



SAN JOAQUIN COUNTY
EMPLOYEES' RETIREMENT
ASSOCIATION

COMPREHENSIVE ANNUAL FINANCIAL REPORT
FOR THE YEAR ENDED DECEMBER 31, 2017



COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEAR ENDED DECEMBER 31, 2017

ISSUED BY SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

Johanna Shick, *Chief Executive Officer*
Lily Cherng, CPA *Retirement Financial Officer*

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Stockton, California 95202 www.sjcera.org

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San Joaquin County Employees' Retirement Association

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June 1, 2018

Board of Retirement
6 S. El Dorado Street, Suite 400
Stockton, CA 95202



To SJCERA's Trustees, Members and Beneficiaries, Plan Sponsor and Participating Employers:

I am pleased to present to you the Comprehensive Annual Financial Report (CAFR) for the year ended December 31, 2017. This report, which coincides with my one-year anniversary, provides a detailed overview of the SJCERA Plan and the fund's financial, actuarial and investment-related activities for the year. All data and information presented is accurate and reliable, conforms to generally accepted accounting principles, and is free of material misstatements. This Letter of Transmittal is a narrative introduction to the CAFR; I encourage you to read it in conjunction with the Management's Discussion and Analysis included in the Financial Section.

SJCERA AND ITS SERVICES

SJCERA is a public retirement system established by the San Joaquin County Board of Supervisors effective June 28, 1946. SJCERA provides retirement, disability and survivors' benefits to eligible General and Safety members employed by the County of San Joaquin and nine other public agencies:

- Lathrop-Manteca Rural Fire Protection District
- Mountain House Community Services District
- San Joaquin Local Agency Formation Commission
- San Joaquin County Historical Society and Museum
- San Joaquin County Law Library
- San Joaquin County Mosquito and Vector Control District
- San Joaquin County Superior Court
- Tracy Public Cemetery District
- Waterloo-Morada Rural Fire Protection District

SJCERA's nine-member Board of Retirement has exclusive control and fiduciary responsibility for administering the benefits and managing the investment of plan assets. The Board oversees the Chief Executive Officer and staff in the performance of their duties in accordance with the County Employees' Retirement Law (CERL) and the Public Employees' Pension Reform Act of 2013 (PEPRA) as adopted by the Board of Supervisors and Board of Retirement, and the bylaws, policies, and procedures adopted by the Board.

The Board of Retirement includes four trustees appointed by the San Joaquin County Board of Supervisors, the San Joaquin County Treasurer-Tax Collector, and four trustees and one alternate trustee elected by SJCERA members.

INTRODUCTION

LETTER OF TRANSMITTAL

FINANCIAL INFORMATION

SJCERA management is responsible for the accuracy, completeness, and fair presentation of the information in this report, as well as for establishing and maintaining internal controls that ensure SJCERA's financial reporting is accurate and reliable and that SJCERA's assets are protected from loss, theft or misuse. Internal controls are designed to provide reasonable, but not absolute, assurance that these objectives are met. Reasonable assurance recognizes the cost of a control relative to the benefits likely to be derived and that these judgments by management are based on estimates.

Brown Armstrong Accountancy Corporation, a certified public accounting firm, has audited SJCERA's financial statements and related disclosures, which are prepared by management, and attests they are presented in conformity with generally accepted accounting principles (GAAP) in the United States of America as promulgated by the Governmental Accounting Standards Board (GASB) and are free from material misstatement. Internal controls are sufficient to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. The accompanying basic financial statements and transactions of the organization are prepared on the accrual basis of accounting.

INVESTMENTS

SJCERA's strategic asset allocation is designed to ensure diversification among asset classes and achieve SJCERA's long-term objectives. For the year ended December 31, 2017, the portfolio gained 11.85 percent net of fees, which exceeded SJCERA's assumed rate of return of 7.40 percent. As of December 31, 2017, SJCERA's annualized three-year net return was 5.34 percent, the five-year annualized net return was 6.05 percent, and the 10-year annualized net return was 2.93 percent. Plan assets totaled \$2.9 billion as of December 31, 2017. More information about SJCERA's investments is included in the Investments Section.

ACTUARIAL FUNDING

SJCERA engages a professional pension actuary to perform an annual actuarial valuation of the pension plan. Actuarial funding status is determined from a long-term, ongoing perspective. The valuation determines the progress made in accumulating sufficient assets to pay benefits when due. As of January 1, 2017, the pension plan's actuarial accrued liability increased from \$4.0 billion to \$4.2 billion, the actuarial value of assets increased from \$2.6 billion to \$2.7 billion, and the unfunded actuarial liability (UAL) increased from \$1.4 billion to \$1.5 billion. The funding status (ratio of plan assets to plan liabilities) decreased from 65 percent to 64.6 percent. A more detailed discussion of funding is provided in the Actuarial Section of this report.

MAJOR INITIATIVES

SJCERA adopted an ambitious action plan for 2017 and each goal was achieved. Heeding the words of Benjamin Franklin to "Waste neither time nor money, but make the best use of both," efficiency and cost effectiveness were a significant focus in our action plan. A summary of our accomplishment follows.

Reduce Costs. By prudently managing costs, SJCERA's 2017 administrative expenses were approximately \$1 million less than budgeted. To accomplish this, SJCERA postponed

LETTER OF TRANSMITTAL

filling vacant positions, reduced travel expense, and negotiated decreased insurance premiums. In addition, SJCERA reduced investment fees by more than \$230,000 annually by moving the Small Cap Growth U.S. asset class from active to passive management.

Improve Efficiency. Staff implemented a new financial accounting system and completed a comprehensive analysis of our current pension administration system, concluding that enhancing our current system would provide gains in efficiency at a lower cost than purchasing a new system. In addition, staff improved business processes related to disability retirement, payment handling, retirement benefit estimates and service retirement.

Invest in Human Capital. Implemented an employee recognition program and an electronic customer satisfaction survey so that member feedback can also be used to recognize staff's efforts.

Optimize Organizational Structure. The Leadership Team re-aligned business functions and processes, which resulted in better service to members, ensured proper allocation of resources, and improved the prioritization of tasks.

Manage Emerging Organizational Needs. SJCERA improved communications with members and stakeholders. We redesigned and implemented a new website in August 2017, and I reached out to each participating employer with the goal of strengthening our working relationship.

ACHIEVEMENTS IN FINANCIAL REPORTING AND PLAN ADMINISTRATION

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to SJCERA for its Comprehensive Annual Financial Report for the Year Ended December 31, 2017. This award recognizes compliance with the highest standards for state and local government financial reporting.

ACKNOWLEDGMENT

SJCERA's success, as reflected in this report, is the result of the combined effort of many. I want to recognize the trustees of the Board of Retirement for their leadership and policy decisions, which provide direction and focus to our work and set the course towards full funding through prudent investing. Additionally, I want to thank SJCERA's staff for their dedicated service to our members, their commitment to administering the Plan with integrity, and their hard work in compiling this report. We are proud to count ourselves among the many public employees who diligently serve the people of San Joaquin County.

Sincerely,



Johanna Shick
Chief Executive Officer

CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

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

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

December 31, 2016

Christopher P. Morrell

Executive Director/CEO

**PUBLIC PENSION STANDARDS AWARD FOR FUNDING AND
ADMINISTRATION 2017**



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2017***

Presented to

San Joaquin County Employees' Retirement Association

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

Presented by the Public Pension Coordinating Council, a confederation of

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

A handwritten signature in black ink, reading 'Alan H. Winkle'. The signature is fluid and cursive, with the first name 'Alan' being more prominent.

Alan H. Winkle
Program Administrator

INTRODUCTION

MEMBERS OF THE BOARD OF RETIREMENT AS OF DECEMBER 31, 2017



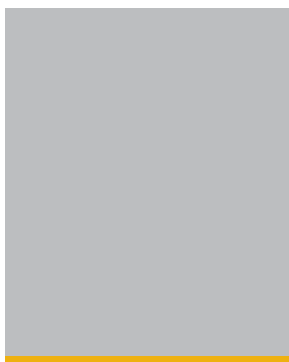
MICHAEL RESTUCCIA
Chair
Appointed by Board
of Supervisors



MICHAEL DUFFY
Vice Chair
Appointed by Board
of Supervisors



RAYMOND MCCRAY
Secretary
Appointed by Board
of Supervisors



(VACANT)
Treasurer-Tax
Collector
Ex-Officio Member



JENNIFER GOODMAN
Elected by General
Members



KATHERINE MILLER
Appointed by Board
of Supervisors



ADRIAN VAN HOUTEN
Elected by Retired
Members



J.C. WEYDERT
Elected by General
Members

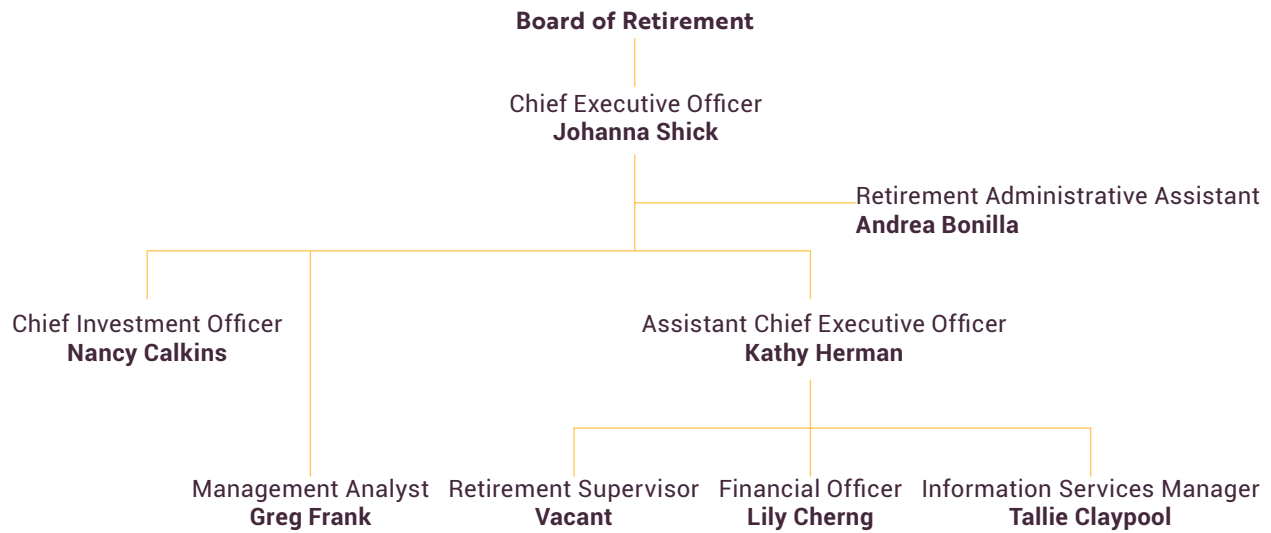


CHANDA BASSETT
Elected by Safety
Members



MARGO PRAUS
Elected by Retired
Members - Alternate

ADMINISTRATIVE ORGANIZATION CHART



LIST OF PROFESSIONAL CONSULTANTS

CONSULTING SERVICES

ACTUARY

Cheiron Actuaries

AUDITORS

Brown Armstrong Accountancy Corporation

CUSTODIAN

Northern Trust Company

INFORMATION SYSTEMS

IG, Incorporated

INVESTMENT CONSULTANTS

Courtland Partners

Pension Consulting Alliance

LEGAL COUNSEL

Hanson Bridgett, LLP

Haydel and Ornellas

Morrison & Foerster

Nossaman, LLP

San Joaquin County Counsel

INTRODUCTION

LIST OF PROFESSIONAL CONSULTANTS

INVESTMENT MANAGERS

CREDIT

Crestline Associates
Marinus Capital Advisors
Medley Capital
Mesa West Capital
Raven Capital Management
Stone Harbor Investment Partners
White Oak Global Advisors

CRISIS RISK OFFSET

AQR Capital Management
Bridgewater Associates (Pure Alpha)
Dodge & Cox Investment Managers
(Long Duration)
Graham Capital Management
Mount Lucas Management
PE Global, LLC

GLOBAL PUBLIC EQUITIES

BlackRock Institutional Trust Co.
Capital Prospects
Invesco Advisers Inc.
PIMCO RAE Fundamental Funds

PRIVATE APPRECIATION

Almanac Realty Investors
Angelo Gordon & Co.
Colony Realty Partners

PRIVATE APPRECIATION (CONT.)

Deutsche Asset & Wealth Management
(RREEF)
Greenfield Acquisition Partners
Steelwave
Miller Global Properties
Morgan Creek Capital Management
Ocean Avenue Capital Partners
Principal Financial Group
Prologis
Walton Street Capital

RISK PARITY

Bridgewater Associates (All Weather)
PanAgora Asset Management Inc.

SHORT TERM INVESTMENTS/CASH CASH EQUIVALENTS

Parametric Engineered Portfolio Solutions
STIF - Northern Trust Company

STABLE FIXED INCOME

Dodge & Cox Investment Managers
(Fixed Income)
DoubleLine Capital
Prima Capital Advisors

Note: Please refer to the Investment Section for a list of *Investment Managers* on pages 69-70 and the *Schedule of Investment Fees* on page 67.



FINANCIAL

INDEPENDENT AUDITOR'S REPORT


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

BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

To the Members of the Board of Retirement and Audit Committee of
San Joaquin County Employees' Retirement Association
Stockton, California

Report on the Financial Statements and Other Information

We have audited the accompanying Statement of Fiduciary Net Position of the San Joaquin County Employees' Retirement Association (SJCERA) as of December 31, 2017, the related Defined Benefit Pension Plan Statement of Changes in Fiduciary Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise SJCERA's basic financial statements as listed in the table of contents. We have also audited the Schedule of Cost Sharing Employer Allocations and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) as of and for the year ended December 31, 2017, listed as other information in the table of contents.

Management's Responsibility for the Financial Statements and Other Information

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

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements and other information based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and other information are free 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 SJCERA'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 SJCERA's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements and other information.

INDEPENDENT AUDITOR'S REPORT

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

Opinions

In our opinion, the financial statements and other information referred to above present fairly, in all material respects, the Fiduciary Net Position of SJCERA as of December 31, 2017; the changes in the Defined Benefit Plan's Fiduciary Net Position for the year then ended; the Schedule of Cost Sharing Employer Allocations; the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) as of and for the year ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Other Matters*Required Supplementary Information*

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

Other Supplementary Information

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

Additional Information

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

INDEPENDENT AUDITOR'S REPORT

Report on Summarized Comparative Information

We have previously audited SJCERA's December 31, 2016 financial statements, and our report dated June 2, 2017, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2016, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June 1, 2018, on our consideration of SJCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering SJCERA's internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
June 1, 2018

MANAGEMENT'S DISCUSSION AND ANALYSIS

Management's Discussion and Analysis (MD&A) presents the overview and analysis of the financial activities of the San Joaquin County Employees' Retirement Association (SJCERA) for the year ended December 31, 2017. This MD&A presents SJCERA's overall financial position and the results of its operations, in conjunction with SJCERA's financial statements and notes.

FINANCIAL HIGHLIGHTS

- SJCERA's fiduciary net position, increased by \$324.5 million, or 12.70 percent, to \$2.9 billion as of December 31, 2017.
- SJCERA's funding objective is to meet long-term benefit obligations through contributions and investment income. As of January 1, 2017, the date of the last actuarial valuation, the funded ratio for the actuarial accrued liability was approximately 64.6 percent. In general, this indicates that for every dollar of benefits liability, SJCERA has \$0.646 of fiduciary net position to cover it. The portion of the pension liability attributable to inactive members (retired or deferred) is fully funded by plan assets. (Note 8c provides a more detailed explanation of recent changes in funded ratio.)
- Revenues for the year were \$534.0 million, an increase of \$193.4 million, or 56.76 percent, from the prior year's \$340.6 million. It was mainly caused by the increase in unrealized gains in comparison to the prior year.
- Expenses for the year were \$209.5 million, an increase of \$10.4 million, or 5.24 percent, from the prior year's \$199.1 million. It was primarily due to the \$10.3 million increase in pension benefit payments to retirees.

OVERVIEW OF FINANCIAL STATEMENTS

The SJCERA 2017 financial statements, notes to the financial statements, required supplementary information, other supplementary information, and other information were prepared in accordance with the accounting principles and reporting standards prescribed by the Governmental Accounting Standards Board (GASB). The following discussion and analysis is intended to serve as an introduction and overview of SJCERA's financial reporting components.

The **Statement of Fiduciary Net Position** is the financial statement that presents the major categories of assets and liabilities and their related values for the Pension Fund. It reflects the resources available for future payments of benefits to retirees and beneficiaries and the current liabilities owed as of December 31, 2017, with comparative totals as of December 31, 2016.

The **Statement of Changes in Fiduciary Net Position** is the financial statement that provides an income statement presentation of annual additions to and deductions from the Pension Fund for the year ended December 31, 2017, with comparative totals as of December 31, 2016.

The **Notes to the Financial Statements** provides additional information that is essential to a full understanding of the data provided in the audited financial statements.

MANAGEMENT'S DISCUSSION AND ANALYSIS

The **Required Supplementary Information** provides the Schedule of Changes of Net Pension Liability and Related Ratios, Schedule of Contributions from the Employers and Other Contributing Sources, Schedule of Investment Returns, and Notes to Required Supplementary Information.

The **Other Supplementary Information** includes a Schedule of Administrative Expenses, Schedule of Investment Expenses, Schedule of Payments to Consultants, and Statement of Changes in Assets and Liabilities for the Post-Employment Healthcare Agency Fund.

The **Other Information** includes two schedules pertaining to GASB Statement No. 68, Schedule of Cost Sharing Employer Allocations and Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan.

DEFINED BENEFIT PENSION PLAN FINANCIAL ANALYSIS

As of December 31, 2017, SJCERA's financial position increased by \$324.5 million, or 12.70 percent, from the prior year, due to the increase of investment income. As of December 31, 2017, SJCERA had \$2.9 billion in fiduciary net position, where the amount of total assets of \$3.0 billion exceeded the total liabilities of \$0.09 billion. For 2017, SJCERA's portfolio investment performance gained 11.85 percent (net of investment expenses) while retiree benefits and other expenses experienced only a moderate increase. Over time, increases and decreases in fiduciary net position are one of the indicators of whether SJCERA's financial situation is improving or deteriorating. Additional factors, such as market conditions, also need to be considered in assessing SJCERA's overall financial situation. The table below compares SJCERA's fiduciary net position as of December 31, 2017 and 2016.

SJCERA FIDUCIARY NET POSITION

	2017	2016	INCREASE (DECREASE) AMOUNT	PERCENT CHANGE
Cash and Receivables	\$ 194,077,851	\$ 235,867,811	\$ (41,789,960)	-17.72%
Investments	2,773,700,839	2,463,815,871	309,884,968	12.58%
Other Assets	163,925	242,630	(78,705)	-32.44%
TOTAL ASSETS	2,967,942,615	2,699,926,312	268,016,303	9.93%
TOTAL LIABILITIES	88,653,984	145,124,188	(56,470,204)	-38.91%
TOTAL FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS	\$ 2,879,288,631	\$ 2,554,802,124	\$ 324,486,507	12.70%

DEFINED BENEFIT PENSION PLAN REVENUES – ADDITIONS TO FIDUCIARY NET POSITION

The reserves needed to finance the retiree benefits are accumulated through the collection of employer and employee contributions and through earnings on investments. The contributions and investment income for the year ended December 31, 2017, totaled \$534.0 million. Of the total \$300.0 million in net investment gain, \$284.7 million is attributable to net appreciation in the fair value of investments.

