

348 West Hospitality Lane | San Bernardino, CA 92408

P. 909.885.7980 | f. 909.885.7446 | www.SBCERA.org

TABLE OF CONTENTS

INTRODUCTORY SECTION

Letter of Transmittal	8
2018-19 in Numbers	12
Certificate of Achievement for Excellence in Financial Reporting	14
Public Pension Standards Award	15
Members of the Board of Retirement	16
Key Members of the Administrative Staff	17
Outside Consultants	17
Report from the Board Chair	18

FINANCIAL SECTION

Independent Auditor's Report	20
Management's Discussion and Analysis (<i>Unaudited</i>)	24
Basic Financial Statements	
Statements of Fiduciary Net Position	32
Statements of Changes in Fiduciary Net Position	33
Notes to the Basic Financial Statements	34
Required Supplementary Information (<i>Unaudited</i>)	
Schedule of Employer Contributions	75
Schedule of Investment Returns	75
Schedule of Changes in Net Pension Liability of Participating Employers and Related Ratios	76
Notes to the Required Supplementary Information	78
Other Supplementary Information	
Schedule of Investment Expenses	81
Schedule of Administrative and Other Expenses	82
Schedule of Payments to Consultants	83

INVESTMENTS SECTION

Report on Investment Activity	86
Outline of Investment Policies	88
Investment Professionals	90
Investment Results	91
Asset Allocation	
Target vs. Actual Asset Allocation Percentages	92
Fair Value Growth of Plan Assets Held for Investments	93
History of Investment Performance	93
List of Largest Assets Held	94
Schedule of Fees and Commissions	95
Investment Summary	96

TABLE OF CONTENTS

ACTUARIAL SECTION

Actuary's Certification Letter	98
Schedule of Funding Progress	101
Latest Actuarial Valuation Methods and Assumptions	102
Development of Actuarial Value of Assets	103
Schedule of Active Member Valuation Data	104
Schedule of Retirees and Beneficiaries	105
Summary of Major Plan Provisions	106
Analysis of Financial Experience	108
Schedule of Funded Liabilities by Type	109
Ratio of Current Compensation to Compensation Anticipated at Retirement	110
Probabilities of Separation from Active Service	111
Expectation of Life	113
History of Total Employer Contribution Rates	114
Retirees and Beneficiaries Added to and Removed from Rolls	117

STATISTICAL SECTION

Statistical Changes in Fiduciary Net Position	120
Additions by Source	121
Deductions by Type	122
Benefit Expenses by Type	123
Retired Members by Type of Benefit	124
Average Benefit Payments	125
History of Membership by Participating Employer	126
Statistical Membership Information	
Active Membership Classification	128
Membership History (Active and Deferred)	128
Membership History (Retired)	128
Average Monthly Retirement Benefits	129
Benefits and Refunds Paid	129

MISSION STATEMENT

It is the mission of the San Bernardino County Employees' Retirement Association (SBCERA) to provide the members and their beneficiaries with those retirement and related benefits and services which they have earned and which are commensurate with their years of service and compensation.

It is the responsibility of those charged with administration of SBCERA to:

- Effectively collect contributions to fund liabilities incurred;
- Diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return;
- Administer the benefits impartially, fairly, and in accordance with the applicable law;
- Deliver service to the membership in an accurate, courteous, prompt, professional, and cost-efficient manner;
- Appropriately set employer and member contributions in accordance with responsible funding practices; and
- Strategically plan for the future.

INTRODUCTORY SECTION



LETTER OF TRANSMITTAL

November 14, 2019

Board of Retirement
San Bernardino County Employees' Retirement Association
348 West Hospitality Lane
San Bernardino, CA 92408

We are pleased to present the San Bernardino County Employees' Retirement Association (SBCERA) Comprehensive Annual Financial Report (CAFR) for the fiscal years ended June 30, 2019 and 2018. This report is created annually to provide a detailed overview of the SBCERA Plan (the Plan) and the Fund's financial, actuarial, and investment-related activities for the year.

Established in 1945, SBCERA celebrates its 74th year in operation by reaching another all-time high in assets under management. Formed by the will of San Bernardino County voters on May 16, 1944, SBCERA now administers service retirement, disability, and death and survivor benefits for over 40,000 members, serves 18 active participating employers, and manages approximately \$10.6 billion in assets. A listing of participating employers, as of June 30, 2019, can be found on page 34.

The information contained in this CAFR is designed to provide a complete and accurate review of the year's operations. SBCERA's management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal control that it has established for this purpose. We encourage you to review Management's Discussion and Analysis beginning on page 24, which provides a narrative introduction, overview, and analysis of our financial operations for the years ended June 30, 2019 and June 30, 2018.

As you read the 2019 CAFR, we trust you – the members and participating employers of SBCERA – will appreciate the detailed work of staff in developing the report and find the content helpful in understanding SBCERA's defined benefit plan.

MAJOR INITIATIVES

During the fiscal year (FY) 2018-19, SBCERA adopted a Triennial Strategic Plan for Fiscal Years 2020 through 2022, the purpose of which was to gain a common understanding for the direction of SBCERA, with informed direction from the Board to the staff. The Triennial Strategic Plan established an agreed-upon set of foundational values, and updated SBCERA's mission statement.

Integrity

We will be honest, ethical, respectful, and trustworthy in all aspects in serving our members, employees, and our community.

Accountability & Transparency

We will ensure that the decisions we make and how we conduct business is clearly communicated and understood. We will be accountable for our conduct in all aspects of our service.

Commitment

We will approach our work enthusiastically.

Effectiveness

We will be results-oriented in a cost-effective manner, capitalizing on our strengths and capabilities.

Professional Excellence

We will be skilled, confident, and capable.

Collaboration

We will work together as a team and with key stakeholders.

LETTER OF TRANSMITTAL

(Continued)

MAJOR INITIATIVES (Continued)

FIVE CO-EQUAL STRATEGIC PILLARS:

- **Operational Excellence and Efficiency**
- **Superior Service Experience**
- **Quality Employer and Workplace**
- **Prudent Fiscal Management**
- **Effective Communications**

Under each pillar, SBCERA established strategic priorities: projects, programs and/or initiatives, with specific, actionable goals, timing, and lead personnel. These priorities informed the development and approval of the FY 2019-20 Budget. The Triennial Strategic Plan and Strategic Priorities are available at www.sbcera.org; every six months, an accountability update will be provided to the Board.

FINANCIAL INFORMATION

Management of SBCERA is responsible for establishing and maintaining an internal control structure designed to ensure SBCERA's assets are protected from loss, theft, or misuse. Responsibility for the accuracy, completeness, fair presentation of information, and all disclosures rests with SBCERA's management. Brown Armstrong, a firm of licensed certified public accountants, provides financial statement independent audit services to SBCERA. The financial statement audit provides reasonable assurance that SBCERA's Basic Financial Statements are presented in conformity with accounting principles generally accepted in the United States (GAAP) and are free from material misstatements.

The independent auditor's report is presented as the first component of the financial section of this report. Included are all disclosures management believes necessary to enhance your understanding of the financial condition of the Plan.

SBCERA recognizes even sound internal controls have inherent limitations. SBCERA's internal controls are designed to provide reasonable, but not absolute, assurance that SBCERA's operating policies and procedures are sufficient to safeguard SBCERA's assets. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management.

This report has been prepared in accordance with GAAP as promulgated by the Government Accounting Standards Board (GASB).

ACTUARIAL FUNDING STATUS

SBCERA contracts with an independent actuarial firm, Segal Consulting (Segal), to conduct annual actuarial valuations, which are presented to the Board each year. On a triennial basis, the actuarial firm also conducts an experience study and makes recommendations to the Board on all economic and non-economic assumptions, which was last completed for the year ended June 30, 2016. Segal completed the annual valuation for the year ended June 30, 2019 and it is presented annually to the Board.

The funding objective of SBCERA is to maintain a well-funded plan by setting a strategic allocation that has a high probability of achieving the returns necessary to meet the expected liabilities with the lowest level of expected risk, while secondarily minimizing contributions. Generally, employer contributions are relatively stable, on a percentage basis, based on Plan member payroll. However, on a five-year smoothed basis, if actual fund returns are below the actuarial hurdle rate of 7.25%, the employer will make up the shortfall on a 20-year amortized basis.

LETTER OF TRANSMITTAL

(Continued)

ACTUARIAL FUNDING STATUS (Continued)

The actuarial accrued liability of the SBCERA Plan on June 30, 2019 and June 30, 2018 amounts to \$13.3 and \$12.6 billion, respectively. The actuarial value of assets increased from \$10.0 billion at June 30, 2018 to \$10.6 billion at June 30, 2019. The funding ratio, on an actuarial value basis, increased to 80.0% at June 30, 2019, from the previous fiscal year's 79.5%. This ratio compares the assets of the Plan to the liabilities of the Plan. High ratios indicate a well-funded plan with assets sufficient to pay most future benefits. Lower ratios may indicate recent changes to benefit structures, funding of a plan below actuarial requirements, poor asset performance, or a variety of other changes. For a more in-depth review of the funding of the Plan, see the Actuarial Section of this report (page 97).

As prescribed by GASB Statement No. 67, Financial Reporting for Pension Plans, an Amendment of GASB Statement No. 25, the total pension liability of participating employers is not reported in the Basic Financial Statements, but is disclosed in Note 4 to the Basic Financial Statements, and in the Required Supplementary Information. The total pension liability is determined by the Plan's actuary and is a measure of the present value of the actuarial accrued liabilities estimated to be payable in the future to current retirees, beneficiaries, and active members for service earned to date. The net pension liability is measured as the total pension liability less the amount of the Plan's fiduciary net position. The net pension liability is an accounting measurement for financial statement purposes.

INVESTMENTS

The Board maintains sole and exclusive control of all investments of the Plan, and is responsible for the establishment of investment objectives, strategies and policies. The Board is authorized to invest in any form or type of investment deemed prudent in the informed opinion of the Board. Members of the Board serve in a fiduciary capacity and must discharge their duties with respect to the interests of the Plan members, their beneficiaries, and the Plan.

External, professional investment management firms manage SBCERA's assets. The investment staff closely monitors the activity of these managers and assists the Board with the implementation of investment policies and long-term investment strategies. SBCERA's *Investment Plan, Policy and Guidelines* establish the investment program goals, asset allocation, policies, performance objectives, investment management policies, and risk controls.

For the year ended June 30, 2019, investments provided a rate of return (net of fees) of 4.81%. The Plan's annualized rate of return (net of fees) over the three-year period ended June 30, 2019 was 8.89%.

On a fair value basis, the total pension Plan net position available for benefits increased from \$10.1 billion to \$10.6 billion. Details of the components of this increase are included in the Statements of Changes in Fiduciary Net Position on page 33 of this report.

PROFESSIONAL SERVICES

Professional consultants are appointed by the Board to perform professional services that are essential to the effective and efficient operation of the Plan. An opinion from SBCERA's certified public accountant, a certification from the Plan's independent actuary, and a report on investment activity from the Plan's investment consultant are all included in this report. The consultants appointed by the Board are listed on page 17 of this report.

LETTER OF TRANSMITTAL

(Continued)

AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to SBCERA for its CAFR for the year ended June 30, 2018. This is the 22nd consecutive year that SBCERA has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current CAFR continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

SBCERA also received an Award for Outstanding Achievement in Popular Annual Financial Reporting from the GFOA for its Popular Annual Financial Report (PAFR) for the year ended June 30, 2018, which is a short summary version of the CAFR.

In addition, the Public Pension Coordinating Council (PPCC) awarded a Public Pension Standards Award for Funding and Administration to SBCERA for the year ended June 30, 2019. This is the fourth consecutive year that SBCERA has applied for and received this prestigious award. In order to be awarded a Public Pension Standards Award, a public pension program must meet professional standards for plan design, administration, and funding, as set forth in the Public Pension Standards. The PPCC (a coalition of three national associations that represent public retirement systems and administrators) established the Public Pension Standards to reflect minimum expectations for public retirement system management and administration, as well as serve as a benchmark by which all defined benefit public plans should be measured. A Public Pension Standards Award is valid for a period of one year.

ACKNOWLEDGMENTS

We express our sincere appreciation to the Board for bestowing their confidence in us. SBCERA has a rich history and is one of the strongest public Plans in California. We are proud to administer such a successful Plan and realize the importance of efficiently managing our resources and responsibly funding the Plan over time.

The successful and timely completion of this CAFR would not be possible without the teamwork of SBCERA's incredible staff and professional providers, along with the support and leadership of the Board, and our esteemed Board Chair, Supervisor Janice Rutherford.

To our Plan Sponsors and members, thank you for placing your trust in SBCERA. We are fully aware of our duty to you, and we will strive for continual improvement in our service and transparent communication.

Very truly yours,



Debby Cherney
Chief Executive Officer



Amy McNerny, CPA
Chief Financial Officer

2018-19 IN NUMBERS

THE FOUNDATION FOR A SECURE RETIREMENT



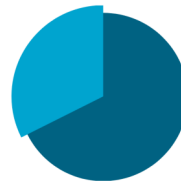
\$10.6 BILLION
TOTAL NET POSITION



4.81%
NET RATE OF RETURN



42,000
MEMBERS



80%
FUNDED (AVA)



18
PARTICIPATING EMPLOYERS



\$3,679
AVERAGE MONTHLY BENEFIT



San Bernardino County Employees'
Retirement Association

PAGE INTENTIONALLY LEFT BLANK.



Government Finance Officers Association

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

Presented to

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

For its Comprehensive Annual
Financial Report
For the Fiscal Year Ended

June 30, 2018

Christopher P. Morrell

Executive Director/CEO



Public Pension Coordinating Council

***Recognition Award for Administration
2019***

Presented to

***San Bernardino County Employees'
Retirement Association***

In recognition of meeting professional standards for
plan 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 black ink, reading 'Alan H. Winkle'.

Alan H. Winkle
Program Administrator

MEMBERS OF THE BOARD OF RETIREMENT

AS OF JUNE 30, 2019



Janice Rutherford
Board Chair
Administrative Committee¹
Executive Committee¹

Appointed by Board of Supervisors



Neal Waner
Board Vice Chair
Executive Committee¹
Investment Committee¹

Appointed by Board of Supervisors



Marc Bracco
Administrative Committee

Elected by Safety Members



Louis Fiorino
Executive Committee
Investment Committee

Elected by General Members



Sean Flynn

Administrative Committee

Appointed by Board of Supervisors



Michael Kennedy

Audit Committee

Appointed by Board of Supervisors



Ensen Mason

Audit Committee

County Treasurer/Ex-Officio Member



Dawn Stafford

Investment Committee

Elected by Retired Members



Vere Williams

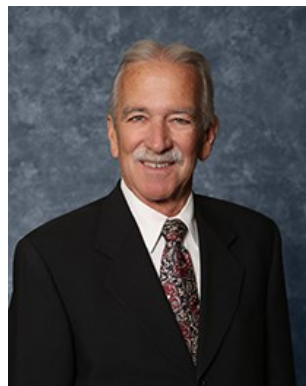
Administrative Committee
Audit Committee

Elected by General Members



John Johnson

Alternate Ex-Officio



John Michaelson

Audit Committee¹

Alternate Elected by Retired Members



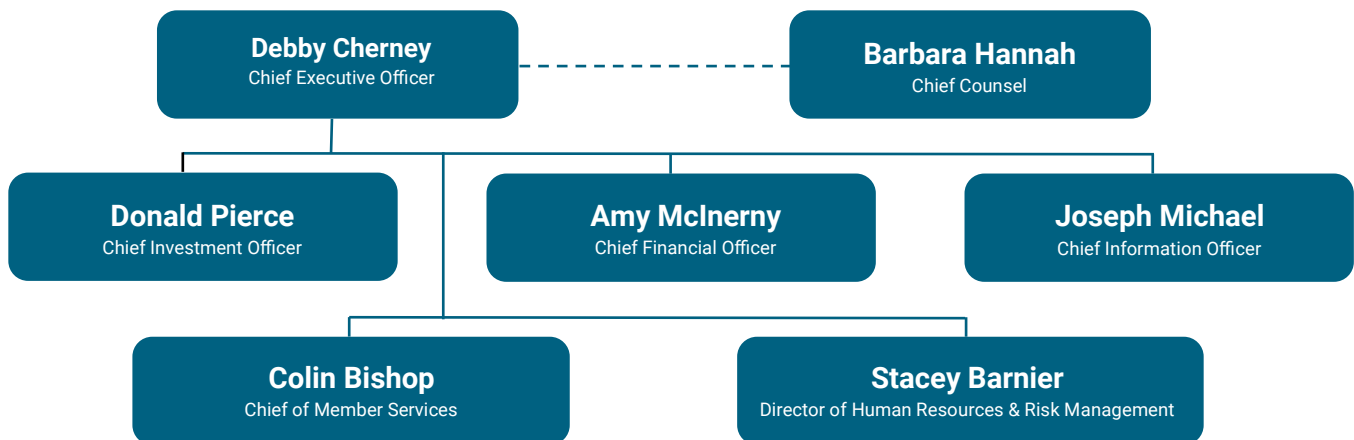
Jared Newcomer

Investment Committee

Alternate Elected by Safety Members

(1) Denotes Committee Chair.

KEY MEMBERS OF THE ADMINISTRATIVE STAFF



OUTSIDE CONSULTANTS

AS OF JUNE 30, 2019

Actuary

Segal Consulting
Consulting Actuary

Custodial Services

State Street Bank and Trust Company
Sacramento, CA

Independent Auditors

Brown Armstrong
Certified Public Accountants
Financial Statement Auditors

Investment Consultants

NEPC, LLC
Investment Advisor

Kreischer Miller
Compliance Advisor

Maples Finance
LLC Administrator

Legal Counsel

Liebert Cassidy Whitmore
General Advisory Counsel

Nossaman, LLP
General Advisory Counsel

Foley & Lardner
Investment Counsel

Hirschler Fleischer, APC
Investment Counsel

Morgan, Lewis & Bockius, LLP
Investment Counsel

Squire Patton Boggs, LLP
Investment Counsel

Arias & Lockwood, APLC
Litigation & Disability Counsel

Hanson Bridgett, LLP
Tax & Trust Counsel

Public Pension Consultants
Trust Counsel

REPORT FROM THE BOARD CHAIR

San Bernardino County Employees' Retirement Association

November 14, 2019

Dear Members:

On behalf of the San Bernardino County Employees' Retirement Association (SBCERA) Board of Retirement, I am pleased to present the June 30, 2019 Comprehensive Annual Financial Report (CAFR).

SBCERA reached its highest recorded market value in its history at \$10.6 billion, an increase of \$521 million from a year ago, and a net investment gain of \$499 million for the year.

This year has marked a number of changes for SBCERA. Our new Chief Executive Officer, Debby Cherney, joined us in August 2018, a few months into the new fiscal year. Notably, one of her highest priorities was to work with the Board and staff to create and adopt a new Triennial Strategic Plan. That plan centers around shared SBCERA values and five strategic pillars:

Shared SBCERA Values

Integrity – We will be honest, ethical, respectful, and trustworthy in all aspects in serving our members, employees, and our community.

Accountability & Transparency – We will ensure that the decisions we make and how we conduct business is clearly communicated and understood. We will be accountable for our conduct in all aspects of our service.

Commitment – We will approach our work enthusiastically.

Effectiveness – We will be results-oriented in a cost-effective manner, capitalizing on our strengths and capabilities.

Professional Excellence – We will be skilled, confident and capable.

Collaboration – We will work together as a team and with key stakeholders.

Strategic Pillars

SBCERA is driven to provide service and a focus on the following co-equal pillars:

- Operational Excellence and Efficiency
- Superior Service Experience
- Quality Employer and Workplace
- Prudent Fiscal Management
- Effective Communications

Each strategic pillar has a variety of specific actionable projects. You can read more about our strategic plan and implementation progress on our website at www.sbcera.org.

I am grateful for the leadership of our senior executive team, for all of our dedicated staff, and for my fellow Board members. As Chair of the Board, I look forward to the continued focus on values and priorities, and successful years ahead.

Sincerely,

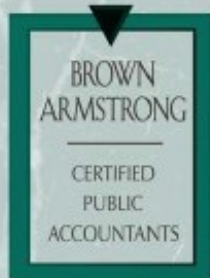


Janice Rutherford, Board Chair
Supervisor, Second District, San Bernardino County

FINANCIAL SECTION



INDEPENDENT AUDITOR'S REPORT



BROWN ARMSTRONG
Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

Board of Retirement
San Bernardino County Employees' Retirement Association
San Bernardino, California

Report on the Financial Statements

We have audited the accompanying financial statements of San Bernardino County Employees Retirement Association (SBCERA), which comprise the statement of fiduciary net position as of June 30, 2019, the related statement of changes in fiduciary net position for the year then ended, and the related notes to the basic financial statements, which collectively comprise SBCERA's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to SBCERA's preparation and fair presentation of the financial statements 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 SBCERA's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

BAKERSFIELD OFFICE
(MAIN OFFICE)
4200 TRUXTON AVENUE
SUITE 300
BAKERSFIELD, CA 93309
TEL 661.324.4971
FAX 661.324.4997
EMAIL info@bacpas.com

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

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

WWW.BACPAS.COM

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

INDEPENDENT AUDITOR'S REPORT

(Continued)

Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the fiduciary net position of SBCERA as of June, 2019, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplemental Information

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

Other Supplemental Information

Our audit was conducted for the purpose of forming an opinion on the basic financial statements. The other supplemental information and the introduction, investments, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

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

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

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 14, 2019, on our consideration of SBCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing on internal control over financial reporting and compliance and the results of that testing, and not to provide and opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering SBCERA's internal control over financial reporting and compliance.

INDEPENDENT AUDITOR'S REPORT

(Continued)

Report on Summarized Comparative Information

The financial statements of SBCERA as of June 30, 2018, were audited by other auditors. Those auditors expressed an unmodified opinion on those audited financial statements in their report dates November 27, 2018. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2018, 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 SBCERA management, the Audit Committee of SBCERA, the Board of Retirement of SBCERA, and SBCERA employers and their auditors and is not intended to be, and should not be, used by anyone other than these specified parties.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
November 14, 2019

PAGE INTENTIONALLY LEFT BLANK.

MANAGEMENT'S DISCUSSION AND ANALYSIS

June 30, 2019 and 2018

The San Bernardino County Employees' Retirement Association (SBCERA) administers the SBCERA pension plan – a cost-sharing multiple-employer defined benefit pension plan (the Plan). As management of SBCERA, we offer this narrative overview and analysis of the financial activities of SBCERA for the years ended June 30, 2019 and 2018. Readers are encouraged to consider the information presented in this analysis in conjunction with the financial statements as presented in this report.

FINANCIAL HIGHLIGHTS

The net position – restricted for pensions of SBCERA as of June 30, 2019 and 2018 was \$10.59 billion and \$10.07 billion, respectively. All of the net position is available to meet SBCERA's ongoing obligations to Plan members (members) and their beneficiaries.

SBCERA's total net position – restricted for pensions increased by \$521.42 million or 5.18% and increased by \$778.55 million or 8.38% for the years ended June 30, 2019 and 2018, respectively. The increases are primarily a result of positive investment returns.

Total additions, as reflected in the Statements of Changes in Fiduciary Net Position, for the years ended June 30, 2019 and 2018 are \$1.11 billion and \$1.33 billion, respectively. This includes employer and member contributions of \$609.85 million, net investment income of \$502.46 million, and net securities lending income of \$292 thousand for the year ended June 30, 2019. For the year ended June 30, 2018, it includes employer and member contributions of \$528.15 million, a transfer from an outside plan of \$4.31 million, net investment income of \$797.24 million, and net securities lending income of \$238 thousand.

Total deductions as reflected in the Statements of Changes in Fiduciary Net Position are \$591.18 million for the year ended June 30, 2019, an increase of \$39.79 million over the year ended June 30, 2018, or approximately 7.22%. Total deductions for the year ended June 30, 2018 are \$551.39 million, an increase of \$40.32 million over the year ended June 30, 2017, or approximately 7.89%.

The net pension liability of participating employers as of June 30, 2019 and 2018 is \$2.71 billion and \$2.53 billion, respectively. The Plan fiduciary net position as a percentage of the total pension liability is 79.61% and 79.89% as of June 30, 2019 and 2018, respectively. The net pension liability as a percentage of covered payroll is 183.59% and 180.14% as of June 30, 2019 and 2018, respectively. Refer to Note 4 – Net Pension Liability of Participating Employers, and Required Supplementary Information sections of this report for further information.

OVERVIEW OF THE FINANCIAL STATEMENTS

The following discussion and analysis are intended to serve as an introduction to SBCERA's Basic Financial Statements. The financial statements and required disclosures are prepared in accordance with pronouncements (accounting principles and reporting guidelines) as set forth by the Governmental Accounting Standards Board (GASB). These pronouncements require certain disclosures and require SBCERA to report using the full accrual method of accounting. SBCERA complies with all material requirements of these pronouncements. SBCERA's Basic Financial Statements are comprised of Statements of Fiduciary Net Position, Statements of Changes in Fiduciary Net Position, and Notes to the Basic Financial Statements.

MANAGEMENT'S DISCUSSION AND ANALYSIS

June 30, 2019 and 2018

(Continued)

OVERVIEW OF THE FINANCIAL STATEMENTS (Continued)

The **Statements of Fiduciary Net Position** are a snapshot of account balances at year-end, indicating the assets available for future payments to retirees and their beneficiaries, and any current liabilities owed as of year-end.

The **Statements of Changes in Fiduciary Net Position** reflect all the activities that occurred during the year and show the impact of those activities as additions to or deductions from to the Plan. The trend of additions versus deductions will indicate the condition of SBCERA's financial position over time.

The **Statements of Fiduciary Net Position** and the **Statements of Changes in Fiduciary Net Position** report information about SBCERA's activities. These statements include all assets and liabilities, using the full accrual method of accounting, which is similar to the accounting used by private sector companies. All of the current year's revenues and expenses are considered regardless of when cash is received or paid. All investment gains and losses are shown at trade date, not settlement date, and both realized and unrealized gains and losses are shown on investments. Refer to Note 2 – Summary of Significant Accounting Policies for further information.

The **Statements of Fiduciary Net Position** and **Statements of Changes in Fiduciary Net Position** report SBCERA's net position – restricted for pensions (net position is the difference between assets and liabilities) as one way to measure the Plan's financial position. Over time, increases and decreases in SBCERA's net position are an indicator of whether its financial health is improving or deteriorating. Other factors, such as investment earnings and SBCERA's actuarial funded status, should also be considered in measuring SBCERA's overall financial health. Refer to SBCERA's Basic Financial Statements following this analysis.

Notes to the Basic Financial Statements (Notes) are an integral part of the financial reports. The Notes provide additional information that is necessary to acquire a full understanding of the data provided in the financial statements, including a detailed discussion of key policies, programs, investments, and activities that occurred during the year. Refer to the Notes to the Basic Financial Statements section of this report.

Other information to supplement SBCERA's Basic Financial Statements is provided as follows:

Required Supplementary Information (RSI) presents historical trend information concerning the changes in net pension liability, employer contributions, and investment returns. RSI includes notes that explain factors that significantly affect trends in the amounts reported, such as changes of benefit terms, changes in the size or composition of the population covered by the benefit terms, or the use of different assumptions over time. The information is based on actuarial valuations and contributes to the understanding of the changes in the net pension liability of participating employers over the past ten years. Refer to the Required Supplementary Information section of this report.

Other Supplementary Information includes the Schedules of Administrative and Other Expenses, Investment Expenses, and Payments to Consultants, which are presented immediately following the Required Supplementary Information section of this report.

MANAGEMENT'S DISCUSSION AND ANALYSIS

June 30, 2019 and 2018

(Continued)

FINANCIAL ANALYSIS—NET POSITION

Net position may serve as an indication of SBCERA's financial position over time. Refer to Table 1, below, for further information. As of June 30, 2019, SBCERA had \$10.59 billion in net position, which means total assets of \$10.76 billion exceed total liabilities of \$175.03 million. All of the net position is available to meet SBCERA's ongoing obligation to members and their beneficiaries.

As of June 30, 2019, net position increased by \$521.42 million, accounting for an 5.18% increase from the prior year. As of June 30, 2018, net position increased by \$778.55 million, for an 8.38% increase from the prior year. The increases for 2019 and 2018 are primarily due to gains from net investment activity.

FIDUCIARY NET POSITION (TABLE 1)

As of June 30, 2019, 2018 and 2017

(Amounts in Thousands)

	2019	2018	2017	Increase (Decrease)	
				Amount	% Change
ASSETS					
Cash	\$ 14,574	\$ 15,314	\$ 5,755	\$ (740)	(4.83%)
Receivables	103,300	102,733	70,350	567	0.55%
Investments, at Fair Value	10,640,653	10,105,671	9,380,575	534,982	5.29%
Capital Assets, Net	4,907	5,811	6,391	(904)	(15.56%)
TOTAL ASSETS	10,763,434	10,229,529	9,463,071	533,905	5.22%
LIABILITIES					
Securities Lending	113,695	77,807	103,668	35,888	46.12%
Securities Options Payable	270	-	13,231	270	100.00%
Payables for Securities Purchased	46,696	71,917	45,647	(25,221)	(35.07%)
Other Liabilities	14,366	12,815	12,084	1,551	12.10%
TOTAL LIABILITIES	175,027	162,539	174,630	12,488	7.68%
NET POSITION—RESTRICTED FOR PENSIONS	\$ 10,588,407	\$ 10,066,990	\$ 9,288,441	\$ 521,417	5.18%

In order to determine that the \$10.59 billion in net position will be sufficient to meet future obligations, SBCERA's independent actuary, Segal Consulting, performed an actuarial valuation as of June 30, 2019. The result of the funding valuation determines what future contributions are needed by the participating employers and members to pay all expected future benefits. The valuation considers SBCERA's policy to smooth the impact of market volatility by spreading each year's gains or losses over five years.

On the valuation date, the assets available for payment of retirement benefits are appraised. These assets are compared with the actuarial liabilities, which are the actuarial present value of all future benefits expected to be paid with respect to each member. The actuary uses assumptions regarding life expectancy, projected salary increases over time, projected retirement age, and expected rate of return for the investment portfolio (7.25% rate of return was used for the June 30, 2019 and 2018 valuations). The Board of Retirement (Board) reviews all assumptions used by the actuary every three years.

MANAGEMENT'S DISCUSSION AND ANALYSIS

June 30, 2019 and 2018

(Continued)

CAPITAL ASSETS

SBCERA's capital assets decreased from \$5.81 million to \$4.91 million (net of accumulated depreciation and amortization) between the years ended June 30, 2018 and 2019, and from \$6.39 million to \$5.81 million between the years ended June 30, 2017 and 2018. This investment in capital assets includes equipment, furniture, leasehold improvements, software, and technology infrastructure with an initial cost of \$25 thousand or more and a life expectancy over one year. The total decrease in SBCERA's investment in capital assets for the year ended June 30, 2019 was \$904 thousand from 2018. The total decrease in SBCERA's investment in capital assets for the year ended June 30, 2018 was \$580 thousand from 2017. The decreases are primarily due to older assets being fully depreciated or amortized during 2019 and 2018.

RESERVES

SBCERA's reserves are established based upon contributions and the accumulation of investment income, after satisfying investment, administrative, and other expenses. Refer to Table 2, on the following page, for further information.

Investments are stated at fair value, instead of at cost, and include the recognition of unrealized gains and losses in the current period. For actuarial purposes, it is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to fair value. Under this valuation method, the full value of market fluctuations are not recognized in a single year, rather, they are smoothed over a five-year period. This method results in more stable asset values and therefore, the plan costs are more stable. These gains and losses are shown in the net unrecognized gains/(losses) reserve account.

The total unrecognized net investment loss as of June 30, 2019 is \$53.99 million as compared to an unrecognized net investment gain of \$46.13 million as of June 30, 2018. This deferred investment loss of \$53.99 million will be recognized in the determination of the Actuarial Value of Assets for funding purposes in the next five years as part of a five-year smoothing technique.