MANAGEMENT'S DISCUSSION AND ANALYSIS

The overall year 2017 revenues increased by \$193.4 million from that of the prior year, primarily due to appreciation in the fair value of investments.

In 2017, due to an additional five percent contribution from the County of San Joaquin (the County) to decrease its unfunded actuarial liability, the employers' contributions increased by \$41.0 million, or 25.72 percent, over the prior year, and employees' contributions increased by \$3.5 million, or 11.68 percent, over the prior year. The County and the majority of its employees agreed to equally share the normal cost of pre-funding post-retirement cost-of-living adjustments. Prior to 2012, the employer paid 100 percent of the cost to fund this benefit. Beginning in 2013, some employees also began paying an additional percentage of the basic member contribution rate, which reduced the employers' Normal Cost portion of the required contribution. Employers pay all of the required unfunded accrued liability (UAL) amortization payment.

Below is the summary of the changes from year 2016 to year 2017.

Additions to Fiduciary Net Position

	2017	2016	INCREASE (DECREASE) AMOUNT	PERCENT CHANGE
Employers' Contributions	\$ 200,051,742	\$ 159,122,523	\$ 40,929,219	25.72%
Members' Contributions	33,634,906	30,117,408	3,517,498	11.68%
Net Investment and Miscellaneous Income	299,960,693	151,114,788	148,845,905	98.50%
Transfer from Healthcare Agency Fund	364,714	293,779	70,935	24.15%
TOTAL ADDITIONS	\$ 534,012,055	\$ 340,648,498	\$ 193,363,557	56.76%

DEFINED BENEFIT PENSION PLAN EXPENSES – DEDUCTIONS FROM FIDUCIARY NET POSITION

The primary expenses of SJCERA include the payment of benefits to retirees and beneficiaries, the refund of contributions to former members, and the cost of administering the defined benefit pension plan. Expenses for the year 2017 totaled \$209.5 million, an increase of 5.24 percent over 2016. The increase is attributed to annual cost-of-living adjustment to the additional benefit payments for retirees as well as the growth in the number and average amount of benefits paid to retirees.

Deductions from Fiduciary Net Position

	2017	2016	INCREASE (DECREASE) AMOUNT	PERCENT CHANGE
Benefit Payments	\$ 202,408,260	\$ 192,113,542	\$ 10,294,718	5.36%
Members Death Benefits	701,206	618,769	82,437	13.32%
Refunds	2,297,504	1,986,866	310,638	15.63%
Administrative and Other Expenses	4,118,578	4,369,744	(251,166)	-5.75%
TOTAL	\$ 209,525,548	\$ 199,088,921	\$ 10,436,627	5.24%

MANAGEMENT'S DISCUSSION AND ANALYSIS

PLAN ADMINISTRATION

SJCERA MEMBERSHIP

The table below provides comparative SJCERA membership data for the last two fiscal years. Total membership at December 31, 2017, was 13,665, an increase of 426 members, or 3.22 percent, compared to December 31, 2016.

SJCERA Membership
AS OF DECEMBER 31, 2017 AND 2016

	2017	2016	INCREASE (DECREASE) AMOUNT	PERCENT CHANGE
Active Members	6,229	6,102	127	2.08%
Retired Members	5,821	5,628	193	3.43%
Deferred Members	1,615	1,509	106	7.02%
TOTAL MEMBERSHIP	13,665	13,239	426	3.22%

ADMINISTRATIVE EXPENSES

The County Employees Retirement Law of 1937 (CERL) Section 31580.2 states the Administrative Expense may not exceed twenty-one hundredths of one percent (0.21 percent) of the actuarial accrued liability (AAL) of the system.

The table below provides comparison of the actual administrative expenses for the fiscal years ended 2017 and 2016. The AAL was used to calculate the statutory budget amount. SJCERA's administrative expenses were well below the limit imposed by CERL for both years.

Compliance with Statutory Limitation Administrative Expenses

AS OF DECEMBER 31, 2017 AND 2016

(Dollars in Thousands)

	2017	2016
BASIS FOR BUDGET CALCULATION (ACTUARIAL ACCRUED LIABILITY)		
Actual Administrative Expenses	\$ 3,369	\$ 3,615
Actuarial Accrued Liability as Basis for Budget Calculation*	4,006,390	3,731,634
ADMINISTRATIVE EXPENSES AS A PERCENTAGE OF		
The Basis for Budget Calculation	0.08%	0.10%
Limit per CERL	0.21%	0.21%

* Based on valuations dated January 1, 2016 and January 1, 2015, respectively.

ACTUARIAL VALUATIONS

SJCERA engages an independent actuarial firm, Cheiron, to perform an annual actuarial valuation to monitor its funding and funding integrity. The valuation assesses the magnitude of SJCERA's benefit commitments, in comparison with the assets expected to be available to

MANAGEMENT'S DISCUSSION AND ANALYSIS

support those commitments. The most recent Annual Actuarial Valuation as of January 1, 2017, is included in the Actuarial Section of this report, and contains a detailed discussion of the funding requirements. This valuation is used for funding purposes and establishing employer and employee contributions rates. As of the January 1, 2017 actuarial valuation, the AAL was \$4.23 billion and the Actuarial Value of Assets was \$2.73 billion, resulting in an Unfunded Actuarial Liability (UAL) of \$1.50 billion. The funded ratio decreased from 65.0 percent last year to 64.6 percent on an actuarial value of assets basis. Using the market value of assets as of the valuation date, the funded ratio slightly increased from 60.1 percent to 60.3 percent.

For the year ended December 31, 2017, a GASB Statement No. 67/68 report was prepared by Cheiron. The purpose of this report is to provide accounting and financial disclosure information under GASB Statements No. 67 and No. 68. In order to accommodate the annual reporting requirements of our plan sponsors in a timely manner, the valuation was prepared using the January 1, 2017 valuation as the basis for calculating the total pension liability (TPL) and rolled forward to December 31, 2017. Based on this actuarial valuation, the TPL was \$4.5 billion compared to a fiduciary net position of \$2.9 billion, resulting in the employers' net pension liability (NPL) of \$1.6 billion and a fiduciary net position as a percentage TPL of 64.54 percent. The NPL, as a percentage of covered payroll, was 371.43 percent. Please see the Note 8 for more details.

REPORTING SJCERA'S FIDUCIARY RESPONSIBILITIES

SJCERA's Board of Retirement and staff are fiduciaries for the pension plan of the County and certain special districts. Accordingly, SJCERA is responsible for ensuring that the assets reported in the statements are used for the intended purpose of paying retirement benefits to the employees of the County and certain special districts.

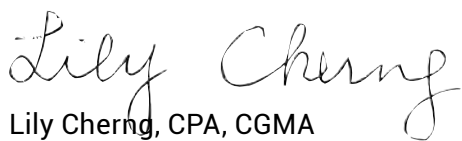
THE RETIREMENT FUND AS A WHOLE

The fund increased 12.7 percent for 2017 from 2016; the net increase in the fair value of investments was \$309.9 million versus the prior year's depreciation of investments of \$135.6 million. The investment section of Note 4 of this report reviews the result of investment activity for the year ended December 31, 2017.

CONTACTING SJCERA'S MANAGEMENT

This financial report is designed to provide the Board of Retirement, the membership, taxpayers, and investment managers with a general overview of SJCERA's finances and to show SJCERA's accountability for the money it receives. Any questions about this report, or need for additional financial information, can be addressed to SJCERA, 6 South El Dorado Street, Suite 400, Stockton, California 95202.

Respectfully Submitted,



Lily Cherng, CPA, CGMA
Retirement Financial Officer

STATEMENTS OF FIDUCIARY NET POSITION AVAILABLE FOR BENEFITS

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
STATEMENT OF FIDUCIARY NET POSITION
AS OF DECEMBER 31, 2017 (WITH COMPARATIVE TOTALS)

	2017		2016	
	Defined Benefit Pension Plan	Post- Employment Healthcare Agency Fund	Defined Benefit Pension Plan	Post- Employment Healthcare Agency Fund
<u>Assets</u>				
Cash and Short-Term Investments				
Cash and Cash Equivalents	\$ 98,314,384	\$ 7,707	\$ 83,994,149	\$ 16,105
Cash Collateral - Securities Lending	86,901,391	-	141,349,290	-
Total Cash and Short-Term Investments	185,215,775	7,707	225,343,439	16,105
Receivables				
Investment Income Receivables	2,974,773	-	3,754,074	-
Contributions Receivables	5,793,466	-	4,190,176	-
Securities Sold, Not Received	35,717	-	2,517,855	-
Miscellaneous Receivables	58,120	-	62,267	-
Total Receivables	8,862,076	-	10,524,372	-
Investments, at Fair Value				
Stable Fixed Income	275,595,222	-	230,000,201	-
Credit	321,700,181	-	314,318,602	-
Global Public Equity	995,174,782	-	811,746,374	-
Private Appreciation	328,280,801	-	308,327,211	-
Risk Parity	372,838,817	-	330,517,689	-
Crisis Risk Offset	480,111,036	-	468,905,794	-
Total Investments, at Fair Value	2,773,700,839	-	2,463,815,871	-
Other Assets				
Prepaid Expenses	90,155	-	127,142	-
Equipment and Fixtures, Net	73,770	-	115,488	-
Total Other Assets	163,925	-	242,630	-
Total Assets	2,967,942,615	7,707	2,699,926,312	16,105
<u>Liabilities</u>				
Securities Lending - Cash Collateral	86,901,391	-	141,349,290	-
Securities Purchased, Not Paid	172,476	-	2,542,373	-
Accrued Expenses and Other Payables	1,475,117	-	1,169,645	-
Securities Lending Interest and Other Payables	105,000	-	62,880	-
Retiree Sick Leave Bank Benefits Payable	-	7,707	-	16,105
Total Liabilities	88,653,984	7,707	145,124,188	16,105
Fiduciary Net Position Restricted for Pension Benefits	\$2,879,288,631	\$ -	\$2,554,802,124	\$ -

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

FINANCIAL

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION AVAILABLE FOR BENEFITS

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION DEFINED BENEFIT PENSION PLAN STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED DECEMBER 31, 2017 (WITH COMPARATIVE TOTALS)

	2017	2016
Additions		
Contributions		
Employers' Contributions	\$ 200,051,742	\$ 159,122,523
Members' Contributions	33,634,906	30,117,408
Total Contributions	<u>233,686,648</u>	<u>189,239,931</u>
Net Investment Income		
Net Appreciation in		
Fair Value of Investments	284,668,325	119,638,107
Interest	19,065,667	21,433,543
Dividends	8,375,172	18,476,288
Real Estate Income, Net	8,352,681	9,870,590
Investment Expenses	(20,954,361)	(19,015,255)
Miscellaneous Investment Income	1,943	8,057
Net Investment Income,		
Before Securities Lending Income	<u>299,509,427</u>	<u>150,411,330</u>
Securities Lending Income		
Earnings	1,440,490	1,149,690
Rebates	(943,349)	(323,724)
Fees	(124,117)	(206,122)
Net Securities Lending Income	<u>373,024</u>	<u>619,844</u>
Total Net Investment Income	<u>299,882,451</u>	<u>151,031,174</u>
Miscellaneous Income	78,242	83,614
Transfer Between Plans	364,714	293,779
Total Additions	<u>534,012,055</u>	<u>340,648,498</u>
Deductions		
Benefit Payments	202,408,260	192,113,542
Death Benefits	701,206	618,769
Refunds of Members' Contributions	2,297,504	1,986,866
Administrative Expenses		
General Administrative Expenses	3,369,124	3,614,872
Other Expenses		
Information Technology Expenses	171,534	215,426
Actuary Fees	144,211	251,775
Fund Legal Fees	433,709	287,671
Total Administrative and Other Expenses	<u>4,118,578</u>	<u>4,369,744</u>
Total Deductions	<u>209,525,548</u>	<u>199,088,921</u>
Changes in Fiduciary Net Position	324,486,507	141,559,577
Fiduciary Net Position Restricted for Pension Benefits		
Beginning of Year	<u>2,554,802,124</u>	<u>2,413,242,547</u>
End of Year	<u>\$ 2,879,288,631</u>	<u>\$ 2,554,802,124</u>

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

NOTES TO THE FINANCIAL STATEMENTS

The San Joaquin County Employees' Retirement Association (SJCERA) is the public employee retirement system established by the County of San Joaquin (County) and is administered by the Board of Retirement of SJCERA to provide retirement, disability, death, and survivor benefits under the County Employees Retirement Law of 1937 (CERL) for the employees of the County and certain special districts within the County. SJCERA also administers the Post-Employment Healthcare Agency Fund. Although the assets of the plans (defined benefit pension and post-employment healthcare) are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to eligible members and beneficiaries of that plan, in accordance with the terms of the plan. A description of the Post-Employment Healthcare Agency Fund is located in Note 2. All notes to the financial statements apply to both plans unless indicated otherwise.

NOTE 1 – DEFINED BENEFIT PENSION PLAN DESCRIPTION

A. GENERAL DESCRIPTION

SJCERA is a contributory defined benefit pension plan initially organized on April 29, 1946, under the provisions of the CERL and the Public Employees' Pension Reform Act of 2013 (PEPRA). SJCERA is administered by the Board of Retirement (Board). Pursuant to Government Code Sections 31520.1 and 31520.5, the Board consists of nine regular members, one alternate retired member, and under certain circumstances an alternate safety member. Four members and the alternate member(s) are elected by SJCERA's members, four are appointed by the County Board of Supervisors, and the County Treasurer is an ex-officio member. Board members serve for a term of three years, except for the County Treasurer who is a permanent member. The Board members as of December 31, 2017, were as follows:

Michael Restuccia, Chair	Jennifer Goodman
Michael Duffy, Vice Chair	Katherine Miller
Raymond McCray, Secretary	Chanda Bassett
Vacant, County Treasurer	Adrian Van Houten
Margo Praus (Retired Alternate)	J.C. Weydert

SJCERA is a multiple-employer retirement system covering the County and certain special districts including the SJC Historical Society and Museum, Local Agency Formation Commission (LAFCO), Lathrop-Manteca Rural Fire Protection District, San Joaquin County Law Library, SJC Mosquito and Vector Control District, Mountain House Community Services District, Superior Courts, Tracy Public Cemetery District, and Waterloo-Morada Rural Fire Protection District. All employees of these special districts and employees of the County are required, automatically upon appointment to a full-time, permanent position, to become members of SJCERA. Persons who commence covered employment at age 60 or older may irrevocably elect to waive membership in SJCERA. Public Health, a division of the County's Healthcare Services Department, became a participant of SJCERA effective June 27, 1993. Prior to that date, they were members of the California Public Employees' Retirement System (CalPERS). The elected officials of the County may become members of SJCERA by applying to the Board of Retirement. All benefits vest after five years of service.

SJCERA has two benefit tiers:

- Tier 1 - Hired into public service on or before December 31, 2012.
- Tier 2 - Hired into public service for the first time on or after January 1, 2013

NOTES TO THE FINANCIAL STATEMENTS

There are two types of memberships:

1. **Safety Member** – Permanent employees engaged in the performance of active law enforcement, including probation officers and fire suppression employees, are considered Safety Members and are not generally covered by Social Security.
2. **General Member** – All other eligible employees not classified as Safety Members are considered General Members and are covered by Social Security.

Membership Summary

SJCERA's membership as of December 31, 2017, is presented below:

	TIER 1	TIER 2	TIER 1	TIER 2	TIER 1	TIER 2	TIER 1	TIER 2	TIER 1	TIER 2
	RETIREEs		BENEFICIARIES		ACTIVE		DEFERRED		TOTAL	
	YEAR 2017									
General	4,184	6	615	-	3,190	2,190	1,208	243	9,197	2,439
Safety	820	1	195	-	632	217	152	12	1,799	230
TOTAL	5,004	7	810	-	3,822	2,407	1,360	255	10,996	2,669

B. PLAN BENEFITS

Eligibility for Retirement

TIER 1:

A Tier 1 member may retire for service at age 50 or older with five years of service credit, and at least ten years have elapsed since the date of membership. A General, Tier 1 member may retire at any age with 30 or more years of service. A Safety, Tier 1 member may retire at any age with 20 or more years of service.

TIER 2:

A Tier 2 member may retire for service with five or more years of service credit upon attaining the minimum retirement age of 52 for General members, and 50 for Safety members.

Any member of SJCERA, regardless of benefit tier, may retire at age 70 with no minimum service credit requirement.

Retirement Benefits

The amount of a monthly allowance at retirement depends upon the type of membership, years of retirement service credit, final compensation, age at retirement, and the benefit option, if any, elected by the member.

TIER 1:

For Tier 1 members, final compensation for purposes of computing a retirement allowance is the average monthly salary for the highest twelve consecutive months of employment. In addition to base salary, final compensation may include other items defined as compensation earnable for retirement purposes.

NOTES TO THE FINANCIAL STATEMENTS

In accordance with a settlement agreement issued on August 22, 2001, SJCERA implemented Government Code Sections 31676.14 and 31664.1 to provide a 2.61 percent of final compensation for each year of service credit at age 62 benefit formula for General, Tier 1 members, and a 3.0 percent of final compensation for each year of service credit at age 50 benefit formula for Safety, Tier 1 members effective January 1, 2001. The settlement also provides an additional \$50 monthly supplemental pay to retirees who retired prior to April 1, 1982, with 15 years or more of County service commencing when the retiree attains age 65. It also provides a supplemental monthly benefit of \$10 per year of service up to 30 years to retirees who retired on or after April 1, 1982, but before January 1, 2001. This "Post 1982" supplemental benefit is payable if sufficient funds exist.

Federal law limits the annual compensation that may be used to calculate retirement benefits (applicable to persons who became SJCERA members January 1, 1996, or later), and the maximum annual benefit payable by SJCERA to any retired member. For 2017, the annual compensation limit under Internal Revenue Code Section 401(a)(17) is \$270,000 and the annual benefit limit under Internal Revenue Code Section 415(b) is \$215,000. Tier 1 retirees whose statutory benefits from SJCERA would exceed the annual benefit limitation are eligible for the County's Replacement Benefits Plan.

TIER 2:

For Tier 2 members, final compensation for purposes of computing a retirement allowance is the average monthly salary for the highest 36 consecutive months of employment. In addition to base salary, final compensation may include other items defined as pensionable compensation.

Tier 2 provides a 2.5 percent of final compensation for each year of service credit at age 67 benefit formula for General members, and a 2.7 percent of final compensation for each year of service credit at age 57 benefit formula for Safety members. PEPRA specifies the maximum annual compensation that may be used to calculate retirement benefits. A lower limit applies to members whose service under SJCERA is also covered by Social Security, and a higher limit applies to members whose service under SJCERA is not covered by Social Security. These limits are adjusted annually based on changes in the Consumer Price Index (CPI). For 2017, the annual compensation limit is \$118,775 for those included in Federal Social Security System and \$142,350 for those not included.

Cost-of-Living Adjustment (COLA)

For both Tier 1 and Tier 2 members, monthly allowances are eligible for an annual cost-of-living adjustment (COLA) based on the change in the CPI for the San Francisco-Oakland-San Jose area for the previous calendar year, up to a maximum of 3.0 percent, because the Bureau of Labor Statistics does not publish a CPI for San Joaquin County. When the CPI exceeds 3.0 percent in any year, the difference between the actual change in CPI (rounded to the nearest one-half percent) and the 3.0 percent ceiling is "accumulated" for future years when the change is less than 3.0 percent. The plan's actuary has determined that the CPI for All Urban Consumers in San Francisco-Oakland-San Jose area increased by 3.09 percent in 2016, resulting in the maximum COLA of 3.0 percent, effective in April 2017.

NOTES TO THE FINANCIAL STATEMENTS

Under the statutory requirements of the CERL, this change must be rounded to the nearest half percent. Therefore, members received an increase in benefits of 3.0 percent in 2017, based on the changes in the CPI. Members' accumulated carry-over balances as of April 1, 2017, remain the same as they were on April 1, 2016.

Terminated Member's Deferred Allowance and Withdrawal Benefits

Members who terminate all employment with participating employers may elect to withdraw his or her accumulated member contributions, including credited interest. A member electing such withdrawal terminates membership in and forfeits all related rights and benefits from SJCERA. A terminated member does not have a right to withdraw or otherwise receive employer contributions prior to the member's retirement.

Alternatively, terminated members may leave their member contributions on account with SJCERA and continue participating in interest accumulation thereon.

A member with five or more years of credited service who terminates all employment with participating employers and leaves his or her contributions on account with SJCERA is eligible for a deferred retirement. A deferred vested member may retire on or after the date the member meets the retirement eligibility requirements for the tier of benefits to which the member is subject.

Death Benefits

The beneficiary of an actively employed member who dies prior to attaining five years of credited service is refunded the member's accumulated contributions, with interest, and receives one month's salary for each full year of service, up to a maximum of six months' salary.

If the death occurs after five years of credited service and is not the result of a service-related injury or disease, the surviving spouse or minor children may elect to receive, in lieu of the lump sum benefit of the retirement contributions to date including interest and one month's salary for each full year of service up to six months' salary, either 60 percent of the retirement allowance to which the deceased member would have been entitled had the member retired on either a service retirement or nonservice-connected disability retirement on the date of death, or a lump sum payment of six months' salary and a reduced monthly retirement benefit. The monthly allowance to minor children is discontinued once they marry or reach age 18 (age 22 if a full-time student).

The beneficiary of a deferred member receives the member's contributions plus accumulated interest.

Upon the death of a retiree, the beneficiary receives a retirement benefit as determined by the benefit option elected by the member at the time of retirement. In addition, the beneficiary also receives a \$5,000 death benefit, which is paid from retirement reserves.

NOTES TO THE FINANCIAL STATEMENTS**NOTE 2 – POST-EMPLOYMENT HEALTHCARE AGENCY FUND**

The Post-Employment Healthcare Agency Fund is used as a clearing account for cash flows in from employers to fund Sick Leave Bank Benefits for their eligible retired employees on a pay-as-you-go basis, and for cash flows out for payment of Sick Leave Bank Benefits. The Sick Leave Bank Benefit provides that accumulated unused and un-cashed sick leave upon retirement can be converted to a Sick Leave Bank at a rate of \$27.65 per hour. Retired or deferred members who were employed prior to August 27, 2001, are eligible for Sick Leave Bank Benefits.

In 2007, the San Joaquin Superior Court (Court) extended eligibility for Sick Leave Bank Benefits to Court employees hired on or after August 27, 2001. Employers fund the Sick Leave Bank Benefits and employees are not required to contribute to the plan.

Eligible retired and deferred members may use their Sick Leave Bank Benefits to pay for employer-sponsored group health, dental, and vision care insurance premiums and/or reimbursement of Medicare Part B premiums for the members, their spouses, and dependents. When a retiree's Sick Leave Bank is depleted, the retiree assumes responsibility for payment of health, dental, and vision care insurance premiums.

SJCERA allocates the investments held at December 31, 2017, between the Defined Benefit Pension Plan and the Post-Employment Healthcare Agency Fund based on the internal records of the respective accounts at December 31, 2017.

The Post-Employment Healthcare Agency Fund accounts for assets held as an agent on behalf of others. The funds held within the Post-Employment Healthcare Agency Fund do not meet the definition of a qualifying OPEB Trust under GASB Statement No. 74. This fund is custodial in nature and does not measure the results of operations.

**NOTE 3 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES
– PENSION PLAN****A. BASIS OF ACCOUNTING**

SJCERA's financial statements are presented on the accrual basis of accounting. Employer and employee contributions that should have been made in the calendar year based on the actuarial determined contribution rates or amounts are recognized as revenues of that calendar year. Contributions receivable pursuant to an installment contract are also recognized in full in the year in which the contract is made. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. REPORTING ENTITY

SJCERA, governed by the Board and considered as an independent entity, is a blended component unit of the County. SJCERA's annual financial statements are included in the County's financial reports as a pension trust fund.

NOTES TO THE FINANCIAL STATEMENTS

C. CASH EQUIVALENTS

SJCERA's cash and short-term investments are managed by The Northern Trust Company (NT) and the County Treasurer.

THE NORTHERN TRUST COMPANY

Cash not required for daily operations is deposited with NT, SJCERA's master custodian for investment securities. NT pools from its clients all cash pending permanent investment in its Short-Term Investment Fund (STIF). The cash in the STIF account is invested in high-grade money market instruments with very short maturities, such as bonds, notes, and other evidence of indebtedness, in accordance with SJCERA's investment policy.

The cash collateral received under the security lending program is invested by NT through its security lending collateral fund, which is created solely for the investment of cash collateral.

COUNTY TREASURER

Cash necessary for SJCERA's daily operations is pooled with other County funds for short-term investment by the County Treasurer. The County is responsible for the control and safekeeping of all instruments of title and for all investment of the pooled funds.

D. METHOD USED TO VALUE INVESTMENTS

Investments are carried at fair value. Fair values for investments are derived by various methods as indicated in the following table.

Publicly traded stocks and bonds, and issues of the U.S. Government and its agencies	Most recent sales price as of the fiscal year-end. International securities reflect currency exchange rates in effect at December 31, 2017.
Mortgages	Equivalent pricing to comparable Government National Mortgage Association (GNMA).
Real estate equity funds	Fair market value as provided by real estate fund manager.
Real estate title holding corporations and limited liability companies	Fair market value of the investment as provided by fund managers, unless an alternative value has been determined by the Board per SJCERA's Real Estate Investment Policy and reviewed by SJCERA's Investment Consultant.
Private equity	Fair market value as provided by the investment manager and reviewed by SJCERA's Investment Consultant.
Private placement bonds	Face value of the security subject to designated conditions such as sales restrictions or limited marketability.

NOTES TO THE FINANCIAL STATEMENTS

E. CAPITAL ASSETS

Capital assets, mainly leasehold improvements, furniture, and equipment, acquired by SJCERA are capitalized at cost. Depreciable capital assets are depreciated using the straight-line method over estimated useful lives of 3 to 7 years for computer equipment, furniture, and other equipment. Leasehold improvements are amortized over the life of the lease. Depreciation expenses of the capital assets are included in general administrative expenses.

The change in capital assets owned for the year 2017 is presented below:

	BALANCE JANUARY 1, 2017	ADDITIONS	DELETIONS	BALANCE DECEMBER 31, 2017
Original Cost	\$ 1,547,471	\$ 9,411	\$ (20,019)	\$ 1,536,863
Accumulated Depreciation	(1,431,983)	(51,129)	20,019	(1,463,093)
NET BOOK VALUE	\$ 115,488	\$ (41,718)	\$ -	\$ 73,770

Depreciation expense for the year ended December 31, 2017, was \$51,129.

F. OPERATING LEASE

SJCERA leases office space for the administration of the plans on the fourth floor of 6 S. El Dorado Street in Stockton. The lease specifies the rate for each year of the term. Total rent expense under this agreement for the current year was \$264,869. The terms of the lease expire at the end of November 2019.

The estimated total minimum rent expense projected based on the remaining term of the lease agreement is \$524,430.

YEAR ENDED DECEMBER 31	TOTAL
2018	\$ 270,708
2019	253,722
	\$ 524,430

G. RECEIVABLES

Receivables consist primarily of interest, dividends, investments in transition (traded but not yet settled), and contributions owed by participating employers. Contributions receivable pursuant to an installment contract between the employee and SJCERA for purchases of certain service credits are recognized in full in the year in which the contract is made even though the service credits are not granted until the full payment is received.

H. USE OF ESTIMATES IN THE PREPARATION OF FINANCIAL STATEMENTS

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make certain estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

NOTES TO THE FINANCIAL STATEMENTS

I. RECLASSIFICATIONS

Comparative data for the prior year have been presented in the selected sections of the accompanying Statements of Fiduciary Net Position and Changes in Fiduciary Net Position. Also, certain accounts presented in the prior year's data may have been reclassified to be consistent with the current year's presentation.

NOTE 4 – CASH AND INVESTMENTS

A. INVESTMENT SECURITIES LENDING

SJCERA participates in NT's pooled security lending program. Under the agreement, NT is authorized to lend SJCERA's securities that it holds to certain SJCERA approved borrowers. NT does not have the ability to pledge or sell collateral securities unless a borrower default occurs.

All loans are fully collateralized with either cash, securities issued or fully guaranteed by the U.S. government, or irrevocable bank letters of credit. All collateral is held or invested by NT. The term or maturity of the securities loaned is generally matched with the term or maturity of the investment of the cash collateral. U.S. securities are loaned with collateral valued at 102 percent of the fair value of the securities plus any accrued interest. Non-U.S. securities are loaned with collateral valued at 105 percent of the fair value of the securities plus any accrued interest.

As of December 31, 2017, SJCERA had the following securities out on loan:

	FAIR VALUE OF SECURITIES LENT	CASH COLLATERAL VALUE	NON-CASH COLLATERAL VALUE
U.S. Equities	\$ 20,686,675	\$ 20,072,406	\$ 1,182,793
U.S. Debt Securities	105,136,697	66,828,985	40,830,109
TOTAL U.S. SECURITIES	125,823,372	86,901,391	42,012,902
Non-U.S. Equities	8,954,972	-	9,517,417
Non-U.S. Debt Securities	64,173,942	-	67,750,525
TOTAL NON-U.S. SECURITIES	73,128,914	-	77,267,942
TOTAL	\$ 198,952,286	\$ 86,901,391	\$ 119,280,844

The cash collateral is reported on the financial statements as assets and as liabilities of SJCERA. Securities lending transactions collateralized by letters of credit or by securities that SJCERA does not have the ability to pledge or sell unless the borrower defaults should not be reported as assets and liabilities in accordance with Governmental Accounting Standards Board (GASB) Statement No. 28. The potential risks involved in the securities lending program include borrower bankruptcy, collateral deficiencies, settlement problems, corporate actions, dividends, and interest. SJCERA's pro-rata share of net income derived from NT's pooled securities lending transactions in 2017 was \$1,440,490. As of December 31, 2017, there was no credit risk exposure to borrowers because the collateral exceeded the amount borrowed. The securities on loan at year-end were \$199 million and the collateral received for those securities on loan was \$206 million.

NOTES TO THE FINANCIAL STATEMENTS

B. CASH AND SHORT-TERM INVESTMENTS

The carrying value of cash and short-term investments at December 31, 2017, consists of the following:

	AMOUNT
Cash and Cash Equivalents - Custodian	\$ 97,603,334
Cash and Cash Equivalents - County Treasury	718,757
TOTAL CASH AND CASH EQUIVALENTS	98,322,091
Cash and Cash Equivalents - Securities Lending - Custodian	86,901,391
TOTAL CASH AND SHORT-TERM INVESTMENTS	\$ 185,223,482

C. LONG-TERM INVESTMENTS

SJCERA owned the following long-term investments at December 31, 2017:

	FAIR VALUE
INVESTMENTS - CATEGORIZED	
Stable Fixed Income	\$ 275,595,222
Credit	321,700,181
Global Public Equities	995,174,782
Private Appreciation	328,280,801
Risk Parity	372,838,817
Crisis Risk Offset (CRO)	480,111,036
TOTAL INVESTMENTS - CATEGORIZED	\$ 2,773,700,839
INVESTMENTS - NOT CATEGORIZED	
Investments Held by Broker-Dealers Under Securities Loans	
U.S. Equities	20,072,406
U.S. Debt Securities	66,828,985
TOTAL INVESTMENTS HELD BY BROKER-DEALERS UNDER SECURITIES LOANS	86,901,391
TOTAL INVESTMENTS	\$ 2,860,602,230

GASB Statement No. 40, *Deposits and Investments Risk Disclosures*, establishes and modified disclosure requirements related to the following:

- Credit risk
- Custodial credit risk
- Concentration of credit risk
- Interest rate risk
- Foreign currency risk

NOTES TO THE FINANCIAL STATEMENTS

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. SJCERA's Investment Policy seeks to maintain a diversified portfolio of fixed income instruments in order to obtain the highest total return for the fund at an acceptable level of risk within the asset class. To control such risk, credit quality guidelines have been established for the separately managed accounts. The following table depicts the value of the investments exposed to those risks and the corresponding credit ratings from Standard & Poor's (S&P) at December 31, 2017.

QUALITY RATINGS	FAIR VALUE
AAA	\$ 6,113,795
AA	2,932,432
A	12,759,035
BBB	39,669,639
BB	9,946,220
B	3,243,115
CCC	10,182,148
D	7,107,002
Not Rated	245,100,255
SUBTOTAL	337,053,641
U.S. Government Agencies - Implied AAA (FNMA, FHLB, FHLMC, FFCB, SLMA, Other)	260,241,762
TOTAL INVESTMENTS IN FIXED INCOME SECURITIES	\$ 597,295,403

Custodial Credit Risk

The custodial credit risk represents the risk that, in the event of the failure of the counterparty of a transaction, SJCERA will not be able to recover the value of deposits and investments or collateral securities that are in the possession of an outside party.

DEPOSITS

The deposits with the County Treasurer are uninsured but secured by public funds of the pledging banks. The pool's investments, all held in the County's name, are short-term and include U.S. Treasury Bills, certain Federal agencies' instruments, bankers' acceptances, "prime" commercial paper, certificates of deposit, repurchase agreements, and the State Treasurer's Local Agency Investment Fund.

The cash deposits with NT are uninsured and uncollateralized. All underlying investments in the commingled STIF account are not registered in SJCERA's name.

INVESTMENTS

Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in SJCERA's name, and held by the counterparty. SJCERA's investment securities are not exposed to custodial credit risk because all securities are held by SJCERA's custodial bank in SJCERA's name, or by other qualified third party administrator trust accounts.

NOTES TO THE FINANCIAL STATEMENTS

Concentration of Credit Risk

This risk represents the potential loss attributable to the magnitude of SJCERA's investments in a single issuer. As of December 31, 2017, for separately managed investment accounts, SJCERA did not hold any investments within any one issuer that would represent five percent (5%) or more of plan fiduciary net position.

Interest Rate Risk

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

As of December 31, 2017, SJCERA had the following interest rate sensitive investments:

INVESTMENT TYPE	FAIR VALUE	WEIGHTED AVERAGE MATURITY – YEARS
U.S. GOVERNMENT AND AGENCY INSTRUMENTS		
U.S. Government Mortgages	\$ 56,265,867	24.44
U.S. Government Bonds	166,756,779	18.86
U.S. Government-Issued Commercial Mortgage-Backed	59,891	8.08
Index Linked Government Bonds	1,814,253	2.66
Municipal/Revenue Bonds	3,207,351	14.26
Agency	1,591,267	16.21
Short-Term Bills and Notes	59,552,118	0.07
TOTAL U.S. GOVERNMENT AND AGENCY INSTRUMENTS	289,247,526	
CORPORATE SECURITIES		
Asset Backed Securities	13,550,172	19.01
Bank Loans	15,774	5.29
Collateralized Bonds	202,898	28.53
Commercial Mortgage-Backed	11,343,975	21.25
Corporate and Other Credit	61,590,382	11.40
Non-Government Backed Collateralized Mortgage Obligations (CMOs)	45,391,197	20.38
TOTAL CORPORATE SECURITIES	132,094,398	
REAL ESTATE FINANCING	175,953,479	
TOTAL FIXED INCOME SECURITIES	\$ 597,295,403	

NOTES TO THE FINANCIAL STATEMENTS

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates may adversely affect the fair value of an investment. SJCERA's external non-U.S. equity and fixed income investment managers may invest in international securities in accordance with their investment guidelines pertaining to these types of investments.

Currency hedging on an unleveraged basis is permitted by non-U.S. equity managers as a strategy to protect against losses due to currency translations (defensive hedging). However, it is expected that the primary sources of value-added for non-U.S. equity investment managers will be stock and country selection, with currency management focused on limiting losses due to fluctuations in currency values. Managers may purchase or sell currency on a spot basis to accommodate securities settlements.

Managers may invest in developed market currencies and emerging market currencies in accordance with their investment guidelines. Permitted instruments are currency spots, currency forward contracts (deliverable or non-deliverable), currency futures, options on currency forwards or futures, and currency swaps. Other investments, contracts, or positions that, in the managers' judgment, are of similar purpose and character and equal credit quality and marketability to any of the investments above, are also permissible.

SJCERA's exposure to foreign currency risk in U.S. dollars as of December 31, 2017, is:

CURRENCY	FAIR VALUE
British Pound Sterling	\$ 3,141
Canadian Dollar	361,656
Euro Currency	27,962
Swiss Franc	17,364
TOTAL	\$ 410,123

D. FAIR VALUE MEASUREMENT

SJCERA implemented GASB Statement No. 72, Fair Value Measurement and Application, in 2016. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The statement establishes a fair value hierarchy based on three types of input to develop the fair value measurements for investments. The level is determined based on the lowest level of input significant to the measurement in its entirety.

NOTES TO THE FINANCIAL STATEMENTS

Assets and liabilities measured at fair value are classified into one of the following categories:

Fair Value Hierarchy

Level 1 – reflects unadjusted quoted prices in active markets for identical assets or liabilities accessible on the measurement date. Observable markets include exchange markets, dealer markets, and brokered markets.

Level 2 – reflects similar observable inputs other than quoted market prices. It includes quoted prices for similar assets in active markets or quoted prices for identical or similar assets in inactive markets.

Level 3 – reflects prices based on unobservable sources. They should be used only when relevant Level 1 and Level 2 inputs are unavailable.

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NOTES TO THE FINANCIAL STATEMENTS

The following table presents fair value measurements as December 31, 2017.