\$10.6 billion

in net position

5.18% increase

from prior year



MANAGEMENT'S DISCUSSION AND ANALYSIS

June 30, 2019 and 2018

(Continued)

RESERVES (Continued)

RESERVES (TABLE 2)

As of June 30, 2019, 2018 and 2017

(Amounts in Thousands)

TYPE OF RESERVE	2019	2018	2017
Member Deposit Reserve	\$ 1,517,088	\$ 1,418,875	\$ 1,345,262
Employer Current Service Reserve	2,762,603	2,558,813	2,398,395
Contra Account	(3,303,286)	(2,938,180)	(2,689,760)
Pension Reserve	4,883,597	4,603,736	4,327,170
Cost of Living Reserve	2,277,979	2,080,398	1,913,071
Annuity Reserve	2,422,029	2,218,705	2,017,325
Supplemental Disability Reserve	7,439	7,819	8,194
Survivor Benefit Reserve	74,376	70,068	65,633
Burial Allowance Reserve ¹	576	629	686
TOTAL RESERVES (SMOOTHED MARKET ACTUARIAL VALUE)	10,642,401	10,020,863	9,385,976
Net Unrecognized Gains (Losses)	(53,994)	46,127	(97,535)
NET POSITION—RESTRICTED FOR PENSIONS INCLUDING NON-VALUATION RESERVES, AT FAIR VALUE	\$ 10,588,407	\$ 10,066,990	\$ 9,288,441

(1) Reserve not included in valuation value of assets.

ADDITIONS AND DEDUCTIONS TO FIDUCIARY NET POSITION

ADDITIONS

The primary sources of financing SBCERA benefits are through the collection of participating employer and member contributions and through earnings from investment income (net of investment expenses). Additions for the year ended June 30, 2019 totaled \$1.11 billion compared to \$1.33 billion for June 30, 2018 and \$1.60 billion for June 30, 2017. Refer to Table 3, on page 27, for further information. Overall, additions decreased by \$217.34 million or a 16.34% decrease between the years ended June 30, 2018 and 2019 due primarily to a 36.98% decrease in net investment income compared to the prior year and a plan asset transfer that happened in the prior year only. Employer and member contributions also increased by 9.42%. Net securities lending income increased by 22.69% compared to the prior year.

Overall, total employer and member contributions continue to rise due to the increases in the average employer and member contribution rates, as recommended by the Plan's independent actuary.

Refer to Note 3 – Contribution Requirements for further information.

MANAGEMENT'S DISCUSSION AND ANALYSIS

June 30, 2019 and 2018

(Continued)

ADDITIONS AND DEDUCTIONS TO FIDUCIARY NET POSITION (Continued)

DEDUCTIONS

SBCERA was created to provide lifetime retirement benefits, survivor benefits, and permanent disability benefits to eligible members and their beneficiaries. The cost of such programs includes recurring Plan designated benefit payments, refunds of contributions to terminated members, and the cost of administering the Plan.

Deductions for the year ended June 30, 2019 totaled \$591.18 million, an increase of \$39.79 million or 7.22% over the June 30, 2018 amount of \$551.39 million. The increase in deductions for the year ended June 30, 2018 was \$40.32 million or 7.89% over the June 30, 2017 amount of \$511.07 million. Refer to Table 3 below for further information. The increases in all years, related to benefits and refunds, are primarily due to the overall growth in the number of retirees and the average amount of benefits paid to them. Refer to Note 1—Significant Provisions of the Plan (see section for SBCERA Membership) for further information. Deductions for administrative expenses have remained relatively stable in all years. In addition, deductions for other expenses have remained fairly consistent. Refer to Note 2—Summary of Significant Accounting Policies (see section for Administrative Expenses), and Other Supplementary Information (see Schedule of Administrative and Other Expenses) for further information.

CHANGES IN FIDUCIARY NET POSITION (TABLE 3)

As of June 30, 2019, 2018 and 2017

(Amounts in Thousands)

	2019	2018	2017	Increase (Decrease)	
				Amount	% Change
ADDITIONS					
Employer Contributions	\$ 446,295	\$ 378,668	\$ 360,478	\$ 67,627	17.86%
Member Contributions	163,552	149,478	143,858	14,074	9.42%
Plan Asset Transfer from an Outside Plan	-	4,312	-	(4,312)	100.00%
Net Investment Income ¹	502,461	797,242	1,097,783	(294,781)	(36.98%)
Net Securities Lending Income	292	238	415	54	22.69%
TOTAL ADDITIONS	1,112,600	1,329,938	1,602,534	(217,338)	(16.34%)
DEDUCTIONS					
Benefits and Refunds	578,508	539,297	497,904	39,211	7.27%
Administrative Expense	9,383	8,752	9,961	631	7.21%
Other Expenses	3,292	3,340	3,202	(48)	(1.44%)
TOTAL DEDUCTIONS	591,183	551,389	511,067	39,794	7.22%
INCREASE IN NET POSITION	521,417	778,549	1,091,467	(257,132)	(33.03%)
NET POSITION—RESTRICTED FOR PENSIONS: BEGINNING OF YEAR					
	10,066,990	9,288,441	8,196,974	778,549	8.38%
END OF YEAR	\$ 10,588,407	\$ 10,066,990	\$ 9,288,441	\$ 521,417	5.18%

(1) Net of investment expenses of \$156,158, \$160,666, and \$163,990 for the years ending June 30, 2019, 2018, and 2017, respectively.

MANAGEMENT'S DISCUSSION AND ANALYSIS

June 30, 2019 and 2018

(Continued)

NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

SBCERA is subject to the provisions of GASB Statement No. 67 (GASB 67), *Financial Reporting for Pension Plans*, and SBCERA's participating employers are subject to the provisions of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 25*. These standards require governmental employers to recognize their long-term obligation for pension benefits as a liability on their statements of fiduciary net position, to recognize their annual pension expense as a comprehensive measurement of the annual cost of pension benefits, and requires SBCERA to provide note disclosures and required supplementary information related to the Plan's net pension liability (NPL) of participating employers.

NPL represents the excess of the total pension liability (using an entry age cost method, discounted at a discount rate that reflects the expected return on Plan assets) over fiduciary net position (valued at fair value). It is a measurement of pension liabilities using market assets that provides a consistent and standardized methodology allowing comparability of data and increased transparency of the pension liability across all governmental entities. SBCERA has complied with GASB 67 for the years ended June 30, 2019, 2018, and 2017.

Based on the June 30, 2019, 2018, and 2017 actuarial valuations, the NPL of participating employers on a fair value basis is \$2.71 billion, \$2.53 billion, and \$2.64 billion, respectively. Refer to Table 4, below, for further information. The increase of \$178,316 or 7.04% from 2018 to 2019 is primarily due to the investment return being less than the actuarial rate of 7.25%. The decrease of \$101.92 million or 3.87% from 2017 to 2018 is primarily a result of net investment gains outpacing the increase in total pension liability. Refer to Note 4 – Net Pension Liability of Participating Employers, and the Required Supplementary Information sections of this report for further information.

CHANGES IN NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (TABLE 4)

As of June 30, 2019, 2018, and 2017

	2019	2018	2017	Increase (Decrease)	
				Amount	% Change
Total Pension Liability	\$ 13,300,303	\$ 12,600,570	\$ 11,923,945	\$ 699,733	5.55%
Less Plan Fiduciary Net Position	10,588,407	10,066,990	9,288,441	521,417	5.18%
NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS	\$ 2,711,896	\$ 2,533,580	\$ 2,635,504	\$ 178,316	7.04%

MANAGEMENT'S DISCUSSION AND ANALYSIS

June 30, 2019 and 2018

(Continued)

OVERALL ANALYSIS

For the year ended June 30, 2019, SBCERA's financial position and results from operations have experienced an increase from the prior year, as net position increased by \$521.42 million or 5.18% from the year ended June 30, 2018. For the year ended June 30, 2018, net position increased by \$778.55 million or 8.38% from the year ended June 30, 2017. The overall increase in net position for June 30, 2019 is primarily attributable to the appreciation in the fair value of the Plan's investment portfolio due to gains incurred from SBCERA's unique asset positioning and a strengthening financial market. Despite the fluctuations in the financial markets, SBCERA remains in a sound financial position to meet its obligations to members and their beneficiaries. The overall financial position of SBCERA results from a very strong and successful investment program, risk management, and strategic planning. As a long-term investor, SBCERA can take advantage of price volatility along with a diversified exposure to domestic and international equities, fixed income investments, natural resources, real estate, infrastructure, private equity, and overlay programs. Overall, this diversification minimizes the risk of loss and maximizes the rate of return for the Plan.

SBCERA'S FIDUCIARY RESPONSIBILITIES

SBCERA's Board and management are fiduciaries of the pension trust fund. Under the California Constitution, the assets of the Plan can only be used for the exclusive benefit of members and their beneficiaries.

REQUESTS FOR INFORMATION

The Basic Financial Statements are designed to provide the SBCERA Board, its membership, taxpayers, investment managers and creditors with a general overview of SBCERA's finances and to account for the money it received. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

San Bernardino County Employees' Retirement Association (SBCERA)
Attn: Fiscal Services Department
348 West Hospitality Lane
San Bernardino, CA 92408

Respectfully,



Amy McInerney, CPA
Chief Financial Officer

STATEMENTS OF FIDUCIARY NET POSITION

As of June 30, 2019 and 2018

(Amounts in Thousands)

	2019	2018
ASSETS		
Cash		
Cash in Bank	\$ 4,093	\$ 5,773
Cash Pooled with County Treasurer	10,481	9,541
TOTAL CASH	14,574	15,314
Receivables		
Securities Sold	58,021	56,609
Accrued Interest and Dividends	5,804	5,367
Employer and Member Contributions	37,435	35,139
Due from Withdrawn Employers	485	519
Due from Outside Plan, Plan Asset Transfer	-	4,312
Other Receivables	1,555	787
TOTAL RECEIVABLES	103,300	102,733
Investments, at Fair Value		
Short-Term Cash Investment Funds	842,709	938,199
Emerging Market Debt	31,970	58,496
United States Government Obligations and Other Municipals	259,479	164,641
Domestic Bonds	189,936	204,185
Foreign Bonds	231,340	136,825
Domestic Common and Preferred Stock	1,443,184	1,346,030
Foreign Common and Preferred Stock	839,958	827,307
Investments of Cash Collateral on Securities Lending	113,710	77,825
Real Estate	438,658	414,468
Domestic Alternatives	4,114,472	3,947,597
Foreign Alternatives	2,135,237	1,990,098
TOTAL INVESTMENTS, AT FAIR VALUE	10,640,653	10,105,671
Capital Assets, Net of Accumulated Depreciation and Amortization	4,907	5,811
TOTAL ASSETS	10,763,434	10,229,529
LIABILITIES		
Securities Lending	113,695	77,807
Securities Options Payable	270	-
Payables for Securities Purchased	46,696	71,917
Other Liabilities	14,366	12,815
TOTAL LIABILITIES	175,027	162,539
NET POSITION—RESTRICTED FOR PENSIONS	\$ 10,588,407	\$ 10,066,990

The accompanying Notes are an integral part of these financial statements.

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

For the Years Ended June 30, 2019 and 2018

(Amounts in Thousands)

	2019	2018
ADDITIONS		
Contributions		
Employer Contributions	\$ 446,295	\$ 378,668
Member Contributions	163,552	149,478
TOTAL CONTRIBUTIONS	609,847	528,146
Plan Asset Transfer from an Outside Plan	-	4,312
Investment Income		
Net Appreciation in Fair Value of Investments:		
Securities and Alternative Investments	419,930	832,029
Real Estate	2,021	17,969
TOTAL NET APPRECIATION IN FAIR VALUE	421,951	849,998
Interest Income on Cash and Securities	159,378	67,391
Other Investment Income		
Dividend Income	37,921	18,311
Net Real Estate Rental Income	31,370	26,343
Other Income (Loss)	7,999	(4,135)
TOTAL OTHER INVESTMENT INCOME	77,290	40,519
Less Investment Expenses		
Investment Advisement Fees	(93,010)	(103,534)
Other Investment Expenses	(63,148)	(57,132)
TOTAL INVESTMENT EXPENSES	(156,158)	(160,666)
NET INVESTMENT INCOME	502,461	797,242
Securities Lending Income		
Earnings	2,745	1,369
Less Rebates and Bank Charges	(2,453)	(1,131)
NET SECURITIES LENDING INCOME	292	238
TOTAL ADDITIONS	1,112,600	1,329,938
DEDUCTIONS		
Benefits and Refunds Paid to Members and Beneficiaries	578,508	539,297
Administrative Expenses	9,383	8,752
Other Expenses	3,292	3,340
TOTAL DEDUCTIONS	591,183	551,389
NET INCREASE IN NET POSITION	521,417	778,549
NET POSITION—RESTRICTED FOR PENSIONS		
Beginning of Year	10,066,990	9,288,441
END OF YEAR	\$ 10,588,407	\$ 10,066,990

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

NOTES OF THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

NOTE 1 – SIGNIFICANT PROVISIONS OF THE PLAN

The San Bernardino County Employees' Retirement Association (SBCERA) administers the SBCERA pension plan – a cost-sharing multiple-employer defined benefit pension plan (Plan). SBCERA was established in 1945 and operates under the provisions of the California County Employees Retirement Law of 1937 (CERL), the California Public Employees' Pension Reform Act of 2013 (PEPRA) and the regulations, procedures, and policies adopted by SBCERA's Board of Retirement (Board). The Plan's provisions may be amended by the California state legislature and in some cases require approval by the County of San Bernardino Board of Supervisors and/or the SBCERA Board.

SBCERA provides retirement, disability, death, and survivor benefits to its members, who are employed by 17 active Plan sponsors (participating employers), and four withdrawn employers.

Active Plan Sponsors

- Barstow Fire Protection District (BFPD)
- Big Bear Fire Authority (BBFA)
- California Electronic Recording Transaction Network Authority (CERTNA)
- California State Association of Counties (CSAC)
- City of Big Bear Lake (CBBL)
- City of Chino Hills (CCH)
- Crestline Sanitation District (CSD)
- Department of Water and Power of the City of Big Bear Lake (DWP)
- Hesperia Recreation and Park District (HRPD)
- Law Library for San Bernardino County (LL)
- Local Agency Formation Commission (LAFCO)
- Mojave Desert Air Quality Management District (MDAQMD)
- San Bernardino County (County)
- San Bernardino County Employees' Retirement Association (SBCERA)
- San Bernardino County Transportation Authority (SBCTA)
- South Coast Air Quality Management District (SCAQMD)
- Superior Court of California, County of San Bernardino (Superior Court)

WITHDRAWN EMPLOYERS

Inland Library System (ILS) (withdrew May 31, 2019)*

Inland Valley Development Agency (IVDA) (withdrew June 30, 2012)

Rim of the World Recreation and Park District (Rim) (withdrew May 4, 2013)

San Bernardino International Airport Authority (SBIAA) (withdrew June 30, 2012)

* For actuarial purposes, ILS is considered a withdrawn employer; however, until the irrevocable ILS board resolution is passed, the employer is still considered active for accounting purposes.

NOTES OF THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 1 – SIGNIFICANT PROVISIONS OF THE PLAN (Continued)

Fiduciary oversight of SBCERA is vested with the SBCERA Board, which consists of nine voting members and three alternate members. Four members are appointed by the County of San Bernardino's Board of Supervisors, six members (which include two alternates) are elected by the members of SBCERA (General members elect two members, Safety members elect one member and one alternate, and Retired members elect one member and one alternate), and the County of San Bernardino Treasurer (County Treasurer) is an ex-officio member who has designated one alternate.

Board members serve three-year terms, with the exception of the County Treasurer, who serves during their tenure in office. The Board meets monthly. Appointed and retired members of the Board receive compensation (a stipend for meeting attendance), and all members are reimbursed for necessary business expenses pursuant to California Government Code (GC) section 31521. SBCERA's Chief Executive Officer is appointed by the Board, and implements the policies and direction set by the Board.

MEMBERSHIP AND BENEFIT ELIGIBILITY

All benefits established by the CERL and PEPR, as amended from time to time, are administered by SBCERA for its participating employers. SBCERA administers benefits for two membership classifications, General and Safety, and those benefits are tiered based upon date of SBCERA membership. Safety membership is extended to those involved in active law enforcement and fire suppression. All other members are classified as General members. Generally, those who became members prior to January 1, 2013 (effective date of PEPR) are Tier 1 members. All other members are Tier 2. Employees become eligible for membership on their first day of regular employment, and members become fully vested after earning five years of service credit or attaining the age of 70. Additional information regarding SBCERA's benefits is included in the Summary Plan Description, also known as The Compass, which is available on SBCERA's website at www.SBCERA.org.

SBCERA MEMBERSHIP

An employee who is appointed to a regular position and whose service is equal to or greater than 50% of the full standard of hours required by an SBCERA participating employer must become a member of SBCERA on the first day of employment. However, membership may be delayed in accordance with SBCERA regulations for establishing reciprocity with another public retirement system as described in the CERL, and employees who have attained age 60 prior to employment may waive their membership within 90 days following the initial appointment.

SBCERA membership consists of active members, inactive members, and their beneficiaries as displayed on the following page.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 1 — SIGNIFICANT PROVISIONS OF THE PLAN (Continued)

MEMBERSHIP AND BENEFIT ELIGIBILITY | SBCERA MEMBERSHIP (Continued)

SBCERA membership consists of active members, inactive members, and their beneficiaries as follows:

SBCERA MEMBERSHIP

As of June 30, 2019

Membership Type	Tier 1			Tier 2			Total
	General	Safety	Sub-Total	General	Safety	Sub-Total	
Active Members							
Active Members—Vested	10,712	1,568	12,280	1,029	147	1,176	13,456
Active Members—Non-Vested	55	7	62	7,394	911	8,305	8,367
TOTAL ACTIVE MEMBERS	10,767	1,575	12,342	8,423	1,058	9,481	21,823
Inactive Members or Beneficiaries Currently Receiving Benefits							
Retirees Currently Receiving Benefits	9,625	1,829	11,454	21	6	27	11,481
Beneficiaries and Dependents Currently Receiving Benefits	1,390	369	1,759	4	-	4	1,763
TOTAL INACTIVE MEMBERS OR BENEFICIARIES CURRENTLY RECEIVING BENEFITS	11,015	2,198	13,213	25	6	31	13,244
Inactive Members not Receiving Benefits							
Inactive Members Eligible for, but not yet Receiving Benefits	2,401	173	2,574	174	38	212	2,786
Inactive Members Eligible for Refund Value of Account Only ¹	1,820	57	1,877	1,919	144	2,063	3,940
TOTAL INACTIVE MEMBERS NOT RECEIVING BENEFITS	4,221	230	4,451	2,093	182	2,275	6,726
TOTAL SBCERA MEMBERSHIP	26,003	4,003	30,006	10,541	1,246	11,787	41,793

SBCERA MEMBERSHIP

As of June 30, 2018

Membership Type	Tier 1			Tier 2			Total
	General	Safety	Sub-Total	General	Safety	Sub-Total	
Active Members							
Active Members—Vested	11,504	1,661	13,165	266	28	294	13,459
Active Members—Non-Vested	101	11	112	6,927	967	7,894	8,006
TOTAL ACTIVE MEMBERS	11,605	1,672	13,277	7,193	995	8,188	21,465
Inactive Members or Beneficiaries Currently Receiving Benefits							
Retirees Currently Receiving Benefits	9,232	1,767	10,999	9	2	11	11,010
Beneficiaries and Dependents Currently Receiving Benefits	1,348	354	1,702	4	-	4	1,706
TOTAL INACTIVE MEMBERS OR BENEFICIARIES CURRENTLY RECEIVING BENEFITS	10,580	2,121	12,701	13	2	15	12,716
Inactive Members not Receiving Benefits							
Inactive Members Eligible for, but not yet Receiving Benefits	2,293	166	2,459	78	19	97	2,556
Inactive Members Eligible for Refund Value of Account Only ¹	1,894	60	1,954	1,586	115	1,701	3,655
TOTAL INACTIVE MEMBERS NOT RECEIVING BENEFITS	4,187	226	4,413	1,664	134	1,798	6,211
TOTAL SBCERA MEMBERSHIP	26,372	4,019	30,391	8,870	1,131	10,001	40,392

(1) Inactive members with fewer than five years of service credit are entitled to withdraw their refundable member contributions made, together with accumulated interest only.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 1 — SIGNIFICANT PROVISIONS OF THE PLAN (Continued)

MEMBERSHIP AND BENEFIT ELIGIBILITY (Continued)

MEMBERSHIP RETIREMENT BENEFITS

General Tier 1 members are eligible for retirement benefits upon completion of 10 years of service credit and attaining age 50, or 30 years of service credit regardless of age, or age 70 regardless of years of service credit. Safety Tier 1 members have the same eligibility requirements as General members except they are required to complete only 20 years of service credit, regardless of age. Retirement benefits are calculated at 2% for General Tier 1 members and 3% for Safety Tier 1 members of the highest 12 consecutive months of compensation earnable, as defined in GC sections 31462.1, 31676.15, and 31664.1 of the CERL, for each completed year of service based on a normal retirement age of 55 for General members and age 50 for Safety members.

For Tier 1 members, the maximum monthly retirement allowance is 100% of final compensation, and final compensation is capped pursuant to internal Revenue Code (IRC) section 401 (a) (17), which is \$275,000 and \$270,000 for the fiscal years ending June 30, 2019 and 2018, respectively. Tier 1 members and participating employers are exempt from paying contributions on compensation earnable paid in excess of the annual cap (except for the survivor benefit contribution), and Tier 1 members are exempt from paying contributions on compensation earnable when the member reaches 30 or more years of service credit (except for the survivor benefit contribution). The annual cap, for Tier 1 members, is applied to the fiscal year for the IRC section 401 (a) (17) limit in effect at the beginning of the fiscal year.

General Tier 2 members are eligible for retirement benefits upon completion of five years of service credit and attaining age 52 or attaining age 70 regardless of service credit. Safety Tier 2 members are eligible for retirement benefits upon completion of five years of service credit and attaining age 50. Retirement benefits are calculated at 2.5% at age 67 for General Tier 2 members and 2.7% at age 57 for Safety Tier 2 members of the highest 36 consecutive months of pensionable compensation, as defined in GC sections 7522.20(a) and 7522.25(d) of the PEPPRA, for each completed year of service. For Tier 2 members, the monthly retirement allowance is not capped. However, pensionable compensation for all Tier 2 members is limited each year by an annual cap per GC section 7522.10, which is \$149,016 and \$145,666 for calendar years 2019 and 2018, respectively. Since pensionable compensation is capped, participating employers and Tier 2 members are exempt from paying contributions on pensionable compensation paid in excess of the annual cap (except for the survivor benefit contribution).

The member may elect an unmodified retirement allowance, or choose an optional retirement allowance. The unmodified retirement allowance provides the highest monthly benefit and a 60% continuance to an eligible surviving spouse/registered domestic partner or eligible child. An eligible surviving spouse or registered domestic partner is one married to or registered with the member one year prior to the effective retirement date. To be considered a post-retirement eligible spouse/registered domestic partner, the member must have been married/legally registered at least two years prior to death, and the spouse/registered domestic partner must be 55 years or older upon the member's death, and no other person may be designated in a court order as a payee. There are four optional retirement allowances the member may choose, each requiring a reduction in the unmodified retirement allowance in order to allow the member the ability to provide certain benefits to a surviving spouse, registered domestic partner, or named beneficiary having an insurable interest in the life of the member.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 1 – SIGNIFICANT PROVISIONS OF THE PLAN (Continued)

TERMINATED MEMBER BENEFITS

If a member terminates before earning five years of service credit, the member forfeits the right to receive benefits and is entitled to withdraw refundable contributions made, together with accumulated interest. If the member enters a reciprocal retirement system within 180 days of terminating from SBCERA and elects to leave their accumulated contributions on deposit with SBCERA, the member will receive a deferred retirement allowance when eligible. A member with fewer than five years of service credit may elect to leave accumulated contributions in the retirement fund indefinitely pursuant to GC section 31629.5. If a member terminates after five years of service credit, the member may elect to withdraw the refundable contributions, including interest earned, or leave the accumulated deposits in the retirement fund and be granted a deferred retirement allowance at the time the member would have been entitled to the allowance if service had been continued. The acceptance of a refund payment cancels the individual's rights and benefits in SBCERA.

DEATH AND DISABILITY BENEFITS

The Plan provides death benefits to beneficiaries of members, and these benefits are governed by Articles 12, 15, and 15.6 of the CERL. In accordance with applicable California law, a surviving spouse/registered domestic partner, or minor children, even if not the named beneficiary, may have certain rights superseding the rights of the named beneficiary.

DEATH BEFORE RETIREMENT WITH FEWER THAN FIVE YEARS OF SERVICE CREDIT

If a member with fewer than five years of service credit dies because of a non-work-related incident, the member's designated beneficiary will receive the member's refundable retirement contributions plus accumulated interest earned. In addition, the beneficiary will receive one month's compensation for each completed year the member served to a maximum of 50% of annual compensation pursuant to GC section 31781. If the member established reciprocity with another public pension plan, SBCERA will coordinate benefits with the last public employer, pursuant to GC sections 31839 and 31840.

DEATH BEFORE RETIREMENT WITH MORE THAN FIVE YEARS OF SERVICE CREDIT

A member who dies after earning at least five years of service credit, but whose death is not job-related, is entitled to leave the eligible spouse/registered domestic partner (or any eligible children) a monthly payment equal to 60% of the amount that would have been paid had the member retired with a non-service connected disability. If the beneficiary is other than a spouse/registered domestic partner or dependent child, the beneficiary receives a lump sum payment of the refundable retirement contributions plus accumulated interest earned. In addition, the beneficiary would receive one month's compensation for each completed year the member served to a maximum of six months pursuant to GC section 31781. If the member established reciprocity with another public pension plan, SBCERA will coordinate benefits with the last public employer, pursuant to GC sections 31839 and 31840.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 1 – SIGNIFICANT PROVISIONS OF THE PLAN (Continued)

DEATH AND DISABILITY BENEFITS (Continued)

DEATH BEFORE RETIREMENT CAUSED BY EMPLOYMENT

If a member dies due to injury or disease arising out of or in the course of employment, the surviving spouse/registered domestic partner is eligible for a monthly allowance equal to the amount that would have been paid had the employee retired with a service connected disability at the time of death. This amount is equal to 50% of the individual's final monthly compensation. If a Safety member dies while in the performance of duty, the spouse/registered domestic partner will receive an additional lump-sum payment equal to one year's salary. Furthermore, an additional death benefit of 25% of the annual death allowance may be payable for one eligible child, and increases to 40% for two eligible children, or 50% for three or more eligible children if the death qualifies pursuant to GC section 31787.5. Under GC section 31787.65, the final compensation upon which the additional death payment is calculated may be increased any time current active members, in the same classification as the deceased member, receive a compensation increase. The final compensation will be subject to these increases until the earlier of the death of the surviving spouse or eligible children, or the date that the deceased member would have attained the age of 50 years.

DEATH AFTER RETIREMENT

If the unmodified retirement option is chosen as part of a service retirement, the eligible spouse/registered domestic partner will receive 60% of the retiree's monthly pay for the remainder of the spouse/registered domestic partner's life. The continuance is 100% if the member retired with a service-connected disability. The spouse/registered domestic partner's eligibility in the case of a service retirement is determined by whether the marriage/registered domestic partnership occurred at least one year prior to retirement. In the event the member was unmarried at retirement, under GC section 31760.2, the eligibility is determined based on whether the marriage/registered domestic partnership occurred at least two years prior to the date of death of the member and the spouse/registered domestic partner has attained the age of 55 years on or prior to the date of death of the member. However, in the case of a service-connected disability, the spouse/registered domestic partner must have been married/registered at least one day prior to retirement pursuant to GC section 31786. A burial allowance of \$1,000 is also payable to the deceased retiree's beneficiary or estate (\$250 of this amount is discretionary, subject to the availability of funds in the burial allowance reserve).

If there is no eligible surviving spouse, any minor children are eligible and the unmodified option was selected at retirement, the total benefit received is 60% of the retiree's monthly compensation, which would be divided amongst the unmarried children (if more than one). The benefit continues until the unmarried child/children reach age 18 or marry, whichever comes first. If the child/children remain unmarried and are enrolled as full-time students in an accredited school, the benefit will continue up to the age of 22.

If one of the four modified retirement options are chosen by the member as part of a service retirement, the monthly allowance is reduced for the retiree's lifetime. The type of reduction is dependent on the election made by the member and is approved by the Board, upon the advice of SBCERA's independent actuary.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 1 – SIGNIFICANT PROVISIONS OF THE PLAN (Continued)

DEATH AND DISABILITY BENEFITS (Continued)

SURVIVOR BENEFITS

The Plan provides a General member survivor benefit to an eligible spouse/registered domestic partner, eligible dependent children, and eligible dependent parents, if the active General member had been a member continuously for at least 18 months immediately prior to death, pursuant to GC section 31855.12.

DISABILITY BENEFITS

The Plan provides disability benefits to eligible members and Article 10 of the CERL governs these benefits.

An active member, who is found by the Board to be permanently incapacitated as a result of a service connected injury or illness, arising out of or in the course of the member's employment, is paid an annual disability allowance equal to the greater of 50% of the employee's final average compensation or the normal service retirement benefits accumulated by the member as of the date of the disability retirement. A member, who is found by the Board to be permanently incapacitated as a result of a non-service connected injury or illness, which does not arise out of or in the course of the member's employment, is paid a monthly allowance determined by their entry date. If the member entered the system on or after January 1, 1981, pursuant to GC section 31727.7, the benefit is 20% of final average compensation for five years of service credit and 2% for each additional whole year of service credit thereafter, up to a maximum of 40% of final average compensation. For members who entered the system prior to January 1, 1981, the non-service connected monthly disability benefit is one-third of the member's final average compensation. For all members, regardless of when they entered the system, if the service retirement benefit is higher, the member would be paid that amount.

COST-OF-LIVING ADJUSTMENTS

Pursuant to GC section 31870, an automatic cost-of-living adjustment is provided based on changes in the local region Consumer Price Index (CPI) up to a maximum of 2% per year. Any increase greater than 2% is "banked" and may be used in years when the CPI is less than 2%. In addition, there is a one-time 7% increase at retirement for members hired before August 19, 1975 pursuant to Article 16.6 of the CERL.

PARTICIPATING EMPLOYERS

A district may become a participating employer in SBCERA pursuant to GC section 31557. A participating employer is eligible to withdraw from SBCERA pursuant to GC section 31564. The terminating employer remains liable to SBCERA for the employer's share of any unfunded actuarial liability of the Plan, which is attributable to the employees of the withdrawing employer who either have retired or will retire from the Plan. The liability is determined by SBCERA's actuary pursuant to GC section 31564.2.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 1 – SIGNIFICANT PROVISIONS OF THE PLAN (Continued)

PARTICIPATING EMPLOYERS (Continued)

Four employers have withdrawn from SBCERA, one remains liable for their unfunded actuarial liability at June 30, 2019 and at June 30, 2018, and one (ILS) has not completely withdrawn. On June 30, 2012, San Bernardino International Airport Authority (SBIAA) and the Inland Valley Development Agency (IVDA) withdrew from SBCERA and subsequently entered into a payment agreement with SBCERA in September 2013 to pay their unfunded actuarial liability of \$3.6 million and \$4.4 million, respectively. SBIAA and IVDA requested the payments be first applied to SBIAA until their liability was paid in full in August 2015. On May 4, 2013, Rim of the World Recreation and Park District (Rim) withdrew from SBCERA and subsequently entered into a payment agreement with SBCERA in February 2014 to pay their unfunded actuarial liability of \$669 thousand.

On May 31, 2019, Inland Library System's (ILS) last employee retired; however, the participating employer will not be considered fully withdrawn until the ILS board issues an irrevocable resolution to withdraw. At that time, ILS will agree to a withdrawal liability and payment plan according the SBCERA General Policy No. 020 (Issue 1.0). For the purpose of actuarial valuations, the employer is considered withdrawn.

See below for a summary of the amounts due from withdrawn employers as of June 30, 2019 and 2018.

DUE FROM WITHDRAWN EMPLOYERS

As of June 30, 2019 and 2018

(Amounts in Thousands)

Employer	Balance			Balance
	July 1, 2018	Additions	Deductions	June 30, 2019
Rim	\$ 519	\$ -	\$ (34)	\$ 485
TOTAL	\$ 519	\$ -	\$ (34)	\$ 485

Employer	Balance			Balance
	July 1, 2017	Additions	Deductions	June 30, 2018
IVDA	\$ 3,204	\$ -	\$ (3,204)	\$ -
Rim	552	-	(33)	519
TOTAL	\$ 3,756	\$ -	\$ (3,237)	\$ 519

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following are the significant accounting policies followed by SBCERA.