INVESTMENTS BY FAIR VALUE LEVEL	TOTAL FAIR VALUE	QUOTED PRICES IN ACTIVE MARKETS FOR IDENTICAL ASSETS (LEVEL 1)	SIGNIFICANT OTHER OBSERVABLE INPUTS (LEVEL 2)	SIGNIFICANT UNOBSERVABLE INPUTS (LEVEL 3)
EQUITIES				
Common Stocks	\$ 79,530,116	\$ 79,520,011	\$ 10,105	\$ -
Preferred Stocks	898,596	898,596	-	-
Rights and Warrants	186	-	186	-
TOTAL EQUITIES	80,428,898	80,418,607	10,291	-
FIXED INCOME				
Asset Backed Securities	13,550,172	-	13,550,172	-
Bank Loans	15,774	-	15,774	-
Collateralized Bonds	202,898	-	202,898	-
Commercial Mortgage-Backed	11,343,975	-	11,343,975	-
Corporate Bonds	61,590,382	-	61,590,382	-
Funds - Corporate Bonds	5,149,237	-	5,149,237	-
Funds - Government Bonds	6,471,282	-	6,471,282	-
Government Issued Commercial Mortgage Backed	59,891	-	59,891	-
Government Agencies	1,591,267	-	1,591,267	-
Government Bonds	166,756,779	-	166,756,779	-
Government Mortgage Backed Securities	56,265,867	-	56,265,867	-
Index Linked Government Bonds	1,814,253	-	1,814,253	-
Municipal/Provincial Bonds	3,207,351	-	3,207,351	-
Non Government Backed CMO's	45,391,197	-	45,391,197	-
Other Fixed Income	101,804,281	-	101,804,281	-
TOTAL FIXED INCOME	475,214,606	-	475,214,606	-
OTHER ASSETS				
Short-Term Bills and Notes	57,857,690	57,857,690	-	-
Future Contracts	1,677,193	1,677,193	-	-
Option Contracts	631,135	631,135	-	-
Swaps	(514,114)	-	(514,114)	-
TOTAL OTHER ASSETS	59,651,904	60,166,018	(514,114)	-
Collateral from Securities Lending	86,901,391	-	86,901,391	-
TOTAL INVESTMENTS BY FAIR VALUE	\$ 702,196,799	\$ 140,584,625	\$ 561,612,174	\$ -
INVESTMENTS MEASURED AT THE NET ASSET VALUE (NAV)				
Global Equities Funds	915,654,767			
Fixed Income Funds	185,777,971			
Risk Parity Funds	372,838,817			
Multi-Strategy Hedge Funds	268,521,603			
Hedge Funds - Fixed Income	47,707,775			
Private Equity Funds	81,775,897			
Private Real Estate Funds	286,128,601			
TOTAL INVESTMENTS MEASURED AT NAV	2,158,405,431			
TOTAL INVESTMENTS	\$ 2,860,602,230			

NOTES TO THE FINANCIAL STATEMENTS

Investments Measured at Net Asset Value (NAV)

SJCERA measures certain investments that do not have a readily determinable fair value, such as hedge funds, commingled funds, and private equity funds, using NAV as a practical expedient. The SJCERA investments valued at NAV are the majority holdings for SJCERA portfolio. The following table presents the unfunded commitments, redemption frequency (if currently eligible), and the redemption notice period for SJCERA investments measured at NAV.

The following table presents the investments measured at NAV as December 31, 2017:

INVESTMENTS MEASURED AT NAV	FAIR VALUE	UNFUNDED COMMITMENT	REDEMPTION FREQUENCY IF CURRENTLY ELIGIBLE	REDEMPTION NOTICE PERIOD
Global Equities Funds	\$ 915,654,767	\$ -	Daily, Weekly, Semi-Monthly, Monthly	1-30 Days
Fixed Income Funds	185,777,971	27,321,900	Daily, Not Eligible	1 Day
Risk Parity Funds	372,838,817	-	Monthly	5-15 Days
Multi-Strategy Hedge Funds	268,521,603	-	Daily, Weekly, Semi-Monthly, Monthly	0-15 Days
Hedge Funds - Fixed Income	47,707,775	12,717,985	Daily, Quarterly, Not Eligible	0-60 Days
Private Equity Funds	81,775,897	55,800,000	Not Eligible	Not Applicable
Private Real Estate Funds	286,128,601	108,063,818	Quarterly, Not Eligible	Not Applicable
TOTAL INVESTMENTS MEASURED AT NAV	\$ 2,158,405,431	\$ 203,903,703		

Global Equity Funds - Assets within these funds represent shares of ownership in a U.S. headquartered corporation, including publicly traded common stocks, American and Global Depository Receipts, as well as Real Estate Investment Trusts (REITS).

Fixed Income Funds - Funds within this segment represent debt instruments of corporations, government or agencies characterized by a fixed or variable interest rate and stated maturity date, including marketable bonds.

Risk Parity Funds - Funds within this segment represent portfolios that seek to balance the risk characteristics of assets across multiple segments. These portfolios generally invest in equities, bonds and commodities among other assets.

Multi-Strategy Hedge Funds - Funds within this segment can involve holding both long and short positions in securities instead of traditional long-only investments in publicly traded investments. Portfolios also may utilize derivatives or hedging strategies as well. Multi-Strategy managers utilized various investment segments to invest, including but not limited to, equities, bonds, currency, and commodities.

Hedge Funds (Fixed Income) - Funds within this segment can involve holding both long and short positions in securities instead of traditional long-only investments in publicly traded investments. Portfolios also may utilize derivatives or hedging strategies as well. These investment funds generally focus on opportunities within fixed income markets.

NOTES TO THE FINANCIAL STATEMENTS

Private Equity Funds - These funds are illiquid allocations that invest primarily in buyout funds, venture capital, and debt/special situations. These funds are not eligible for redemption and investment periods are generally between 5 and 15 years.

Private Real Estate Funds - These funds are defined as those investments that are unleveraged or leveraged positions in real property. The portfolios may pursue direct privately held partnership interests, publicly traded real estate securities, fund-of-funds interests, and direct holdings for its real estate allocation.

E. SUMMARY OF INVESTMENT POLICY

The CERL vests the Board with exclusive control over SJCERA's investment portfolio. The Board established Investment Policies in accordance with applicable local, State, and Federal laws. The Board members exercise authority and control over the management of SJCERA's assets (the Plans) by setting policy which the Investment Staff executes either internally, or through the use of external prudent experts. The Board oversees and guides the Plans subject to the following basic fiduciary responsibilities:

- Solely in the interest of, and for the exclusive purpose of, providing economic benefits to participants and their beneficiaries.
- With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character with like objectives.
- Diversify the investments of the Plans so as 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. Diversification is applicable to the deployment of the assets as a whole.

F. TARGET ASSET ALLOCATION

The Board completed an asset-liability study during 2015, facilitated by its investment consultant, Pension Consulting Alliance (PCA), and its consulting actuary, Cheiron, Inc. A key aspect of the study was the Board's consensus on how it defines risk and determining its tolerance for risk, which plays a significant role in the selection of the policy mix of assets that comprise the strategic asset allocation for the investment program.

On October 23, 2015, the Board adopted a revised strategic asset allocation policy for SJCERA's investments. The portfolio was reorganized into more risk-aligned strategic asset classes, and added a 20 percent allocation to a new Crisis Risk Offset (CRO) strategic class. The purpose of this CRO class is to provide significant return during a growth crisis using liquid instruments available at scale for a reasonable cost. This would include strategies involving treasury rate duration, systematic trend following, and liquid alternative risk premia.

This new asset allocation policy was implemented in 2016 and SJCERA was at or near these policy targets throughout 2017. The move to the new strategic asset allocation is expected to improve the likelihood of the plan accomplishing its primary financial objective: to earn a long-term return that, coupled with projected contributions, is projected to be sufficient to attain full funding in the long term while avoiding substantial deterioration in funded status along the way.

NOTES TO THE FINANCIAL STATEMENTS

CURRENT ASSET ALLOCATION POLICY			
ASSET CLASS	POLICY ALLOCATION PERCENTAGE	PURPOSE	MAIN RISK EXPOSURES
Global Public Equity ¹	30.00%	Return	Growth, Currency
Stable Fixed Income	10.00%	Income, Stability	Interest Rates
Credit	14.00%	Income, Growth	Growth
Private Appreciation ²	12.00%	Return	Growth
Risk Parity	14.00%	Balanced Return	Growth, Interest Rates, Inflation
Crisis Risk Offset (CRO) Long Duration Systematic Trend Following Alternative Risk Premia	20.00%	Return and Liquidity During a Growth Crisis	Interest Rates Variable Based on Trends Alternative Factor Risks
	100.00%		

¹ Includes 3% public real estate securities

² Includes 7% private real estate equity investments

NOTE 5 – DERIVATIVE FINANCIAL INSTRUMENTS

The Board has authorized certain investment managers to invest in, or otherwise enter into, transactions involving derivative financial instruments when such transactions are consistent with the investment objectives established for a specific investment manager's assignment. A professional investment consultant is employed to monitor and review each investment manager's securities and derivative position as well as the manager's performance relative to established benchmark rates of return and risk measures. Derivative activities must be evaluated within the context of the overall portfolio performance and cannot be evaluated in isolation.

Investment derivatives involve the following types of risks:

Market Risk: Market risk is the risk of change in value of an instrument in response to changes in a market price or index. While all investments are subject to market risk, derivatives often have a higher degree of market risk than other types of investment instruments. Values of cash securities containing derivative features are often more susceptible to market risk than other types of fixed income securities because the amounts and/or timing of their scheduled cash flows may fluctuate under changing market conditions, according to their contractual terms. For other types of derivatives, amounts of contractual cash flows may be either positive or negative depending upon prevailing market conditions relative to the reference prices or rates, and thus the values of such instruments may be positive or negative, despite the fact that little or no cash is initially exchanged to enter into such contacts.

NOTES TO THE FINANCIAL STATEMENTS

Credit Risk: Credit risk of cash securities containing derivative features is based upon the credit worthiness of the issuers of such securities. It includes the risk that counterparties to contracts will not perform and/or the public exchange will not meet its obligation to assume this counterparty risk. Exchange traded derivatives are generally considered to be of lower credit risk than over-the-counter derivatives due to the exchange's margin requirements. The derivative investments are exchange traded, and credit risk is limited to the clearing corporation. As of December 31, 2017, collateral for derivatives was \$6.4 million. This represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform as contracted.

The following Credit Risk Analysis schedule discloses the counterparty credit ratings of SJCERA's derivative investments as December 31, 2017. The Rights/Warrants are equity contracts received from bankruptcy proceedings and as such are not rated. The swaps represent a basket of multiple securities. There is no single rating.

CREDIT RISK ANALYSIS
AS OF DECEMBER 31, 2017

DERIVATIVE TYPE	S & P CREDIT RATING	
	NOT RATED	TOTAL FAIR VALUE
Rights/Warrants	\$ 186	\$ 186
Swap Agreements	(514,114)	(514,114)
TOTAL	\$ (513,928)	\$ (513,928)

Interest Rate Risk: Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Interest rate swaps are an example of an investment that has a fair value that is highly sensitive to interest rate changes. SJCERA is exposed to interest rate risk in the form of futures contracts and option contracts in the following global government bond markets:

INTEREST RATE RISK
AS OF DECEMBER 31, 2017

GLOBAL BONDS	FUTURES CONTRACTS	OPTION CONTRACTS
Canadian Government Bond	\$ (12,469,179)	\$ -
Long Gilt	10,151,102	-
Japanese Government Bond	12,046,873	-
Euro Bond	4,466,273	-
U.S. Ten Year Notes	(9,923,750)	-
Eurodollars	(65,745,725)	597,890
TOTAL	\$ (61,474,406)	\$ 597,890

NOTES TO THE FINANCIAL STATEMENTS

SJCERA measures derivative interest rate risk using duration with varying maturities of less than three months to more than 10 years. At December 31, 2017, SJCERA had the following investment derivative interest rate risks:

INTEREST RATE RISK ANALYSIS

As of December 31, 2017

(DOLLARS IN THOUSANDS)

DERIVATIVE TYPE	NOTIONAL VALUE	FAIR VALUE	< 3 MONTHS	3 TO 6 MONTHS	6 TO 12 MONTHS	1 TO 5 YEARS	5 TO 10 YEARS	10+ YEARS
Futures Contracts	\$ 19,317	\$ -	\$ 19,317	\$ -	\$ -	\$ -	\$ -	\$ -
Swap Agreements	-	(514)	-	-	-	(514)	-	-
Rights/Warrants	-	-	-	-	-	-	-	-
TOTAL	\$ 19,317	\$ (514)	\$ 19,317	\$ -	\$ -	\$ (514)	\$ -	\$ -

Foreign Currency Risk: Foreign currency risk is the risk that changes in currency exchange rates will adversely affect the fair value of an investment. Currency forward contracts represent foreign exchange contracts that are used to control currency exposure and facilitate the settlement of international security purchase and sale transactions. At December 31, 2017, SJCERA had the derivative foreign currency exposures listed in the table below.

FOREIGN CURRENCY RISK ANALYSIS

As of December 31, 2017

CURRENCY	FUTURES CONTRACTS	OPTION CONTRACTS	INTEREST RATE CONTRACTS
Australian Dollar	\$ 390,550	\$ 14,685	\$ -
Canadian Dollar	9,139,663	-	-
Euro Currency	7,849,075	-	(110,999)
British Pound Sterling	7,795,275	-	-
Japanese Yen	(7,799,750)	-	-
Swiss Franc	(7,874,338)	-	-
TOTAL	\$ 9,500,475	\$ 14,685	\$ (110,999)

Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative. Gains and losses from derivatives are included in net investment income (loss). For financial reporting purposes, all SJCERA derivatives are classified as investment derivatives.

NOTES TO THE FINANCIAL STATEMENTS

Derivative financial instruments held by SJCERA from time to time consist of the following:

FUTURES CONTRACTS

A futures contract represents an agreement to buy (long position) or sell (short position) an underlying asset at a specified future date for a specified price. Payment for the transaction is delayed until a future date, which is referred to as the settlement or expiration date. Futures contracts are standardized contracts traded on organized exchanges.

OPTION CONTRACTS

An option contract is a type of derivative security in which a buyer (purchaser) has the right, but not the obligation, to buy or sell a specified amount of an underlying security at a fixed price by exercising the option before its expiration date. The seller (writer) has an obligation to buy or sell the underlying security if the buyer decides to exercise the option.

SWAP AGREEMENTS

A swap is an agreement between two or more parties to exchange a sequence of cash flows over a period of time in the future. No principal is exchanged at the beginning of the swap. The cash flows the counterparties exchange are tied to a "notional" amount. A swap agreement specifies the time period over which the periodic payments will be exchanged. The fair value represents the gains or losses as of the prior marking-to-market.

All investment derivative positions are included as part of investments at fair value on the Statement of Fiduciary Net Position. All changes in fair value are reported as part of net appreciation/(depreciation) in fair value of investments in the Statement of Changes in Fiduciary Net Position. Investment information was provided either by SJCERA's investment managers or SJCERA's custodian bank. The Investment Derivatives schedule below is classified by type and reports the fair value balances and notional amounts of derivatives outstanding as of and for the year ended December 31, 2017.

INVESTMENT DERIVATIVES

As of December 31, 2017

DERIVATIVE TYPE	NOTIONAL AMOUNT	FAIR VALUE
Futures Contracts	\$ (34,723,631)	\$ 1,677,193
Option Contracts	486,738	631,321
Swap Agreements	-	(514,114)
TOTAL	\$ (34,236,893)	\$ 1,794,400

NOTES TO THE FINANCIAL STATEMENTS**NOTE 6 – CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE
DEFINED BENEFIT PENSION PLAN**

The funding objective of the plan is to establish contribution rates that, over time, are likely to remain as a level percentage of payroll unless plan benefit provisions are changed. Actuarial valuations involve estimates and make assumptions about the probability of events far into the future, therefore actuarially determined rates are subject to continual revision as results are compared to past expectations and new estimates are made about the future.

Beginning in 2011, the County and a few special district employers have established employment resolutions and collective bargaining agreements that increase the employees' share of the cost of funding their retirement benefits. As of the close of 2014, most General Members and some Safety Members pay one-half of the cost of pre-funding post-retirement COLAs. Prior to 2012, the employer paid 100 percent of the cost to fund this benefit.

Beginning in 2013, some of these members also began paying an additional percentage of the basic member contribution rate, which reduced the employers' Normal Cost portion of the required contribution. Employers pay all of the required Unfunded Accrued Liability (UAL) amortization payment.

Tier 1 member contribution rates are calculated by the actuary using the Entry Age Normal Funding Method (Cost Method). Tier 2 members pay a single contribution rate adjusted annually. The required contribution rates are expressed as a percentage of covered payroll. The 2017 contribution rates were determined using the actuarial valuations performed as of January 1, 2016.

EMPLOYER CONTRIBUTIONS

For 2017, the required employer contribution rates including normal cost and amortization of the UAL were determined by using the valuation report as of January 1, 2016. In 2015, the SJCERA Board changed the funding policy to amortize any unexpected changes in the UAL over a period of 15 years as a level percent of pay, with new amortization layers each year. The result is a set of three amortization bases as of January 1, 2017: The 2008 Extraordinary Actuarial Loss being amortized over a closed 30-year period, with 22 years remaining as of January 1, 2017; the remaining UAL as of December 31, 2014, being amortized over a closed 19-year period with 16 years remaining as of January 1, 2017; and new additions to the UAL on and after January 1, 2014, being amortized over 15 years. The single amortization period for these streams of payments is 17 years as of January 1, 2017. The amortization period for each unfunded actuarial liability layer will decrease each year.

On March 29, 2016, the County Board of Supervisors approved additional annual contributions from the County, ranging from zero percent to five percent of payroll for the next ten years effective January 1, 2017. These additional contributions should decrease only the County share of the unfunded actuarial liability and should not decrease the liability for other entities participating in SJCERA.

NOTES TO THE FINANCIAL STATEMENTS

EMPLOYER RETIREMENT CONTRIBUTION RATES
Expressed as a Percentage of Active Member Payroll

	2017 (PER 1/1/2016 VALUATION)		
	NORMAL COST	UAL AMORTIZATION	TOTAL
TIER 1			
For General Members			
Paying Basic Rate Only (G.C. 31621.3)	17.81%	23.33%	41.14%
Paying Basic Rate with COLA Cost Share	15.28%	23.33%	38.61%
Paying 114% of Basic Rate with COLA Cost Share	14.78%	23.33%	38.11%
For Safety Members			
Paying Basic Rate Only (G.C. 31639.5)	30.82%	46.70%	77.52%
Paying Basic Rate with COLA Cost Share	26.23%	46.70%	72.93%
Paying 133% of Basic Rate with COLA Cost Share	24.78%	46.70%	71.48%
Composite Total for General and Safety Combined			
Paying Basic Rate Only (G.C. 31621.3)	20.25%	27.66%	47.91%
Paying Basic Rate with COLA Cost Share	17.33%	27.66%	44.99%
Paying 114%/133% of Basic Rate with COLA Cost Share	16.65%	27.66%	44.31%
TIER 2			
For General Members	8.97%	23.33%	32.30%
For Safety Members	14.53%	46.70%	61.23%
Composite Total for General and Safety Combined	9.40%	25.08%	34.48%

The composite employer contribution rates (for General and Safety Members combined) expressed as a percentage, or range of percentages, of covered payroll for the past seven years are as follows.

CONTRIBUTION YEAR	TIER 1	TIER 2
2017	44.31% - 47.91%	34.48%
2016	42.06% - 45.58%	31.95%
2015	39.84% - 43.06%	30.34%
2014	36.59% - 38.93%	29.43%
2013	32.66% - 35.12%	26.65%
2012	29.30% - 32.04%	-
2011	31.92%	-

NOTES TO THE FINANCIAL STATEMENTS**MEMBER CONTRIBUTIONS**

Employee contributions are deducted from the employee's salary on a biweekly basis.

Tier 1 members pay contributions based upon their membership category, General or Safety, and age at entry into membership. All Safety members of Tier 1, and General members of Tier 1 employed prior to March 7, 1973, stop paying member contributions when they have 30 years of service, but continue to accrue retirement service credit for subsequent active employment subject to membership.

Tier 2 members pay contributions based upon their membership category equal to one-half of the normal cost of the applicable benefits.

In 2017, member contributions totaled \$33,634,906, and employer contributions totaled \$200,051,742. Employee contributions increased by \$3.5 million, or 11.68 percent, over the prior year, and employer contributions increased by \$40.9 million, or 25.72 percent, over the prior year.

NOTE 7 – FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS

As required by the CERL and the Board's policy, the following reserves from Fiduciary Net Position Restricted for Pension Benefits must be established and used to account for the members', employers', and retirees' contributions. The Unappropriated Earnings Reserves were not sufficient to fully credit interest earnings at the 7.40 percent assumption rate for all of the reserves except for active and deferred members' reserve in 2017. In addition, there were no excess earnings to fund the Contingency Reserve in 2017.

A. ACTIVE AND DEFERRED MEMBERS' RESERVE

This reserve represents the cumulative contributions made by active members, net of refunds to the members, plus the investment earnings credited to the reserve at assumption rates determined by the actuary.

B. EMPLOYER ADVANCE RESERVES

This reserve represents the cumulative contributions made by the County and certain special districts for the active members. Interest earnings are credited semi-annually to the reserves at assumption rates determined by the actuary if sufficient unappropriated earnings reserve funds exist.

C. COUNTY ADDITIONAL 5% CONTRIBUTIONS RESERVE

This reserve represents that, beginning January 1, 2017, San Joaquin County made additional contributions in excess of Actuarially Determined Contributions to decrease the County share of the unfunded actuarial liability.

NOTES TO THE FINANCIAL STATEMENTS

D. RETIRED MEMBERS' RESERVES

These reserves are established to account for the unpaid retirees' pension benefits. Upon a member's retirement, the member's accumulated contributions are transferred from the Active and Deferred Members' Reserve account to the Retired Members' Annuity Reserve account. In addition, the actuarially determined amount of the member's vested interest is transferred from the Employer Advance Reserves account to the Retired Members' Pension Reserve account.

The Retired Members' Reserve account at December 31, 2017, includes the authorized "Purchasing Power" benefit reserve and additional pension benefits specified in the pre-April 1, 1982 class-action lawsuit settlement agreement. These benefits are explained in Note 1b. In November 2012, the Board adopted a revised Statement of Reserve Policy to classify the post-April 1, 1982 Settlement Reserve as a Special Reserve, which is not included in valuation assets.

E. CONTINGENCY RESERVE

Earnings of the retirement fund during any year in excess of the total interest credited to contributions and reserves during the year remain in the fund as a reserve against deficiencies in interest earnings in other years, losses on investments, and other contingencies. The CERL provides that when the contingency reserve exceeds one percent of total assets, the retirement board may transfer all or any part of the surplus as specified in Government Code Section 31592.2. By policy, the SJCERA Board has set the Contingency Reserve target at three percent of total assets. In June 2017, the SJCERA Board amended its Contingency Reserve target from three percent to one percent of total assets. The Contingency Reserve is 0.00 percent of the fair value of total assets at December 31, 2017.

F. MARKET STABILIZATION DESIGNATION RESERVE

This "designation" account is used to further minimize the impact of the fluctuations in the fair value of the investments owned by SJCERA. It represents the difference between the actuarial value of assets and the fair value of assets at year-end. It is the balance of deferred earnings and losses created by a five-year smoothing of actual gains and losses compared to the assumed investment rate of return.

G. UNAPPROPRIATED EARNINGS RESERVE

The Unappropriated Earnings Reserve (UER) is used to accumulate investment income earned by SJCERA, net of the investment expenses and SJCERA's administration cost. From this unappropriated earnings account, interest is credited to various reserve accounts. In addition, at the Board's discretion and subject to the settlement agreement in 2001, this account may also be used, from time to time, to stabilize the County's and the special districts' Actuarially Determined Contribution (ADC), and to fund the market stabilization and contingency reserves accounts.

H. CLASS ACTION SETTLEMENT – POST 4/1/82 RESERVE

The Class Action Settlement – Post 4/1/82 Reserve designates the fund that pays the Post-82 Class Action Settlement allowances for the lifetime of the members and beneficiaries, who retired between April 1, 1982 and December 31, 2000, to the extent sufficient funds are available.

NOTES TO THE FINANCIAL STATEMENTS

I. SUMMARY OF RESERVES

A summary of reserved and designated net position at December 31, 2017, is as follows:

RESERVES	
Active and Deferred Members	\$ 351,144,291
Employer Advance	1,261,401,477
County Additional 5% Contribution	20,385,011
Retired Members	1,280,230,506
Class Action Settlement - Post-4/1/82	485,100
Contingency	-
Market Stabilization Designation	(34,357,754)
Unappropriated Earnings	0
TOTAL RESERVES	\$ 2,879,288,631

NOTE 8 – NET PENSION LIABILITY AND SIGNIFICANT ASSUMPTIONS**A. NET PENSION LIABILITY OF EMPLOYERS**

SJCERA is a cost-sharing multiple-employer pension plan with a reporting date of December 31, 2017. Measurements as of the reporting date are based on the fair value of assets as of December 31, 2017, and the Total Pension Liability as of the valuation date, January 1, 2017, updated to December 31, 2017. There were no significant events between the valuation date and the measurement date so the updated procedures only include the addition of service cost and interest cost offset by benefit payments. Beginning of the year measurements are also based on the actuarial valuation as of January 1, 2017. Because the beginning and ending values are based on the same actuarial valuation and there were no significant events, no liability gains or losses due to experience are reported this year.

The Net Pension Liability was measured as of December 31, 2017, and determined based upon rolling forward the Total Pension Liability from the actuarial valuation as of January 1, 2017. The net pension liability (i.e., the pension plan's liability determined in accordance with GASB Statement No. 67 less the fiduciary net position) is shown below:

EMPLOYERS' NET PENSION LIABILITY (GASB STATEMENT NO. 67)

As of December 31, 2017

(DOLLARS IN MILLIONS)

Total Pension Liability	\$ 4,461
Plan Fiduciary Net Position	2,879
Employers' Net Pension Liability	1,582
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	64.54%

NOTES TO THE FINANCIAL STATEMENTS

B. ACTUARIAL ASSUMPTIONS AND SIGNIFICANT ASSUMPTIONS

SJCERA retains an independent actuarial firm to conduct actuarial valuations of the pension plan to monitor SJCERA's funding status and to establish the contribution rate requirements for the pension plan. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future. Projections of benefits for financial reporting purposes are based on the plan and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations. The total pension liability was determined by an actuarial valuation as of January 1, 2017, using the following actuarial assumptions applied to all prior periods included in the measurement in accordance with the requirements of GASB Statement No. 67.

In the January 1, 2017 actuarial valuation, the Entry Age Normal Funding Method (Cost Method) was used. The actuarial assumptions include a 7.40 percent investment rate of return, annual inflation rate of 2.90 percent per year, and projected salary increases at 3.15 percent per year for the year ended 2017. The actuarial value of the plan's assets was based on a five year smoothing of actual versus expected returns.

In 2015, the SJCERA Board changed the funding policy to amortize any unexpected changes in the UAL over a period of 15 years as a level percent of pay, with new amortization layers each year. As of January 1, 2017: The 2008 Extraordinary Actuarial Loss being amortized over a closed 30-year period, with 22 years remaining as of January 1, 2017; the remaining UAL as of December 31, 2014, being amortized over a closed 19-year period with 16 years remaining as of January 1, 2017; and new additions to the UAL on and after January 1, 2014, being amortized over 15 years. The single amortization period for these streams of payments is 17 years as of January 1, 2017. The amortization period for each unfunded actuarial liability layer will decrease each year.

The total pension liability for the pension plan was determined by an actuarial valuation as of January 1, 2017, and accepted actuarial procedures were applied to roll-forward the total pension liability to December 31, 2017.

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NOTES TO THE FINANCIAL STATEMENTS

Key methods and assumptions used in the latest actuarial valuations as of January 1, 2017, are presented below:

Valuation Date	January 1, 2017
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll with Separate Amortization Periods for Extraordinary Actuarial Gains or Losses
Remaining Amortization Period	2008 Extraordinary Actuarial Loss - 22 years Remaining UAL as of January 1, 2014 - 16 years Subsequent Unexpected Changes in UAL after January 1, 2014 - 15 years Single Equivalent Period as of January 1, 2017 - 17 years
Asset Valuation Method	Smoothed Actuarial Value (5 years): 80%-120% Asset Corridor
ACTUARIAL ASSUMPTIONS:	
Discount Rate	7.4%, Net of Pension Plan Investment Expenses, Including Inflation
Projected Salary Increases	3.15%, Plus Service-Based Rates
General Inflation Rate	2.90%
Cost-of-Living Adjustments	2.60% Per Year Assumed
Healthy Mortality	<p>Mortality rates for active members are based on the sex distinct CalPERS Preretirement Non-Industrial Mortality Table, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p> <p>Mortality rates for healthy annuitants are based on the sex distinct CalPERS Healthy Annuitant Mortality Table, with a partial credibility adjustment of 1.10 for Safety members, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p> <p>Mortality rates for active members who die in the line-of-duty are based on the sex distinct CalPERS Preretirement Industrial Mortality Table, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p>
Disabled Mortality	<p>Mortality rates for Safety disabled annuitants are based on the sex distinct CalPERS Industrially Disabled Annuitant Mortality Table, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p> <p>Mortality rates for General disabled annuitants are based on the sex distinct CalPERS Non-Industrially Disabled Annuitant Mortality Table, with a partial credibility adjustment of 1.05, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p>

NOTES TO THE FINANCIAL STATEMENTS

C. FUNDED STATUS AND FUNDING PROGRESS

The plan's funded status is determined from a long-term, ongoing perspective. The annual actuarial valuation determines the progress made in accumulating sufficient assets to pay benefits when due. As of January 1, 2017, the pension plan's actuarial accrued liabilities were \$4.23 billion and the actuarial value of assets was \$2.73 billion, resulting in unfunded accrued liabilities (UAL) of \$1.5 billion. The covered payroll (annual payroll of active employees covered by the plan) was \$447 million, and the ratio of the UAL to the covered payroll was 335 percent.

As of the annual actuarial valuation January 1, 2017, the funded status decreased to 64.6 percent from 65.0 percent as of the annual actuarial valuation January 1, 2016. The Extraordinary Actuarial Loss of 2008 adversely affected the funded ratio from 2009 to 2013. In addition, for January 1, 2016, valuation assumption changes were made that reflect lower expected future returns on assets and improved mortality, lessening the impact of recent asset gains on the funded ratio.

SJCERA's Funding Policy provides for regular employer and employee contributions at actuarially determined rates, expressed as percentages of annual covered payroll. Contributions required and contributions made are explained in Note 6.

D. ASSET ALLOCATION POLICY AND EXPECTED LONG-TERM RATE OF RETURN BY ASSET CLASS

The allocation of investment assets within SJCERA's portfolio is approved by the Board. 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 defined benefit pension plans. The long-term expected rate of return on defined benefit pension plan investment assets was determined using a building-block method in which best estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are 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, adjusted for inflation. The following table displays the Board-approved asset allocation policy for 2017 and the long-term expected real rates of return:

ASSET CLASS	TARGET ALLOCATION	ARITHMETIC LONG-TERM EXPECTED REAL RATE OF RETURN
Global Public Equities	30.00%	8.90%
Stable Fixed Income	10.00%	4.20%
Credit	14.00%	6.75%
Risk Parity	14.00%	6.90%
Private Appreciation/Real Estate-Private Manager	12.00%	10.55%
Crisis Risk Offset (CRO)	20.00%	6.75%
Short Term Investments/Cash/Cash Equivalents	0.00%	2.90%
TOTAL	100.00%	

NOTES TO THE FINANCIAL STATEMENTS

E. DISCOUNT RATE

The discount rate used to measure the total pension liability was 7.40 percent as of December 31, 2017. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of December 31, 2017.

F. SENSITIVITY OF THE NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE

The following table presents the net pension liabilities of SJCERA as of December 31, 2017, calculated using the discount rate of 7.40 percent, as well as what SJCERA's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate.

	1% DECREASE (6.40%)	CURRENT DISCOUNT RATE (7.40%)	1% INCREASE (8.40%)
Total Pension Liability	\$ 5,061,293,035	\$ 4,461,166,328	\$ 3,967,917,434
Pension Plan Fiduciary Net Position	2,879,288,631	2,879,288,631	2,879,288,631
COLLECTIVE NET PENSION LIABILITY	\$ 2,182,004,404	\$ 1,581,877,697	\$ 1,088,628,803
Fiduciary Net Position as a Percentage of the Total Pension Liability	56.89%	64.54%	72.56%

G. RATE OF RETURN

For the year ended December 31, 2017, the annual money-weighted rate of return on investments, net of investment expense, was 11.85 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NOTE 9 – INVESTMENT EXPENSES

Investment expenses include fees paid for investment management services, investment consulting services, fund evaluation services, securities custodian services, and interest expense and other fees incurred in security lending transactions.

NOTES TO THE FINANCIAL STATEMENTS

NOTE 10 – GENERAL ADMINISTRATIVE EXPENSES

General administrative expenses, including the depreciation and amortization of capital assets, are funded by investment income earnings and are limited, pursuant to Government Code Section 31580.2, to twenty-one-hundredths of one percent (0.21 percent) of SJCERA's actuarial accrued liability. The actual administration expense for years 2017 was 0.08 percent of the actuarial accrued liability. SJCERA was in compliance with this requirement during 2017.

NOTE 11 – PENDING LITIGATION

On June 23, 2017, SJCERA received a claim letter on behalf of the Retired Public Employees of San Joaquin County (RPESJC) alleging that SJCERA breached a 2001 class action Settlement Agreement ("2001 Settlement Agreement") by failing to sufficiently fund a reserve account established to pay supplemental benefits to a group of SJCERA retirees and claiming over \$25 million in damages. SJCERA denied this claim. On September 28, 2017, SJCERA received an amended claim letter, mirroring its first claim letter, but adding SJCERA's Board of Retirement to the demand. SJCERA denied this claim again.

On November 3, 2017, two RPESJC members, Margaret Miller and Pauline Toy, served a purported class action lawsuit that they had previously filed against SJCERA and the Board of Retirement in San Joaquin County Superior Court (Case No. STK-CV-UBC-2017-10696), alleging causes of action for declaratory relief, writ of mandate, accounting, breach of contract, and the breach of the covenant of good faith and fair dealing related to SJCERA's alleged breach of the 2001 Settlement Agreement by allegedly failing to sufficiently fund a reserve account established to pay supplemental benefits to a group of SJCERA retirees. SJCERA and the Board moved to dismiss the Complaint, and in response Plaintiffs filed a First Amended Complaint on December 27, 2017. SJCERA and the Board then moved to dismiss the First Amended Complaint based on the statute of limitations among other defenses. That motion is pending and is scheduled for hearing on July 12, 2018. A trial date has been set for December 10, 2018 (but may be avoided entirely if SJCERA prevails on its motion to dismiss). In addition, if the motion to dismiss is not granted, SJCERA expects other parties to the 2001 Settlement Agreement to join the litigation, in which case the December 10, 2018 trial date would also likely be continued. SJCERA and the Board are vigorously defending themselves in the litigation and will continue to do so.

NOTE 12– COMMITMENTS AND CONTINGENCIES

SJCERA participates in certain investments that require commitments of a specified amount of capital upfront that is then drawn down at a later time as the investment vehicle requires. The total unfunded capital commitment represents the amount of funds that SJCERA could potentially be required to contribute at a future date. SJCERA had unfunded capital commitments totaling \$203.9 million at December 31, 2017.

NOTE 13 – SUBSEQUENT EVENTS

SJCERA has evaluated subsequent events through June 1, 2018, the date on which the financial statements were available to be issued. There are no pending subsequent events.

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN NET PENSION LIABILITY
AND RELATED RATIOS

For the Years Ended*

	DECEMBER 31, 2017	DECEMBER 31, 2016	DECEMBER 31, 2015	DECEMBER 31, 2014
TOTAL PENSION LIABILITY				
Service Cost	\$ 98,438,144	\$ 92,857,369	\$ 94,377,630	\$ 90,429,416
Interest (Includes Interest on Service Cost)	308,566,601	295,197,992	280,581,484	266,668,435
Change of Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience	37,219,673	(10,171,368)	(25,752,670)	-
Changes of Assumptions	-	87,601,669	-	-
Benefit Payments, Including Refunds of Employee Contributions	(205,406,970)	(194,719,177)	(181,468,913)	(165,870,971)
NET CHANGE IN TOTAL PENSION LIABILITY	238,817,448	270,766,485	167,737,531	191,226,880
TOTAL PENSION LIABILITY - BEGINNING	4,222,348,880	3,951,582,395	3,783,844,864	3,592,617,984
TOTAL PENSION LIABILITY - ENDING (A)	\$ 4,461,166,328	\$ 4,222,348,880	\$ 3,951,582,395	\$ 3,783,844,864
FIDUCIARY NET POSITION				
Contributions - Employer	\$ 200,051,742	\$ 159,122,523	\$ 150,371,556	\$ 136,686,133
Contributions - Employee	33,634,906	30,117,408	29,026,901	27,367,908
Transfer Between Plans	364,714	293,779	378,969	19,968,779
Net Investment Income (Loss)	299,960,693	151,114,788	(47,339,750)	110,728,303
Benefit Payments, Including Refunds of Employee Contributions	(205,406,970)	(194,719,177)	(181,468,913)	(165,870,971)
Administrative Expenses and Other Expenses	(4,118,578)	(4,369,744)	(4,075,745)	(4,042,986)
NET CHANGE IN FIDUCIARY NET POSITION	324,486,507	141,559,577	(53,106,982)	124,837,166
FIDUCIARY NET POSITION - BEGINNING	2,554,802,124	2,413,242,547	2,466,349,529	2,341,512,363
FIDUCIARY NET POSITION - ENDING (B)	\$ 2,879,288,631	\$ 2,554,802,124	\$ 2,413,242,547	\$ 2,466,349,529
FIDUCIARY NET PENSION LIABILITY - ENDING (A)-(B)	\$ 1,581,877,697	\$ 1,667,546,756	\$ 1,538,339,848	\$ 1,317,495,335
FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	64.54%	60.51%	61.07%	65.18%
COVERED EMPLOYEE PAYROLL**	\$ 425,886,951	\$ 392,227,314	\$ 396,136,470	\$ 376,030,944
FIDUCIARY NET POSITION LIABILITY AS A PERCENTAGE OF COVERED EMPLOYEE PAYROLL	371.43%	425.15%	388.34%	350.37%

* Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

** Covered Employee Payroll reported by plan sponsors is the payroll on which contributions are based in accordance with GASB Statement No. 82.