BASIS OF ACCOUNTING

The financial statements are prepared using the accrual basis of accounting and in accordance with accounting principles generally accepted in the United States of America (U.S.) known as Generally Accepted Accounting Principles (GAAP), under which revenues are recognized when earned and deductions are recorded when the liability is incurred. Employer and member contributions are recognized as revenues when due, pursuant to statutory requirements. Contributions are recorded in the period the related salaries are earned and become measurable pursuant to statutory or contractual requirements. Investment income is recognized as revenue when earned. The net appreciation/(depreciation) in fair value of investments held by SBCERA is recorded as an increase/(decrease) to investment income based on the valuation of investments at year-end, which includes both realized and unrealized gains and losses on investments. Retirement benefits and refunds are recognized when currently due and payable in accordance with the terms of the Plan. Other expenses are recognized when the corresponding liabilities are incurred.

CASH

Cash includes cash on hand (petty cash), deposits with a financial institution and deposits with a pooled account managed by the San Bernardino County Treasurer. Refer to Note 7 – Deposits and Investments (see section for Cash and Deposits) for further information.

INVESTMENTS

SBCERA is authorized by GC sections 31594 and 31595 to invest in any form or type of investment deemed prudent by the Board and does so through the *Investment Plan, Policy and Guidelines* established by the Board. The assets of the Plan are held for the exclusive purpose to provide benefits to members and their beneficiaries and to defray reasonable expenses of administering SBCERA. The Board is required by statute to use care, skill, prudence, and diligence to 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. Refer to Note 7 – Deposits and Investments (see section for Investments) for further information.

Plan investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value for investments of publicly traded securities is based upon closing sales prices reported on recognized securities exchanges on the last business day of the period, or for listed securities having no sales reported and for unlisted securities, based upon last reported bid prices. All purchases and sales of securities are accounted for on a trade date basis and dividends declared but not received are accrued on the ex-dividend date. Realized gains or losses of securities are determined based on average cost.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 2 — SUMMARY OF SIGNIFICANT ACCOUNTING POLICES (Continued)

BASIS OF ACCOUNTING | INVESTMENTS (Continued)

Fair value for investments in limited partnerships and/or commingled funds of debt securities, equity securities, real estate, private equity, commodities, infrastructure, and other alternatives is based on fund share price or percentage of ownership, provided by the fund manager or general partner, which is based on net asset value as determined by the fund manager or general partner. Fair value for these investments is reported by the fund manager and/or general partner on a monthly and/or quarterly basis and is supported by annual financial statements that are audited by an independent third-party accountant. Where fair value information as of June 30, 2019 and 2018 was not available at the time of these financial statements, SBCERA has estimated fair value by using the most recent fair value information available from the fund manager/general partner and adding any contributions and/or deducting any distributions to/from the investment from the date of the most recent fair value information.

Fair value for investments in separately owned real estate is based on independent appraisals obtained every three years along with quarterly valuations performed by SBCERA's individual real estate advisors in accordance with the Real Estate Information Standards of the National Council of Real Estate Investment Fiduciaries.

The allocation of investment assets within SBCERA's portfolio is approved by the Board as outlined in the *Investment Plan, Policy and Guidelines*. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the Plan. The table below provides the Board's adopted *Asset Allocation* policy as of June 30, 2019 and 2018.

ASSET ALLOCATION POLICY

As of June 30, 2019 and 2018

Asset Class	Target Allocation	
	2019	2018
Domestic Equity	13.00%	13.00%
International Equity	15.00%	15.00%
Domestic Fixed Income	15.00%	15.00%
International Fixed Income	20.00%	18.00%
Private Equity	16.00%	16.00%
Real Estate	7.00%	9.00%
Absolute Return	7.00%	7.00%
Timber	2.00%	2.00%
Infrastructure	1.00%	1.00%
Commodities	2.00%	2.00%
Short-Term Cash	2.00%	2.00%
TOTAL	100.00%	100.00%

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF ACCOUNTING (Continued)

DERIVATIVES

The Plan uses financial instruments such as derivatives and similar transactions to gain exposure to various financial markets and reduce its exposure to certain financial market risks for purposes of investments only. The financial instruments are valued at fair value and, as such, gains and losses are recognized daily, based on changes in their fair value. These changes are reflected as net appreciation/(depreciation) in fair value of investments on the Statements of Changes in Fiduciary Net Position. The use of these financial instruments exposes the Plan to counter-party credit risk and to market risk associated with a possible adverse change in interest rates, equity values, and currency movement. The Plan may have additional exposure to derivative instruments through investments in commingled funds whose strategies may include the use of derivatives to gain exposure to various financial markets and reduce its exposure to certain financial market risks. Refer to Note 7 – Deposits and Investments (see section for Derivatives) for further information.

RESERVES

Employer and member contributions are allocated to various reserve accounts based on actuarial determinations. Pursuant to the Board's *Interest Crediting Procedures and Undesignated Excess Earnings Allocation* policy, funds in excess of reserve requirements are allocated first to prior year shortfalls (the Contra Account), then 3% of the fair value of assets are set aside as a contingency reserve for future losses, and any excess is then allocated to the employer current service reserve, maintained as an additional contingency reserve, or held as undesignated excess earnings. Refer to Note 5 – Reserves for further information.

INCOME TAXES

SBCERA is a qualified plan under IRC section 401(a) and is exempt from federal income taxes under IRC section 501(a). Accordingly, no provision for income taxes has been made in the accompanying financial statements.

ADMINISTRATIVE EXPENSES

The Board adopts the annual operating budget for the administration of SBCERA. The administrative expenses are charged against the earnings of the Plan. Pursuant to GC section 31580.2, administrative expenses incurred in any one year are not to exceed twenty-one hundredths of one percent or 0.21% of SBCERA's actuarial accrued liabilities. Actual administrative expenses did not exceed this limitation for the years ended June 30, 2019 and 2018 (see table on next page).

Pursuant to GC sections 31522.5, 31522.7, 31580.2, 31529.9, 31596.1, and 31699.9, certain expenses are excluded from the limits described above for investment costs, actuarial service costs, legal service costs, and technology costs. Therefore, investment costs were offset against investment income, and actuarial service costs, technology costs, and non-investment legal service costs are all reported on the Statements of Changes in Fiduciary Net Position as Other Expenses. A Schedule of Administrative and Other Expenses subject to the statutory limitation described above is also included in the Other Supplementary Information section of this report.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

BASIS OF ACCOUNTING | ADMINISTRATIVE EXPENSES (Continued)

STATUTORY LIMITATION FOR ADMINISTRATIVE EXPENSES

(Amounts in Thousands)

		For the Year Ended June 30, 2019	For the Year Ended June 30, 2018
Actuarial Accrued Liability (AAL) ¹	a	\$ 11,928,310	\$ 10,669,688
Statutory Limit for Administrative Expenses (AAL x 0.21%)		25,049	22,406
Actual Administrative Expenses Subject to Statutory Limit	b	9,383	8,752
EXCESS OF LIMITATION OVER ACTUAL ADMINISTRATIVE EXPENSES		\$ 15,666	\$ 13,654
ACTUAL ADMINISTRATIVE EXPENSES AS A PERCENTAGE OF AAL	b/a	0.08%	0.08%

MANAGEMENT'S ESTIMATES

The preparation of financial statements in conformity with GAAP requires management to make certain estimates and assumptions. These affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

CAPITAL ASSETS

Capital assets are recorded at cost and consist of furniture, equipment, intangible assets, including computer software, and leasehold improvements with an initial cost of \$25 thousand or more and an estimated useful life in excess of one year. Depreciation and amortization are provided using the straight-line method over the estimated useful lives of the assets, which range from three to thirty-nine years. SBCERA's capital assets are summarized on the following page as of June 30, 2019 and 2018.

(1) The AAL, as determined by the Plan's actuary each year, is used to calculate the statutory limitation for administrative expenses for the year after next. For example, the AAL as of June 30, 2017 was approved by the Board in December 2017, and was used to establish the statutory limitation for administrative expenses for the year ended June 30, 2019.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

BASIS OF ACCOUNTING | CAPITAL ASSETS (Continued)

CAPITAL ASSETS

(Amounts in Thousands)

	Balance July 1, 2018	Additions	Balance June 30, 2019
Furniture, Equipment & Leaseholds	\$ 10,887	\$ 7	\$ 10,894
Computer Software	4,395	34	4,429
Accumulated Depreciation ¹	(6,520)	(458)	(6,978)
Accumulated Amortization ¹	(2,951)	(487)	(3,438)
TOTAL	\$ 5,811	\$ (904)	\$ 4,907

	Balance July 1, 2017	Additions	Balance June 30, 2018
Furniture, Equipment & Leaseholds	\$ 10,429	\$ 458	\$ 10,887
Computer Software	4,395	-	4,395
Accumulated Depreciation ¹	(6,094)	(426)	(6,520)
Accumulated Amortization ¹	(2,339)	(612)	(2,951)
TOTAL	\$ 6,391	\$ (580)	\$ 5,811

RECLASSIFICATION OF FINANCIAL STATEMENTS PRESENTATION

Certain amounts presented in the year ended June 30, 2018 financial statements were reclassified to be consistent with the current year's presentation. Such reclassifications have no effect on the net increase in fiduciary net position as previously reported.

SUBSEQUENT EVENTS

There were no subsequent events that require an adjustment or disclosure other than described within these Notes.

(1) Depreciation and amortization expense totaled \$945 thousand and \$1.04 million for the years ended June 30, 2019 and 2018, respectively.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 3 – CONTRIBUTION REQUIREMENTS

Participating employers and active members are required by statute to contribute a percentage of covered payroll to the Plan. This requirement is pursuant to GC sections 31453.5 and 31454 for participating employers, and GC sections 31621.6, 31639.25, and 7522.30 for active members. The contribution requirements are established and may be amended by the Board pursuant to Article 1 of the CERL, which is consistent with the Plan's actuarial funding policy. The contribution rates are adopted yearly, based on an annual actuarial valuation, conducted by an independent actuary, that considers the mortality, service (including age at entry into the Plan, if applicable, and tier), and compensation experience of the members and their beneficiaries, and also includes an evaluation of the Plan's assets and liabilities. Participating employers may pay a portion of the active member contributions, and active members may pay a portion of the participating employer contributions, through negotiations and bargaining agreements.

One of the funding objectives of the Plan is to establish contribution rates that, over time, will remain level as a percentage of payroll unless the Plan benefit provisions are changed. Actuarial funding is based on the Entry Age Cost method. The employer contribution rate provides for current cost (normal cost) plus a level percentage of payroll to amortize the Unfunded Actuarial Accrued Liability (UAAL). Normal cost is the annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement benefit if all underlying assumptions are met. The UAAL is the difference between the Actuarial Accrued Liability and the Actuarial Value of Assets. The amortization period for the UAAL is 20 years for all combined UAAL existing through June 30, 2002, with three years of amortization remaining at June 30, 2019. Any new UAAL after June 30, 2002 is amortized over a closed 20-year period effective with that valuation.

SBCERA's actuarial valuation for funding purposes is completed as of June 30 of each year. The rates recommended in the actuarial valuation apply to the year beginning 12 months after the valuation date. For example, the actuarial valuation dated June 30, 2019 establishes the contribution rates for the year ended June 30, 2021. Any shortfall or excess contributions, because of this implementation lag, are amortized as part of SBCERA's UAAL in the following valuation. Commencing with the June 30, 2012 valuation, any increase in UAAL resulting from Plan amendments will be amortized over its own declining 15-year period; temporary retirement incentives, including the impact of benefits resulting from additional service permitted in GC section 31641.04 (Golden Handshake) will be amortized over a declining period of up to five years. If an overfunding exists (i.e., the total of all UAAL becomes negative so that there is a surplus), such surplus and any subsequent surpluses will be amortized over an "open" amortization period of 30 years. Any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL will be amortized over 20 years as the first of a new series of amortization layers. The amortization policy components apply separately to each of SBCERA's UAAL cost sharing groups.

For funding purposes, SBCERA's actuarial valuation values the Plan's assets at fair value of assets less unrecognized gains and losses from each of the last five years. Under this method, the assets used to determine employer contribution rates consider fair value by recognizing the differences between the actual market return and the expected market return over a five-year period.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 3 – CONTRIBUTION REQUIREMENTS (Continued)

Separate contribution rates are established by the Board for the General member survivor benefit provided by the Plan. The costs of survivor benefits are based on an annual valuation conducted by an independent actuary, and are equally shared between the participating employers and the active General members. The contribution rates are calculated to provide for the ongoing cost of this benefit, plus any amounts necessary to recognize any shortfall of reserves to the actuarial accrued liabilities associated with this benefit. For the survivor benefit valuation, the same amortization policy components as described on the previous page and above apply, except that a level dollar methodology is used instead of a level percent of payroll. Survivor benefit contribution rates, for the years ended June 30, 2019 and 2018 are \$1.72, per biweekly employer pay period.

The tables below provide a summary of the employer and member contributions received for the years ended June 30, 2019 and 2018. Participating employers satisfied 100% of the contribution requirements for the years ended June 30, 2019 and 2018.

EMPLOYER CONTRIBUTIONS

For the Years Ended June 30, 2019 and 2018

(Amounts in Thousands)

Contribution Type	2019	2018
Actuarially Determined Contributions - Employer Paid	\$ 445,426	\$ 377,743
Actuarially Determined Contributions - Member Paid	221	116
Survivor Benefit Contributions	648	809
TOTAL EMPLOYER CONTRIBUTIONS	\$ 446,295	\$ 378,668

MEMBER CONTRIBUTIONS

For the Years Ended June 30, 2019 and 2018

(Amounts in Thousands)

Contribution Type	2019	2018
Actuarially Determined Contributions - Member Paid	\$ 156,533	\$ 139,671
Actuarially Determined Contributions - Employer Paid	3,274	4,782
Survivor Benefit Contributions	648	809
Purchase of Eligible Service Credit	3,097	4,216
TOTAL MEMBER CONTRIBUTIONS	\$ 163,552	\$ 149,478

SBCERA is also a participating employer and all SBCERA employees are eligible for membership in the Plan. The employer contributions paid by SBCERA, on behalf of these employees, are funded by earnings of the Plan, pursuant to GC section 31580.2. SBCERA paid 100% of the actuarially determined contributions, including survivor benefit contributions, in the amounts of \$1.4 million and \$1.2 million, for the years ended June 30, 2019 and 2018, respectively.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 3 – CONTRIBUTION REQUIREMENTS (Continued)

The tables below summarize the actuarially determined, Board approved, required employer and member contribution rates in effect for the years ended June 30, 2019 and 2018. Contribution rates are expressed as a percentage of covered payroll.

EMPLOYER CONTRIBUTION RATES

For the Year Ended June 30, 2019

Actuarial Cost Group	Tier 1 Members ¹			Tier 2 Members ¹		
	Normal Cost	Unfunded Actuarial Accrued Liability	Total	Normal Cost	Unfunded Actuarial Accrued Liability	Total
County General Members	11.70%	13.57%	25.27%	9.16%	13.57%	22.73%
Safety Members	21.81%	33.76%	55.57%	16.54%	33.76%	50.30%
Superior Court Members	11.70%	16.47%	28.17%	9.16%	16.47%	25.63%
SCAQMD Members	11.84%	28.50%	40.34%	8.39%	28.50%	36.89%
Other General Members	11.78%	25.25%	37.03%	9.05%	25.25%	34.30%

EMPLOYER CONTRIBUTION RATES

For the Year Ended June 30, 2018

Actuarial Cost Group	Tier 1 Members ²			Tier 2 Members ²		
	Normal Cost	Unfunded Actuarial Accrued Liability	Total	Normal Cost	Unfunded Actuarial Accrued Liability	Total
County General Members	11.50%	10.91%	22.41%	8.45%	10.91%	19.36%
Safety Members	22.14%	28.06%	50.20%	15.15%	28.06%	43.21%
Superior Court Members	11.50%	13.20%	24.70%	8.45%	13.20%	21.65%
SCAQMD Members	11.68%	23.25%	34.93%	7.66%	23.25%	30.91%
Other General Members	13.18%	21.35%	34.53%	8.74%	21.35%	30.09%

MEMBER CONTRIBUTION RATES

For the Years Ended June 30, 2019 and 2018

Actuarial Cost Group	2019 ¹		2018 ²	
	Lowest ³	Highest ³	Lowest ³	Highest ³
General Members - Tier 1	9.13%	15.50%	7.90%	14.87%
Safety Members - Tier 1	11.79%	17.98%	10.65%	17.62%
County General and Superior Court Members - Tier 2	9.16%	9.16%	8.45%	8.45%
Safety Members - Tier 2	16.54%	16.54%	15.15%	15.15%
SCAQMD Members - Tier 2	8.39%	8.39%	7.66%	7.66%
Other General Members - Tier 2	9.05%	9.05%	8.74%	8.74%

(1) Rates are in accordance with the June 30, 2017 valuation.

(2) Rates are in accordance with the June 30, 2016 valuation.

(3) Tier 1 rates are based on age at entry, the lowest rate shows entry age of 16 and highest represents the highest rate. Tier 2 rates are not age dependent.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 4 – NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

The components of the net pension liability of participating employers as of June 30, 2019 and 2018 are below.

NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

As of June 30, 2019 and 2018

(Amounts in Thousands)

		As of June 30, 2019	As of June 30, 2018
Total Pension Liability	a	\$ 13,300,303	\$ 12,600,570
Plan Fiduciary Net Position	b	10,588,407	10,066,990
NET PENSION LIABILITY	a-b	\$ 2,711,896	\$ 2,533,580

PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY

b/a	79.61%	79.89%
-----	--------	--------

The net pension liability of participating employers was measured as of June 30, 2019 and 2018 and determined based upon the total pension liability from actuarial valuations as of June 30, 2019 and 2018, respectively.

ACTUARIAL ASSUMPTIONS

The actuarial assumptions used to determine the total pension liability as of June 30, 2019 and 2018 were based on the results of the June 30, 2017 Actuarial Experience Studies (experience study), which covered the periods from July 1, 2013 through June 30, 2016. They are the same assumptions used in the June 30, 2019 and 2018 actuarial valuations, respectively, which are used to determine future contribution rates for funding purposes. The key assumptions used in the actuarial valuations include the following items:

Discount Rate	7.25% - net of Plan investment expense
Inflation	3.00%
Projected Salary Increases	General: 4.50% to 14.50%; Safety: 4.70% to 14.50% - Includes real "across the board" salary increases of 0.50% and merit and promotional increases
Cost-of-Living Adjustments	Contingent upon consumer price index with a 2.00% maximum
Administrative Expenses	0.70% of payroll

The notes to the required supplementary information present multiyear information for changes made to actuarial assumptions.

MORTALITY RATES

Mortality rates used in the June 30, 2019 and 2018 actuarial valuations are based on the RP 2014 Healthy Annuitant Mortality Table projected generationally with the two-dimensional MP-2016 projection scale. For healthy General male members, the ages are set forward one year. No adjustment is made for healthy General female members. For all healthy and disabled Safety members, the ages are set back one year. For all General members that are disabled, the ages are set forward seven years. Beneficiaries are assumed to have the same mortality as a General member of the opposite sex who is receiving a service (non-disability) retirement.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 4 – NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

(Continued)

LONG-TERM EXPECTED REAL RATE OF RETURN

The long-term expected rate of return on Plan investments was determined using a building block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. This information is combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, and by adding expected inflation and subtracting expected investment expenses and a risk margin.

The target allocations approved by the Board, and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumptions as of June 30, 2019 and 2018, are summarized in the table below. This information will change every three years based on the triennial actuarial experience study.

LONG-TERM EXPECTED REAL RATE OF RETURN

As of June 30, 2019 and 2018

Asset Class	Investment Classification	Target Allocation ¹	Long-Term Expected Real Rate of Return (Arithmetic)
Large Cap U.S. Equity	Domestic Common and Preferred Stock	8.00%	5.61%
Small Cap U.S. Equity	Domestic Common and Preferred Stock	2.00%	6.37%
Developed International Equity	Foreign Common and Preferred Stock	6.00%	6.96%
Emerging Market Equity	Foreign Common and Preferred Stock	6.00%	9.28%
U.S. Core Fixed Income	U.S. Government and Municipals/Domestic Bonds	2.00%	1.06%
High Yield/Credit Strategies	Domestic Bonds/Foreign Bonds	13.00%	3.65%
International Core Fixed Income	Foreign Bonds	1.00%	0.07%
Emerging Market Debt	Emerging Market Debt	6.00%	3.85%
Real Estate	Real Estate	9.00%	4.37%
International Credit	Foreign Alternatives	11.00%	6.75%
Absolute Return	Domestic Alternatives/Foreign Alternatives	13.00%	3.56%
Real Assets	Domestic Alternatives/Foreign Alternatives	5.00%	6.35%
Private Equity	Domestic Alternatives/Foreign Alternatives	16.00%	8.47%
Cash and Equivalents	Short-Term Cash Investment Funds	2.00%	(0.17%)
TOTAL		100.00%	

(1) For actuarial purposes, target allocations only change once every three years based on the triennial actuarial experience study.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 4 – NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

(Continued)

DISCOUNT RATE

The discount rate used to measure the total pension liability was 7.25% for the years ended June 30, 2019 and 2018. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers and active members are made at the actuarially determined contribution rate. For this purpose, only employer and member contributions that are intended to fund benefits of current members and their beneficiaries are included.

Projected employer contributions that are intended to fund the service costs of future members and their beneficiaries, as well as projected contributions from future members, are not included. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current members. Therefore, the long-term expected rate of return on Plan investments of 7.25% was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2019 and 2018.

The table below presents the net pension liability of participating employers calculated using the discount rate of 7.25% as of June 30, 2019 and 2018, as well as what the net pension liability of participating employers would be if it were calculated using a discount rate that is 1.00% lower or 1.00% higher than the current rate.

SENSITIVITY OF NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE

As of June 30, 2019 and 2018

(Amounts in Thousands)

Net Pension Liability	1.00% Decrease 6.25%	Current Discount Rate 7.25%	1.00% Increase 8.25%
June 30, 2019	\$ 4,531,326	\$ 2,711,896	\$ 1,220,254
June 30, 2018	4,267,951	2,533,580	1,110,972

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 5 – RESERVES

All employer and member contributions are allocated to various reserve accounts based on the recommendation of the Plan's actuary, as approved by the Board, and where applicable, as required by the CERL. SBCERA currently does not set aside a separate reserve for purposes of benefit increases or reduced employer contributions. All of the current reserves are available to pay for existing pensions or for Plan administration. All reserves, except the burial allowance reserve, are expected to be fully funded based on actuarially determined contributions. Set forth below are descriptions of the purpose of each reserve account.

MEMBER DEPOSIT RESERVE – the reserve represents the total accumulated contributions of members.

EMPLOYER CURRENT SERVICE RESERVE – the reserve includes the total accumulated contributions of the employers held for the benefit of non-retired General and Safety members on account of service rendered as a member of the Plan.

CONTRA ACCOUNT – the contra account represents the amount of interest credited to the reserve accounts that have not been paid for out of current or excess earnings. A balance in this account is the result of applying the full interest crediting policy of the Board and will be replenished in subsequent periods as sufficient earnings allow.

PENSION RESERVE – the reserve represents total accumulated contributions of the employer held for the benefit of retired members for service rendered as a member of the retirement system less the pension payments made to retired members.

COST-OF-LIVING RESERVE – the reserve represents the accumulated contributions of the employer to be used to pay cost-of-living payments.

ANNUITY RESERVE – the reserve includes the total accumulated contributions of retired members less the annuity payments made to the members.

SUPPLEMENTAL DISABILITY RESERVE – the reserve represents the accumulated contributions of the employer to pay supplemental disability payments.

SURVIVOR BENEFIT RESERVE – the reserve represents the accumulated contributions of the employer and members to be used to pay retirees' survivor benefit allowances.

BURIAL ALLOWANCE RESERVE – the reserve represents the excess earnings allocated by the Board to pay retirees' discretionary burial allowance. In 1985, the Board adopted GC section 31789.13 that provides an additional \$250 burial allowance to retired SBCERA members.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 5 – RESERVES (Continued)

For funding purposes, the various reserve accounts comprise net position - restricted for pensions under the five-year smoothed market asset valuation method as displayed below.

RESERVES

As of June 30, 2019 and 2018

(Amounts in Thousands)

	2019	2018
Valuation Reserves		
Member Deposit Reserve	\$ 1,517,088	\$ 1,418,875
Employer Current Service Reserve	2,762,603	2,558,813
Contra Account	(3,303,286)	(2,938,180)
Pension Reserve	4,883,597	4,603,736
Cost-of-Living Reserve	2,277,979	2,080,398
Annuity Reserve	2,422,029	2,218,705
Supplemental Disability Reserve	7,439	7,819
Survivor Benefit Reserve	74,376	70,068
TOTAL RESERVED FOR PENSIONS	10,641,825	10,020,234
Non-Valuation Reserves		
Burial Allowance Reserve	576	629
TOTAL - NON-VALUATION RESERVES	576	629
TOTAL RESERVES (SMOOTHED MARKET ACTUARIAL VALUE)	10,642,401	10,020,863
Net Unrecognized Gains/(Losses)	(53,994)	46,127
NET POSITION - RESTRICTED FOR PENSIONS INCLUDING NON-VALUATION RESERVES, AT FAIR VALUE	\$ 10,588,407	\$ 10,066,990

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 6 – SECURITIES LENDING

SBCERA, pursuant to a Securities Lending Authorization Agreement (Agreement), has authorized State Street Bank and Trust Company (State Street) to act as SBCERA's agent in lending the Plan's securities to approved borrowers. State Street, as agent, enters into Securities Loan Agreements with borrowers.

State Street lent, on behalf of SBCERA, certain securities of the Plan held by State Street as custodian and received cash or other collateral including securities issued or guaranteed by the U.S. Government. The types of securities loaned are U.S. Government obligations and other municipals, domestic equity, domestic fixed income, international equity, and international fixed income securities. State Street does not have the ability to pledge or sell collateral securities delivered absent a borrower default. Borrowers are required to deliver collateral for each loan equal to 102% for domestic loans and 105% for international loans, of the fair value of the loaned securities plus accrued income, for the years ended June 30, 2019 and 2018.

SBCERA did not impose any restrictions during the two-year period ended June 30, 2019 on the amount of loans that State Street made on its behalf. Pursuant to the Agreement, State Street had an obligation to indemnify SBCERA in the event of default by a borrower. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the same two-year period that resulted in a declaration or notice of default of the borrower.

During the years ended June 30, 2019 and 2018, SBCERA and the borrowers maintained the right to terminate securities lending transactions upon notice. The cash collateral received on each loan was invested, together with the cash collateral of other qualified tax-exempt plan lenders, in a collective investment fund comprised of a liquidity pool. The pool is not rated. All securities in this pool with maturities of 13 months or less are rated at least "A1", "P1", or "F1", and maturities in excess of 13 months are rated at least "A-" or "A3", by at least two nationally recognized statistical rating organizations, or if unrated, have been determined by the bank to be of comparable quality. As of June 30, 2019, the liquidity pool had an average duration of 23 days, and a weighted average final maturity of 105 days. As of June 30, 2018, the liquidity pool had an average duration of 27 days, and a weighted average final maturity of 114 days. Because the securities lending transactions were terminable at will, their duration did not generally match the duration of the investments made with the cash collateral received from the borrower.

On June 30, 2019, SBCERA had no credit risk exposure to borrowers. As of June 30, 2019, the fair value of securities on loan was \$131.30 million, with the fair value of cash collateral received for the securities on loan of \$113.71 million, and non-cash collateral of \$16.83 million. As of June 30, 2018, the fair value of securities on loan was \$119.60 million, with the fair value of cash collateral received for the securities on loan of \$77.82 million, and non-cash collateral of \$45.42 million.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS

CASH AND DEPOSITS

The Board is authorized by the CERL to deposit monies to pay benefits and administrative costs. Operational cash accounts are held with a financial institution in the amount of \$4.09 million and \$5.77 million at June 30, 2019 and 2018, respectively. Except for a nominal balance, operational cash accounts held with a financial institution are swept into a pooled money market fund that invests in repurchase agreements and U.S. Treasuries. Operational cash accounts are also held with the County of San Bernardino Treasurer's Investment Pool (SBCIP) in the amount of \$10.48 million and \$9.54 million at June 30, 2019 and 2018, respectively. The SBCIP is an external investment pool and is not registered with the Securities and Exchange Commission. At June 30, 2019 and 2018, the SBCIP has a weighted average maturity of 424 and 353 days, respectively. The SBCIP is rated AAA-F/S1 by Fitch. The deposits in the SBCIP are reported at fair value. For further information regarding the SBCIP, refer to the County of San Bernardino CAFR.

INVESTMENTS

The Board is authorized by the CERL to invest in any form or type of investment deemed prudent in the informed opinion of the Board. The CERL vests the Board with exclusive control over SBCERA's investment portfolio. The Board has adopted its *Investment Plan, Policy and Guidelines*, which provide the framework for the management of SBCERA's investments, in accordance with applicable local, state, and federal laws. The Board members exercise authority and control over the management of SBCERA's assets by setting policy, which the Investment Staff executes either internally or through the use of external prudent experts. SBCERA retains investment managers specializing in specific strategies and/or investments within a particular asset class. Investment managers are subject to the guidelines and controls established in SBCERA's *Investment Plan, Policy and Guidelines*, various types of investment manager agreements, and other applicable policies and documents.

The *Investment Plan, Policy and Guidelines* encompass the following:

- Purpose and Core Beliefs
- Governing Law
- Functional Organization and Responsibilities
- General Objectives and Plan Policies
- Asset Allocation Plan and Objectives
- Investment Structure
- Investment Program Implementation
- Review and Modification of Investment Plan
- Emergency Actions

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

DERIVATIVES

SBCERA invests in investment derivative instruments, and did not enter into any synthetic guaranteed investment contracts or hedging derivative instruments. SBCERA does post collateral for investment derivatives for speculation purposes pursuant to clearing requirements or swap agreements.

The following table provides a summary of the derivative instruments outstanding as of June 30, 2019.

DERIVATIVE INSTRUMENTS OUTSTANDING

As of June 30, 2019

(Amounts in Thousands)

Investment Derivatives	Fair Value at June 30, 2019			Notional ³
	Change ¹	Classification	Amount ²	
Commodity Futures Short	\$ (973)	Short-Term Cash Investment Funds	\$ -	213
Commodity Futures Long	2,757	Short-Term Cash Investment Funds	-	(213)
Credit Default Swaps Bought	(13,877)	Domestic Alternatives	(53,287)	\$ 968,360
Credit Default Swaps Written	(464)	Domestic Alternatives	-	\$ -
Equity Options Written	(29)	Securities Options Payable	(29)	51,957
Fixed Income Futures Long	2,192	Domestic Alternatives	-	210,300
Fixed Income Futures Short	(48,409)	Domestic Alternatives	-	(551,590)
Fixed Income Options Bought	(12,842)	Domestic Alternatives	9,976	1,075,982
Foreign Currency Futures Short	669	Domestic Alternatives	-	(10,375)
Futures Options Bought	554	Domestic Alternatives	82	907
Futures Options Written	455	Securities Options Payable	(241)	(106)
Fx Forwards	12,492	Foreign Common and Preferred Stock	(1,710)	\$ 244,863
Index Futures Long	8,977	Domestic Alternatives	-	18,999
Index Futures Short	(7,008)	Domestic Alternatives	-	(97)
Index Options Bought	27,363	Domestic Alternatives	-	-
Index Options Written	4,773	Securities Options Payable	-	-
Total Return Swaps Bond	(7,171)	Domestic Alternatives	-	\$ -
Warrants	40	Domestic Alternatives	2,537	\$ 11,451
TOTAL	\$ (30,501)		\$ (42,672)	

(1) Negative values refer to losses; change reflected in the net appreciation in fair value of investments for securities and alternative investments.

(2) Negative values refer to liabilities.

(3) Notional may be a dollar amount or quantity of underlying investment; negative values refer to short positions.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – Deposits and Investments (Continued)

DERIVATIVES (Continued)

The following table provides a summary of the derivative instruments outstanding as of June 30, 2018.