REQUIRED SUPPLEMENTARY INFORMATION**SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYERS AND
OTHER CONTRIBUTING SOURCES DEFINED BENEFIT PENSION PLAN****For the Ten Years Ending December 31****2017–2013**

	2017	2016	2015	2014	2013
Actuarially Determined Contributions	\$ 179,824,882	\$ 159,122,523	\$ 150,371,556	\$ 136,686,133	\$ 119,494,319
Contributions in Relation to the Actuarially Determined Contribution	200,051,742	159,122,523	150,371,556	136,686,133	119,494,319
Contribution Deficiency / (Excess)	\$ (20,226,860)	\$ -	\$ -	\$ -	\$ -
Covered Employee Payroll*	\$ 425,886,951	\$ 392,227,314	\$ 396,136,470	\$ 376,030,944	\$ 362,650,568
Contributions as a Percentage of Covered Employee Payroll	46.97%	40.57%	37.96%	36.35%	32.95%

2012–2008

	2012	2011	2010	2009	2008
Actuarially Determined Contributions	\$ 108,062,510	\$ 112,891,701	\$ 104,451,673	\$ 97,805,585	\$ 94,162,866
Contributions in Relation to the Actuarially Determined Contribution	108,062,510	112,891,701	104,451,673	97,805,585	94,162,866
Contribution Deficiency / (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Employee Payroll*	\$ 356,419,000	\$ 367,344,000	\$ 384,442,000	\$ 377,559,000	\$ 367,561,000
Contributions as a Percentage of Covered Employee Payroll	30.32%	30.73%	27.10%	25.90%	25.62%

* Covered Employee Payroll reported by plan sponsors for 2017, 2016, 2015, and 2014. Previous years' amounts are based on projected payroll from the actuarial valuation reports.

The contributions in excess of Actuarially Determined Contributions are due to the County Additional 5% Contributions effective in January 1, 2017.

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REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF INVESTMENT RETURNS

For the Years Ended*

	DECEMBER 31, 2017	DECEMBER 31, 2016	DECEMBER 31, 2015	DECEMBER 31, 2014
Annual Money-Weighted Rate of Return, Net of Investment Expense	11.85%	6.20%	-2.06%	4.29%

* Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. It is calculated by finding the rate of return that will set the present values of all cash flows and terminal values equal to the value of the initial investment. The money-weighted rate of return is equivalent to the internal rate of return (IRR).

Time-weighted rate of return is assumed that all cash distributions are reinvested in the portfolio and the exact same periods are used for comparisons. When calculating the time-weighted rate of return, the effect of varying cash inflows is eliminated by assuming a single investment at the beginning of a period and measuring the growth or loss of fair value to the end of that period.

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NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

NOTE 1 - KEY METHODS AND ASSUMPTIONS USED TO DETERMINE CONTRIBUTION RATES

The following actuarial methods and assumptions were used to determine contribution rates for the year ended December 31, 2017, in the Schedule of Contributions from the Employers and Other Contributing Sources:

Valuation Date	January 1, 2016
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll with Separate Amortization Periods for Extraordinary Actuarial Gains or Losses.
Remaining Amortization Period	2008 Extraordinary Actuarial Loss - 23 years Remaining UAL as of January 1, 2014 - 17 years Subsequent Unexpected Changes in UA after January 1, 2014 - 15 years Single Equivalent Period as of January 1, 2016 - 19 years
Asset Valuation Method	Smoothed Actuarial Value (5 years) 80%-120% Asset Corridor
ACTUARIAL ASSUMPTIONS:	
Discount Rate	7.4%, Net of Pension Plan Investment Expenses, Including Inflation
Projected Salary Increases	3.15%, Plus Service-Based Rates
General Inflation Rate	2.90%
Cost-of-Living Adjustments	2.6% Per Year Assumed
Healthy Mortality	<p>Mortality rates for active members are based on the sex distinct CalPERS Preretirement Non-Industrial Mortality Table, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p> <p>Mortality rates for healthy members are based on the sex distinct CalPERS Healthy Annuitant Mortality Table, with a partial credibility adjustment of 1.10 for Safety members, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p> <p>Mortality rates for active members who die in the line-of-duty are based on the sex distinct CalPERS Preretirement Industrial Mortality Table, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p>
Disabled Mortality	<p>Mortality rates for Safety disabled annuitants are based on the sex distinct CalPERS Industrially Disabled Annuitant Mortality Table, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p> <p>Mortality rates for General disabled annuitants are based on the sex distinct CalPERS Non-Industrially Disabled Annuitant Mortality Table, with a partial credibility adjustment of 1.05, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p>

A complete description of the methods and assumptions used to determine contribution rates for the year ending December 31, 2017, can be found in the January 1, 2016 actuarial valuation report.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION**NOTE 2 - CHANGES OF ASSUMPTIONS**

The most recent Actuarial Experience Study was performed in 2016, covering experience from January 1, 2013 through December 31, 2015, leading to changes in demographic and economic assumptions. This experience study specifically analyzed and made the following recommendations for the demographic and economic assumptions. The merit salary rates increased at lower service levels and decreased at higher service levels for all members. The retirement rates reduced at younger ages for General members. The termination rates had minor increases to General member with less than 20 years of service, and modest increases for Safety members with less than five years of service and decreased after five years of service. Disability rates decreased in safety members over age 50. Mortality rates adjusted California Public Employees Retirement System (CalPERS) base tables, with generational improvement for all members.

On November 18, 2016, the Board of Retirement adopted new economic assumptions effective with the January 1, 2016 valuation. To reflect changes in market conditions, the long-term rate of return on plan assets was adjusted from 7.50 percent to 7.40 percent, the long-term inflation rate measured by the Consumer Price Index (CPI) was adjusted from 3.00 percent to 2.90 percent, the annual wage was adjusted from 3.25 percent to 3.15 percent, and a post-retirement COLA average growth rate was 2.60 percent.

In 2017, the assumptions and methods used in the most current valuation as of January 1, 2017, are based on the Actuarial Experience Study performed in 2016. There have been no changes in assumptions or methods since the prior valuation.

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OTHER SUPPLEMENTARY INFORMATION

SCHEDULE OF ADMINISTRATIVE EXPENSES

For the Year Ended December 31, 2017

	2017
GENERAL ADMINISTRATIVE EXPENSES (Expenses Subject to the Statutory Limit)	
Personnel Services	
Staff Salaries	\$ 1,380,805
Cafeteria Benefits	124,974
Insurance	204,833
Social Security	99,198
Retirement	560,799
TOTAL PERSONNEL SERVICES	2,370,609
Professional Services	
Professional and Specialized Services	456,341
Allocated Department Costs	27,394
TOTAL PROFESSIONAL SERVICES	483,735
Communications	
Postage	15,065
Telephone	18,598
Travel	47,269
TOTAL COMMUNICATIONS	80,932
Rentals/Equipment	
Office Space and Equipment	253,311
Depreciation-Equipment	34,849
Equipment Leasing	13,197
TOTAL RENTALS/EQUIPMENT	313,357
Miscellaneous	
Office Supplies/Expense	33,801
Subscriptions and Periodicals	4,590
Memberships	8,005
Maintenance	697
Insurance	73,398
TOTAL MISCELLANEOUS	120,491
TOTAL GENERAL ADMINISTRATIVE EXPENSES	3,369,124
OTHER EXPENSES (Expenses Not Subject to the Statutory Limit)	
Information Technology Expenses	171,534
Actuary Fees	144,211
Fund Legal Fees	433,709
TOTAL OTHER EXPENSES	749,454
TOTAL ADMINISTRATIVE AND OTHER EXPENSES	\$ 4,118,578

OTHER SUPPLEMENTARY INFORMATION

SCHEDULE OF INVESTMENT EXPENSES

For the Year Ended December 31, 2017

	2017
INVESTMENT MANAGEMENT FEES	
Global Public Equities	\$ 1,815,318
Stable Fixed Income	837,336
Credit	5,010,246
Risk Parity	1,387,439
Private Appreciation	5,729,865
Credit Risk Offset	5,205,908
Short-Term Investments/Cash/Cash Equivalents	107,936
TOTAL INVESTMENT MANAGEMENT FEES	20,094,048
OTHER INVESTMENT FEES AND EXPENSES	
Custodian Fees	193,051
Investment Consultant Fees	316,247
Investment Legal Fees	84,746
Miscellaneous Investment Expense	266,269
TOTAL INVESTMENT FEES AND EXPENSES	860,313
TOTAL INVESTMENT EXPENSES	\$ 20,954,361

SCHEDULE OF PAYMENTS TO CONSULTANTS

For the Year Ended December 31, 2017

	2017
NATURE OF SERVICE	
Actuarial-Retainer and Valuation	\$ 144,211
Audit	60,670
Legal Counsels	433,709
Business Technology Services	124,075
TOTAL PAYMENTS TO CONSULTANTS	\$ 762,665

OTHER SUPPLEMENTARY INFORMATION

STATEMENT OF CHANGES IN ASSETS AND LIABILITIES
POST-EMPLOYMENT HEALTHCARE AGENCY FUND

For the Year ended December 31, 2017

	BALANCE JANUARY 1, 2017	ADDITIONS	DELETIONS	BALANCE DECEMBER 31, 2017
ASSETS				
Cash and Cash Equivalents	\$ 16,105	\$ 4,212,689	\$ (4,221,087)	\$ 7,707
TOTAL ASSETS	\$ 16,105	\$ 4,212,689	\$ (4,221,087)	\$ 7,707
LIABILITIES				
Retiree Sick Leave Bank Benefits Payable	\$ 16,105	\$ 4,212,689	\$ (4,221,087)	\$ 7,707
TOTAL LIABILITIES	\$ 16,105	\$ 4,212,689	\$ (4,221,087)	\$ 7,707

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OTHER INFORMATION

SCHEDULE OF COST SHARING EMPLOYER ALLOCATIONS

For the Year Ended December 31, 2017

EMPLOYER	PROPORTIONATE SHARE ⁽¹⁾	NET PENSION LIABILITY ⁽²⁾
County of San Joaquin	93.7441%	\$ 1,482,917,010
Superior Court	3.7408%	59,174,881
Lathrop-Manteca Rural Fire Protection District	1.1244%	17,786,633
SJC Mosquito and Vector Control District	0.4961%	7,847,695
Waterloo-Morada Rural Fire Protection District	0.4534%	7,172,233
Mountain House Community Services District	0.3585%	5,671,032
Tracy Public Cemetery District	0.0531%	839,977
SJC Historical Society and Museum	0.0256%	404,961
San Joaquin County Law Library	0.0040%	63,275
Local Agency Formation Commission	0.0000%	-
TOTAL	100.0000%	\$ 1,581,877,697

⁽¹⁾ As SJCERA is a cost-sharing multiple-employer pension plan, each employer participating in SJCERA must reflect a portion the collective net pension liability and pension expense in their financial statement. The calculation for the proportionate share for each employer allocates net pension liability and pension expense based on each employer's share of the unfunded liability amortization payment. The proportionate shares are then adjusted to account for the additional contributions made by the County of San Joaquin for the year ended December 31, 2017.

⁽²⁾ Proportionate share of net pension liability is based on the actuarial valuation.

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OTHER INFORMATION

SCHEDULE OF EMPLOYER PENSION AMOUNTS ALLOCATED BY COST SHARING PLAN

For the Year Ended December 31, 2017

		DEFERRED OUTFLOWS OF RESOURCES					DEFERRED INFLOWS OF RESOURCES			PENSION EXPENSE		
EMPLOYER	NET PENSION LIABILITY	DIFFERENCES BETWEEN EXPECTED AND ACTUAL ECONOMIC EXPERIENCE	NET DIFFERENCES BETWEEN PROJECTED AND ACTUAL INVESTMENT EARNINGS ON PENSION PLAN INVESTMENTS	CHANGES OF ASSUMPTIONS	CHANGES IN PROPORTION AND DIFFERENCES BETWEEN CONTRIBUTIONS AND PROPORTIONATE SHARE OF CONTRIBUTIONS	TOTAL DEFERRED OUTFLOWS OF RESOURCES	DIFFERENCES BETWEEN EXPECTED AND ACTUAL ECONOMIC EXPERIENCE	CHANGES IN PROPORTION AND DIFFERENCES BETWEEN EMPLOYER CONTRIBUTIONS AND PROPORTIONATE SHARE OF CONTRIBUTIONS	TOTAL DEFERRED INFLOWS OF RESOURCES	PROPORTIONATE SHARE OF ALLOCABLE PLAN PENSION EXPENSE	NET AMORTIZATION OF DEFERRED AMOUNTS IN PROPORTION AND DIFFERENCES BETWEEN EMPLOYER CONTRIBUTIONS AND PROPORTIONATE SHARE OF CONTRIBUTIONS	TOTAL PENSION EXPENSE
County of San Joaquin	\$1,482,917,010	\$27,912,998	\$32,043,483	\$49,272,837	\$ 2,604,502	\$111,833,820	\$15,377,678	\$ 4,546,366	\$ 19,924,044	\$ 232,371,905	\$ (1,271,830)	\$ 231,100,075
Superior Court	59,174,881	1,113,851	1,278,675	1,966,202	3,379,089	7,737,817	613,637	1,934,663	2,548,300	9,272,656	1,045,913	10,318,569
Lathrop-Manteca Rural Fire Protection District	17,786,633	334,798	384,341	590,996	953,103	2,263,238	184,445	514,263	698,708	2,787,151	217,914	3,005,065
SJC Mosquito and Vector Control District	7,847,695	147,717	169,576	260,755	38,170	616,218	81,380	412,815	494,195	1,229,728	(84,052)	1,145,676
Waterloo-Morada Rural Fire Protection District	7,172,233	135,003	154,981	238,312	262,456	790,752	74,375	211,054	285,429	1,123,883	24,381	1,148,264
Mountain House Community Services District	5,671,032	106,746	122,542	188,431	642,442	1,060,161	58,808	192,259	251,067	888,646	93,214	981,860
Tracy Public Cemetery District	839,977	15,811	18,151	27,910	134,591	196,464	8,710	38,925	47,635	131,624	35,095	166,719
SJC Historical Society and Museum	404,961	7,623	8,751	13,456	5,005	34,835	4,199	37,988	42,187	63,457	(7,467)	55,990
San Joaquin County Law Library	63,275	1,191	1,367	2,102	14,528	19,188	656	86,900	87,556	9,915	(10,122)	(207)
Local Agency Formation Commission	-	-	-	-	20,478	20,478	-	79,132	79,132	-	(43,046)	(43,046)
TOTALS	\$1,581,877,697	\$29,775,738	\$34,181,867	\$52,561,001	\$ 8,054,365	\$ 124,572,971	\$16,403,888	\$ 8,054,365	\$ 24,458,253	\$ 247,878,965	\$ -	\$ 247,878,965

NOTES TO THE OTHER INFORMATION

For the Year Ended December 31, 2017

NOTE 1 – BASIS OF PRESENTATION AND BASIS OF ACCOUNTING

Because San Joaquin County Employees' Retirement Association (SJCERA) is a cost-sharing multiple-employer pension plan, employers participating in SJCERA are required to report a portion of the collective Net Pension Liability, Pension Expense and Deferred Outflows and Inflows in their financial statements for fiscal periods beginning on or after June 15, 2014, in accordance with Governmental Accounting Standard Board (GASB) Statement No. 68, Accounting and Financial Reporting for Pensions – and Amendment of GASB Statement No. 27. GASB Statement No. 68 requires that the proportionate share for each employer shall be determined based on the employer's projected long-term contribution effort to the pension.

SJCERA's actuary prepared the following documents, (1) the Schedule of Cost Sharing Employer Allocations and (2) the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan, in accordance with accounting principles generally accepted in the United States of America as applicable to governmental organizations based on information provided by SJCERA. These documents provide the required information for financial reporting related to SJCERA that employers may use in their financial statements. The measurement date for SJCERA is December 31, 2017. Measurements are based on the fair value of assets as of December 31, 2017, and the Total Pension Liability, \$4,461,166,328 as of December 31, 2017, was measured as of a valuation date of January 1, 2017, and projected to December 31, 2017.

NOTE 2 – AMORTIZATION OF DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES

The difference between projected and actual investment earnings on pension plan investments is amortized over five years on a straight-line basis. One-fifth was recognized in pension expense during the measurement period. The remaining difference between projected and actual investment earnings on investments at December 31, 2017, is to be amortized over the remaining periods. The changes in assumptions and differences between expected and actual experience are recognized over the average of the expected remaining service lives of all active and inactive members of SJCERA, which is also five years. The net effect of the change in the employer's proportionate share of the collective net pension liability and collective deferred outflows of resources and deferred inflows of resources is recognized over the average expected remaining service lives of all active and inactive employees of SJCERA.

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INVESTMENT

INDEPENDENT CONSULTANT'S REPORT



April 18, 2018

Board of Trustees
San Joaquin County Employees' Retirement Association
6 South El Dorado Street
Suite 400
Stockton, CA 95202

Dear Trustees:

Enclosed is our report on the investment activity for the San Joaquin County Employees' Retirement Association (SJCERA) for the period ending December 31, 2017.

SJCERA – Total Fund Performance

As of December 31, 2017, the SJCERA Portfolio had approximately \$2.9 billion in total assets, an increase of roughly \$116 million for the calendar year due to cash flows and investment results. The SJCERA Total Fund generated a net of fees return of 11.85% for the year, underperforming its policy benchmark. While Global Equity and Private Appreciation provided strong double digit returns on an absolute basis, the Risk Parity portfolio was the only class that provided strong relative returns over the 1-year period. Performance from the remaining strategic classes were positive but trailed their respective benchmarks over the 1-year period. Each quarter, the Pension Plan reviews the performance of the total fund along with the underlying strategic classes and individual managers versus their appropriate benchmarks. In 2017, SJCERA met its primary goal of ensuring sufficient funds available to make scheduled benefit payments.

Market Review

Global equities ended the year with high double-digit returns. Within global equities, non-U.S. equities significantly outperformed U.S. equities as U.S. equity valuations remained extended, and non-U.S. equity valuations returned to their historical levels. Broad U.S. and international bond markets also had a good year as high yield bonds and emerging market debt produced high single digit returns. As of year-end, fundamental momentum remained positive in most U.S. markets. Inflation indicators moved up at year-end, off decade low levels. The Fed increased the federal fund rate to between 1.25% and 1.50% by the end of the year and is expected to have three to four additional rate hikes in 2018. Fiscal policy, monetary policy, and economic fundamentals were all drivers of returns within the global capital markets during the fiscal year, and these various aspects will continue to be interrelated. Throughout the complicated market conditions of the past few years, with its constant review and oversight, the Board continues to position SJCERA for competitive long-term performance consistent with its objectives.