DERIVATIVE INSTRUMENTS OUTSTANDING

As of June 30, 2018

(Amounts in Thousands)

Investment Derivatives	Fair Value at June 30, 2018			
	Change ¹	Classification	Amount ²	Notional ³
Commodity Futures Short	\$ (699)	Short-Term Cash Investment Funds	\$ -	(150)
Credit Default Swaps Bought	6,765	Domestic Alternatives	(37,982)	\$ 922,000
Credit Default Swaps Written	702	Domestic Alternatives	604	\$ 42,150
Equity Options Bought	21,986	Domestic Alternatives	-	-
Equity Options Written	(11,794)	Securities Options Payable	-	-
Fixed Income Futures Long	(7,437)	Domestic Alternatives	-	374,700
Fixed Income Futures Short	(25,936)	Domestic Alternatives	-	(647,747)
Fixed Income Options Bought	(2,119)	Domestic Alternatives	22,818	1,077,607
Foreign Currency Futures Short	132	Domestic Alternatives	-	(10,875)
Foreign Currency Options Bought	(1,506)	Domestic Alternatives	-	-
Futures Options Bought	(5,064)	Domestic Alternatives	1,939	1,898
Fx Forwards	7,974	Foreign Common and Preferred Stock	2,991	\$ 368,363
Index Futures Long	166,025	Domestic Alternatives	-	16,314
Index Futures Short	(4,079)	Domestic Alternatives	-	(29)
Index Options Bought	11,755	Domestic Alternatives	-	-
Index Options Written	(3,404)	Securities Options Payable	-	-
Rights	(196)	Domestic Alternatives	-	-
Total Return Swaps Bond	(42,214)	Domestic Alternatives	4,491	\$ 500,000
Warrants	401	Domestic Alternatives	2,497	\$ 11,451
TOTAL	\$ 111,292		\$ (2,642)	

(1) Negative values refer to losses; change reflected in the net appreciation in fair value of investments for securities and alternative investments.

(2) Negative values refer to liabilities.

(3) Notional may be a dollar amount or quantity of underlying investment; negative values refer to short positions.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – Deposits and Investments (Continued)

DERIVATIVES (Continued)

The counterparty credit ratings of SBCERA's non-exchange traded investment derivative instruments outstanding and subject to loss as of June 30, 2019 and 2018 are displayed below.

CREDIT QUALITY RATINGS (S&P) OF COUNTERPARTIES FOR INVESTMENT DERIVATIVES

As of June 30, 2019 and 2018

(Amounts in Thousands)

Counterparty Name	2019	2018	S&P Credit Rating
	Total Fair Value	Total Fair Value	
Bank of America	\$ -	\$ 466	A+
Bank of New York	8	-	A
Barclays Bank	340	11,961	A
BNP Paribas	-	50	A
Citi	-	87	A+
Commonwealth Bank of Australia Sydney	29	377	AA-
Goldman Sachs	4,490	-	BBB+
JP Morgan Chase	1	323	A+
Royal Bank of Canada	27	423	AA-
State Street Bank and Trust Company	30	1,036	AA-
UBS AG	37	369	A+
Westpac Banking Corporation	-	378	AA-
TOTAL	\$ 4,962	\$ 15,470	

The maximum exposure SBCERA would face in case of default of all counterparties is \$4.96 million and \$15.47 million as of June 30, 2019 and 2018, respectively. At June 30, 2019 and 2018, SBCERA did not have any significant exposure to counterparty credit risk with any single party. SBCERA does not have any specific policies relating to the posting of collateral or master netting agreements.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

DERIVATIVES (Continued)

As of June 30, 2019, and 2018, SBCERA is exposed to interest rate risk on its investments in various swap arrangements and fixed income options based on daily interest rates for LIBOR (London Interbank Offered Rate), EURIBOR (Euro Interbank Offered Rate), and federal funds rate. The tables on the next page describe the maturity periods of these derivative instruments.

INVESTMENT MATURITIES

As of June 30, 2019

(Amounts in Thousands)

Investment Type	Fair Value	Investment Maturities			
		Less than 1 Year	1-5 Years	6-10 Years	More than 10 Years
Credit Default Swaps Bought	\$ (53,287)	\$ -	\$ (53,287)	\$ -	\$ -
Fixed Income Options Bought	9,976	1	408	6,550	3,017
TOTAL	\$ (43,311)	\$ 1	\$ (52,879)	\$ 6,550	\$ 3,017

INVESTMENT MATURITIES

As of June 30, 2018

(Amounts in Thousands)

Investment Type	Fair Value	Investment Maturities			
		Less than 1 Year	1-5 Years	6-10 Years	More than 10 Years
Credit Default Swaps Bought	\$ (37,982)	\$ (4)	\$ (37,978)	\$ -	\$ -
Credit Default Swaps Written	604	-	604	-	-
Fixed Income Options Bought	22,818	-	1,849	11,088	9,881
Total Return Swaps Bond	4,491	4,491	-	-	-
TOTAL	\$ (10,069)	\$ 4,487	\$ (35,525)	\$ 11,088	\$ 9,881

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

DERIVATIVES (Continued)

SBCERA is exposed to foreign currency risk for its investments in derivative instruments denominated in foreign currencies that may be adversely affected by changes in the currency exchange rates as displayed below.

NET EXPOSURE TO FOREIGN CURRENCY RISK FOR DERIVATIVE INSTRUMENTS

As of June 30, 2019

Currency	Fair Value	Forward Contracts	
		Net Receivables	Net Payables
Brazilian Real	\$ (6)	\$ -	\$ (6)
Canadian Dollar	(282)	1	(283)
Euro Currency	(1,396)	-	(1,396)
Japanese Yen	1	1	-
Norwegian Krone	(1)	-	(1)
Pound Sterling	116	116	-
Russian Ruble	(8)	-	(8)
South African Rand	(31)	-	(31)
Swiss Franc	(103)	-	(103)
TOTAL	\$ (1,710)	\$ 118	\$ (1,828)

NET EXPOSURE TO FOREIGN CURRENCY RISK FOR DERIVATIVE INSTRUMENTS

As of June 30, 2018

Currency	Fair Value	Options	Forward Contracts	
			Net Receivables	Net Payables
Argentine Peso	\$ 190	\$ -	\$ 236	\$ (46)
Brazilian Real	(103)	-	-	(103)
Canadian Dollar	(233)	-	-	(233)
Euro Currency	2,726	6	2,733	(13)
Japanese Yen	79	11	69	(1)
Pound Sterling	319	3	401	(85)
South African Rand	26	-	26	-
Swiss Franc	7	-	7	-
TOTAL	\$ 3,011	\$ 20	\$ 3,472	\$ (481)

At June 30, 2019 and 2018, SBCERA did not hold any positions in derivatives containing contingent features.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

CREDIT RISK

Credit Risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. SBCERA seeks to maintain a diversified portfolio of debt investments in order to obtain the highest total return for the fund at an acceptable level of risk within this asset class. To mitigate credit risk, investment guidelines have been established for each manager investing on behalf of SBCERA.

Emerging market debt and private placement investments' credit risk is controlled through limited partnership agreements and other applicable commingled fund documents. These investments are not rated by nationally recognized statistical rating organizations although they may be partly or wholly made up of individual securities rated by nationally recognized statistical rating organizations. The emerging market debt is shown as "Not Rated" in the following tables. The short-term cash investment funds consist primarily of open-ended mutual funds and external investment pools. These investments are not rated by a nationally recognized statistical rating organization. Therefore, they are disclosed as such in the aforementioned tables. Private placement investments considered fixed income investments are not shown in the following tables, but amount to \$26.07 million and \$46.16 million as of June 30, 2019 and 2018, respectively. U.S. Treasury obligations are considered obligations of the U.S. Government, are explicitly guaranteed by the U.S. Government, are not considered to have credit risk, and are not shown in the following tables, but amount to \$257.04 million and \$164.50 million as of June 30, 2019 and 2018, respectively.

The credit quality ratings of investments in fixed income securities and short-term cash investments by a nationally recognized statistical rating organization (Standard and Poor's) as of June 30, 2019 and 2018 are below.

CREDIT QUALITY RATINGS (S&P) OF FIXED INCOME AND SHORT-TERM CASH INVESTMENTS

As of June 30, 2019

Investment Type	Total Fair Value	AA+ to AA-	BB+ to BB-	B+ to B-	CCC+ to CCC-	CC+ to CC-	D	Not Rated
Asset Backed	\$ 25,320	\$ -	\$ -	\$ 1,007	\$ -	\$ 3	\$ 1	\$ 24,309
Corporate Bonds ¹	81,814	-	-	31,663	10,734	-	11,493	27,924
Collateralized Mortgage	56,729	10,819	1,068	2,986	2,264	12	-	39,580
Emerging Market Debt	31,970	-	-	-	-	-	-	31,970
Foreign Bonds	231,340	-	15,303	21,898	4,775	-	1,880	187,484
Municipals	2,440	79	-	-	-	-	-	2,361
Short-Term Cash Investment Funds	842,709	-	-	-	-	-	-	842,709
TOTAL	\$ 1,272,322	\$ 10,898	\$ 16,371	\$ 57,554	\$ 17,773	\$ 15	\$ 13,374	\$ 1,156,337

(1) Does not include private placements of \$26,073.

Note: Table above does not include U.S. Treasury obligations of \$257,039, as these obligations are not subject to credit risk.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

Credit Risk (Continued)

CREDIT QUALITY RATINGS (S&P) OF FIXED INCOME AND SHORT-TERM CASH INVESTMENTS

As of June 30, 2018

CUSTODIAL CREDIT RISK

Custodial Credit Risk for deposits is the risk that, in the event of a financial institution's failure, SBCERA would not be able to recover its deposits. Deposits are exposed to custodial credit risk if they are not insured or not collateralized. As of June 30, 2019, and 2018, SBCERA's deposits with a financial institution are insured up to \$250 thousand by the Federal Deposit Insurance Corporation (FDIC) with the remaining balance exposed to custodial credit risk as it is not insured. However, the financial institution does collateralize the deposit of monies in excess of the FDIC insurance amount with eligible securities held by the pledging financial institution, but not in SBCERA's name. Deposits with the County of San Bernardino Treasurer's investment pool are not exposed to custodial credit risk as they are held in a trust fund in SBCERA's name. SBCERA does not have a general policy relating to custodial credit risk.

Custodial Credit Risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, SBCERA would not be able to recover the value of the investment or collateral securities that are in possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in SBCERA's name, and held by the counterparty.

SBCERA's investment securities and collateral received through securities lending are not exposed to custodial credit risk because all securities are held by SBCERA's custodial bank in SBCERA's name or by other qualified third-party administrator trust accounts.

At June 30, 2019 and 2018, SBCERA did not hold any positions in derivatives containing contingent features.

Investment Type	Total Fair Value	AA+ to AA-	BBB+ to BBB-	BB+ to BB-	B+ to B-	CCC+ to CCC-	CC+ to CC-	D	Not Rated
Asset Backed ¹	\$ 95,580	\$ -	\$ 1,645	\$ 5,482	\$ 5,312	\$ -	\$ 3	\$ 2	\$ 83,136
Corporate Bonds ²	45,327	-	-	69	11,295	2,411	-	-	31,552
Collateralized Mortgage Obligations	17,119	64	-	-	-	2,468	14	-	14,573
Emerging Market Debt	58,496	-	-	-	-	-	-	-	58,496
Foreign Bonds	136,825	-	-	-	-	-	-	-	-
Municipals	141	74	-	-	-	-	-	-	67
Short-Term Cash Investment Funds	938,199	-	-	-	-	-	-	-	938,199
TOTAL	\$ 1,291,687	\$ 138	\$ 1,645	\$ 7,130	\$ 22,762	\$ 8,211	\$ 17	\$ 2	\$ 1,251,782

(1) Does not include private placements of \$26,036.

(2) Does not include private placements which amount of \$26,123.

Note: Table above does not include U.S. Treasury obligations of \$164,500, as these obligations are not subject to credit risk.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS *(Continued)*

CONCENTRATION OF CREDIT RISK

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of an investment in a single issuer. As of June 30, 2019, and 2018, SBCERA did not hold any investments in any one issuer that would represent 5% or more of total investments. Investments issued or explicitly guaranteed by the U.S. Government and pooled investments are excluded from this requirement.

CONCENTRATION OF INVESTMENTS

As of June 30, 2019, and 2018, SBCERA did not hold investments in any one organization that represents 5% or more of the Plan's fiduciary net position. Investments issued or explicitly guaranteed by the U.S. Government and pooled investments are excluded from this requirement.

INTEREST RATE RISK

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Generally, an investment with a longer maturity date has a greater sensitivity of its fair value to changes in market interest rates. One of the ways that SBCERA manages its exposure to interest rate risk is by purchasing a combination of shorter-term and longer-term investments, and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time, as necessary, to provide the cash flow and liquidity needed for operations.

To mitigate interest rate risk, the managers investing on behalf of SBCERA have applicable investment guidelines. Interest rate risk for emerging market and private placement debt investments is managed through limited partnership agreements and applicable fund documents.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

Interest Rate Risk (Continued)

As of June 30, 2019, and 2018, SBCERA had the following Fixed Income and Short-Term Cash Investments as displayed below.

INTEREST RATE RISK OF FIXED INCOME AND SHORT-TERM CASH INVESTMENTS

As of June 30, 2019

Investment Type	Fair Value	Investment Maturities			
		Less than 6 Months	6 Months to 1 Year	1-5 Years	More than 5 Years
Asset Backed	\$ 25,320	\$ -	\$ -	\$ 2,445	\$ 22,875
Corporate Bonds ¹	107,887	9,534	9,200	55,746	33,407
Collateralized Mortgage Obligations	56,729	9,471	-	-	47,258
Emerging Market Debt	31,970	211	3,006	11,498	17,255
Foreign Bonds	231,340	7,035	224	32,606	191,475
Municipals	2,440	8	-	789	1,643
Short-Term Cash Investment Funds	842,709	842,709	-	-	-
U.S. Treasury Obligations	257,039	220,765	36,274	-	-
TOTAL	\$ 1,55,434	\$ 1,089,733	\$ 48,704	\$ 103,084	\$ 313,913

INTEREST RATE RISK OF FIXED INCOME AND SHORT-TERM CASH INVESTMENTS

As of June 30, 2018

Investment Type	Fair Value	Investment Maturities			
		Less than 6 Months	6 Months to 1 Year	1-5 Years	More than 5 Years
Asset Backed ¹	\$ 115,616	\$ -	\$ -	\$ 2,632	\$ 112,984
Corporate Bonds ²	71,450	4,415	-	31,669	35,366
Collateralized Mortgage Obligations	17,119	-	-	-	17,119
Emerging Market Debt ³	44,239	859	-	33,945	9,435
Foreign Bonds	136,825	2,333	141	32,334	102,017
Municipals	141	-	-	-	141
Short-Term Cash Investment Funds	938,199	938,199	-	-	-
U.S. Treasury Obligations	164,500	145,712	9,327	9,461	-
TOTAL	\$ 1,488,089	\$ 1,091,518	\$ 9,468	\$ 110,041	\$ 277,062

(1) Includes private placements, which amount to \$26,063 and \$20,036, respectively.

(2) Includes private placements, which amount to \$26,123.

(3) Excludes holdings with no maturity, which amount to \$14,257.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

FOREIGN CURRENCY RISK

SBCERA's exposure to foreign currency risk primarily derives from its positions in foreign currency denominated international equity, fixed income investments, and foreign currency overlay exposure. SBCERA's investment policy allows international managers to enter into foreign exchange contracts provided the contracts have a maturity of one year or less and are limited to hedging currency exposure existing in the portfolio. Specific managers in international equities or fixed income may engage in the active management of currencies, per individual investment agreements approved by the Board.

SBCERA's net exposure to foreign currency risk in U.S. dollars as of June 30, 2019 and 2018 is displayed below.

NET EXPOSURE TO FOREIGN CURRENCY RISK

As of June 30, 2019 and 2018

(Amounts in Thousands)

Currency	2019				2018			
	Fair Value	Fixed Income	Equity	Cash	Fair Value	Fixed Income	Equity	Cash
Argentine Peso	\$ 3,646	\$ 3,646	\$ -	\$ -	\$ 2,334	\$ 2,334	\$ -	\$ -
Australian Dollar	210,337	-	201,487		12,928	-	12,030	898
Brazilian Real	65,439	-	65,218		4,045	-	4,045	-
Canadian Dollar	247,392	-	239,578		27,619	-	26,013	1,606
Danish Krone	8	-	8	-	-	-	-	-
Egyptian Pound	1,639	1,639	-	-	-	-	-	-
Euro Currency	4,938,808	444,530	4,313,580	180,698	342,320	13,283	315,378	13,659
Hong Kong Dollar	6,098	-	-	6,098	-	-	-	-
Indonesian Rupiah	172	-	172	-	-	-	-	-
Japanese Yen	34,083	-	17	34,066	4,144	-	-	4,144
Mexican Peso	2,470	2,470	-	-	-	-	-	-
Norwegian Krone	431	-	431	-	-	-	-	-
Polish Zloty	44	-	44	-	-	-	-	-
Pound Sterling	526,459	126,485	347,583	52,391	38,608	702	28,830	9,076
Russian Ruble	4,823	4,823	-	-	-	-	-	-
Swedish Krona	3,342	-	1	3,341	465	-	-	465
Swiss Franc	173	-	130	43	-	-	-	-
TOTAL	\$6,045,364	\$ 583,593	\$5,168,249	\$ 293,522	\$ 432,463	\$ 16,319	\$ 386,296	\$ 29,848

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

RATE OF RETURN

For the years ended June 30, 2019 and 2018, the annual money-weighted rate of return on the assets of the Plan, net of investment expense, was 5.01% and 8.64%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the timing of cash flows and the changing amounts actually invested.

COMMITMENTS TO FUND PARTNERSHIPS

As of June 30, 2019 and 2018, the total capital commitments to fund partnerships were \$4.84 billion and \$4.63 billion, respectively. Of this amount, \$1.01 billion and \$985.86 million, respectively, remained unfunded and is not recorded on the SBCERA Statements of Fiduciary Net Position as of June 30, 2019 and 2018. The following tables depict the total commitments and unfunded commitments, respectively, by asset class.

TOTAL COMMITMENTS AND UNFUNDED COMMITMENTS TO FUND PARTNERSHIPS BY ASSET CLASS

As of June 30, 2019 and 2018

(Amounts in Thousands)

Asset Class	2019		2018	
	Total Commitments	Unfunded Commitments	Total Commitments	Unfunded Commitments
Real Estate	\$ 875,120	\$ 179,893	\$ 947,718	\$ 127,474
Alternatives	3,963,531	831,284	3,679,667	858,384
TOTAL	\$ 4,838,651	\$ 1,011,177	\$ 4,627,385	\$ 985,858

FAIR VALUE MEASUREMENTS

SBCERA categorizes its fair value measurements of its investments based on the fair value hierarchy established by GAAP. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value. Level 1 inputs are unadjusted quoted prices in active markets for identical assets. Level 2 inputs are quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-derived valuations in which all significant inputs are observable. Level 3 inputs are valuations derived from valuation techniques in which significant inputs are unobservable.

The tables on the next two pages depict the fair value measurements as of June 30, 2019 and 2018.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 — DEPOSITS AND INVESTMENTS (Continued)

Fair Value Measurement (Continued)

INVESTMENTS AND DERIVATIVE INSTRUMENTS MEASURED AT FAIR VALUE

As of June 30, 2019

(Amounts in Thousands)

Investment Type	June 30, 2019	Fair Value Measurements Using		
		Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Short-Term Cash Investment Funds	\$ 842,709	\$ 17,738	\$ 824,971	\$ -
Emerging Market Debt	17,802	-	17,517	285
United States Government Obligations and Other Municipals:				
U.S. Treasury	257,039	-	257,039	-
Municipals	2,440	-	2,440	-
Total US Government Obligations and Other Municipals	259,479	-	259,479	-
Domestic Bonds:				
Asset Backed	25,320	-	24,617	703
Collateralized Mortgage Obligations	56,729	-	56,729	-
Corporate Bonds	107,887	-	87,764	20,123
Total Domestic Bonds	189,936	-	169,110	20,826
Foreign Bonds	231,340	-	207,286	24,054
Domestic Common and Preferred Stock	1,443,184	1,439,421	-	3,763
Foreign Common and Preferred Stock	709,895	708,179	-	1,716
Investments of Cash Collateral Received on Securities Lending	113,710	-	113,710	-
Domestic Alternatives	118,284	-	4,913	113,371
Foreign Alternatives	38,320	-	6,373	31,947
TOTAL INVESTMENTS BY FAIR VALUE LEVEL	\$ 3,964,659	\$ 2,165,338	\$ 1,603,359	\$ 195,962
Investment Derivative Instruments				
Swaps	\$ (53,287)	\$ -	\$ (53,287)	\$ -
Options	12,595	-	10,056	2,539
Forward Contracts	(1,710)	(1,710)	-	-
TOTAL INVESTMENT DERIVATIVE INSTRUMENTS	\$ (42,402)	\$ (1,710)	\$ (43,231)	\$ 2,539
Investments Measured at the Net Asset Value (NAV)				
Emerging Market Debt	\$ 14,168			
Foreign Common and Preferred Stock	131,773			
Real Estate	438,658			
Domestic Alternatives:				
Absolute Return Composite	1,010,399			
Non-U.S. Developed Credit	334,378			
Private Equity - Commodities	238,271			
Private Equity - Composite	1,499,975			
Private Equity - Infrastructure	12,236			
Private Equity - Real Assets	70,123			
U.S. Credit Strategies	873,712			
Total Domestic Alternatives	4,039,094			
Foreign Alternatives:				
Absolute Return Composite	1,935			
Non-U.S. Developed Credit	1,752,965			
Private Equity - Composite	339,803			
Total Foreign Alternatives	2,094,703			
TOTAL INVESTMENTS MEASURED AT THE NAV	\$ 6,718,396			
TOTAL INVESTMENTS MEASURED AT FAIR VALUE	\$ 10,640,653			

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

Fair Value Measurement (Continued)

INVESTMENTS AND DERIVATIVE INSTRUMENTS MEASURED AT FAIR VALUE

As of June 30, 2018

(Amounts in Thousands)

Investment Type	June 30, 2018	Fair Value Measurements Using		
		Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Short-Term Cash Investment Funds	\$ 938,199	\$ 41,591	\$ 896,608	\$ -
Emerging Market Debt	44,239	-	43,817	422
United States Government Obligations and Other Municipals:				
U.S. Treasury	164,500	-	164,500	-
Municipals	141	-	141	-
Total US Government Obligations and Other Municipals	164,641	-	164,641	-
Domestic Bonds:				
Asset Backed	115,616	-	115,616	-
Collateralized Mortgage Obligations	17,119	-	17,119	-
Corporate Bonds	71,450	-	56,073	15,377
Total Domestic Bonds	204,185	-	188,808	15,377
Foreign Bonds	136,825	-	118,045	18,780
Domestic Common and Preferred Stock	1,346,030	1,342,492	967	2,571
Foreign Common and Preferred Stock	707,447	703,635	-	3,812
Investments of Cash Collateral Received on Securities Lending	77,825	-	77,825	-
Domestic Alternatives	72,841	-	14,183	58,658
Foreign Alternatives	24,802	-	6,140	18,662
TOTAL INVESTMENTS BY FAIR VALUE LEVEL	\$ 3,717,034	\$ 2,087,718	\$ 1,511,034	\$ 118,282
Investment Derivative Instruments				
Swaps	\$ (32,887)	\$ -	\$ (32,887)	\$ -
Options	24,757	-	24,757	-
Forward Contracts	2,991	2,991	-	-
Warrants	2,497	-	-	2,497
TOTAL INVESTMENT DERIVATIVE INSTRUMENTS	\$ (2,642)	\$ 2,991	\$ (8,130)	\$ 2,497
Investments Measured at the Net Asset Value (NAV)				
Emerging Market Debt	\$ 14,257			
Foreign Common and Preferred Stock	116,869			
Real Estate	414,468			
Domestic Alternatives:				
Absolute Return Composite	1,000,465			
Non-U.S. Developed Credit	277,439			
Private Equity - Commodities	223,410			
Private Equity - Composite	1,353,718			
Private Equity - Infrastructure	29,252			
Private Equity - Real Assets	112,634			
U.S. Credit Strategies	885,673			
Total Domestic Alternatives	3,882,591			
Foreign Alternatives:				
Absolute Return Composite	2,910			
Non-U.S. Developed Credit	1,679,908			
Private Equity - Composite	280,276			
Total Foreign Alternatives	1,963,094			
TOTAL INVESTMENTS MEASURED AT THE NAV	\$ 6,391,279			
TOTAL INVESTMENTS MEASURED AT FAIR VALUE	\$ 10,105,671			

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

FAIR VALUE MEASUREMENTS (Continued)

In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements, in their entirety, are categorized based on the lowest level input that is significant to the valuation. SBCERA's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. Investments are measured by type of investment as follows:

Short-term cash investments generally include investments in currency, classified in Level 1 of the fair value hierarchy at fair value, and money market-type securities and other short-term investment funds, classified in Level 2 of the fair value hierarchy at fair value.

Debt securities includes emerging market debt, U.S. Government obligations and other municipals, domestic bonds, and foreign bonds. Debt securities classified in Level 2 of the fair value hierarchy are valued using the matrix pricing technique or the discounted cash flow method. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Debt securities classified in Level 3 of the fair value hierarchy are valued using the discounted cash flow method or proprietary pricing information.

Equity securities includes domestic and foreign common and preferred stock. Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Equity securities classified in Level 2 of the fair value hierarchy are valued using prices quoted in active markets for similar securities. Equity securities classified in Level 3 of the fair value hierarchy are valued with last trade data having limited trading volume.

Cash collateral received on securities lending consists primarily of U.S. Government debt obligations, and also includes domestic equity, domestic fixed income, international equity, and international fixed income securities classified in Level 2 of the fair value hierarchy using prices quoted in active markets for similar securities.

Alternative securities include domestic and foreign alternatives. Alternative securities classified at Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Alternative securities classified in Level 2 of the fair value hierarchy are valued using prices quoted in active markets for similar securities. Alternative securities classified in Level 3 of the fair value hierarchy are valued using the discounted cash flow method or proprietary pricing information.

Derivative instruments classified in Level 1 of the fair value hierarchy are valued using a market approach using prices quoted in active markets for those securities. Derivative instruments classified in Level 2 of the fair value hierarchy are valued using a market approach that considers benchmark interest rates and foreign exchange rates.

The fair value of investments in certain equity, fixed income, real estate, and marketable alternatives are based on the investment's net asset value (NAV) per share (or its equivalent) provided by the investee. The fair values of investments in certain private equity funds have been determined using recent observable transaction information for similar investments and nonbinding bids received from potential buyers of the investments. Such fair value measurements are shown in the tables on the next two pages as of June 30, 2019 and 2018.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

INVESTMENTS MEASURED AT THE NAV

As of June 30, 2019

(Amounts in Thousands)

Investment Type	Fair Value	Unfunded Commitments	Redemption Frequency ¹	Redemption Notice Period
Emerging Market Debt	\$ 14,168	\$ -	N/A	N/A
Foreign Common and Preferred Stock	131,773	-	N/A	N/A
Real Estate	438,658	179,893	D,Q	30-90 days
Domestic Alternatives:				
Absolute Return Composite	1,010,399	65,327	D,Q	65 days
Non-U.S. Developed Credit	334,378	-	D,M	20-30 days
Private Equity - Commodities	238,271	21,088	A	180 days
Private Equity - Composite	1,499,975	538,982	SA	185 days
Private Equity - Infrastructure	12,236	881	D	3 days
Private Equity - Real Assets	70,123	-	N/A	N/A
U.S. Credit Strategies	873,712	-	D,Q,SA	30-180 days
Total Domestic Alternatives	4,039,094	626,278		
Foreign Alternatives:				
Absolute Return Composite	1,935	8,194	N/A	N/A
Non-U.S. Developed Credit	1,752,965	-	D,Q	30-90 days
Private Equity - Composite	339,803	196,812	N/A	N/A
Total Foreign Alternatives	2,094,703	205,006		
TOTAL INVESTMENTS MEASURED AT THE NAV	\$ 6,718,396	\$ 1,011,177		

INVESTMENTS MEASURED AT THE NAV

As of June 30, 2018

(Amounts in Thousands)

Investment Type	Fair Value	Unfunded Commitments	Redemption Frequency ¹	Redemption Notice Period
Emerging Market Debt	\$ 14,257	\$ -	N/A	N/A
Foreign Common and Preferred Stock	116,869	-	N/A	N/A
Real Estate	414,468	127,474	D,Q	30-90 days
Domestic Alternatives:				
Absolute Return Composite	1,000,465	81,600	D,Q	65 days
Non-U.S. Developed Credit	277,439	-	D,M	20-30 days
Private Equity - Commodities	223,410	4,188	A	180 days
Private Equity - Composite	1,353,718	566,565	SA	185 days
Private Equity - Infrastructure	29,252	-	D	3 days
Private Equity - Real Assets	112,634	-	N/A	N/A
U.S. Credit Strategies	885,673	-	D,Q,SA	30-180 days
Total Domestic Alternatives	3,882,591	652,353		
Foreign Alternatives:				
Absolute Return Composite	2,910	8,592	N/A	N/A
Non-U.S. Developed Credit	1,679,908	-	D,Q	30-90 days
Private Equity - Composite	280,276	197,439	N/A	N/A
Total Foreign Alternatives	1,963,094	206,031		
TOTAL INVESTMENTS MEASURED AT THE NAV	\$ 6,391,279	\$ 985,858		

(1) D= Daily, M= Monthly, Q= Quarterly, SA= Semi-Annually, A= Annually

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

FAIR VALUE MEASUREMENTS (Continued)

The investment types listed in the tables above were measured at the NAV as follows:

Emerging market debt includes investments in alternative funds that invest primarily in debt in emerging markets to access income from a broader global pool of assets. The fair values of the investments in this type have been determined using the NAV per share of the investments. Investments in this category are not redeemable as of June 30, 2019 and 2018.

Foreign common and preferred stock includes investments in equities that invest in assets that focus on global credit strategies to provide an income-focus by utilizing credit dislocation opportunities. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the investments. As of June 30, 2019, and 2018, investments in this category cannot be redeemed because the investments include restrictions that do not allow for redemption.

Real estate investments provide stable income and participation in broad economic growth. This type includes real estate funds that invest in global commercial real estate and commingled funds. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. Investments representing approximately 31% and 30% of the value of the investments as of June 30, 2019 and 2018, respectively, cannot be redeemed with the funds. It is expected that the underlying assets of the funds will be liquidated over the next ten years.

Domestic alternatives: Absolute return composite provides income and diversification through below investment grade credit and distressed debt strategies. This type includes credit and debt securities. Investments representing approximately 27% and 30% of the value of the investments as of June 30, 2019 and 2018, respectively, cannot be redeemed.

Domestic alternatives: Non-U.S. developed credit provides access to income from a broader pool of assets in Europe. This type includes investments in funds that focus on corporate and sovereign bonds of developed economies issued in U.S. dollars. Investments representing approximately 34% and 26% of the value of the investments as of June 30, 2019 and 2018, respectively, may be redeemed according to the provisions in the aforementioned tables.

Domestic alternatives: Private equity – commodities provide exposure to inflation related assets and includes investments in partnerships that focus on natural resources and energy. The fair values of this investment type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. Investments of this type cannot be redeemed with the funds. It is expected that the underlying assets of the funds will be liquidated over the next ten years, unless the partnership agreement allows for an indefinite continuance.

Domestic alternatives: Private equity – composite provides participation in equity and debt instruments that provide for a premium on illiquid assets. This type includes investments in partnerships as a limited partner that invest in private equity and private debt. The fair values of this investment type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. Investments of this type cannot be redeemed with the funds. It is expected that the underlying assets of the funds will be liquidated over the next ten years, unless the partnership agreement allows for an indefinite continuance.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 7 – DEPOSITS AND INVESTMENTS (Continued)

FAIR VALUE MEASUREMENTS (Continued)

Domestic alternatives: Private equity – infrastructure provides participation in equity and debt instruments that provide for a premium on illiquid assets. This type includes investments in partnerships that focus on infrastructure in highly regulated markets. The fair values of this investment type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. The underlying assets of the funds are currently in liquidation.

Domestic alternatives: Private equity – real assets provide exposure to inflation related assets and includes investments in partnerships that focus on real assets including timber and wetlands. The fair values of this investment type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. Investments of this type cannot be redeemed with the funds. It is expected that the underlying assets of the funds will be liquidated over the next four years.

Domestic alternatives: U.S. credit strategies include investments in assets that focus on U.S. credit strategies to provide an income-focus by utilizing credit dislocation. This type includes investments in funds that focus on credit strategies, including direct loans, securitized products, and public-traded debt products. Investments representing approximately 2% and 3% of the value of the investments as of June 30, 2019 and 2018, respectively, cannot be redeemed.

Foreign alternatives: Absolute return composite provides income and diversity through below investment grade global credit and distressed debt strategies. This type includes global credit and debt securities. It is expected that the underlying assets of the funds will be liquidated over the next two years.

Foreign alternatives: Non-U.S. developed credit provides access to income from a broader pool of assets in Europe. This type includes investments in funds that focus on corporate and sovereign bonds of developed economies. All investments of this type may be redeemed according to the provisions in the aforementioned tables.

Foreign alternatives: Private equity – composite provides participation in equity and debt instruments that provide for a premium on illiquid assets. This type includes investments in partnerships as a limited partner that invest in private equity and private debt. The fair values of this investment type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. Investments of this type cannot be redeemed with the funds. It is expected that the underlying assets of the funds will be liquidated over the next twelve years.

NOTES TO THE BASIC FINANCIAL STATEMENTS

June 30, 2019 and 2018

(Continued)

NOTE 8 – RELATED PARTY TRANSACTIONS

By necessity, SBCERA has entered into a Memorandum of Understanding with the County of San Bernardino (County), a participating employer, to provide administrative services in the areas of information technology, staff payroll, telecommunications, postage and mailing, motor pool services, and Board elections. SBCERA's payments to the County for the years ended June 30, 2019 and 2018 were \$389 thousand and \$314 thousand, respectively.

NOTE 9 – LITIGATION

SBCERA is subject to legal proceedings and claims which have arisen in the ordinary course of its business and have not been finally adjudicated. These actions, when finally concluded and determined, will not, in the opinion of the management of SBCERA, have a material adverse effect upon the financial position of SBCERA.

REQUIRED SUPPLEMENTARY INFORMATION

(Unaudited)

SCHEDULE OF EMPLOYER CONTRIBUTIONS

(Amounts in Thousands)

Years Ended June 30	(a) Actuarially Determined Contributions ¹	(b) Actual Contributions ¹	(a) - (b) Contribution Deficiency (Excess)	(c) Covered Payroll ²	(b) / (c) Contributions as a % of Covered Payroll
2010	163,960	163,960	-	1,226,431	13.37%
2011	180,756	180,756	-	1,250,193	14.46%
2012	210,000	210,000	-	1,244,555	16.87%
2013	248,841	248,841	-	1,260,309	19.74%
2014	278,352	278,352	-	1,262,752	22.04%
2015	303,244	303,244	-	1,267,667	23.92%
2016	340,512	340,512	-	1,309,095	26.01%
2017	360,478	360,478	-	1,346,408	26.77%
2018	378,668	378,668	-	1,406,470	26.92%
2019	446,295	446,295	-	1,477,131	30.21%

SCHEDULE OF INVESTMENT RETURNS

Years Ended June 30 ³	Annual Money Weighted Rate of Return, Net of Investment Expense
2013	14.64%
2014	12.25%
2015	3.49%
2016	(0.97%)
2017	13.47%
2018	8.64%
2019	5.01%

- (1) The Board has approved all contribution rates recommended by the Plan's actuary. Actuarially determined contributions include contributions required for the survivor benefit, and excludes employer paid member contributions, UAAL prepayments, Golden Handshake payments, funds deposited for purchase of service credit, payments made by withdrawn employers, member paid employer contributions, and member contributions. Commencing with the year ended June 30, 2015, member paid employer contributions are included in actuarially determined contributions.
- (2) Covered payroll represents the collective total of SBCERA eligible wages of all SBCERA participating employers. The covered payroll shown is an estimate based on the prior year's valuation for each date shown.
- (3) Data for the years ended June 30, 2010 through 2012 are not available in a comparable format.

See accompanying notes to the Required Supplementary Information.

REQUIRED SUPPLEMENTARY INFORMATION

(Unaudited) (Continued)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS AND RELATED RATIOS (Amounts in Thousands)

		June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016
Total Pension Liability					
Service Cost		\$ 334,062	\$ 321,931	\$ 300,779	\$ 295,458
Interest		916,790	868,277	803,778	770,842
Differences Between Expected and Actual Experience		27,389	25,714	(10,634)	(151,493)
Changes of Assumptions		-	-	662,714	-
Benefit Payments, Including Refunds of Member Contributions		(578,508)	(539,297)	(497,904)	(464,068)
NET CHANGE IN TOTAL PENSION LIABILITY		699,733	676,625	1,258,733	450,739
Total Pension Liability - Beginning		12,600,570	11,923,945	10,665,212	10,214,473
TOTAL PENSION LIABILITY - ENDING	a	\$ 13,300,303	\$ 12,600,570	\$ 11,923,945	\$ 10,665,212
Plan Fiduciary Net Position					
Contributions - Employers ¹		\$ 446,295	\$ 378,668	\$ 360,478	\$ 340,512
Contributions - Members ¹		163,552	149,478	143,858	139,132
Transfer from an Outside Plan		-	4,312	-	-
Net Investment Income/(Loss)		502,753	797,480	1,098,198	(80,028)
Benefit Payments, Including Refunds of Member Contributions		(578,508)	(539,297)	(497,904)	(464,068)
Administrative Expenses		(9,383)	(8,752)	(9,961)	(7,569)
Other Expenses		(3,292)	(3,340)	(3,202)	(2,664)
NET CHANGE IN PLAN FIDUCIARY NET POSITION		521,417	778,549	1,091,467	(74,685)
Plan Fiduciary Net Position - Beginning		10,066,990	9,288,441	8,196,974	8,271,659
PLAN FIDUCIARY NET POSITION - ENDING	b	\$ 10,588,407	\$ 10,066,990	\$ 9,288,441	\$ 8,196,974
NET PENSION LIABILITY	a-b=c	\$ 2,711,896	\$ 2,533,580	\$ 2,635,504	\$ 2,468,238
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY COVERED PAYROLL²	b/a	79.61%	79.89%	77.90%	76.86%
COVERED PAYROLL²	d	\$ 1,477,131	\$ 1,406,470	\$ 1,346,408	\$ 1,309,095
NET PENSION LIABILITY AS A PERCENTAGE OF COVERED PAYROLL	c/d	183.59%	180.14%	195.74%	188.55%

(1) Commencing with the year ended June 30, 2015, member paid employer contributions are included in employer contributions, and employer paid member contributions are included in member contributions.

(2) Covered payroll represents the collective total of SBCERA eligible wages of all SBCERA participating employers. The covered payroll shown is an estimate based on the prior year's valuation for each date shown.

Note: Data as of June 30, 2010 through 2012 is not available in a comparable format.

See accompanying notes to the Required Supplementary Information.

REQUIRED SUPPLEMENTARY INFORMATION

(Unaudited) (Continued)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS AND RELATED RATIOS (Amounts in Thousands) (Continued)

		June 30, 2015	June 30, 2014	June 30, 2013
Total Pension Liability				
Service Cost		\$ 290,642	\$ 271,473	\$ 273,020
Interest		732,842	709,993	673,932
Differences Between Expected and Actual Experience		(75,362)	(306,201)	(97,497)
Changes of Assumptions		-	328,748	-
Benefit Payments, Including Refunds of Member Contributions		(428,475)	(397,823)	(367,396)
NET CHANGE IN TOTAL PENSION LIABILITY		519,647	606,190	482,059
Total Pension Liability - Beginning		9,694,826	9,088,636	8,606,577
TOTAL PENSION LIABILITY - ENDING	a	\$ 10,214,473	\$ 9,694,826	\$ 9,088,636
Plan Fiduciary Net Position				
Contributions - Employers ¹		\$ 303,244	\$ 330,330	\$ 303,080
Contributions - Members ¹		129,895	89,861	91,056
Transfer from an Outside Plan		-	-	-
Net Investment Income/(Loss)		280,842	877,018	912,310
Benefit Payments, Including Refunds of Member Contributions		(428,475)	(397,823)	(367,396)
Administrative Expenses		(6,710)	(6,386)	(6,258)
Other Expenses		(2,208)	(2,483)	(1,572)
NET CHANGE IN PLAN FIDUCIARY NET POSITION		276,588	890,517	931,220
Plan Fiduciary Net Position - Beginning		7,995,071	7,104,554	6,173,334
PLAN FIDUCIARY NET POSITION ENDING	- b	\$ 8,271,659	\$ 7,995,071	\$ 7,104,554
NET PENSION LIABILITY	a-b=c	\$ 1,942,814	\$ 1,699,755	\$ 1,984,082
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	b/a	80.98%	82.47%	78.17%
COVERED PAYROLL²	d	\$ 1,267,667	\$ 1,262,752	\$ 1,260,309
NET PENSION LIABILITY AS A PERCENTAGE OF COVERED PAYROLL	c/d	153.26%	134.61%	157.43%

(1) Commencing with the year ended June 30, 2015, member paid employer contributions are included in employer contributions, and employer paid member contributions are included in member contributions.

(2) Covered payroll represents the collective total of SBCERA eligible wages of all SBCERA participating employers. The covered payroll shown is an estimate based on the prior year's valuation for each date shown.

Note: Data as of June 30, 2010 through 2012 is not available in a comparable format.

See accompanying notes to the Required Supplementary Information.

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION

(Unaudited)

ACTUARIAL VALUATION METHODS AND ASSUMPTIONS USED IN DETERMINING TOTAL PENSION LIABILITY

The NPL of participating employers was measured as of June 30, 2013 through 2019 and determined based upon the total pension liability from actuarial valuations as of June 30, 2013 through 2019, respectively.

CHANGES IN BENEFIT TERMS

For the year ended June 30, 2013: In September 2012, Governor Edmund G. Brown, Jr. (Governor Brown) signed the PEPRA, which resulted in the creation of two new benefit formulas for members entering SBCERA on or after January 1, 2013 (and who are not “reciprocal” with another pension system) as follows: 2.5% at age 67 for General members and 2.7% at age 57 for Safety members. PEPRA also caps pensionable compensation, reduces the amount of pay items eligible for pensionable compensation, increases the final average compensation used to calculate benefits from highest one-year average to a highest three-year average, and requires members to pay at least 50% of the total normal cost of the Plan. SBCERA members subject to the provisions of PEPRA are considered Tier 2 members.

For the year ended June 30, 2014: On September 6, 2013, Governor Brown approved Assembly Bill 1380 (AB 1380), which makes various technical corrections and conforming changes that align the CERL with the provisions of the PEPRA. In particular, the bill clarifies that Tier 2 members are eligible to retire at age 70, regardless of years of service, that the Board may, but is not required to, round Tier 2 contribution rates to the nearest quarter of one percent, and that those rates may be adjusted for any change in the normal cost rate. AB 1380 was effective January 1, 2014.

The addition of a new tier of benefits and the subsequent technical corrections stated above did not result in a significant change in the net pension liability of participating employers during the year in which the change was effective.

There were no changes in benefit terms for the years ended June 30, 2015 through 2019.

CHANGES OF METHODS AND ASSUMPTIONS

The actuarial methods and assumptions used in actuarial valuations, for the years ended June 30, 2013 through 2019, were based on the results of Board approved triennial actuarial experience studies prepared by the Plan’s independent actuary. The actuarial methods and assumptions used in determining the net pension liability are the same actuarial methods and assumptions used in determining contribution rates, except for the asset valuation method. For purposes of determining net pension liability, the fair value of assets was used for the years ended June 30, 2013 through 2019. See schedules of changes to actuarial methods and assumptions shown on the following page for actuarial methods and assumptions used for the years ended June 30, 2013 through 2019. Note: The discount rate of return used for the years ended June 30, 2013 through 2019 is equal to the investment rate of return shown on the following page.

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION

(Unaudited) (Continued)

ACTUARIAL VALUATION METHODS AND ASSUMPTIONS USED IN DETERMINING CONTRIBUTION RATES

Actuarially determined contributions are established and may be amended by the Board, based on an annual actuarial valuation and review, pursuant to Article 1 of the CERL. The actuarially determined contribution rates in the Schedule of Employer Contributions are calculated as of June 30, two years prior to the end of the year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule for the years ended June 30, 2009 through 2019 (adjustments were made to more closely reflect actual experience unless indicated otherwise).

SCHEDULE OF ACTUARIAL EXPERIENCE STUDIES

For the Years Ended June 30, 2009 through 2019

Years Ended June 30	Date of Actuarial Experience Study	Periods Covered in Actuarial Experience Study
2009 to 2010	June 30, 2008	3 Year Period Ended 6/30/2008
2011 to 2013	June 30, 2011	3 Year Period Ended 6/30/2011
2014 to 2016	June 30, 2014	3 Year Period Ended 6/30/2013
2017 to 2019	June 30, 2017	3 Year Period Ended 6/30/2016

SCHEDULE OF CHANGES TO ACTUARIAL ECONOMIC ASSUMPTIONS

For the Years Ended June 20, 2009 through 2019

Years Ended June 30	Investment Rate of Return	Projected Salary Increases (General)	Projected Salary Increases (Safety)	Inflation	Wage Inflation	Cost-of-Living ¹	Administrative Expenses
2009 to 2010	8.00%	5.00% to 13.25%	5.00% to 13.25%	3.75%	4.25%	2.00%	Offset to Investment Return
2011 to 2013	7.75%	4.75% to 14.00%	4.75% to 14.00%	3.50%	4.00%	2.00%	Offset to Investment Return
2014 to 2016	7.50%	4.60% to 13.75%	4.55% to 13.75%	3.25%	3.75%	2.00%	0.60% of payroll ²
2017 to 2019	7.25%	4.50% to 14.50%	4.70% to 14.50%	3.00%	3.50%	2.00%	0.70% of payroll ²

SCHEDULE OF CHANGES TO AMORTIZATION METHODS

For the Years Ended June 30, 2009 through 2019

Years Ended June 30	Actuarial Cost Method	Amortization Method ³	Remaining Amortization Period ⁴	Asset Valuation Method
2009 to 2019	Entry age	Level percent of payroll	20-year closed period	5-year smoothed market

- (1) Cost-of-living adjustments are contingent upon the consumer price index with a 2.00% maximum.
- (2) Allocated to both the employer and member based on the components of the total contribution rate (before expenses) for the employer and member.
- (3) See Schedule of Changes to Actuarial Economic Assumptions for the wage inflation used.
- (4) Effective June 30, 2012, any temporary change in UAAL that arises due to Plan amendments is amortized over its own declining 15-year period (with exception of a change due to retirement incentives, which is amortized over a declining period of up to five years).

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION

(Unaudited) (Continued)

ACTUARIAL VALUATION METHODS AND ASSUMPTIONS USED IN DETERMINING CONTRIBUTION RATES (Continued)

SCHEDULE OF CHANGES TO ACTUARIAL NON-ECONOMIC ASSUMPTIONS

Years Ended June 30	Marriage Assumption ¹	Mortality Rates ² (General)	Mortality Rates ² (Safety)	Reciprocity Assumption	Deferral Age for Vested Terminations
2009 to 2010	Male members 75% Female members 55%	RP-2000 Combined Healthy Mortality Table: M - SB one year DML - SF five years DFL - SF six years	RP-2000 Combined Healthy Mortality Table: M - SB one year	40%	General members Age 57 Safety members Age 53
2011 to 2013	Male members 70% Female members 55%	RP-2000 Combined Healthy Mortality Table: M - SB two years DML - SF four years DFL - SF five years	RP-2000 Combined Healthy Mortality Table: M - SB three years DM - SF one year	40%	General members Age 58 Safety members Age 52
2014 to 2016	Male members 70% Female members 55%	RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020: DML - SF seven years DFL - SF eight years	RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020: ML - SB two years FL - SB one year DM - SF two years.	General members 40% Safety members 50%	General members Age 58 Safety members Age 52
2017 to 2019	Male members 65% Female members 55%	RP-2014 Healthy Annuitant Mortality Table projected generationally with two-dimensional MP-2016 projection scale: ML - SF one year DM - SF seven years	RP-2014 Healthy Annuitant Mortality Table projected generationally with two-dimensional MP- 2016 projection scale: M - SB one year DM - SB one year	General members 40% Safety members 60%	General members Age 59 Safety members Age 53

(1) Assumed married at retirement or pre-retirement death.

(2) Type of Member: M = Member; ML = Male Member; FL = Female Member; DM = Disabled Member; DML = Disabled Male Member; DFL = Disabled Female Member. Mortality Table Type: SB = Set Back; SF = Set Forward.

Note: The probabilities of separation from active service and expectation of life are adjusted every three years with the actuarial experience study.

OTHER SUPPLEMENTARY INFORMATION

SCHEDULE OF INVESTMENT EXPENSES

For the Years Ended June 30, 2019 and 2018

Type of Investment Expense	2019	2018
Investment Manager's Advisement Fees		
Equity Managers		
Domestic	\$ 2,477	\$ 2,050
International	4,126	5,720
TOTAL EQUITY MANAGERS	6,603	7,770
Fixed Income Managers		
Domestic	3,588	3,849
International	2,824	2,269
TOTAL FIXED INCOME MANAGERS	6,412	6,118
Alternative Managers	70,308	78,449
Real Estate Managers	6,477	7,912
TOTAL INVESTMENT MANAGER'S ADVISEMENT FEES	89,800	100,249
Other Investment Advisement Fees		
Consultant Fees	2,296	2,423
Custodian Fees	763	708
Legal Fees	151	154
TOTAL INVESTMENT ADVISEMENT FEES¹	93,010	103,534
Other Investment Expenses		
Other Investment Expenses ²	60,453	54,878
Investment Department Expenses	2,695	2,254
TOTAL OTHER INVESTMENT EXPENSES	63,148	57,132
SECURITIES LENDING REBATES & BANK CHARGES	2,453	1,131
TOTAL INVESTMENT EXPENSES	\$ 158,611	\$ 161,797

(1) Advisement fees include amounts for investment management fees and performance fees. It does not include unrealized carried interest allocations.

(2) These costs include, but are not limited to, foreign income tax and other indirect flow-through investment expenses such as organizational expenses in limited partnership structures.

OTHER SUPPLEMENTARY INFORMATION

(Continued)

SCHEDULE OF ADMINISTRATIVE AND OTHER EXPENSES

For the Years Ended June 30, 2019 and 2018

(Amounts in Thousands)

	2019	2018
Actuarial Accrued Liability (AAL)¹	\$ 11,928,310	\$ 10,669,688
Statutory Limit for Administrative Expenses (AAL x 0.21%)	25,049	22,406
Administrative Expenses Subject to Statutory Limit		
Personnel Services	\$ 6,859	\$ 6,268
Professional Services	883	941
Operational Miscellaneous	1,641	1,543
TOTAL ADMINISTRATIVE EXPENSES SUBJECT TO STATUTORY LIMIT	9,383	8,752
Other Expenses Not Subject to Statutory Limit		
Actuarial Services ²	256	138
Legal Services (Non-Investment)	1,239	1,303
Technology Infrastructure	1,797	1,899
TOTAL OTHER EXPENSES NOT SUBJECT TO STATUTORY LIMIT	3,292	3,340
TOTAL ADMINISTRATIVE AND OTHER EXPENSES³	\$ 12,675	\$ 12,092

- (1) Refer to Note 2—Summary of Significant Accounting Policies for further information.
 (2) Actuarial Services for the year ended June 30, 2019 includes an actuarial audit by Cheiron.
 (3) Does not include investment expenses, see Schedule of Investment Expenses for further information.

OTHER SUPPLEMENTARY INFORMATION

(Continued)

SCHEDULE OF PAYMENTS TO CONSULTANTS

For the Years Ended June 30, 2019 and 2018

(Amounts in Thousands)

Type of Service	2019	2018
Payments to Consultants Subject to the Statutory Limit		
Actuarial Services	\$ 8	\$ 5
Agreed Upon Procedures	39	-
Audit Services	69	59
Benchmarking Services	-	20
Communication Services	64	63
Human Resource Services	97	132
Medical/Disability Services	347	433
TOTAL PAYMENTS TO CONSULTANTS SUBJECT TO THE STATUTORY LIMIT¹	624	712
Payments to Consultants Not Subject to the Statutory Limit		
Actuarial Services ²	256	138
Custodian Services	763	708
Human Resource Services	16	-
Information Technology Services	25	107
Investment Services	2,296	2,422
Legal Services	412	398
TOTAL PAYMENTS TO CONSULTANTS NOT SUBJECT TO THE STATUTORY LIMIT	3,768	3,773
TOTAL PAYMENTS TO CONSULTANTS	\$ 4,392	\$ 4,485

(1) Pursuant to GC section 31580.2, administrative expenses incurred in any one year are not to exceed twenty-one hundredths of one percent (0.21%) of SBCERA's actuarial accrued liabilities. Refer to Note 2—Summary of Significant Accounting Policies for further information.

(2) Actuarial Services for the year ended June 30, 2019 includes an actuarial audit by Cheiron.

PAGE INTENTIONALLY LEFT BLANK.

INVESTMENTS SECTION



REPORT ON INVESTMENT ACTIVITY



Allan Martin

Partner

November 14, 2019

Board of Retirement

San Bernardino County Employees' Retirement Association

348 West Hospitality Lane,

San Bernardino, CA 92408

Dear Board Members:

The overall objective of the San Bernardino County Employees' Retirement Association (SBCERA) is to ensure continued access to retirement, disability and survivor benefits for current and future SBCERA participants. To ensure a solid foundation for the future of the Fund, SBCERA carefully plans and implements an investment program designed to produce superior long-term investment returns, while prudently managing the risk in the portfolio. Investment policy and asset allocation are reviewed and revised by the Board of Retirement, at least annually, to reflect the Fund's actuarial assumptions, accrued liabilities, and economic and investment outlook. The following is a report on the performance of the Fund for the year ended June 30, 2019 with background on the underlying capital market environment.

Market Review for the Year Ended June 30, 2019

The U.S. economic expansion entered its tenth year, setting a record for duration, although total cumulative GDP growth trailed other recoveries. Initially in late 2018, the Federal Reserve maintained a path of systematically normalizing monetary policy, raising interest rates twice. As a result, U.S. investment market volatility returned in late 2018 in response to concerns over the Fed's pace of interest rate increases, slowing U.S. and global economic growth, and U.S.-China trade tensions. However, the Fed reversed course on monetary policy in early 2019 signaling potential interest rate cuts in the near future, easing many of these concerns. Volatility dissipated accordingly throughout the remainder of the 2019 fiscal year. U.S. stocks, as a result, posted their tenth consecutive year of positive returns and dramatically outperformed international equities. Global capital markets continued to be largely driven by accommodative Central Bank policy from both the European Central Bank and Bank of Japan. Despite this stimulus, volatility increased in global markets in the year ending June 30, 2019 as concerns of slowing global economic growth, historically low and broadly negative real interest rates and fears over U.S. trade policy caused uncertainty to impact investor sentiment.

U.S. equities generated a robust 10.4% return for the 2019 fiscal year, as measured by the S&P 500 Index. International developed-markets equities performed positively (1.1% for the year) but lagged domestic equities by 9.3%. Emerging markets equities underperformed U.S. equities but outperformed developed-international equities. Underperformance in international developed-markets and Emerging markets equities was driven by uncertainty stemming from slowing economic growth and U.S. trade policy and the strength of the U.S. Dollar. Driven by declining interest rates and risk aversion, U.S. high quality fixed income investments generated a positive return for the year, returning 7.9% as measured by the Bloomberg Barclays U.S. Aggregate Bond Index.

The SBCERA Investment Portfolio

The SBCERA total investment portfolio return, gross of fees, was 5.1% (4.8% net of fees) for the year ended June 30, 2019. The median fund in the Investor Force peer group universe of large Public Funds returned 5.2% for the period, resulting in a near-median ranking for the Fund. On a risk-adjusted basis the SBCERA Fund total return ranked in the 15th percentile for the one-year period. The Fund's five-year return for the period ended June 30, 2019 was 6.2% per year, gross of fees (6.0% net of fees), underperforming the actuarial assumed rate of 7.25% and ranking in the 36th percentile, well above the median in the peer group. SBCERA has chosen an asset allocation policy which reduces the Fund's volatility risk to more consistently meet its actuarial targets. The plan's five-year volatility, as measured by standard deviation, ranked in the first percentile of its peers (the least variable), resulting in a risk-adjusted return (as measured by the Sharpe Ratio) of 1.4, which ranked in the top 1% of its peers.

255 State Street | Boston, MA 02109 | TEL: 617.374.1300 | www.nepc.com

BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

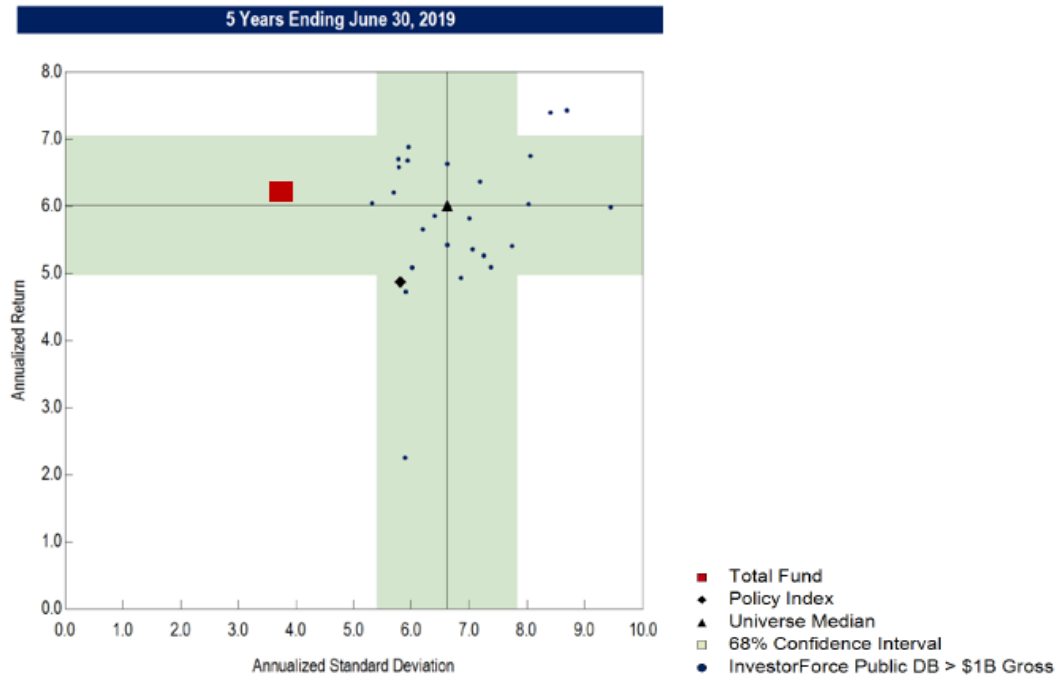
REPORT ON INVESTMENT ACTIVITY

(Continued)



NEPC, LLC

InvMetrics Public Funds Greater than \$1 Billion Universe Risk-Return Comparison (Gross of Fees) 5 Years Ended June 30, 2019



With the majority of the global capital markets exhibiting relatively high valuations and divergent relative economic strength, the potential for downside risk and volatility are increasingly likely. Lower equity exposure and diversification can help protect portfolios from significant declines. SBCERA's portfolio continues to be positioned to withstand significant declines in equity markets.

NEPC, LLC serves as SBCERA's independent investment consultant and provides SBCERA with asset allocation guidance, quarterly economic and investment market updates and performance reviews, and investment manager monitoring and selection advice. SBCERA's custodian, State Street Bank and Trust Company, independently prepared the underlying performance data used in this report. Rates of return are represented using a time-weighted rate of return methodology based upon market values.

Sincerely,

Allan Martin, Partner

Universe rankings are based on gross of fee performance unless otherwise noted.

255 State Street | Boston, MA 02109 | TEL: 617.374.1300 | www.nepc.com

BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

OUTLINE OF INVESTMENT POLICIES

As of June 30, 2019

GENERAL

The overall goal of SBCERA's investment program is to provide members with retirement benefits as required by the California County Employees Retirement Law of 1937 (CERL). This is accomplished by employer and member contributions and the implementation of a carefully planned and executed long-term investment program.

The Board has exclusive control of all investments of the Plan and is responsible for the establishment of investment objectives, strategies, and policies. The Board is composed of nine members and three alternates.

- The County of San Bernardino Treasurer who serves in the capacity of ex-officio member (along with one alternate).
- Four members are appointed by the San Bernardino County Board of Supervisors.
- Two members are elected by active General members.
- One member is elected by active Safety members (along with one alternate).
- One member is elected by retired members (along with one alternate).

The Board is authorized to invest in any form or type of investment deemed prudent in the informed opinion of the Board. Members of the Board serve in a fiduciary capacity and must discharge their duties with respect to SBCERA and the investment portfolio in the following manner.

- Solely in the interest of and for the exclusive purpose of providing benefits to members and their beneficiaries; minimizing contributions thereto; and defraying reasonable expenses of administering the Plan.
- With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- To diversify the investments of the Plan so as to minimize the risk of loss and to maximize the rate of return, unless under circumstances it is clearly prudent not to do so.

SUMMARY OF INVESTMENT OBJECTIVES

The Board has adopted the *Investment Plan, Policy, and Guidelines*, which provide the framework for the management of SBCERA's investments. The *Investment Plan, Policy, and Guidelines* establishes investment program goals, asset allocation policies, performance objectives, investment management policies, and risk controls. It also defines the principal duties of the Board and investment staff.

SBCERA's primary investment objective is to efficiently allocate and manage the assets on behalf of the members and their beneficiaries. These assets are managed on a total return basis. While recognizing the importance of the "preservation of capital," SBCERA also adheres to the principle that varying degrees of investment risk are generally rewarded with compensating returns in the long term.

The total investment portfolio return, over the long term, is directed toward achieving and maintaining a fully-funded status for the Plan. Prudent risk-taking is warranted within the context of overall portfolio diversification to meet this objective. These activities are executed in a manner that serves the best interests of SBCERA's members and their beneficiaries.

OUTLINE OF INVESTMENT POLICIES

As of June 30, 2019

(Continued)

ASSET ALLOCATION

A pension trust fund's strategic asset allocation policy, implemented in a consistent and timely manner, is generally recognized to be the largest determinant of investment performance. The asset allocation process determines an optimal long-term asset class mix (target allocation), which is expected to achieve a specific set of investment objectives.

Effective July 6, 2017, the Board adopted a new asset allocation plan. The following factors were used to determine this new plan:

- Projected actuarial assets, liabilities, benefit payments, and contributions
- Historical and expected long-term capital market risk and return behavior
- Future economic conditions, including inflation and interest rate levels
- SBCERA's current and projected funding status

Over time, the Board implements the asset allocation plan by hiring investment managers to invest assets on SBCERA's behalf.

USE OF PROXIES

SBCERA has adopted a proxy voting policy which best serves the economic interest of its beneficiaries. Investments in equity securities in particular are best viewed within the context of a long-term time horizon. The resolution of management and shareholder issues must be directed towards maximizing equity value; not to entrench the current management team or alternatively, to subject the company to excessive outside influences. SBCERA will support management if management's position appears reasonable, is not detrimental to the value of equity ownership and reflects consideration of the impact of societal values and attitudes on the long-term viability of the corporation.

SBCERA shall support requests for additional disclosure if the requested information is on a subject relevant to the corporation's business, if it is of value to a majority of shareholders in evaluating the corporation or its managers, if the costs of disclosure are reasonable, and if the information to be disclosed will not disadvantage the corporation either competitively or economically.