Strategic Asset Allocation

After performing an extensive review of its strategic allocation during 2015, SJCERA reached its policy targets by the end of 2016. SJCERA was at or near these policy targets through 2017. The target strategic asset allocation was selected with the goal of reducing dependency on the global public equity risk premium through the addition of a risk reducing class that is expected to correlate negatively with public equities during crisis periods. Periodic reviews of the strategic asset allocation and investment policies are performed on a regular basis. The move to the new strategic asset allocation is expected to improve the likelihood of the plan accomplishing its primary financial objective: to earn a long-term return that, coupled with projected contributions, is projected to be sufficient to attain full funding in the long term while avoiding substantial deterioration in funded status along the way.

INDEPENDENT CONSULTANT'S REPORT



Gross of Fees Investment Performance as of December 31, 2017:

Asset Class	Annualized			
	1-Year	3-Year	5-Year	10-Year
Global Equity	22.25	9.18	10.95	4.68
MSCI World Index	24.62	9.89	11.40	5.22
Private Appreciation	15.14	11.77	13.52	1.62
MSCI ACWI +2% (lagged)	21.70	10.45	13.21	6.82
Stable Fixed Income	3.93	3.96	4.25	6.22
Bloomberg BC US Aggregate Index	3.54	2.24	2.10	4.01
Credit	6.53	5.32	6.84	4.50
Custom Credit Benchmark ¹	7.08	4.87	5.24	6.31
Risk Parity	13.25	4.64	0.26	---
BofA Merrill Lynch 3 Month T-Bill +4%	4.89	4.43	4.28	---
CROSM	3.65	5.34	9.69	16.18
CRO SM Benchmark ²	4.31	2.01	3.37	4.49
Cash	0.89	0.45	0.29	0.34
BofA Merrill Lynch 3 Month T-Bill	0.86	0.41	0.27	0.39
Total Fund, Gross of Fees	12.80	6.18	6.96	3.70
Total Fund, Net of Fees	11.85	5.34	6.05	2.93
Policy Benchmark ³	12.56	6.78	6.81	4.26

¹ 50% Bloomberg Barclays High Yield, 50% S&P Leveraged Loans

² (1/3) BB Long Duration Treasuries, (1/3) BTOP50 Index, (1/3) 5% Annual

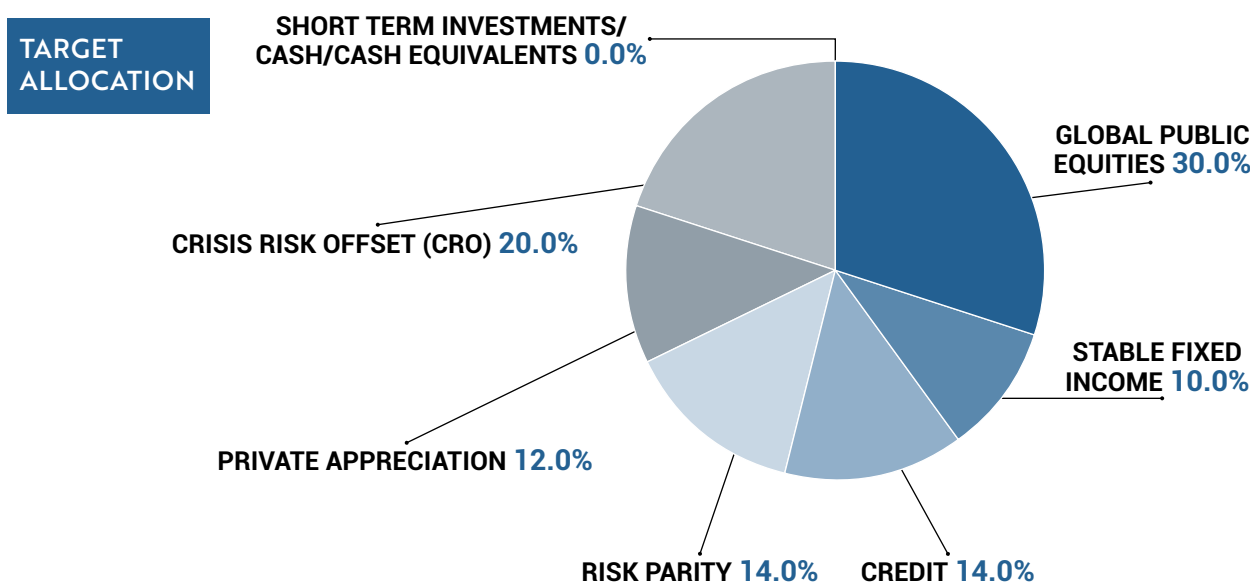
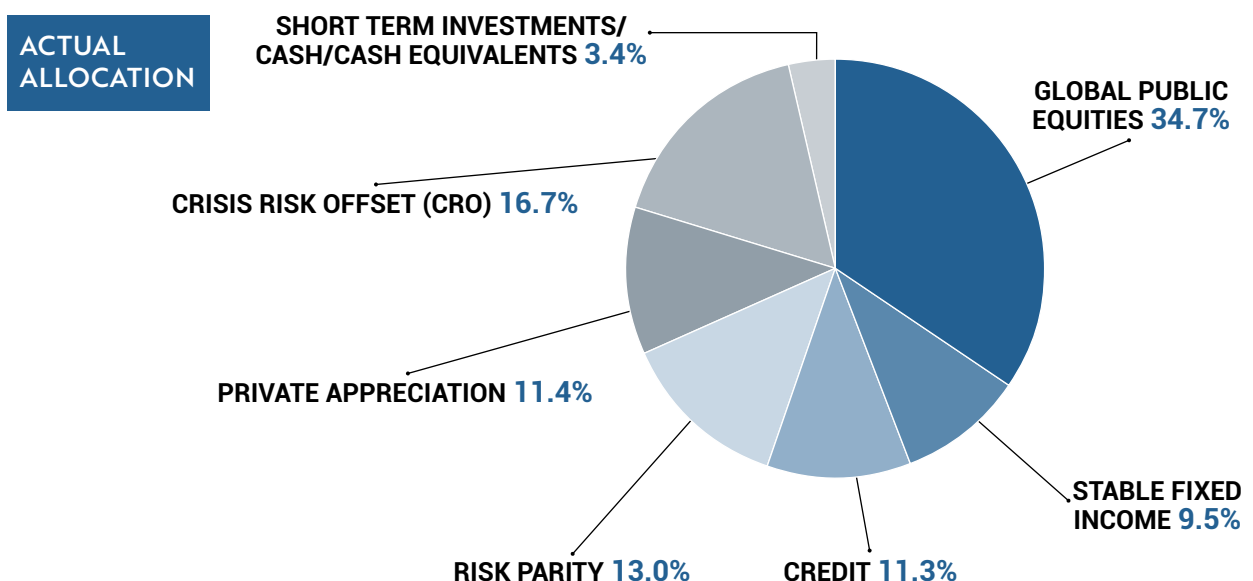
³ The Policy Benchmark currently consists of: 36% MSCI ACWI, 11% MSCI ACWI +2% (lagged), 10% Bloomberg Barclays US Aggregated, 14% Custom Credit, 14% BofA Merrill Lynch 3 Month US T-Bills +4%, 15% CROSM Benchmark

Sincerely,

Pension Consulting Alliance, LLC

ASSET ALLOCATION AS OF DECEMBER 31, 2017

	INVESTMENT	ACTUAL ALLOCATION	TARGET ALLOCATION
Global Public Equities	\$ 995,174,782	34.7%	30.0%
Stable Fixed Income	275,595,222	9.5%	10.0%
Credit	321,700,181	11.3%	14.0%
Risk Parity	372,838,817	13.0%	14.0%
Private Appreciation	328,280,801	11.4%	12.0%
Crisis Risk Offset (CRO)	480,111,036	16.7%	20.0%
Short Term Investments/Cash/Cash Equivalents	98,322,091	3.4%	0.0%
TOTAL	\$ 2,872,022,930	100.0%	100.0%



INVESTMENT

LIST OF LARGEST ASSETS HELD

LARGEST STOCK HOLDINGS (BY FAIR VALUE)

December 31, 2017

	SHARES	STOCKS	FAIR VALUE
1	2,218,044	CF BlackRock Russell 1000 Index Fund	446,074,010.94
2	1,600,000	CF PanAgora Diversified Ltd Ser III Sub-Ser 6	190,458,027.20
3	6,790,385	CF BlackRock MSCI World Ex-US Index A Fund	142,287,688.79
4	25,025	CF Bridgewater Pure Alpha II LLC Fd	76,299,855.35
5	61,648	Stone Harbor Leveraged Loan B Shr	71,435,733.61
6	773,503	CF BlackRock Russell 2000 Growth Fund	34,890,772.97
7	2,287,396	CF BlackRock Developed Ex US Real Estate Index Fund	28,422,885.19
8	19,417	American Tower Corp	2,770,223.39
9	18,173	Crown Castle Corp New Com	2,017,384.73
10	11,506	Simon Property Group Inc Com	1,976,040.44

A complete list of the stock holdings is available upon request.

LARGEST BOND HOLDINGS (BY FAIR VALUE)

December 31, 2017

	PAR	BONDS	FAIR VALUE
1	25,000,000.00	United States Treas Bds Dtd 00246 3% Due 11-15-2045 Reg	26,254,875.00
2	25,500,000.00	United States Treas Bds Dtd 00247 2% Due 02-15-2046 Reg	24,265,851.00
3	25,000,000.00	United States Treas Nts Dtd 683 1.625% Due 02-15-2026 Reg	23,609,375.00
4	15,900,000.00	United States Treas Bds 3.125% Due 11-15-2041 Reg	17,093,120.10
5	35,200,000.00	United States Treas Bd Stripped Prin Pmt 02-15-2044 Reg	17,090,198.40
6	9,850,000.00	United States Treas Bds 5.500 Due 08-15-2028 Reg	12,675,334.60
7	7,500,000.00	United States Treas Bds 00202 4.75% Due 02-15-2037 Reg	9,991,702.50
8	8,550,000.00	United States Treas Nts Dtd 11/15/2015 2.25% Due 11-15-2025 Reg	8,474,854.05
9	5,150,000.00	United States Treas Bds 0 Deb 15/02/2040 USD1000 4.625 Ue 02-15-2040 Reg	6,848,495.75
10	609,348.61	MFO Stone Hbr Invt Fds Emerging Mkts Debt Fd Instl Cl	6,471,282.26

A complete list of the bond holdings is available upon request.

SCHEDULE OF INVESTMENT FEES

		2017
INVESTMENT MANAGEMENT FEES		
Global Public Equities	\$	1,815,318
Stable Fixed Income		837,337
Credit		5,010,246
Risk Parity		1,387,439
Private Appreciation / Real Estate-Private Managers		5,729,865
Credit Risk Offset (CRO)		5,205,908
Short Term Investments / Cash / Cash Equivalents		107,935
	\$	20,094,048
OTHER INVESTMENT FEES		
Custodian Fees	\$	193,051
Investment Consultant Fees		316,247
Investment Legal Fees		84,746
	\$	860,313
TOTAL INVESTMENT EXPENSES		\$ 20,954,361
SECURITY LENDING FEES		
Security Lending Fees and Interest Expense	\$	1,067,466
TOTAL INVESTMENT FEES AND EXPENSES		\$ 22,021,827

INVESTMENT

SCHEDULE OF FEES AND COMMISSIONS

For the year ended December 31, 2017

RANK	BROKER	COMMISSIONS PAID	PERCENTAGE OF TOTAL COMMISSIONS
1	Northern Trust Securities, Inc.	\$ 69,432.52	48.25%
2	Tourmaline Partners, LLC	8,795.76	6.11%
3	J.P. Morgan Securities, LLC / JPMC	3,670.75	2.55%
4	Goldman, Sachs & Co.	2,886.02	2.01%
5	Capital Institutional Services, Inc. - Equities	2,594.53	1.80%
6	Merrill Lynch, Pierce, Fenner & Smith, Inc.	2,371.73	1.65%
7	Keefe Bruyette	2,260.44	1.57%
8	Jones Trading Institutional Services, LLC	2,075.99	1.44%
9	Robert W. Baird & Co., Inc.	2,011.77	1.40%
10	Green Street Trading, LLC	1,960.36	1.36%
11	Others*	45,852.58	31.86%
		\$ 143,912.45	100.00%

* Includes additional firms, each with less than 2% of total commissions.

INVESTMENT SUMMARY

	FAIR VALUE DECEMBER 31, 2017	PERCENTAGE OF MARKET VALUE
GLOBAL PUBLIC EQUITIES		
BlackRock MSCI World Ex-US	\$ 142,287,689	5.0%
BlackRock R1000 Index-Large Cap Core	446,074,011	15.5%
BlackRock R2000 Growth Index	34,890,773	1.2%
BlackRock RE Dev EX US	28,422,885	1.0%
Capital Prospects - Small Cap Value	42,937,908	1.5%
European Investors, Inc.	1,836	0.0%
Invesco REIT	36,580,271	1.3%
PIMCO RAE FUNDAMENTAL Emerging	106,460,718	3.7%
PIMCO RAE FUNDAMENTAL International	157,518,691	5.5%
TOTAL GLOBAL PUBLIC EQUITIES	\$ 995,174,782	34.7%
STABLE FIXED INCOME		
Dodge & Cox - Fixed	89,728,464	3.1%
Double Line - MBS	84,062,477	2.9%
Prima - Mortgage Inv. Trust	101,804,281	3.5%
TOTAL STABLE FIXED INCOME	\$ 275,595,222	9.5%
CREDIT		
Crestline - Opportunity Fund II	31,411,314	1.1%
Marinus Capital - Opportunity Master Fund	1,580,294	0.1%
Medley Capital - Opportunity Fund II	33,496,905	1.2%
Mesa West III	15,918,886	0.6%
Mesa West IV	23,704,811	0.8%
Raven Capital - Fund II	22,181,665	0.8%
Raven Capital - Fund III	26,386,017	0.9%
Stone Harbor Bank Loan	56,719,567	2.0%
Stone Harbor - Absolute Return	63,306,905	2.2%
White Oak Summit	46,993,817	1.6%
TOTAL CREDIT	\$ 321,700,181	11.3%
RISK PARITY		
Bridgewater All-Weather	182,380,790	6.4%
PanAgora Diversified Risk	190,458,027	6.6%
TOTAL RISK PARITY	\$ 372,838,817	13.0%
PRIVATE APPRECIATION		
Almanac Realty	11,228,481	0.4%
Angelo Gordon & Co.	10,131,477	0.4%
Colony Realty Partners III	15,482,415	0.5%
Colony Realty Partners IV	22,839,576	0.8%
Greenfield V	724,245	0.0%
Greenfield VI	4,360,632	0.2%
Greenfield VII	18,015,499	0.6%
Legacy Fund II	104,864	0.0%

(Continued on page 70)

INVESTMENT

INVESTMENT SUMMARY

	FAIR VALUE DECEMBER 31, 2017	PERCENTAGE OF MARKET VALUE
PRIVATE APPRECIATION		
Miller Global Fund V	2,985,362	0.1%
Miller Global Fund VI	14,036,476	0.5%
Miller Global Fund VII	1,591,697	0.1%
Morgan Creek III	9,903,383	0.3%
Morgan Creek V	10,256,945	0.4%
Morgan Creek VI	16,060,619	0.6%
Ocean Avenue II	31,759,523	1.1%
Ocean Avenue III	13,795,427	0.5%
Principal US Property	29,775,532	1.0%
Prologis	53,125,401	1.8%
RREEF America II	48,077,254	1.6%
Walton Street Fund V	7,753,218	0.3%
Walton Street Fund VI	6,272,775	0.2%
TOTAL PRIVATE APPRECIATION	\$ 328,280,801	11.4%
CRISIS RISK OFFSET (CRO)		
AQR Style Premia	43,498,705	1.4%
Bridgewater Pure Alpha	76,299,855	2.6%
Dodge & Cox Long Duration	151,423,419	5.3%
Graham Tactical Trend	80,589,667	2.9%
Mount Lucas - Managed Futures	64,212,462	2.3%
PE Diversified Global Macro/Almond Global	64,086,928	2.2%
TOTAL CRISIS RISK OFFSET (CRO)	\$ 480,111,036	16.7%
TOTAL INVESTMENT AT FAIR VALUE	\$ 2,773,700,839	96.6%
SHORT TERM INVESTMENTS/CASH/CASH EQUIVALENTS		
Parametric PIOS	15,429,658	0.5%
STIF - Northern Trust	82,892,433	2.9%
TOTAL SHORT TERM INVESTMENTS	\$ 98,322,091	3.4%
TOTAL	\$ 2,872,022,930	100.0%



ACTUARIAL

ACTUARY'S CERTIFICATION LETTER


Classic Values, Innovative Advice

June 15, 2018

Retirement Board of San Joaquin
County Employees' Retirement Association
6 South El Dorado Street, Suite 400
Stockton, CA 95202

Actuarial Certification

Dear Members of the Board:

This is the Actuary's Certification Letter for the Actuarial Section of the Comprehensive Annual Financial Report (CAFR) for the San Joaquin County Employees' Retirement Association (the Plan) as of December 31, 2017. This letter includes references to two documents produced by Cheiron for the Plan: the Actuarial Valuation Report as of January 1, 2017 (August 9, 2017) and the GASB 67/68 Report as of December 31, 2017 (May 15, 2018).

Actuarial Valuation Report as of January 1, 2017

The purpose of the annual Actuarial Valuation Report as of January 1, 2017 is to determine the actuarial funding status of the Plan on that date and to calculate recommended contribution rates for the participating employers and Plan members for the year 2018. The prior review was conducted as of January 1, 2016, and included recommended contribution rates for the year 2017.

Actuarial funding is based on the Entry Age Normal Cost Method. Under this method, the employer contribution rate provides for current cost (normal cost and expected administrative expenses) plus a level percentage of payroll to amortize the unfunded actuarial liability (UAL). As of the valuation date (January 1, 2017), the amortization period is 22 years for half of the 2008 investment loss and 16 years for the remaining UAL as of January 1, 2014. Any unexpected change in the UAL occurring after January 1, 2014 is amortized over a closed 15-year period.

The funding objective of the Plan is to accumulate sufficient assets over each Member's working life to provide for Plan benefits after termination of employment or retirement. For actuarial valuation purposes, Plan assets are valued at Actuarial Value, with adjustments for certain Special Reserves. Under this method, the assets used to determine employer contribution rates take into account market value by spreading all investment gains and losses (returns above or below expected returns) over a period of five years, limited by a corridor that restrains the Actuarial Value to within 20% of the market value of assets.