INVESTMENT PROFESSIONALS

As of June 30, 2019

INVESTMENT MANAGERS

DOMESTIC EQUITY

Russell Investment Group
State Street Global Advisors
TOBAM

INTERNATIONAL EQUITY

Batterymarch Financial Mgmt
Gramercy Funds Management, LLC
Mondrian Investment Partners Ltd
Russell Investment Group
TOBAM

DOMESTIC FIXED INCOME

Angelo Gordon
Apollo Global Management, LLC
Beach Point Capital Mgmt, LP
Declaration Mgmt & Research, LLC
GoldenTree Asset Mgmt, LP
King Street Capital Mgmt, LLC
MacKay Shields, LLC
Waterfall Asset Management, LLC

GLOBAL FIXED INCOME

Alcentra Ltd
Ashmore Investment Mgmt Ltd
Bardin Hill Investment Partners
Cairn Capital Ltd
Gramercy Funds Mgmt, LLC
Marathon Asset Mgmt, LP
Prudential Investment Mgmt
York Capital Management

PRIVATE EQUITY

Aberdeen Asset Management, PLC
Alcentra Capital Corporation

Apollo Global Management, LLC
Ares Management, LLC
Aurora Capital Group
Crescent Capital Group, LP
Crestline Management, LP
Industry Ventures, LLC
Kayne Anderson Cap Advisors, LP
Lexington Partners
Partners Group
Pathway Capital Management, LLC
Siguler Guff Advisers, LLC
TCW Asset Management Company
Tennenbaum Capital Partners, LLC
The Catalyst Capital Group, Inc
Waterfall Asset Management, LLC

ABSOLUTE RETURN

Apollo Global Management, LLC
Ares Management, LLC
Birch Grove Capital, LP
Corrum Capital
Four Corners Capital Mgmt, LLC
State Street Global Advisors
ZAIS Group, LLC

TIMBER

Domain Timber Advisors
Hancock Timber Resources Group

INFRASTRUCTURE

Fortress Investment Group, LLC
Kayne Anderson Cap Advisors, LP
Oaktree Capital Management, LP

COMMODITIES

Energy Spectrum Capital
Pinnacle Asset Management, LP
Starwood Energy Partners

REAL ESTATE

American Realty Advisors
Apollo Global Management, LLC
Bryanston Realty Partners, LLC
Fortress Investment Group, LLC
Invesco Real Estate Management
Kayne Anderson Cap Advisors, LP
Morgan Stanley Real Estate Fund
Oaktree Capital Management, LP
Partners Group
PGIM Fund Management Ltd
PGIM Real Estate
Square Mile Capital Mgmt, LP
Starwood Cap Group Global, LLC
Tricon Capital Group, Inc
Walton Street Capital, LLC

SHORT-TERM CASH INVESTMENT FUNDS

State Street Global Advisors

CONSULTANTS

Chantico Global, LLC
Kreischer Miller
Maples Finance
NEPC, LLC

CUSTODIAL SERVICES

State Street Bank & Trust Company

LEGAL COUNSEL

Foley & Lardner, LLP
Hirschler Fleischer, PC
Morgan, Lewis & Bockius, LLP
Squire Patton Boggs, LLP

INVESTMENT RESULTS

As of June 30, 2019

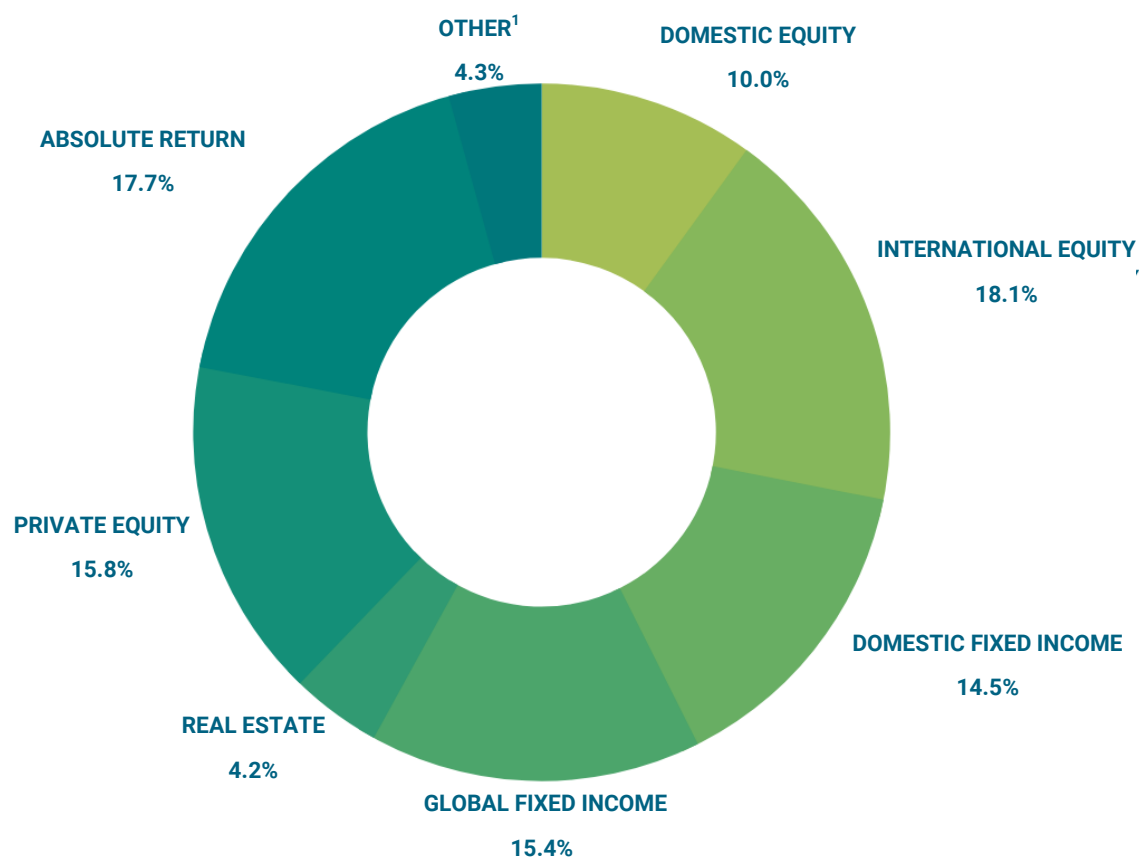
	Current Year 2019	Annualized 3 year	Annualized 5 year
Total Portfolio	4.81%	8.89%	5.98%
<i>SB Policy Benchmark</i>	6.40%	7.01%	4.95%
Cash Equivalents	2.33%	0.88%	(2.57%)
<i>91-Day T-Bill Benchmark</i>	2.31%	1.38%	0.87%
Equity Segment			
Domestic Equity	7.10%	5.06%	3.09%
<i>Russell 3000 Benchmark</i>	8.98%	14.02%	10.19%
Emerging Markets Equity	(0.05%)	7.31%	0.80%
<i>MSCI Emerging Markets Benchmark</i>	1.21%	10.66%	2.49%
International Equity	0.30%	6.38%	2.18%
<i>MSCI EAFE Benchmark</i>	1.08%	9.11%	2.25%
Fixed Income Segment			
Domestic Fixed Income	4.78%	7.97%	6.54%
<i>BofAML High Yield Master II Benchmark</i>	7.58%	7.54%	4.70%
Global and Emerging Market Fixed Income	2.68%	7.30%	4.89%
<i>SBCERA Custom BC Global Benchmark</i>	4.10%	0.97%	(0.12%)
Real Asset Segment			
Real Estate	6.66%	5.91%	8.98%
<i>NCREIF Property Benchmark</i>	6.83%	7.07%	9.13%
Timber	(7.83%)	(3.37%)	(0.90%)
<i>NCREIF Timberland Benchmark</i>	2.38%	3.27%	4.63%
Infrastructure	(3.42%)	12.53%	4.70%
<i>CPI + 600BPS Benchmark</i>	7.74%	8.16%	7.53%
Commodities	5.07%	4.92%	2.39%
<i>Bloomberg Commodity Benchmark</i>	(6.75%)	(2.18%)	(9.15%)
Other Alternative Segment			
Private Equity/Venture Capital	14.35%	14.77%	12.33%
<i>State Street Private Equity Benchmark</i>	10.87%	13.46%	10.45%
Absolute Return	5.95%	8.36%	4.40%
<i>HFRI Fund of Funds Composite Benchmark</i>	1.36%	4.32%	2.23%

Note: Calculations were prepared using a time-weighted rate of return and are net of fees.

ASSET ALLOCATION

As of June 30, 2019

TARGET VS. ACTUAL ASSET ALLOCATION PERCENTAGES

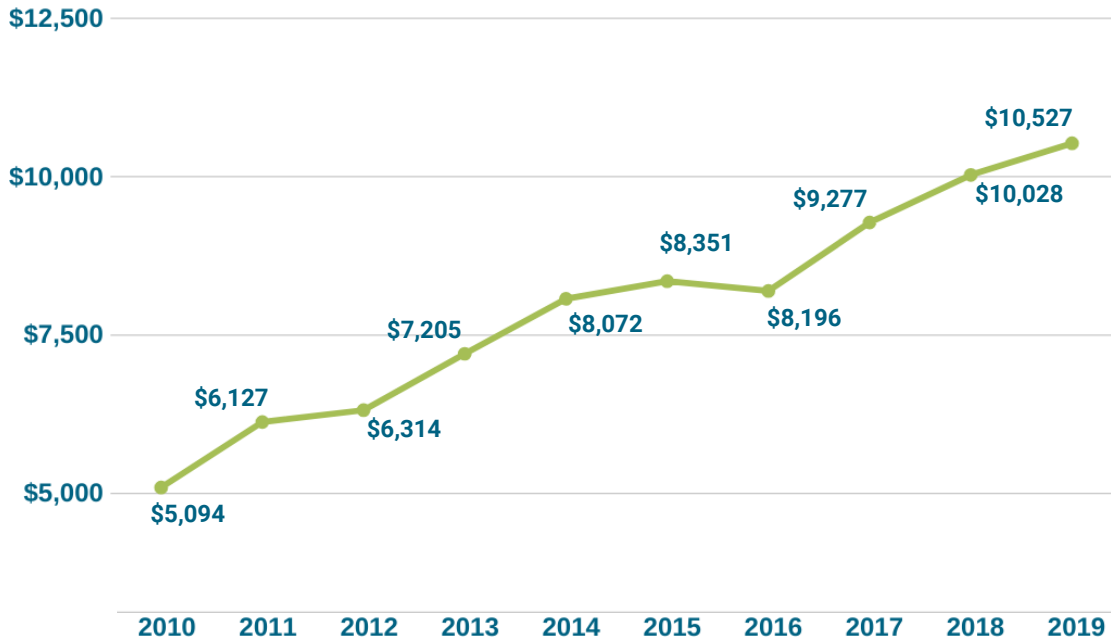


	Actual	Target	Target Ranges	
			Minimum	Maximum
Domestic Equity	10.0%	13.0%	8.0%	18.0%
International Equity	18.1%	15.0%	10.0%	20.0%
Domestic Fixed Income	14.5%	15.0%	10.0%	20.0%
Global Fixed Income	15.4%	20.0%	13.0%	23.0%
Real Estate	4.2%	7.0%	0.0%	14.0%
Private Equity	15.8%	16.0%	6.0%	21.0%
Absolute Return	17.7%	7.0%	0.0%	12.0%
Timber ¹	0.8%	2.0%	0.0%	7.0%
Infrastructure ¹	1.8%	1.0%	0.0%	6.0%
Commodities ¹	2.0%	2.0%	(1.0%)	7.0%
Short-Term Cash Investment Funds ¹	(0.3%)	2.0%	0.0%	10.0%

Note: The "other" category includes percentages 2% and below. These are combined for visual representation purposes.

FAIR VALUE GROWTH OF PLAN ASSETS HELD FOR INVESTMENTS

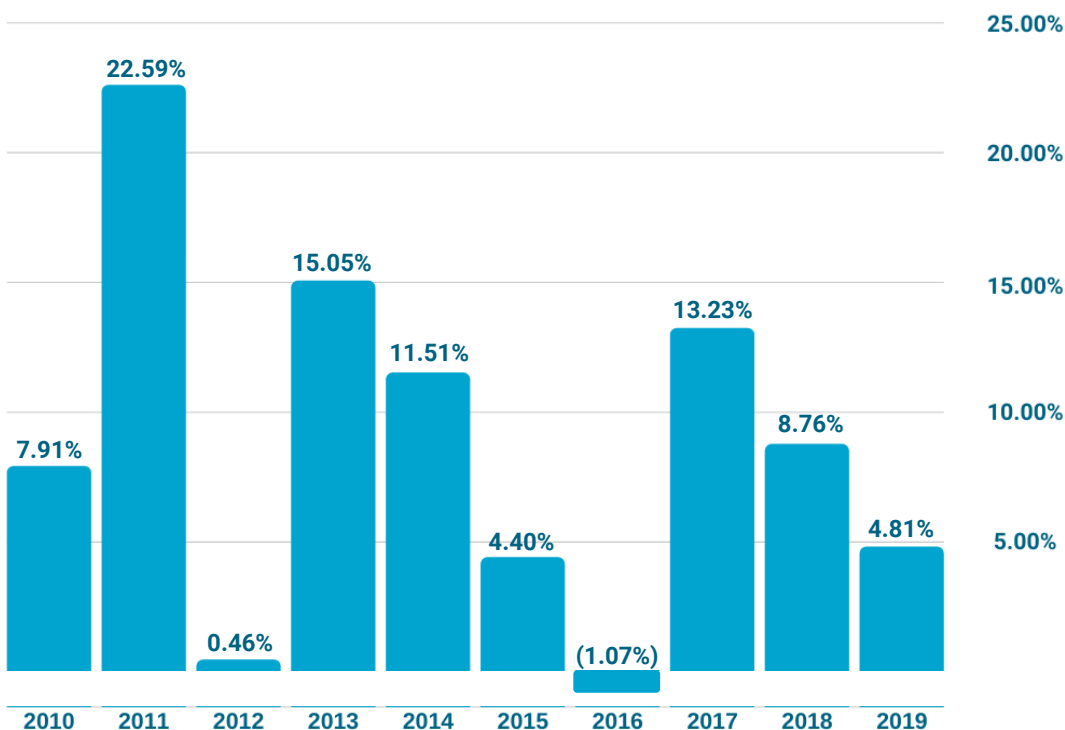
For the Years Ended June 30, 2010 through 2019 (Amounts in Millions)



Note: This chart depicts growth plan assets held for investment excluding investments of cash collateral received on securities lending transactions.

HISTORY OF INVESTMENT PERFORMANCE

For the Years Ended June 30, 2010 through 2019 (Based on Fair Value)



Note: Calculations were prepared using a time-weighted rate of return and are net of fees.

LIST OF LARGEST ASSETS HELD

As of June 30, 2019

(Amounts in Thousands) (By Fair Value)

EQUITY HOLDINGS

Description	Shares	Fair Value
1.Bawag Group AG	1,098	\$ 46,096
2.Ready Capital Corp REIT	2,043	30,436
3.Sutherland Asset Management REIT	2,013	25,058
4.Frontera Energy Corp Common Stock	1,789	18,534
5.Clearway Energy Inc	951	16,026
6.Plains GP Holdings LP	615	15,354
7.Enterprise Products Partners MLP	529	15,263
8.Williams Cos Inc Common Stock	530	14,864
9.LTBI Holdings Common Stock	8,840	13,400
10.Bausch Health Cos Inc	519	13,096
TOTAL OF LARGEST EQUITY HOLDINGS		\$ 208,127
TOTAL EQUITY HOLDINGS		\$ 2,283,142

FIXED INCOME HOLDINGS

Description	Par	Fair Value
1.Treasury Bill 10/19	\$ 81,825	\$ 81,344
2.Treasury Bill 12/19	40,000	39,649
3.Apollo Craft Mid Cap Trade	25,000	26,063
4.Treasury Bill 10/19	22,300	22,163
5.Treasury Bill 12/19	19,850	19,649
6.YRC Worldwide Inc	18,998	18,775
7.Treasury Bill 10/19	17,300	17,205
8.Treasury Bill 12/19	17,125	16,966
9.Treasury Bill 1/20	17,100	16,907
10.GP Holdings SA II	4	14,168
TOTAL OF LARGEST FIXED INCOME HOLDINGS		\$ 272,889
TOTAL FIXED INCOME HOLDINGS		\$ 712,725

Note: The holdings presented above pertain to holdings of equity interests or individual securities. They do not reflect SBCERA's investments in commingled funds and may not be publicly traded. A complete list of portfolio holdings is available upon request.

SCHEDULE OF FEES AND COMMISSIONS

For the Year Ended June 30, 2019

(Amounts in Thousands)

FEES

Type of Fees	Assets Under Management at Fair Value	Fees ¹
Investment Managers' Advisement Fees		
Equity Managers	\$ 2,283,142	\$ 6,603
Fixed Income Managers	712,725	6,412
Real Estate Managers	438,658	6,477
Alternative Managers	6,249,709	70,308
Short-Term Cash & Securities Lending Collateral	956,419	-
TOTAL INVESTMENT MANAGERS' ADVISEMENT FEES	\$ 10,640,653	89,800
Other Investment Advisement Fees		
Consultant Fees		2,296
Custodian Fees		763
Legal Services		151
TOTAL INVESTMENT ADVISEMENT FEES		93,010
SECURITIES LENDING FEES		2,453
TOTAL FEES		\$ 95,463

COMMISSIONS

Brokerage Firm	Total Shares Traded (Actual Shares)	Commissions Per Share (Actual Dollars)	Total Commissions	% of Total Commissions ³
Morgan Stanley	582,140	\$ 1.575	\$ 917	73.95%
National Financial Services Corporation	4,437,131	0.020	89	7.18%
Deutsche Bank Securities Inc.	1,681,469	0.036	62	5.00%
Citigroup Global Markets Inc	794,609	0.037	30	2.42%
Goldman Sachs + Co LLC	1,100,306	0.025	28	2.26%
Other ²	8,727,956	Various ²	114	9.19%
TOTAL	17,323,611		\$ 1,240	100.00%

(1) Fees include amounts for investment management fees and performance fees. It does not include unrealized carried interest allocations and other indirect flow-through investment expenses such as organizational expenses in limited partnership structures.

(2) Includes approximately 43 additional firms, each with less than 2% of total commissions. The average commission per share is 0.127.

(3) Results are adjusted for rounding.

Note: SBCERA has commission recapture arrangements with Russell Investment Group.

INVESTMENT SUMMARY

As of June 30, 2019

(Amounts in Thousands)

Type of Investment	Fair Value	Percent of Total Fair Value
Short-Term Cash Investment Funds	\$ 842,709	7.92%
Emerging Market Debt	31,970	0.30%
U.S. Government Obligations and Other Municipals	259,479	2.44%
Domestic Bonds	189,936	1.79%
Foreign Bonds	231,340	2.17%
Domestic Common and Preferred Stock	1,443,184	13.56%
Foreign Common and Preferred Stock	839,958	7.89%
Investments of Cash Collateral Received—Securities Lending	113,710	1.07%
Real Estate	438,658	4.12%
Domestic Alternatives	4,114,472	38.67%
Foreign Alternatives	2,135,237	20.07%
TOTAL INVESTMENTS, AT FAIR VALUE	\$ 10,640,653	100.00%

ACTUARIAL SECTION



ACTUARY'S CERTIFICATION LETTER



180 Howard Street Suite 1100 San Francisco, CA 94105-6147
T 415.263.8200 www.segalco.com

November 14, 2019

Board of Retirement
San Bernardino County Employees' Retirement Association
348 West Hospitality Lane San Bernardino, CA 92408

**Re: San Bernardino County Employees' Retirement Association June 30, 2019
Actuarial Valuation for Funding Purposes**

Dear Members of the Board:

Segal Consulting (Segal) prepared the June 30, 2019 annual actuarial valuation of the San Bernardino County Employees' Retirement Association (SBCERA). We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices and SBCERA's funding policy that was last reviewed with the Board of Retirement in 2014. In particular, it is our understanding that the assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice (ASOPs).

As part of the June 30, 2019 actuarial valuation, Segal conducted an examination of all participant data for reasonableness. However, the scope of this examination does not qualify as an audit. Summaries of the employee data used in performing the actuarial valuations over the past several years are provided in our valuation report. We did not audit the Association's financial statements, however, the Association's auditor attested to the Association's financial statements. For actuarial valuation purposes, retirement plan assets are valued at Actuarial Value. Under this method, the assets used to determine employer contribution rates take into account market value by recognizing the differences between the total return at market value and the expected investment return over a five-year period.

One of the general goals of an actuarial valuation is to establish contribution rates, which, over time, will remain level as a percentage of payroll for each generation of active members. Actuarial funding is based on the Entry Age Cost Method. Under this method, the employer contribution rate provides for current cost (Normal Cost) plus a level percentage of payroll to amortize any unfunded actuarial accrued liability (UAAL).

In 2002, the Board of Retirement elected to amortize the Association's UAAL as of June 30, 2002 over a declining (or closed) 20-year period. Any change in UAAL that arises due to actuarial gains or losses or due to changes in actuarial assumptions or methods at each valuation after June 30, 2002 is amortized over its own declining (or closed) 20-year period.

ACTUARY'S CERTIFICATION LETTER

(Continued)

Board of Retirement
San Bernardino County Employees' Retirement Association
November 14, 2019
Page 2

Effective with the June 30, 2012 valuation, any change in UAAL that arises due to plan amendments is amortized over its own declining (or closed) 15-year period (with the exception of a change due to retirement incentives, which is amortized over its own declining (or closed) period of up to 5 years). The progress being made towards meeting the funding objective through June 30, 2019 is illustrated in the Schedule of Funding Progress.

Certain information found in the Notes to the Basic Financial Statements and the Required Supplementary Information (RSI) included in the Financial Section was prepared by the Association based on the results of the Governmental Accounting Standards (GAS) 67 actuarial valuation as of June 30, 2019 prepared by Segal. For the Financial Section of the Comprehensive Annual Financial Report (CAFR), Segal provided the Schedule of Changes in Net Pension Liability of Participating Employers and Related Ratios and Schedule of Employer Contributions as shown in the RSI. A listing of the other supporting schedules prepared by the Association based on additional information provided by Segal and the results of the actuarial valuation as of June 30, 2019 for funding purposes is listed below.

- Schedule of Funding Progress
- Development of Actuarial Value of Assets
- Schedule of Active Member Valuation Data
- Schedule of Retirants & Beneficiaries
- Schedule of Funded Liabilities by Type
- Analysis of Financial Experience
- Ratio of Current Compensation-to-Compensation Anticipated at Retirement
- Probabilities of Separation from Active Service
- Expectation of Life
- Retirees and Beneficiaries Added to and Removed from Rolls
- Retired Members by Type of Benefit
- Average Benefit Payments
- Membership History
- Average Monthly Retirement Benefits

ACTUARY'S CERTIFICATION LETTER

(Continued)

Board of Retirement
San Bernardino County Employees' Retirement Association
November 14, 2019
Page 3

The valuation assumptions included in the Actuarial Section were adopted by the Board of Retirement based on the 2017 Actuarial Experience Study (for both the economic and noneconomic assumptions). It is our opinion that the assumptions used in the June 30, 2019 valuation produce results, which, in aggregate, reflect the future experience of the retirement plan. Actuarial valuations are performed on an annual basis. An experience analysis is performed every three years and the next experience analysis is due to be performed in 2020.

In the June 30, 2019 valuation, the ratio of the actuarial value of assets to actuarial accrued liabilities (funded percentage) increased from 79.50% to 79.99%. The average employer contribution rate has increased from 31.09% of payroll to 31.60% of payroll, while the average member contribution rate has decreased from 11.21% of payroll to 10.99% of payroll.

Under the asset smoothing method, the total unrecognized investment loss is \$54 million as of June 30, 2019. This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years. The deferred loss of \$54 million represents about 0.5% of the market value of assets as of June 30, 2019. Unless offset by future investment gains or other favorable experience, the recognition of the \$54 million market loss is expected to have an impact on the Association's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:

- If the net deferred losses were recognized immediately in the actuarial value of assets, the funded ratio would decrease from 79.99% to 79.58%.
- If the net deferred losses were recognized immediately in the actuarial value of assets, the average employer contribution rate would increase from 31.60% to 31.85% of payroll.

We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,



Paul Angelo, FSA, MAAA, FCA, EA
Senior Vice President and Actuary



John Monroe, ASA, MAAA, EA
Vice President and Actuary

JY/hy

SCHEDULE OF FUNDING PROGRESS

For the Year Ended June 30, 2010 through 2019

(Amounts in Thousands)

Actuarial Valuation Date	Actuarial Value of Assets ^{(1),(2)} (a)	Actuarial Accrued Liability (AAL) ³ (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Projected Total Compensation (c)	UAAL as a Percentage of Projected Total Compensation ((b-a)/c)
6/30/2010 ⁴	\$ 6,367,232	\$ 7,444,986	\$ 1,077,754	85.52%	\$ 1,250,193	86.21%
6/30/2011	6,484,507	8,189,646	1,705,139	79.18%	1,244,555	137.01%
6/30/2012	6,789,492	8,606,577	1,817,085	78.89%	1,260,309	144.18%
6/30/2013	7,204,918	9,088,636	1,883,718	79.27%	1,262,752	149.18%
6/30/2014	7,751,309	9,694,825	1,943,516	79.95%	1,267,667	153.31%
6/30/2015	8,255,353	10,214,473	1,959,120	80.82%	1,309,095	149.65%
6/30/2016	8,736,959	10,669,688	1,932,729	81.89%	1,346,408	143.55%
6/30/2017 ⁵	9,385,977	11,928,310	2,542,333	78.69%	1,406,470	180.76%
6/30/2018 ⁵	10,020,863	12,604,942	2,584,079	79.50%	1,477,131	174.94%
6/30/2019 ⁵	10,642,401	13,304,683	2,662,282	79.99%	1,542,495	172.60%

- (1) Includes assets held for survivor benefits, burial allowance, general retiree subsidy (GRS), and excess earnings (EE) reserves. Some years may not include the GRS and EE reserves.
- (2) Excludes present value of additional future contributions payable from the County of San Bernardino to SBCERA related to the Crest Forest Fire transfer.
- (3) Includes liabilities held for survivor benefits, burial allowance, general retiree subsidy (GRS), and excess earnings (EE) reserves. Some years may not include the GRS and EE reserves.
- (4) Does not reflect the subsequent transfer of \$40.6 million from the general retiree subsidy reserve to the current service reserve.
- (5) Does not reflect the present value of additional future contributions payable from the County of San Bernardino, the Barstow Fire Protection District, the City of Big Bear Lake, and the Big Bear Fire Authority for transfers.

Note: Refer to the Required Supplementary Information section (see Schedule of Employer Contributions), and Note 3—Contribution Requirements, for further information.

LATEST ACTUARIAL VALUATION METHODS AND ASSUMPTIONS

As of June 30, 2019

The Entry Age Actuarial Cost Method was used in conjunction with the following actuarial assumptions. The Unfunded Actuarial Accrued Liability (UAAL) is funded over 20 years for all UAAL prior to June 30, 2002. Any changes in UAAL after June 30, 2002 are amortized over a 20-year closed period effective with each valuation. Effective June 30, 2012, any changes in UAAL due to actuarial gains or losses or due to changes in actuarial assumptions or methods will be amortized over a 20-year closed period effective with each valuation. Any change in UAAL that arises due to plan amendments is amortized over its own declining 15-year period. (with exception of a change due to retirement incentives, which is amortized over a declining period of up to 5 years). An analysis of the Plan's non-economic experience was last performed as of June 30, 2017 to establish the validity of these assumptions. An actuarial valuation is performed annually. The actuarial assumptions and methods listed below were recommended by the Plan's independent actuary, Segal Consulting, and were approved by the Board.

Investment Rate of Return	7.25% net of pension plan investment expense, including inflation
Interest Credited to Member Accounts	3.00% (Actual rate is based on six-month Treasury rate).
Inflation	3.00% per annum.
Salary Scale	As shown in Table on page 110.
Asset Valuation	Smoothed market (five year average). See Development of Actuarial Value of Assets on page 103 which shows the development of the assets. As of June 30, 2019, the net unrecognized deferred loss is \$53.99 million.
Gains and Losses	Gains and losses are reflected in the UAAL. They are funded over the period described above.
Spouses and Dependents	65% of male members and 55% of female members assumed married at retirement or pre-retirement death, with female (or male) spouses assumed two (three) years younger (or older) than their spouses, respectively.
Rates of Termination of Employment	As shown in Table on page 111.
Years of Life Expectancy After Retirement	As shown in Table on page 113.
Years of Life Expectancy After Disability	As shown in Table on page 113.
Mortality Rate:	
General	RP-2014 Healthy Annuitant Mortality Table, set forward one year for males, projected generationally with the two-dimensional MP-2016 projection scale; For disabled members, set forward seven years; Weighted 30% male, 70% female.
Safety	RP-2014 Healthy Annuitant Mortality Table, set back one year, projected generationally with the two-dimensional MP-2016 projection scale; For disabled members, set back one year; Weighted 90% male, 10% female.
Reciprocity Assumption	40% of General members and 60% of Safety members who terminate with a vested benefit are assumed to enter a reciprocal system. Assume 4.50% and 4.70% compensation increases per annum, respectively.
Deferral Age for Vested Terminations	Age 59 for General members; Age 53 for Safety members.
Cost-of-Living Adjustments	Contingent upon consumer price index with a 2.00% maximum per annum.
Administrative Expense Assumption Load	0.70% of payroll allocated to both the employer and member based on the components of the total average contribution rate (before expenses) for the employer and member.
Recent Changes	The results of the valuation reflect economic and non-economic changes as recommended and adopted by the Board for the June 30, 2017 valuation. These changes included increases/decreases to the investment rate of return, inflation rate, retirement, mortality, termination, disability incidence and individual salary rates.

Note: The above methods and assumptions were selected by the Plan's actuary as being appropriate for the Plan and are adopted for the year ended June 30, 2019.

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

As of June 30, 2019

(Amounts in Thousands)

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to fair value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize fair value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

1.	Fair Value of Assets		\$ 10,588,407
2.	Calculation of Unrecognized Return		
		Original Amount	Unrecognized Return
	Year Ended June 30, 2019 ¹	\$ (277,826)	\$ (182,261)
	Year Ended June 30, 2018 ¹	124,860	74,916
	Year Ended June 30, 2017 ¹	483,677	193,471
	Year Ended June 30, 2016 ¹	(700,602)	(140,120)
	TOTAL UNRECOGNIZED RETURN²		(53,994)
3.	Actuarial Value of Assets (1) - (2)		10,642,401
4.	Actuarial Value as a Percentage of Market Value (3) / (1)		100.5%
5.	Non-Valuation Reserves		
	Burial Allowance Reserve		576
	TOTAL		576
6.	PRELIMINARY VALUATION VALUE OF ASSETS (3) - (5)		\$ 10,641,825
7.	VALUATION VALUE OF ASSETS		\$ 10,657,549

(1) Recognized at 20% per year over five years.

(2) Deferred (unrecognized) return amount as of June 30, 2019 recognized in each of the next four years as follows:

(a)	Amount recognized during 2019/2020	\$ (63,978)
(b)	Amount recognized during 2020/2021	76,142
(c)	Amount recognized during 2021/2022	(20,593)
(d)	Amount recognized during 2022/2023	(45,565)
	Total	\$ (53,994)

(3) Includes \$15.7 million that represents the present value of additional future contributions from the County to SBCERA related to the Crest Forest Fire District transfer and from the Barstow Fire Protection District and the City of Big Bear Lake (including the Big Bear Fire Authority).

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

For the Years Ended June 30, 2010 through 2019

Valuation Date	Number of Participating Employers ¹	Number of Active Members	Annual Payroll	Annual Average Payroll	% Increase/ (Decrease) in Average Payroll
6/30/2010					
General	18	17,255	\$ 1,054,377,283	\$ 61,106	(1.31%)
Safety	4	2,265	195,815,678	86,453	1.72%
TOTAL	19	19,520	\$ 1,250,192,961	\$ 64,047	(1.01%)
6/30/2011					
General	19	17,070	\$ 1,045,601,554	\$ 61,254	0.24%
Safety	4	2,188	198,953,186	90,929	5.18%
TOTAL	20	19,258	\$ 1,244,554,740	\$ 64,625	0.90%
6/30/2012					
General	18	17,155	\$ 1,061,588,530	\$ 61,882	1.03%
Safety	4	2,151	198,720,507	92,385	1.60%
TOTAL	19	19,306	\$ 1,260,309,037	\$ 65,281	1.01%
6/30/2013					
General	16	17,241	\$ 1,061,419,963	\$ 61,564	(0.51%)
Safety	3	2,160	201,332,001	93,209	0.89%
TOTAL	17	19,401	\$ 1,262,751,964	\$ 65,087	(0.30%)
6/30/2014					
General	16	17,314	\$ 1,067,502,671	\$ 61,655	0.15%
Safety	3	2,183	200,164,139	91,692	(1.63%)
TOTAL	17	19,497	\$ 1,267,666,810	\$ 65,019	(0.11%)
6/30/2015					
General	16	17,726	\$ 1,099,968,966	\$ 62,054	0.65%
Safety	3	2,212	209,126,288	94,542	3.11%
TOTAL	17	19,938	\$ 1,309,095,254	\$ 65,658	0.98%
6/30/2016					
General	16	18,165	\$ 1,120,811,245	\$ 61,702	(0.57%)
Safety	3	2,373	225,596,956	95,068	0.56%
TOTAL	17	20,538	\$ 1,346,408,201	\$ 65,557	(0.15%)
6/30/2017					
General	16	18,619	\$ 1,170,058,184	\$ 62,842	1.85%
Safety	3	2,491	236,411,926	94,906	(0.17%)
TOTAL	17	21,110	\$ 1,406,470,110	\$ 66,626	1.63%
6/30/2018					
General	16	18,798	\$ 1,217,602,722	\$ 64,773	3.07%
Safety	4	2,667	259,528,542	97,311	2.53%
TOTAL	18	21,465	\$ 1,477,131,264	\$ 68,816	3.29%
6/30/2019					
General	16	19,190	\$ 1,278,447,863	\$ 66,621	2.85%
Safety	4	2,633	264,047,375	100,284	3.05%
TOTAL	18	21,823	\$ 1,542,495,238	\$ 70,682	2.71%

(1) Participating employers may have both General and Safety members.

Note: Refer to the Latest Actuarial Valuation Methods and Assumptions, in this section, for information on recent changes to actuarial methods and assumptions.

SCHEDULE OF RETIREES AND BENEFICIARIES

For the Years Ended June 30, 2010 through 2019

Year ¹	Number of Members				Annual Allowances						
	Start of Year	Added During Year	Removed During Year	End of Year	Beginning Annual Allowance	Added During Year	Removed During Year	Annual Allowance ²	% Increase In Annual Allowance	Average Monthly Allowance ²	Average Annual Allowance ²
7/09 to 6/10	8,519	553	(229)	8,843	\$ 256,381,000	\$ 27,380,000	\$ (4,929,000)	\$ 278,832,000	8.76%	\$ 2,628	\$ 31,531
7/10 to 6/11	8,843	694	(272)	9,265	278,832,000	35,099,000	(5,375,000)	308,556,000	10.66%	2,775	33,303
7/11 to 6/12	9,265	690	(219)	9,736	308,556,000	35,576,000	(4,309,000)	339,823,000	10.13%	2,909	34,904
7/12 to 6/13	9,736	755	(318)	10,173	339,823,000	38,851,000	(7,910,000)	370,764,000	9.11%	3,037	36,446
7/13 to 6/14	10,173	756	(311)	10,618	370,764,000	35,254,000	(7,407,000)	398,611,000	7.51%	3,128	37,541
7/14 to 6/15	10,618	796	(286)	11,128	398,611,000	39,452,000	(7,056,000)	431,007,000	8.13%	3,228	38,732
7/15 to 6/16	11,128	803	(301)	11,630	431,007,000	42,262,000	(8,396,000)	464,873,000	7.86%	3,331	39,972
7/16 to 6/17	11,630	869	(320)	12,179	464,873,000	49,799,000	(9,210,000)	505,462,000	8.73%	3,459	41,503
7/17 to 6/18	12,179	850	(313)	12,716	505,462,000	49,124,000	(9,688,000)	544,898,000	7.80%	3,571	42,851
7/18 to 6/19	12,716	859	(331)	13,244	544,898,000	49,620,000	(9,855,000)	584,663,000	7.30%	3,679	44,145

	Retired 7/1/18 to		Total Retirees	
	General	Safety	General	Safety
Average Age at Retirement	61.40	53.40		50.92
Average Years of Credited Service at Retirement	22.30	22.76		21.33
Average Final Average Salary	\$ 6,202	\$ 9,944	\$ 5,536	\$ 7,406
Average Monthly Benefit	\$ 4,161	\$ 7,503	\$ 3,477	\$ 6,372

(1) Amounts listed are as of the actuarial valuation date.

(2) Excludes monthly benefits for Supplemental Disability, Survivor Benefits, General Retiree Subsidy, and beneficiaries that are only receiving a Survivor Benefit.

SUMMARY OF MAJOR PLAN PROVISIONS

As of June 30, 2019

	TIER 1 (SBCERA membership date is prior to January 1, 2013)	TIER 2 (SBCERA membership date is on or after January 1, 2013)
Eligibility	First day of employment ¹ .	First day of employment ¹ .
Definition of Salary	Highest twelve consecutive months of compensation earnable.	Highest thirty-six consecutive months of pensionable compensation.
Service Retirement	<p>Normal Retirement Age The later of: (1) age 55 for General members or (2) age 50 for Safety members or (3) the age at which the member vests in his/her benefits under the CERL, but not later than age 70.</p> <p>Early Retirement Age 70 (regardless of service credit) or age 50 and 10 years of service credit or 30 years of service credit for General members and 20 years of service credit for Safety members (regardless of age). Active part-time employees at age 55 with a minimum of 10 years of membership and five years of service credit.</p> <p>Benefit At normal retirement age, 2% times final average compensation for every year of "General" service credit for benefit and 3% times final average compensation for every year of "Safety" service credit for benefit.</p> <p>Benefit Adjustments Reduced for retirement before age 55 for General members (age 50 for Safety members). Increased for retirement after age 55 up to age 65 (General members only).</p>	<p>Normal Retirement Age The later of: (1) age 55 for General members or (2) age 50 for Safety members or (3) the age at which the member vests in his/her benefits under the CERL, but not later than age 70.</p> <p>Early Retirement Age 70 (regardless of service credit) or age 52 and five years of service credit for General members or age 50 and five years of service credit for Safety members.</p> <p>Benefit At age 67, 2.5% times final average compensation for every year of "General" service credit for benefit. At age 57, 2.7% times final average compensation for every year of "Safety" service credit for benefit.</p> <p>Benefit Adjustments Reduced for retirement before age 67 for General members (age 57 for Safety members).</p>
Disability Retirement	<p>Non-Service Connected (must have five years of service credit to be eligible) <i>Members entering on or before December 31, 1980:</i> Greater of 1.8% of final average compensation per year of service, with a maximum of 33-1/3% if projected service is used or service retirement benefit (if eligible). <i>Members entering on or after January 1, 1981:</i> 20% of final average compensation for the first five years plus 2% of final average compensation per year of service in excess of five, with a maximum of 40% of compensation or service retirement benefit (if eligible).</p> <p>Service Connected Greater of 50% of final average compensation or service retirement benefit (if eligible).</p>	<p>Non-Service Connected (must have five years of service credit to be eligible) <i>Members entering on or after January 1, 2013:</i> 20% of final average compensation for the first five years plus 2% of final average compensation per year of service in excess of five, with a maximum of 40% of compensation or service retirement benefit (if eligible).</p> <p>Service Connected Greater of 50% of final average compensation or service retirement benefit (if eligible).</p>

(1) Membership may be delayed for the purpose of establishing reciprocity with another public retirement system as described in the CERL. Employees who have attained age 60 prior to employment may waive membership within 90 days following initial appointment to an eligible position.

Note: SBCERA is a cost-sharing multiple-employer defined pension plan. Refer to Note 1—Significant Provisions of the Plan for further information. For funding and accounting purposes, SBCERA uses the same actuarial assumptions, except there is a 2-year lag in the assumptions for funding purposes versus the current year assumptions used to calculate total pension liability. Refer to Note 3—Contribution Requirements for further information.

SUMMARY OF MAJOR PLAN PROVISIONS

As of June 30, 2019

(Continued)

	TIER 1 (SBCERA membership date is prior to January 1, 2013)	TIER 2 (SBCERA membership date is on or after January 1, 2013)
Death Before Retirement¹	<p>Less Than 5-Years of Service Credit Refund of contributions plus 1/12 of compensation per year of service credit up to 50% of annual compensation.</p> <p>5 or More Years of Service Credit Lump sum refund of contributions plus 1/12 of compensation per year of service up to six months compensation.</p> <p>Optional Death Allowance (If eligible for disability or service retirement):</p> <p>Monthly payment equal to 60% of member's accrued</p> <p>Modified Optional Death Allowance Lump sum of 1/12 of compensation per year of service up to six months compensation plus a reduced monthly benefit depending on the age of beneficiary.</p> <p>If Service-Connected</p> <p>Monthly payment equal to 50% of final monthly</p> <p>If Service-Connected and Safety Member Additional lump-sum payment of one-year compensation plus a monthly benefit for minor children.</p>	<p>Less Than 5-Years of Service Credit Refund of contributions plus 1/12 of compensation per year of service credit up to 50% of annual compensation.</p> <p>5 or More Years of Service Credit Lump sum refund of contributions plus 1/12 of compensation per year of service up to six months compensation.</p> <p>Optional Death Allowance (If eligible for disability or service retirement):</p> <p>Monthly payment equal to 60% of member's accrued</p> <p>Modified Optional Death Allowance Lump sum of 1/12 of compensation per year of service up to six months compensation plus a reduced monthly benefit depending on the age of beneficiary.</p> <p>If Service-Connected</p> <p>Monthly payment equal to 50% of final monthly</p> <p>If Service-Connected and Safety Member Additional lump-sum payment of one-year compensation plus a monthly benefit for minor children.</p>
Death After Retirement¹	<p>\$1,000 lump sum burial allowance (\$250 is discretionary, funded from undesignated excess earnings and is subject at all times to the availability of</p> <p>Service Retirement or Non-Service Disability² Monthly payment equal to 60% of member's allowance.</p> <p>Service Disability² Monthly payment equal to 100% of member's allow-</p>	<p>\$1,000 lump sum burial allowance (\$250 is discretionary, funded from undesignated excess earnings and is subject at all times to the availability</p> <p>Service Retirement or Non-Service Disability² Monthly payment equal to 60% of member's allowance.</p> <p>Service Disability² Monthly payment equal to 100% of member's</p>
Survivor Benefits	<p>General Members Only Monthly survivor benefit if General member completed at least 18 months of continuous membership with SBCERA including a one-time burial allowance of \$255.</p>	<p>General Members Only Monthly survivor benefit if General member completed at least 18 months of continuous membership with SBCERA including a one-time burial allowance of \$255.</p>
Vesting	<p>After five years of service. Must leave contributions on deposit.</p>	<p>After five years of service. Must leave contributions on deposit.</p>
Member's Contributions	<p>Percentage of compensation earnable based on entry age.</p>	<p>Fixed, flat-rate percentage of pensionable compensation.</p>
Cost-of-Living	<p>"Automatic" not to exceed 2% compounding COLA. A non-compounding 7% increase is payable at retirement for members hired on or before August 18, 1975.</p>	<p>"Automatic" not to exceed 2% compounding COLA.</p>
Current Year Changes in Plan Provisions	<p>None</p>	<p>None</p>

- (1) Payments are made payable to an eligible spouse, registered domestic partner, and/or eligible minor children.
 (2) Payment may be adjusted depending on the payment option selected at time of retirement.

Note: A more detailed description of the Plan provisions is available upon request.

ANALYSIS OF FINANCIAL EXPERIENCE

For the Years Ended June 30, 2010 through 2019
(Amounts in Thousands)

The following are the gains and losses in accrued liabilities during the years ended June 30, 2010 through 2019 resulting from the differences between assumed experience and actual experience.

Year Ended	Pay Increases ¹	Investment Income ²	Death After Retirement ³	Other ⁴	Composite Gain (Loss) During the Year
6/30/2010 Gain/(Loss)	\$ 111,010	\$ (529,630)	\$ (17,399)	\$ (12,666)	\$ (448,685)
6/30/2011 Gain/(Loss)	86,082	(394,003)	(6,413)	(6,804)	(321,138)
6/30/2012 Gain/(Loss)	119,172	(132,274)	(12,372)	(96,438)	(121,912)
6/30/2013 Gain/(Loss) ⁵	159,490	(138,466)	5,019	(105,908)	(79,865)
6/30/2014 Gain/(Loss)	227,699	(35,160)	8,550	(291,340)	(90,251)
6/30/2015 Gain/(Loss)	(19,400)	(72,831)	14,950	18,580	(58,701)
6/30/2016 Gain/(Loss)	135,705	(143,031)	(10,824)	(5,849)	(23,999)
6/30/2017 Gain/(Loss)	15,781	781	(9,835)	(665,842)	(659,115)
6/30/2018 Gain/(Loss)	28,311	(25,827)	(17,763)	(111,271)	(126,550)
6/30/2019 Gain/(Loss) ⁵	(3,688)	(124,316)	(46,603)	2,351	(172,256)

(1) If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.

(2) If there is greater investment income than assumed, there is a gain. If less income, a loss.

(3) If retirees live longer than assumed, there is a loss. If not as long, a gain.

(4) Actual contributions less than expected, retiree subsidy reserve transfer and miscellaneous gains and losses resulting primarily from employee turnover, retirement incidence and data variances, and actuarial assumption changes.

(5) The June 30, 2013 and June 30, 2018 actuarial valuations were audited by independent actuaries, Milliman and Cheiron, respectively. The valuations were found to be complete, accurate, and prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting Recommendations of the American Academy of Actuaries.

SCHEDULE OF FUNDED LIABILITIES BY TYPE

For the Years Ended June 30, 2010 through 2019
(Amounts in Thousands)

Actuarial Valuation Date	Aggregate Accrued Liabilities For			Actuarial Value of Assets	Portion of Accrued Liability Covered by Valuation Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
	Active Member Contributions	Retirees, Beneficiaries & Vested Participants	Active Members (Employer Financed Portion)				
6/30/2010	\$ 934,641	\$ 3,573,651	\$ 2,936,694	\$ 6,367,232	100%	100%	63.30%
6/30/2011	969,913	4,033,102	3,186,631	6,484,507	100%	100%	46.49%
6/30/2012	1,004,751	4,330,245	3,271,581	6,789,492	100%	100%	44.46%
6/30/2013	1,037,767	4,699,518	3,351,351	7,204,918	100%	100%	43.79%
6/30/2014	1,048,914	5,231,227	3,414,684	7,751,309	100%	100%	43.08%
6/30/2015	1,059,688	5,587,189	3,567,596	8,255,353	100%	100%	45.09%
6/30/2016	1,084,761	5,992,772	3,592,155	8,736,959	100%	100%	46.20%
6/30/2017	1,110,149	6,714,830	4,103,331	9,385,977	100%	100%	38.04%
6/30/2018	1,151,640	7,211,256	4,242,046	10,020,863	100%	100%	39.08%
6/30/2019	1,212,740	7,717,959	4,373,984	10,642,401	100%	100%	39.13%

RATIO OF CURRENT COMPENSATION TO COMPENSATION ANTICIPATED AT RETIREMENT

As of June 30, 2019

Age	General Members	Safety Members
20	0.4328	0.4379
25	0.5878	0.5808
30	0.6618	0.6538
35	0.7059	0.6992
40	0.7419	0.7421
45	0.7798	0.7878
50	0.8195	0.8362
55	0.8613	0.8876
60	0.9053	0.9421
65	0.9515	1.0000
70	1.0000	

Note: Merit and promotional increases only (excludes inflation); assumes age at entry is 20. Refer to the Actuary Certification Letter for further information.

PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE

As of June 30, 2019

The following tables indicate the probability of separation from active service for each of the following sources of termination:

- Withdrawal:** Member terminates and either elects refunds of member contributions or contributions are left on deposit.
- Death:** Member dies prior to retirement.
- Disability:** Member receives a disability retirement. Non-service connected disability is when a disability is not employment-related. Service connected disability is when a disability is employment-related.
- Service Retirement:** Member retires after satisfaction of requirements of age and/or service for reasons other than disability.

The probabilities shown for each cause of termination represent the likelihood that a given member will terminate at a particular age for the indicated reason.

Age	Death ¹	Disability ²	Tier 1 Service Retirement	Tier 2 Service Retirement
General Members - Male				
20	0.0005	0.0002	0.0000	0.0000
30	0.0005	0.0003	0.0000	0.0000
40	0.0007	0.0008	0.0000	0.0000
50	0.0019	0.0027	0.0250	0.0000
60	0.0051	0.0058	0.1500	0.0900
70	0.0143	0.0124	0.2500	0.4000
General Members - Female				
20	0.0002	0.0002	0.0000	0.0000
30	0.0002	0.0003	0.0000	0.0000
40	0.0004	0.0008	0.0000	0.0000
50	0.0012	0.0027	0.0250	0.0000
60	0.0027	0.0058	0.1500	0.0900
70	0.0066	0.0124	0.2500	0.4000
Safety Members - Male				
20	0.0005	0.0020	0.0000	0.0000
30	0.0005	0.0031	0.0000	0.0000
40	0.0007	0.0054	0.0000	0.0000
50	0.0019	0.0213	0.1000	0.0400
60	0.0051	0.0760	0.2500	0.2500
Safety Members - Female				
20	0.0002	0.0020	0.0000	0.0000
30	0.0002	0.0031	0.0000	0.0000
40	0.0004	0.0054	0.0000	0.0000
50	0.0012	0.0213	0.1000	0.0400
60	0.0027	0.0760	0.2500	0.2500

- (1) All pre-retirement deaths are assumed to be non-service connected. Note that generational projections beyond the base year (2014) are not reflected in the above mortality rates.
- (2) 50% of General member disabilities are assumed to be service connected and the other 50% are assumed to be non-service connected. 100% of Safety member disabilities are assumed to be service connected.

PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE

As of June 30, 2019

(Continued)

The withdrawal rates below apply based on years of service. No withdrawal is assumed after a member is first assumed to retire.

Years of Service	General Members	Safety Members
Less than 1	0.1500	0.0500
1	0.1100	0.0450
5	0.0525	0.0200
10	0.0400	0.0125
15	0.0350	0.0100
20 or More	0.0300	0.0100

Below are the probabilities of electing a refund of member contributions upon withdrawal.

Years of Service	<u>General Members</u>		<u>Safety Members</u>	
	Elected Refundable Contributions	Elected Non-Refundable Contributions ¹	Elected Refundable Contributions	Elected Non-Refundable Contributions ¹
Less than 5	1.0000	1.0000	1.0000	1.0000
5	0.4000	0.2000	0.2500	0.1250
10	0.4000	0.2000	0.2500	0.1250
15	0.4000	0.2000	0.1500	0.0750
20 or More	0.2000	0.1000	0.0000	0.0000

(1) Assumes member made both refundable and non-refundable contributions during the course of employment. Only the portion attributable to the refundable contributions may be withdrawn.

Note: Ratios provided by SBCERA's independent actuary, Segal Consulting. Refer to Segal's letter in the Actuarial section for further information.

EXPECTATION OF LIFE

As of June 30, 2019
(Amounts in Years)

General Service Retirees¹

Age	Male ²	Female
50	32.78	36.86
60	23.75	27.41
70	15.63	18.55
80	8.79	10.90

Safety Service Retirees¹

Age	Male ³	Female ³
50	34.58	37.77
60	25.46	28.31
70	17.16	19.37
80	9.99	11.56

General Disabled Retirees¹

Age	Male ⁴	Female ⁴
20	54.57	58.42
30	45.58	49.18
40	36.59	39.90
50	27.39	30.37
60	18.72	21.17
70	11.35	13.17
80	5.72	6.81

Safety Disabled Retirees¹

Age	Male ³	Female ³
20	61.03	65.05
30	52.31	56.07
40	43.64	47.08
50	34.58	37.77
60	25.46	28.31
70	17.16	19.37
80	9.99	11.56

(1) The expectation of life was determined by SBCERA's independent actuary, Segal Consulting, using the RP 2014 Healthy Annuitant Mortality Tables, projected generationally with the two-dimensional MP-2016 projection scale, for the ages as of 2019.

(2) The table is set forward one year.

(3) The table is set back one year.

(4) The table is set forward seven years.

HISTORY OF TOTAL EMPLOYER CONTRIBUTION RATES

For Actuarial Valuation Years Ended June 30, 2010 through 2019

Valuation Date - 6/30/2010

County General	
Normal Cost	9.27%
UAAL	5.23%
Total	14.50%

County Safety	
Normal Cost	19.16%
UAAL	11.73%
Total	30.89%

SCAQMD	
Normal Cost	9.72%
UAAL	9.61%
Total	19.33%

Superior Court	
Normal Cost	9.27%
UAAL	7.61%
Total	16.88%

Other General	
Normal Cost	10.57%
UAAL	11.81%
Total	22.38%

Other Safety	
Normal Cost	20.24%
UAAL	26.67%
Total	46.91%

Valuation Date - 6/30/2011

County General	
Normal Cost	9.41%
UAAL	7.71%
Total	17.12%

County Safety	
Normal Cost	19.24%
UAAL	17.15%
Total	36.39%

SCAQMD	
Normal Cost	9.98%
UAAL	13.17%
Total	23.15%

Superior Court	
Normal Cost	9.41%
UAAL	9.15%
Total	18.56%

Other General	
Normal Cost	10.66%
UAAL	15.11%
Total	25.77%

Other Safety	
Normal Cost	20.35%
UAAL	31.38%
Total	51.73%

Valuation Date - 6/30/2012

County General	
Normal Cost	9.94%
UAAL	9.02%
Total	18.96%

County Safety	
Normal Cost	19.73%
UAAL	20.26%
Total	39.99%

SCAQMD	
Normal Cost	9.87%
UAAL	15.35%
Total	25.22%

Superior Court	
Normal Cost	9.94%
UAAL	9.93%
Total	19.87%

Other General	
Normal Cost	11.37%
UAAL	16.32%
Total	27.69%

Other Safety	
Normal Cost	19.59%
UAAL	38.23%
Total	57.82%

Note: These are the recommended rates and include a 2-year lag. For example, the rates recommended in the actuarial valuation dated June 30, 2019 will go into effect for the year ending June 30, 2021.

For June 30, 2010, contribution rates were revised based on a \$40.6 million transfer from the General Subsidy Reserve to the Current Service Reserve on April 7, 2011.

For June 30, 2011 and 2012, contribution rates reflect a three-year phase in, which was approved by the Board on August 15, 2011.

Beginning June 30, 2013, Tier 2 rates added pursuant to PEPRA.

For June 30, 2017, the members in the Other Safety and County Safety cost groups were combined into the Safety cost group.

For June 30, 2019, LAFCO members were transferred to a separate cost group to reflect an additional UAAL payment of \$185 thousand.

HISTORY OF TOTAL EMPLOYER CONTRIBUTION RATES

For the Actuarial Valuation Years Ended June 30, 2010 through 2019
(Continued)

Valuation Date - 6/30/2013

County General - Tier 1	
Normal Cost	10.10%
UAAL	10.14%
Total	20.24%

County General - Tier 2	
Normal Cost	7.88%
UAAL	10.14%
Total	18.02%

County Safety - Tier 1	
Normal Cost	19.88%
UAAL	23.27%
Total	43.15%

County Safety - Tier 2	
Normal Cost	13.75%
UAAL	23.27%
Total	37.02%

SCAQMD - Tier 1	
Normal Cost	10.23%
UAAL	17.53%
Total	27.76%

SCAQMD - Tier 2	
Normal Cost	7.83%
UAAL	17.53%
Total	25.36%

Superior Court - Tier 1	
Normal Cost	10.10%
UAAL	11.65%
Total	21.75%

Superior Court - Tier 2	
Normal Cost	7.88%
UAAL	11.65%
Total	19.53%

Other General - Tier 1	
Normal Cost	11.67%
UAAL	18.24%
Total	29.91%

Other General - Tier 2	
Normal Cost	7.20%
UAAL	18.24%
Total	25.44%

Other Safety - Tier 1	
Normal Cost	20.48%
UAAL	39.17%
Total	59.65%

Other Safety - Tier 2	
Normal Cost	11.56%
UAAL	39.17%
Total	50.73%

Valuation Date - 6/30/2014

County General - Tier 1	
Normal Cost	11.50%
UAAL	10.99%
Total	22.49%

County General - Tier 2	
Normal Cost	8.40%
UAAL	10.99%
Total	19.39%

County Safety - Tier 1	
Normal Cost	22.06%
UAAL	27.03%
Total	49.09%

County Safety - Tier 2	
Normal Cost	15.22%
UAAL	27.03%
Total	42.25%

SCAQMD - Tier 1	
Normal Cost	11.73%
UAAL	18.46%
Total	30.19%

SCAQMD - Tier 2	
Normal Cost	7.97%
UAAL	18.46%
Total	26.43%

Superior Court - Tier 1	
Normal Cost	11.50%
UAAL	12.39%
Total	23.89%

Superior Court - Tier 2	
Normal Cost	8.40%
UAAL	12.39%
Total	20.79%

Other General - Tier 1	
Normal Cost	12.83%
UAAL	20.48%
Total	33.31%

Other General - Tier 2	
Normal Cost	9.29%
UAAL	20.48%
Total	29.77%

Other Safety - Tier 1	
Normal Cost	23.22%
UAAL	45.79%
Total	69.01%

Other Safety - Tier 2	
Normal Cost	12.82%
UAAL	45.79%
Total	58.61%

Valuation Date - 6/30/2015

County General - Tier 1	
Normal Cost	11.50%
UAAL	10.83%
Total	22.33%

County General - Tier 2	
Normal Cost	8.37%
UAAL	10.83%
Total	19.20%

County Safety - Tier 1	
Normal Cost	22.10%
UAAL	28.88%
Total	50.98%

County Safety - Tier 2	
Normal Cost	14.03%
UAAL	28.88%
Total	42.91%

SCAQMD - Tier 1	
Normal Cost	11.69%
UAAL	21.24%
Total	32.93%

SCAQMD - Tier 2	
Normal Cost	7.66%
UAAL	21.24%
Total	28.90%

Superior Court - Tier 1	
Normal Cost	11.50%
UAAL	12.40%
Total	23.90%

Superior Court - Tier 2	
Normal Cost	8.37%
UAAL	12.40%
Total	20.77%

Other General - Tier 1	
Normal Cost	12.88%
UAAL	20.17%
Total	33.05%

Other General - Tier 2	
Normal Cost	9.33%
UAAL	20.17%
Total	29.50%

Other Safety - Tier 1	
Normal Cost	22.35%
UAAL	49.96%
Total	72.31%

Other Safety - Tier 2	
Normal Cost	13.21%
UAAL	49.96%
Total	63.17%

Note: See Note on page 112 for further information.

HISTORY OF TOTAL EMPLOYER CONTRIBUTION RATES

For the Actuarial Valuation Years Ended June 30, 2010 through 2019

(Continued)

Valuation Date - 6/30/2016		Valuation Date - 6/30/2017		Valuation Date - 6/30/2018		Valuation Date - 6/30/2019	
County General - Tier 1		County General - Tier 1		County General - Tier 1		County General - Tier 1	
Normal Cost	11.50%	Normal Cost	11.70%	Normal Cost	11.63%	Normal Cost	11.63%
UAAL	10.91%	UAAL	13.57%	UAAL	13.76%	UAAL	14.21%
Total	22.41%	Total	25.27%	Total	25.39%	Total	25.84%
County General - Tier 2		County General - Tier 2		County General - Tier 2		County General - Tier 2	
Normal Cost	8.45%	Normal Cost	9.16%	Normal Cost	9.10%	Normal Cost	9.11%
UAAL	10.91%	UAAL	13.57%	UAAL	13.76%	UAAL	14.21%
Total	19.36%	Total	22.73%	Total	22.86%	Total	23.32%
County Safety - Tier 1		Safety - Tier 1		Safety - Tier 1		Safety - Tier 1	
Normal Cost	22.14%	Normal Cost	21.81%	Normal Cost	21.66%	Normal Cost	21.73%
UAAL	28.06%	UAAL	33.76%	UAAL	33.42%	UAAL	35.38%
Total	50.20%	Total	55.57%	Total	55.08%	Total	57.11%
County Safety - Tier 2		Safety - Tier 2		Safety - Tier 2		Safety - Tier 2	
Normal Cost	15.15%	Normal Cost	16.54%	Normal Cost	16.19%	Normal Cost	16.13%
UAAL	28.06%	UAAL	33.76%	UAAL	33.42%	UAAL	35.38%
Total	43.21%	Total	50.30%	Total	49.61%	Total	51.51%
SCAQMD - Tier 1		SCAQMD - Tier 1		SCAQMD - Tier 1		SCAQMD - Tier 1	
Normal Cost	11.68%	Normal Cost	11.84%	Normal Cost	12.45%	Normal Cost	13.02%
UAAL	23.25%	UAAL	28.50%	UAAL	29.86%	UAAL	31.20%
Total	34.93%	Total	40.34%	Total	42.31%	Total	44.22%
SCAQMD - Tier 2		SCAQMD - Tier 2		SCAQMD - Tier 2		SCAQMD - Tier 2	
Normal Cost	7.66%	Normal Cost	8.39%	Normal Cost	8.18%	Normal Cost	8.16%
UAAL	23.25%	UAAL	28.50%	UAAL	29.86%	UAAL	31.20%
Total	30.91%	Total	36.89%	Total	38.04%	Total	39.36%
Superior Court - Tier 1		Superior Court - Tier 1		Superior Court - Tier 1		Superior Court - Tier 1	
Normal Cost	11.50%	Normal Cost	11.70%	Normal Cost	11.63%	Normal Cost	11.63%
UAAL	13.20%	UAAL	16.47%	UAAL	16.73%	UAAL	16.92%
Total	24.70%	Total	28.17%	Total	28.36%	Total	28.55%
Superior Court - Tier 2		Superior Court - Tier 2		Superior Court - Tier 2		Superior Court - Tier 2	
Normal Cost	8.45%	Normal Cost	9.16%	Normal Cost	9.10%	Normal Cost	9.11%
UAAL	13.20%	UAAL	16.47%	UAAL	16.73%	UAAL	16.92%
Total	21.65%	Total	25.63%	Total	25.83%	Total	26.03%
Other General - Tier 1		Other General - Tier 1		Other General - Tier 1		Other General - Tier 1	
Normal Cost	13.18%	Normal Cost	11.78%	Normal Cost	11.48%	Normal Cost	11.58%
UAAL	21.35%	UAAL	25.25%	UAAL	26.54%	UAAL	26.80%
Total	34.53%	Total	37.03%	Total	38.02%	Total	38.38%
Other General - Tier 2		Other General - Tier 2		Other General - Tier 2		Other General - Tier 2	
Normal Cost	8.74%	Normal Cost	9.05%	Normal Cost	9.07%	Normal Cost	9.06%
UAAL	21.35%	UAAL	25.25%	UAAL	26.54%	UAAL	26.80%
Total	30.09%	Total	34.30%	Total	35.61%	Total	35.86%
Other Safety - Tier 1						LAFCO - Tier 1	
Normal Cost	22.52%					Normal Cost	11.58%
UAAL	60.67%					UAAL	24.18%
Total	83.19%					Total	35.76%
Other Safety - Tier 2						LAFCO - Tier 2	
Normal Cost	13.06%					Normal Cost	9.06%
UAAL	60.67%					UAAL	24.18%
Total	73.73%					Total	33.24%

Note: See Note on page 112 for further information.

RETIREES & BENEFICIARIES

Added to and Removed from Rolls for the Years Ended June 30, 2010 through 2019
For General and Safety Members (Dollars in Thousands)

Year Ended	Added to Rolls		Removed from Rolls		Net Added/Removed from Rolls		Rolls-End of Year		% Increase in Annual Allowances	Average Annual Allowances (Actual Dollars)
	No.	Annual Allowances ¹	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances		
6/30/2010										
General	465	\$19,648	205	\$4,123	260	\$15,525	7,507	\$210,780	7.95%	\$28,078
Safety	88	7,732	24	806	64	6,926	1,336	68,052	11.33%	50,937
TOTAL	553	\$27,380	229	\$4,929	324	\$22,451	8,843	\$278,832	8.76%	\$31,531
6/30/2011										
General	598	\$25,397	250	\$4,605	348	\$20,792	7,855	\$231,572	9.86%	\$29,481
Safety	96	9,702	22	770	74	8,932	1,410	76,984	13.13%	54,599
TOTAL	694	\$35,099	272	\$5,375	422	\$29,724	9,265	\$308,556	10.66%	\$33,303
6/30/2012										
General	586	\$26,342	204	\$3,741	382	\$22,601	8,237	\$254,173	9.76%	\$30,857
Safety	104	9,234	15	568	89	8,666	1,499	85,650	11.26%	57,138
TOTAL	690	\$35,576	219	\$4,309	471	\$31,267	9,736	\$339,823	10.13%	\$34,904
6/30/2013										
General	638	\$28,585	283	\$6,470	355	\$22,115	8,592	\$276,288	8.70%	\$32,156
Safety	117	10,266	35	1,440	82	8,826	1,581	94,476	10.30%	59,757
TOTAL	755	\$38,851	318	\$7,910	437	\$30,941	10,173	\$370,764	9.11%	\$36,446
6/30/2014										
General	620	\$26,034	286	\$6,575	334	\$19,459	8,926	\$295,747	7.04%	\$33,133
Safety	136	9,220	25	832	111	8,388	1,692	102,864	8.88%	60,794
TOTAL	756	\$35,254	311	\$7,407	445	\$27,847	10,618	\$398,611	7.51%	\$37,541
6/30/2015										
General	632	\$28,114	259	\$5,744	373	\$22,370	9,299	\$318,117	7.56%	\$34,210
Safety	164	11,338	27	1,312	137	10,026	1,829	112,890	9.75%	61,722
TOTAL	796	\$39,452	286	\$7,056	510	\$32,396	11,128	\$431,007	8.13%	\$38,732
6/30/2016										
General	681	\$31,597	269	\$6,759	412	\$24,838	9,711	\$342,955	7.81%	\$35,316
Safety	122	10,665	32	1,637	90	9,028	1,919	121,918	8.00%	63,532
TOTAL	803	\$42,262	301	\$8,396	502	\$33,866	11,630	\$464,873	7.86%	\$39,972
6/30/2017										
General	740	\$38,025	289	\$7,774	451	\$30,251	10,162	\$373,206	8.82%	\$36,726
Safety	129	11,774	31	1,436	98	10,338	2,017	132,256	8.48%	65,571
TOTAL	869	\$49,799	320	\$9,210	549	\$40,589	12,179	\$505,462	8.73%	\$41,503
6/30/2018										
General	720	\$37,229	289	\$8,619	431	\$28,610	10,593	\$401,816	7.67%	\$37,932
Safety	130	11,895	24	1,069	106	10,826	2,123	143,082	8.19%	67,396
TOTAL	850	\$49,124	313	\$9,688	537	\$39,436	12,716	\$544,898	7.80%	\$42,851
6/30/2019										
General	743	\$37,774	296	\$8,033	447	\$29,741	11,040	\$431,557	7.40%	\$39,090
Safety	116	11,846	35	1,822	81	10,024	2,204	153,106	7.01%	69,467
TOTAL	859	\$49,620	331	\$9,855	528	\$39,765	13,244	\$584,663	7.30%	\$44,145

(1) Includes automatic cost-of-living adjustments granted annually on April 1.

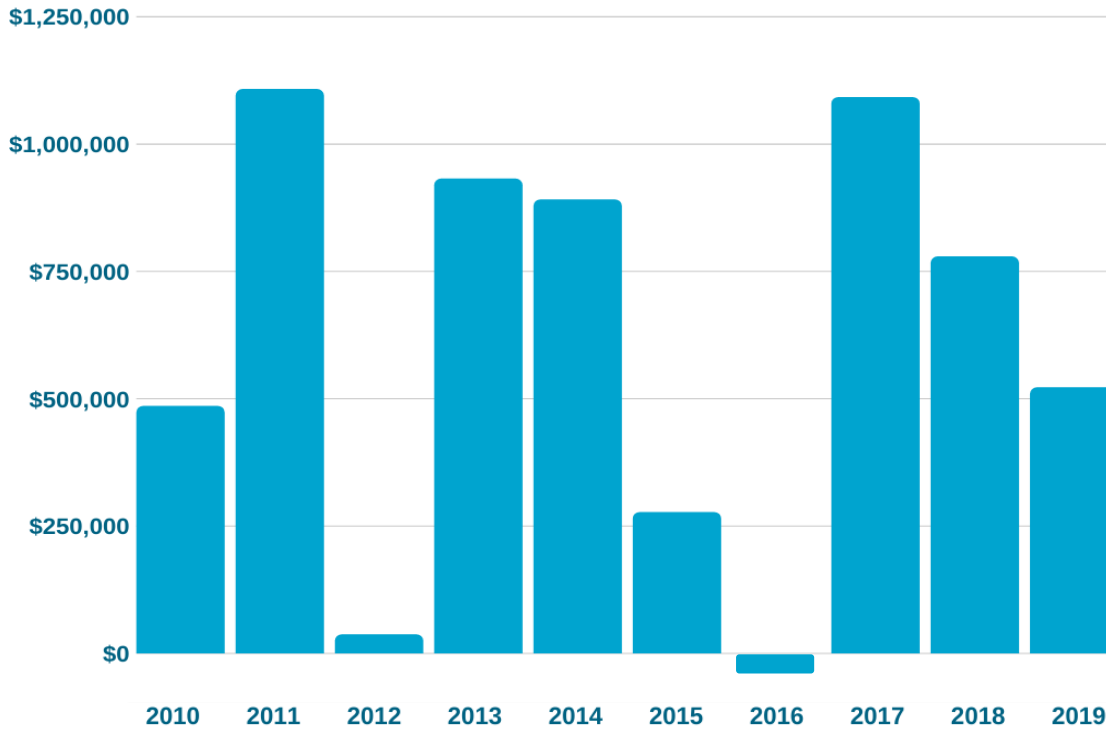
PAGE INTENTIONALLY LEFT BLANK.

STATISTICAL SECTION



STATISTICAL CHANGES IN FIDUCIARY NET POSITION

For the Years Ended June 30, 2010 through 2019
(Amounts in Thousands)



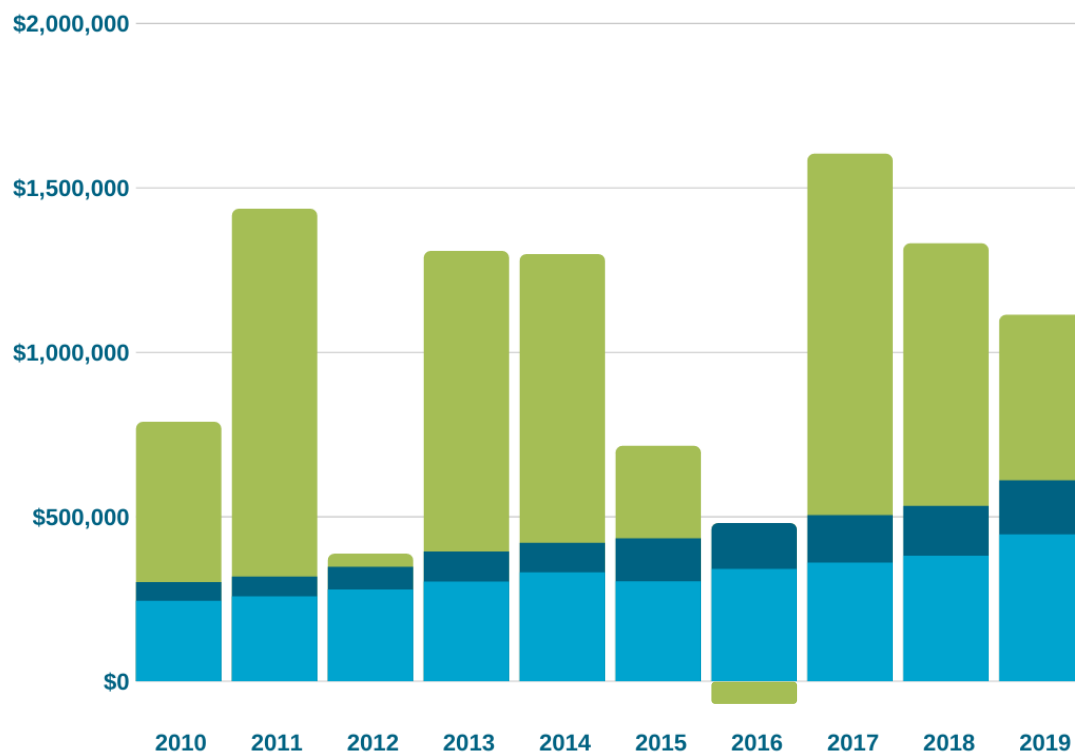
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ADDITIONS										
Employer Contributions ¹	\$ 243,773	\$ 258,128	\$ 278,091	\$ 303,080	\$ 330,330	\$ 303,244	\$ 340,512	\$ 360,478	\$ 381,452	\$ 446,295
Member Contributions ²	56,986	59,612	68,630	91,056	89,861	129,895	139,132	143,858	151,006	163,552
Investment Income/(Loss) ³	486,433	1,117,138	39,786	912,310	877,018	280,842	(80,028)	1,098,198	797,480	502,753
TOTAL ADDITIONS	\$787,192	\$1,434,878	\$386,507	\$1,306,446	\$1,297,209	\$713,981	\$399,616	\$1,602,534	\$1,329,938	\$1,112,600
DEDUCTIONS										
Benefits and Refunds	292,677	320,514	341,728	367,396	397,823	428,475	464,068	497,904	539,297	578,508
Administrative Expenses	7,226	5,599	6,205	6,258	6,386	6,710	7,569	9,961	8,752	9,383
Other Expenses	2,234	1,665	1,814	1,572	2,483	2,208	2,664	3,202	3,340	3,292
TOTAL DEDUCTIONS	\$302,137	\$327,778	\$349,747	\$375,226	\$406,692	\$437,393	\$474,301	\$511,067	\$551,389	\$591,183
TOTAL CHANGE IN FIDUCIARY NET POSITION	\$ 485,055	\$1,107,100	\$ 36,760	\$931,220	\$890,517	\$276,588	\$(74,685)	\$1,091,467	\$ 778,549	\$ 521,417

(1) For the year ended June 30, 2018: Includes \$2,784 thousand in Employer Contributions for a Plan Asset transfer from an outside plan.

(2) For the year ended June 30, 2018: Includes \$1,528 thousand in Member Contributions for a Plan Asset transfer from an outside plan.

ADDITIONS BY SOURCE

For the Years Ended June 30, 2010 through 2019
(Amounts in Thousands)



ADDITIONS	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Employer Contributions ¹	\$ 243,773	\$258,128	\$278,091	\$303,080	\$330,330	\$303,244	\$340,512	\$360,478	\$381,452	\$ 446,295
Member Contributions ²	56,986	59,612	68,630	91,056	89,861	129,895	139,132	143,858	151,006	163,552
Investment Income/(Loss) ³	486,433	1,117,138	39,786	912,310	877,018	280,842	(80,028)	1,098,198	797,480	502,753
TOTAL ADDITIONS	\$787,192	\$1,434,878	\$386,507	\$1,306,446	\$1,297,209	\$713,981	\$ 399,616	\$1,602,534	\$1,329,938	\$1,112,600
COVERED PAYROLL⁴	\$1,226,431	\$1,250,193	\$1,244,555	\$1,260,309	\$1,262,752	\$1,267,667	\$1,309,095	\$1,346,408	\$1,406,470	\$1,477,131
EMPLOYER CONTRIBUTION AS A PERCENTAGE OF COVERED PAYROLL⁴	19.88%	20.65%	22.34%	24.05%	26.16%	23.92%	26.01%	26.77%	27.12%	30.21%

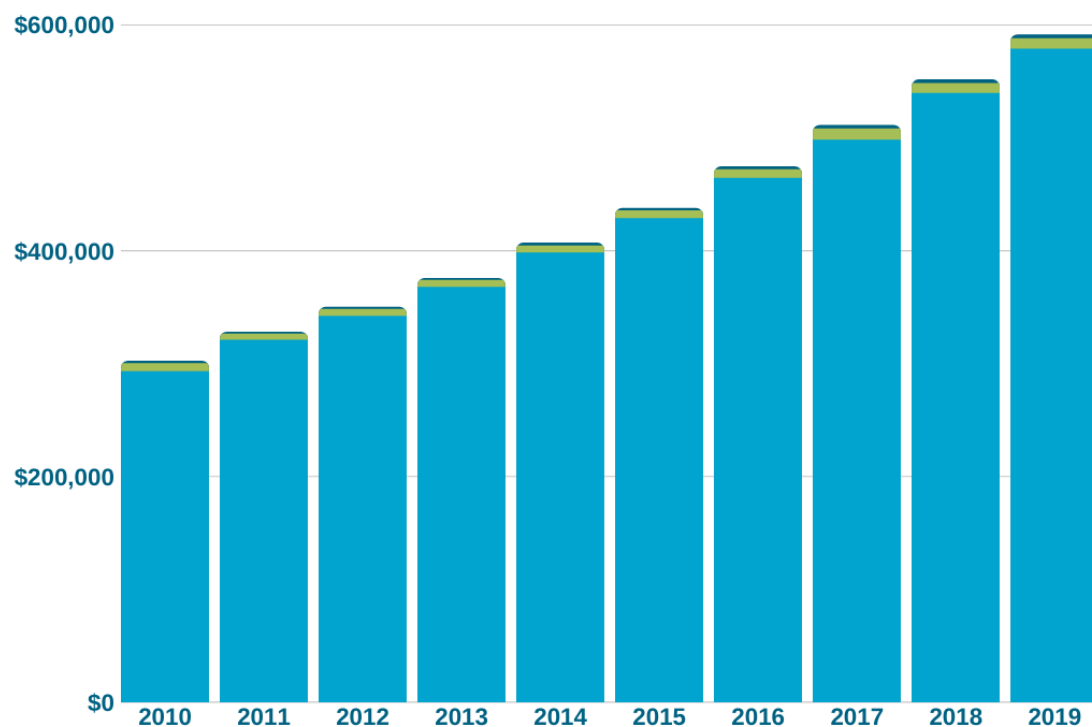
(1) For the year ended June 30, 2018: Includes \$2,784 thousand in Employer Contributions for a Plan Asset transfer from an outside plan.

(2) For the year ended June 30, 2018: Includes \$1,528 thousand in Member Contributions for a Plan Asset transfer from an outside plan.

(3) Net of investment expenses and includes net securities lending income.

DEDUCTIONS BY TYPE

For the Years Ended June 30, 2010 through 2019
(Amounts in Thousands)



DEDUCTIONS	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Benefits and Refunds	\$292,677	\$320,514	\$341,728	\$367,396	\$397,823	\$428,475	\$464,068	\$497,904	\$539,297	\$578,508
Administrative Expenses	7,226	5,599	6,205	6,258	6,386	6,710	7,569	9,961	8,752	9,383
Other Expenses	2,234	1,665	1,814	1,572	2,483	2,208	2,664	3,202	3,340	3,292
TOTAL DEDUCTIONS	\$302,137	\$327,778	\$349,747	\$375,226	\$406,692	\$437,393	\$474,301	\$511,067	\$551,389	\$591,183

BENEFIT EXPENSES BY TYPE

For the Years Ended June 30, 2010 through 2019
(Amounts in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Age & Service Benefits										
Retirees	\$ 217,241	\$ 238,775	\$ 256,160	\$ 276,360	\$ 300,482	\$ 327,541	\$ 354,650	\$ 384,184	\$ 418,274	\$ 450,480
Survivors	10,396	11,427	12,259	13,230	14,293	15,314	16,817	18,428	20,151	21,549
Death in Service Benefits	313	388	341	315	424	247	590	421	466	290
Disability Benefits										
Duty	39,858	42,230	44,080	47,137	50,325	52,722	55,037	58,519	61,904	65,824
Non-Duty	8,642	9,156	9,557	10,220	10,911	11,431	11,933	12,688	13,422	14,272
Survivor	6,926	7,613	7,947	8,576	9,265	9,927	10,902	11,946	13,064	13,971
TOTAL BENEFIT	283,376	309,589	330,344	355,838	385,700	417,182		486,186	527,281	566,385
Refunds										
Death	1,462	925	717	826	1,016	1,106	1,678	1,563	1,463	1,312
Separation	7,839	10,000	10,667	10,732	11,107	10,187	12,461	10,155	10,553	10,811
TOTAL REFUNDS	9,301	10,925	11,384	11,558	12,123	11,293	14,139	11,718	12,016	12,123
TOTAL BENEFIT AND REFUND PAYMENTS	\$292,677	\$320,514	\$341,728	\$367,396	\$397,823	\$428,475	\$464,068	\$497,904	\$539,297	\$578,508

RETIRED MEMBERS BY TYPE OF BENEFIT

For the Years Ended June 30, 2010 through 2019

General Members					Safety Members				
Amount of Monthly Benefit ²	Number of Retirees	Type of Retirement ¹			Amount of Monthly Benefit ²	Number of Retirees	Type of Retirement ¹		
		A	B	C			A	B	C
\$0 - \$999	1,864	1,270	84	510	\$0 - \$999	121	34	22	65
\$1,000 - \$1,999	2,768	2,024	285	459	\$1,000 - \$1,999	203	54	48	101
\$2,000 - \$2,999	2,016	1,515	275	226	\$2,000 - \$2,999	232	78	94	60
\$3,000 - \$3,999	1,350	1,151	99	100	\$3,000 - \$3,999	392	78	260	54
\$4,000 - \$4,999	939	845	48	46	\$4,000 - \$4,999	225	86	101	38
\$5,000 - \$5,999	594	553	18	23	\$5,000 - \$5,999	166	100	47	19
\$6,000 - \$6,999	420	404	6	10	\$6,000 - \$6,999	155	105	38	12
\$7,000 - \$7,999	311	299	4	8	\$7,000 - \$7,999	158	118	33	7
\$8,000 - \$8,999	236	227	4	5	\$8,000 - \$8,999	133	103	26	4
\$9,000 - \$9,999	166	162	2	2	\$9,000 - \$9,999	106	77	27	2
Over \$10,000	376	369	2	5	Over \$10,000	313	209	97	7
TOTAL	11,040	8,819	827	1,394	TOTALS	2,204	1,042	793	369

	Number of Retirees	Type of Retirement ¹		
		A	B	C
GRAND TOTAL	13,244	9,861	1,620	1,763

(1) Type of Retirement: A = Service Retirements; B = Disability Retirement; C = Beneficiary
 (2) Excludes monthly benefits for Supplemental Disability, Survivor Benefit, and Burial Allowance.
 Note: Refer to the Actuarial section, Summary of Major Plan Provisions, for further information.

AVERAGE BENEFIT PAYMENTS

For the Retirement Effective Dates of July 1, 2009 through 2019

	Service Years Credited						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
Period 7/1/09 to 6/30/10							
Average Monthly Benefit	\$ 1,229	\$ 1,656	\$ 1,929	\$ 3,269	\$ 4,878	\$ 6,328	\$ 8,936
Monthly Final Average Salary	\$ 4,272	\$ 3,535	\$ 4,491	\$ 6,114	\$ 7,324	\$ 7,772	\$ 9,275
Number of Active Retirees	8	30	49	57	68	42	81
Period 7/1/10 to 6/30/11							
Average Monthly Benefit	\$ 1,399	\$ 1,887	\$ 1,989	\$ 3,694	\$ 4,588	\$ 6,638	\$ 8,449
Monthly Final Average Salary	\$ 5,979	\$ 4,182	\$ 4,757	\$ 6,600	\$ 6,759	\$ 8,134	\$ 8,801
Number of Active Retirees	10	27	90	67	86	64	88
Period 7/1/11 to 6/30/12							
Average Monthly Benefit	\$ 832	\$ 1,821	\$ 2,085	\$ 2,786	\$ 4,506	\$ 5,282	\$ 8,395
Monthly Final Average Salary	\$ 4,425	\$ 5,084	\$ 4,805	\$ 5,092	\$ 6,901	\$ 6,906	\$ 9,021
Number of Active Retirees	3	45	96	57	107	70	97
Period 7/1/12 to 6/30/13							
Average Monthly Benefit	\$ 2,696	\$ 1,871	\$ 2,006	\$ 3,405	\$ 4,119	\$ 6,005	\$ 8,223
Monthly Final Average Salary	\$ 9,857	\$ 4,645	\$ 5,369	\$ 6,426	\$ 6,479	\$ 7,969	\$ 8,771
Number of Active Retirees	6	45	112	72	92	92	93
Period 7/1/13 to 6/30/14							
Average Monthly Benefit	\$ 1,568	\$ 1,836	\$ 2,124	\$ 2,724	\$ 4,137	\$ 5,714	\$ 6,549
Monthly Final Average Salary	\$ 3,907	\$ 5,148	\$ 5,402	\$ 5,274	\$ 6,343	\$ 7,216	\$ 6,878
Number of Active Retirees	2	24	129	77	117	90	92
Period 7/1/14 to 6/30/15							
Average Monthly Benefit	\$ 1,111	\$ 1,713	\$ 1,983	\$ 2,804	\$ 4,521	\$ 5,708	\$ 7,713
Monthly Final Average Salary	\$ 5,347	\$ 5,293	\$ 5,112	\$ 5,527	\$ 6,685	\$ 6,837	\$ 7,473
Number of Active Retirees	4	46	92	81	96	110	114
Period 7/1/15 to 6/30/16							
Average Monthly Benefit	\$ 350	\$ 1,669	\$ 2,215	\$ 2,913	\$ 3,886	\$ 5,576	\$ 7,764
Monthly Final Average Salary	\$ 7,685	\$ 4,803	\$ 5,795	\$ 5,456	\$ 5,657	\$ 6,613	\$ 8,041
Number of Active Retirees	1	54	80	97	91	104	107
Period 7/1/16 to 6/30/17							
Average Monthly Benefit	\$ 574	\$ 2,042	\$ 2,239	\$ 3,306	\$ 4,470	\$ 6,253	\$ 7,770
Monthly Final Average Salary	\$ 3,227	\$ 5,955	\$ 5,187	\$ 6,294	\$ 6,493	\$ 7,224	\$ 7,793
Number of Active Retirees	3	63	103	90	86	107	145
Period 7/1/17 to 6/30/18							
Average Monthly Benefit	\$ 1,591	\$ 1,742	\$ 2,273	\$ 3,236	\$ 4,228	\$ 6,692	\$ 7,852
Monthly Final Average Salary	\$ 6,706	\$ 6,122	\$ 5,675	\$ 5,840	\$ 6,237	\$ 7,196	\$ 8,069
Number of Active Retirees	11	49	84	110	66	120	128
Period 7/1/18 to 6/30/19							
Average Monthly Benefit	\$ 2,292	\$ 1,655	\$ 2,207	\$ 2,959	\$ 4,401	\$ 6,475	\$ 7,545
Monthly Final Average Salary	\$ 5,396	\$ 6,098	\$ 5,700	\$ 5,760	\$ 6,802	\$ 7,759	\$ 7,783
Number of Active Retirees	4	28	94	128	110	89	137

Note: Active Retiree count does not include beneficiary payments. See page 128 for further information.

HISTORY OF MEMBERSHIP BY PARTICIPATING EMPLOYER

For the Years Ended June 30, 2010 through 2019

Employer	2019		2018		2017		2016		2015	
	Number of Members	% of Total	Number of Members	% of Total	Number of Members	% of Total	Number of Members	% of Total	Number of Members	% of Total
BFPD	23	0.12%	23	0.11%	20	0.09%	18	0.09%	28	0.14%
BBFA ¹	58	0.27%	32	0.15%	-	0.00%	-	0.00%		0.00%
CERTNA	2	0.01%	2	0.01%	2	0.01%	2	0.01%	2	0.01%
CSAC	114	0.52%	106	0.49%	100	0.47%	94	0.46%	94	0.47%
CBBL	50	0.23%	51	0.24%	67	0.32%	67	0.33%	65	0.33%
CCH	157	0.72%	152	0.71%	153	0.72%	153	0.74%	152	0.76%
County	19,338	88.61%	19,096	88.96%	18,797	89.05%	18,319	89.19%	17,718	88.87%
CFFPD ²	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
CSD ³	20	0.09%	19	0.09%	19	0.09%	19	0.09%	20	0.10%
DWP ⁴	38	0.17%	35	0.16%	31	0.15%	31	0.15%	32	0.16%
HRPD	24	0.11%	24	0.11%	24	0.11%	40	0.19%	49	0.24%
ILS	-	0.00%	1	0.00%	1	0.01%	1	0.01%	1	0.01%
IVDA ⁵	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
LL	7	0.03%	6	0.03%	6	0.03%	8	0.04%	8	0.04%
LAFCO	5	0.02%	5	0.02%	5	0.02%	5	0.02%	5	0.02%
MDAQMD	42	0.19%	42	0.20%	39	0.18%	39	0.19%	41	0.21%
RIM ⁶	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
SBCTA ⁷	62	0.28%	57	0.27%	60	0.28%	55	0.27%	50	0.25%
SBCERA	64	0.29%	60	0.28%	64	0.30%	55	0.27%	48	0.24%
SBIAA ⁵	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
SCAQMD	759	3.48%	723	3.37%	702	3.33%	682	3.32%	695	3.49%
Superior Court	1,060	4.86%	1,031	4.80%	1,020	4.84%	950	4.63%	930	4.66%
TOTAL EMPLOYEES	21,823	100.00%	21,465	100.00%	21,110	100.00%	20,538	100.00%	19,938	100.00%

- (1) On June 23, 2018, BBFA joined SBCERA as a participating employer. A portion of the new membership resulted from a Plan transfer from an outside plan as if those members were always members of SBCERA.
- (2) On July 13, 2013 Crest Forest Fire Protection District (CFFPD) transferred all members to the County. For actuarial purposes the transfer of the associated accrued liabilities occurred as of June 30, 2013.
- (3) CSD previously reported under the County. On October 7, 2010, CSD requested to be treated as a separate employer.
- (4) As of July 2, 2011, DWP requested to be treated as a separate employer. Prior to that, members were reported as CBBL employees.
- (5) The Inland Valley Development Agency and San Bernardino International Airport Authority both withdrew from SBCERA on June 30, 2012.
- (6) On May 4, 2013, Rim of the World Recreation and Park District withdrew from SBCERA.
- (7) On June 24, 2017, the San Bernardino Associated Governments members transitioned to SBCTA as if no change of employer had occurred.

HISTORY OF MEMBERSHIP BY PARTICIPATING EMPLOYER

For the Years Ended June 30, 2010 through 2019
(Continued)

2014		2013		2012		2011		2010	
Number of Members	% of Total	Number of Members	% of Total	Number of Members	% of Total	Number of Members	% of Total	Number of Members	% of Total
27	0.14%	20	0.10%	20	0.10%	21	0.11%	23	0.12%
-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
1	0.01%	1	0.01%	1	0.01%	1	0.01%	1	0.01%
83	0.43%	94	0.47%	105	0.54%	108	0.56%	118	0.60%
66	0.34%	71	0.37%	77	0.40%	83	0.43%	116	0.59%
148	0.76%	161	0.83%	168	0.87%	168	0.87%	172	0.88%
17,341	88.93%	17,230	88.81%	16,963	87.87%	16,882	87.66%	17,142	87.81%
-	0.00%	-	0.00%	29	0.15%	26	0.13%	27	0.14%
19	0.10%	18	0.09%	20	0.10%	20	0.10%	-	0.00%
32	0.16%	33	0.17%	33	0.17%	-	0.00%	-	0.00%
44	0.23%	18	0.09%	18	0.09%	17	0.09%	19	0.10%
1	0.01%	1	0.01%	1	0.01%	1	0.01%	2	0.01%
-	0.00%	-	0.00%	-	0.00%	8	0.04%	14	0.07%
8	0.04%	8	0.04%	8	0.04%	8	0.04%	8	0.04%
5	0.03%	4	0.02%	4	0.02%	4	0.02%	5	0.03%
41	0.21%	42	0.22%	38	0.20%	38	0.20%	37	0.19%
-	0.00%	-	0.00%	1	0.01%	1	0.01%	2	0.01%
45	0.23%	48	0.25%	41	0.21%	39	0.20%	38	0.19%
50	0.26%	47	0.24%	48	0.25%	42	0.22%	20	0.10%
-	0.00%	-	0.00%	-	0.00%	6	0.03%	15	0.08%
697	3.57%	713	3.68%	740	3.83%	767	3.98%	780	4.00%
889	4.55%	892	4.60%	991	5.13%	1,018	5.29%	981	5.03%
19,497	100.00%	19,401	100.00%	19,306	100.00%	19,258	100.00%	19,520	100.00%

Note: See Note on page 126 for further information.

STATISTICAL MEMBERSHIP INFORMATION

For the Years Ended June 30, 2010 through 2019

ACTIVE MEMBERSHIP CLASSIFICATION

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
General	17,255	17,070	17,155	17,241	17,314	17,726	18,165	18,619	18,798	19,190
Safety	2,265	2,188	2,151	2,160	2,183	2,212	2,373	2,491	2,667	2,633
TOTAL	19,520	19,258	19,306	19,401	19,497	19,938	20,538	21,110	21,465	21,823

MEMBERSHIP HISTORY (ACTIVE AND DEFERRED)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Active	19,520	19,258	19,306	19,401	19,497	19,938	20,538	21,110	21,465	21,823
Deferred	3,635	3,723	3,782	3,921	4,356	4,804	5,136	5,547	6,211	6,726
TOTAL	23,155	22,981	23,088	23,322	23,853	24,742	25,674	26,657	27,676	28,549

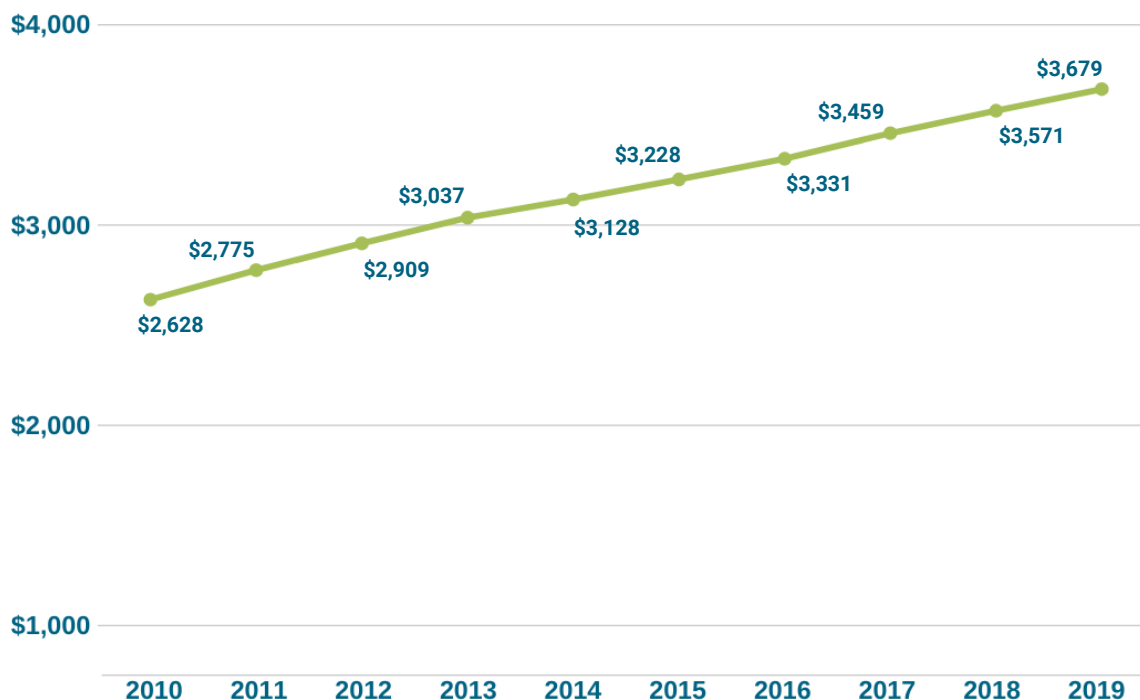
MEMBERSHIP HISTORY (RETIRED)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Service Retirement	6,210	6,571	6,957	7,296	7,681	8,115	8,542	8,983	9,417	9,861
Service Connected Disability	990	1,011	1,047	1,093	1,124	1,148	1,168	1,207	1,242	1,281
Non-Service Connected Disability	349	345	350	351	350	355	352	363	351	339
Survivors	1,294	1,338	1,382	1,433	1,463	1,510	1,568	1,626	1,706	1,763
TOTAL	8,843	9,265	9,736	10,173	10,618	11,128	11,630	12,179	12,716	13,244

STATISTICAL MEMBERSHIP INFORMATION

For the Years Ended June 30, 2010 through 2019
(Continued)

AVERAGE MONTHLY RETIREMENT BENEFITS



BENEFITS AND REFUNDS PAID

(Amounts in Thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Benefits	\$283,376	\$309,589	\$330,344	\$355,838	\$385,700	\$417,182	\$449,929	\$486,186	\$527,281	\$566,385
Refunds	9,301	10,925	11,384	11,558	12,123	11,293	14,139	11,718	12,016	12,123
Total	\$292,677	\$320,514	\$341,728	\$367,396	\$397,823	\$428,475	\$464,068	\$497,904	\$539,297	\$578,508

2019

COMPREHENSIVE ANNUAL FINANCIAL REPORT

A Multiple-Employer Pension Trust Fund

San Bernardino, California

For the Years Ended June 30, 2019 and 2018



San Bernardino County Employees'
Retirement Association

348 West Hospitality Lane | San Bernardino, CA 92408

P. 909.885.7980 | f. 909.885.7446 | www.SBCERA.org