The Board of Retirement is responsible for establishing and maintaining the funding policy of the Plan.

www.cheiron.us 1.877.CHEIRON (243.4766)

ACTUARY'S CERTIFICATION LETTER

Board Members
June 15, 2018
Page 2

We prepared the following schedules, which we understand will be included in the Actuarial Section of the CAFR, based on the January 1, 2017 actuarial valuation. All historical information prior to the January 1, 2013 actuarial valuation shown in these schedules is based on information reported by EFI Actuaries, which was acquired by Cheiron in January 2013.

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Valuation Data
- Retirants and Beneficiaries Added to and Removed from Retiree Payroll
- Solvency Test
- Actuarial Value of Assets and Reserves
- Summary of Plan Provisions

We reviewed the actuarial assumptions shown in the schedules and found them to be reasonably appropriate for use under the Plan. The assumptions used in this report reflect the results of an Experience Study performed by Cheiron covering the period from January 1, 2013 through December 31, 2015, and approved by the Board. The assumptions used in the most recent valuation are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis is expected to cover the years through 2018.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for funding purposes meet the requirements of the Actuarial Standards of Practice, in particular Standards No. 4, 27, 35, and 44.

GASB 67/68 Report as of December 31, 2017

The purpose of GASB 67/68 Report as of December 31, 2017, is to provide accounting and financial reporting information under GASB 67 for the Plan and under GASB 68 for the County of San Joaquin and other participating employers. This report is not appropriate for other purposes, including the measurement of funding requirements for the Plan.

For financial reporting purposes, the Total Pension Liability is based on the January 1, 2017, actuarial valuation updated to the measurement date of December 31, 2017. There were no significant events between the valuation date and the measurement date so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments.

Beginning of year measurements are based on the actuarial valuation as of January 1, 2016. The December 31, 2016, Total Pension Liability presented in the GASB 67/68 Report was based upon the same data, plan provisions, actuarial methods, and assumptions as were used in the Actuarial Valuation Report as of January 1, 2016. The December 31, 2017, Total Pension Liability presented in the GASB 67/68 Report was based upon the same data, plan provisions, actuarial methods, and assumptions as were used in the Actuarial Valuation Report as of January 1, 2017.



ACTUARY'S CERTIFICATION LETTER

Board Members
June 15, 2018
Page 3

Please refer to our GASB 67 report as of December 31, 2017, for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the CAFR based on the December 31, 2017, GASB 67/68 report:

- Change in Net Pension Liability
- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Schedule of Changes in Net Pension Liability and Related Ratios
- Schedule of Employer Contributions
- Notes to the Schedule of Employer Contributions

We certify that the report was performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.

Disclaimers

In preparing our reports, we relied on information (some oral and some written) supplied by the San Joaquin County Employees' Retirement Association. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

Cheiron's reports were prepared solely for the Plan for the purposes described herein, except that the Plan and participating employers' auditors may rely on these reports solely for the purpose of completing an audit related to the matters herein. Other users of these reports are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.



ACTUARY'S CERTIFICATION LETTER

Board Members

June 15, 2018

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We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. These reports do not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully Submitted,
Cheiron



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SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial assumptions and methods are both recommended by our actuaries, Cheiron, and adopted by the Board of Retirement on an annual basis. The most current Actuarial Valuation was conducted on January 1, 2017 for the period ending December 31, 2016.

An Experience Analysis is completed once every three years. The most recent Experience Analysis was conducted on November 1, 2016 for the years 2013 through 2015.

ACTUARIAL COST METHOD	Entry Age Normal Cost Method
UNFUNDED LIABILITY	The excess of the Actuarial Liability over Plan assets is the Unfunded Actuarial Liability (UAL). Half the actuarial loss experienced in 2008 was deemed to be an Extraordinary Actuarial Loss. Thus, 50% of the loss is separately amortized as a level percentage of pay over a closed 30-year period, with 22 years remaining as of January 1, 2017. The remainder of the Plan's UAL as of January 1, 2014 is being amortized over a closed 19 year period (16 years remaining as of January 1, 2017), decreasing by one year in each annual valuation report. All subsequent unexpected change in the UAL after January 1, 2014 is amortized over a 15 year closed period, beginning from the date the change is measured.
VALUATION INTEREST RATE	The annual rate of return on all Plan assets is assumed to be 7.40%, net of investment expenses.
INFLATION ASSUMPTION	2.90% per annum
ADMINISTRATIVE EXPENSES	Administrative expenses are assumed to be \$4,370,908 for the next year, to be split between employees and employers based on their share of the overall contributions. Expenses are expected to growth with the cost of living (by 2.90% per year).
POST RETIREMENT COLA	Benefits are assumed to increase after retirement at the rate of 2.6% per year.
INCREASES IN PAY	Assumed pay increases for active members consist of increases due to base salary adjustments plus service-based increases due to longevity and promotion. Rates vary by age and classification (See <i>Salary Scale Schedule</i>).
ASSET VALUATION METHOD	The Plan uses a modified market-related value method called the Actuarial Value of Plan Assets. The fair value of assets is adjusted to recognize, over a five-year period, differences between actual investment earnings and the assumed investment return. Accordingly, only 20% of this difference is being recognized in any one year (See <i>Actuarial Value of Assets Schedule</i>). The actuarial value of assets is limited to no less than 80% and no more than 120% of the fair value.
HEALTHY MEMBER MORTALITY	Mortality rates for active members are based on the sex distinct CALPERS Preretirement Non-Industrial Mortality Table, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.

(Continued on page 77)

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

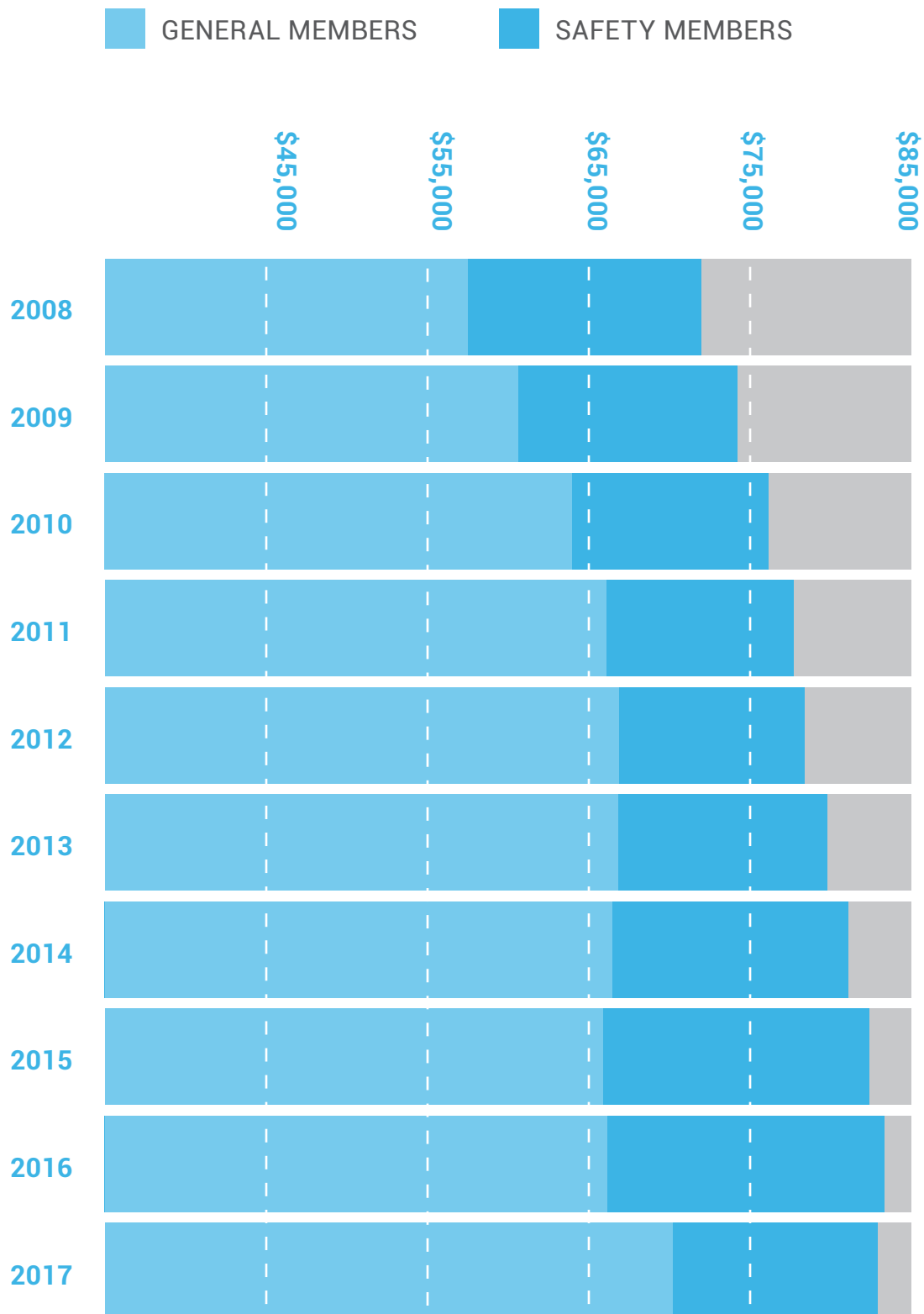
HEALTHY MEMBER MORTALITY (CONT.)	<p>Mortality rates for healthy annuitants are based on the sex distinct CALPERS Healthy Annuitant Mortality Table, with a partial credibility adjustment of 1.10 for Safety members, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p> <p>Mortality rates for active members who die in the line-of-duty are based on the sex distinct CALPERS Preretirement Industrial Mortality Table, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p>
DISABLED MEMBER MORTALITY	<p>Mortality rates for Safety disabled annuitants are based on the sex distinct CALPERS Industrially Disabled Annuitant Mortality Table, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p> <p>Mortality rates for General disabled annuitants are based on the sex distinct CALPERS Non-Industrially Disabled Annuitant Mortality Table, with a partial credibility adjustment of 1.05, with generational mortality improvements projected from 2009 using Projection Scale MP-2015, published by the Society of Actuaries.</p>
VESTED TERMINATION RATES	Rates vary by service and classification (See Probabilities of Separation Schedule).
WITHDRAWAL RATES	Rates vary by service and classification (See Probabilities of Separation Schedule).
DISABILITY RATES	Rates vary by age, gender and classification (See Probabilities of Separation Schedule).
DUTY DISABILITY RATES	Rates vary by age, gender and classification (See Probabilities of Separation Schedule).
SERVICE RETIREMENT RATES	Rates vary by age, service, gender and classification (See Probabilities of Separation Schedule).
FAMILY COMPOSITION	55% of female members and 75% of male members are assumed to be married. Male members are assumed to be four years older than their spouses. Female members are assumed to be two years younger than their spouses.
VESTED TERMINATIONS	<p>No terminations are assumed for participants who are eligible for retirement. 60% of all General Member terminations with less than five years of service are assumed to take a refund of contributions, as well as 30% of those with five to fourteen years of service.</p> <p>60% of all Safety Member terminations with less than five years of service are assumed to take a refund of contributions and 10% of those between five and fourteen years are assumed to take a refund.</p>
DEFERRAL AGE FOR VESTED TERMINATORS	<p>For General Members who terminate with a deferred benefit, 25% are assumed to go to work with a reciprocal employer. This rate is 50% for Safety Members.</p> <p>Vested terminated General Members are assumed to begin receiving benefits at age 58 terminated. Safety Members are assumed to begin receiving benefits at age 50.</p>
EMPLOYMENT STATUS	No future transfers among member groups are assumed.

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

ACTUARIAL VALUATION DATE	PLAN TYPE	MEMBERS	ANNUAL PAYROLL	AVERAGE ANNUAL SALARY	AVERAGE SALARY INCREASE
01/01/2008	General	5,353	\$ 308,773,122	\$ 57,682	4.76%
	Safety	871	62,988,014	72,317	5.34%
	TOTAL	6,224	371,761,136	59,730	4.97%
01/01/2009	General	5,180	315,202,954	60,850	5.49%
	Safety	900	67,127,759	74,586	3.14%
	TOTAL	6,080	382,330,713	62,883	5.28%
01/01/2010	General	4,990	320,526,792	64,234	5.56%
	Safety	925	70,801,157	76,542	2.62%
	TOTAL	5,915	391,327,949	66,159	5.21%
01/01/2011	General	4,643	308,183,424	66,376	3.33%
	Safety	830	64,817,396	78,093	2.03%
	TOTAL	5,473	373,000,820	68,153	3.01%
01/01/2012	General	4,441	298,308,687	67,172	1.20%
	Safety	813	64,041,814	78,772	0.87%
	TOTAL	5,254	362,350,501	68,967	1.19%
01/01/2013	General	4,492	301,505,122	67,120	-0.08%
	Safety	803	64,386,900	80,183	1.79%
	TOTAL	5,295	365,892,022	69,101	0.19%
01/01/2014	General	4,748	316,885,044	66,741	-0.57%
	Safety	805	65,640,055	81,540	1.69%
	TOTAL	5,553	382,525,099	68,886	-0.31%
01/01/2015	General	4,879	322,836,680	66,169	-0.86%
	Safety	827	68,491,483	82,819	1.57%
	TOTAL	5,706	391,328,163	68,582	-0.44%
01/01/2016	General	5,131	340,731,847	66,407	0.36%
	Safety	793	66,456,278	83,804	1.19%
	TOTAL	5,924	407,188,125	68,735	0.22%
01/01/2017	General	5,291	373,202,798	70,535	6.22%
	Safety	811	67,593,920	83,346	-0.55%
	TOTAL	6,102	\$ 440,796,718	\$ 72,238	5.10%

Payroll figures represent year end monthly retirement benefits annualized and exclude Post-Employment Healthcare benefit and benefits under the Class Action Settlement. The most current Actuarial Valuation was conducted on January 1, 2017 for the period ending December 31, 2016. The information in subsequent years is currently not available.

CHART OF ACTIVE MEMBER AVERAGE ANNUAL SALARY



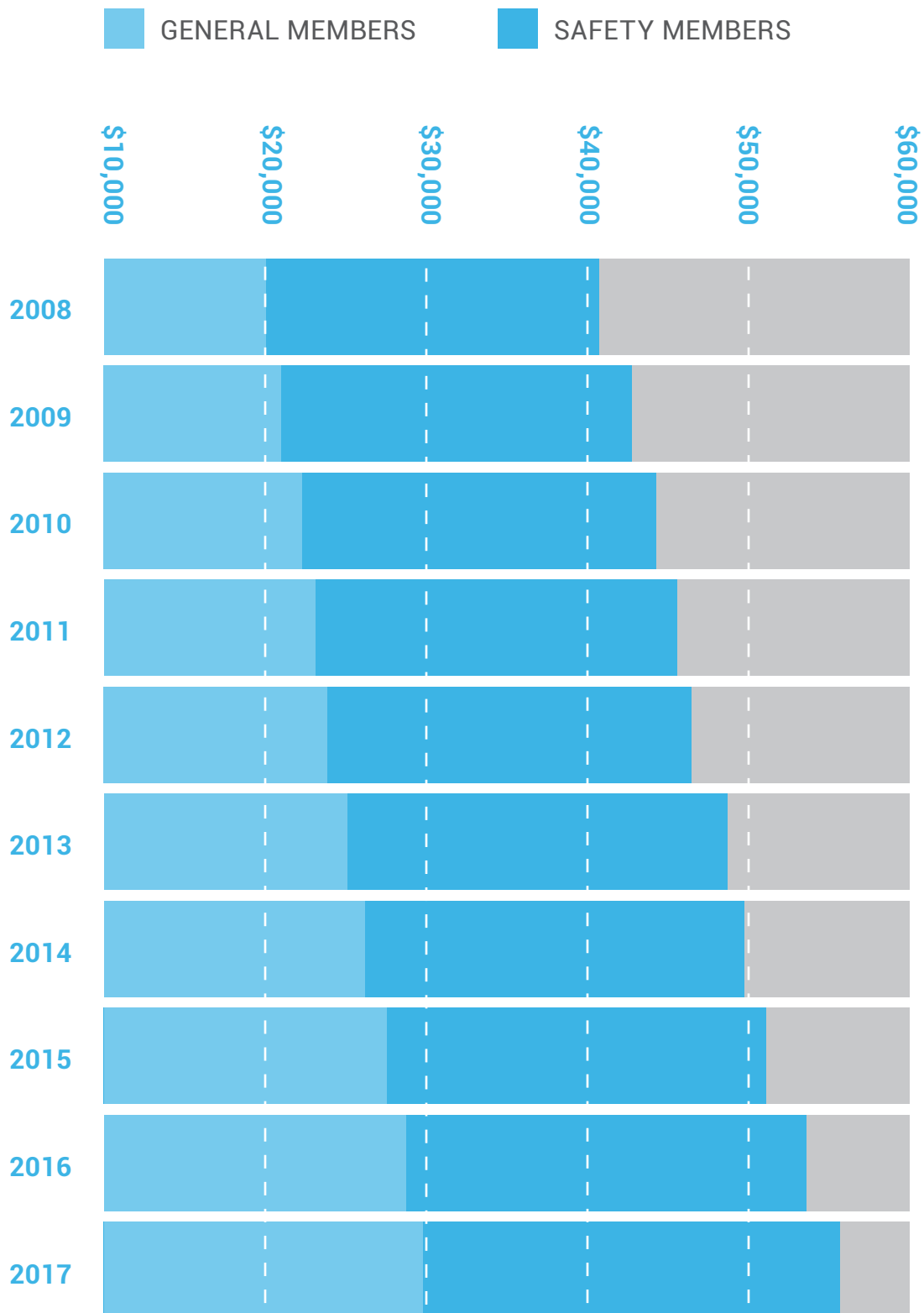
SCHEDULE OF RETIREES AND BENEFICIARIES VALUATION DATA

ACTUARIAL VALUATION DATE	PLAN TYPE	MEMBER RETIREMENTS	BENEFICIARY CONTINUANCE	MEMBERS AND BENEFICIARIES REMOVED	TOTAL RETIREES ON PAYROLL	ANNUAL RETIREMENT PAYROLL	AVERAGE ANNUAL ALLOWANCE	AVERAGE ALLOWANCE % INCREASE
01/01/2008	General	199	31	99	3,238	\$ 65,213,731	\$ 20,140	6.7%
	Safety	38	6	8	668	27,396,329	41,012	3.7%
	TOTAL	237	37	107	3,906	92,610,060	23,710	6.0%
01/01/2009	General	203	30	83	3,388	71,488,335	21,100	4.8%
	Safety	50	10	18	710	30,575,540	43,064	5.0%
	TOTAL	253	40	101	4,098	102,063,875	24,906	5.0%
01/01/2010	General	207	31	104	3,522	78,988,070	22,427	6.3%
	Safety	24	7	11	730	32,575,964	44,625	3.6%
	TOTAL	231	38	115	4,252	111,564,034	26,238	5.3%
01/01/2011	General	242	35	102	3,697	85,931,078	23,243	3.6%
	Safety	65	5	8	792	36,354,738	45,902	2.9%
	TOTAL	307	40	110	4,489	122,285,816	27,241	3.8%
01/01/2012	General	240	42	108	3,871	92,938,361	24,009	3.3%
	Safety	32	4	14	814	38,098,866	46,805	2.0%
	TOTAL	272	46	122	4,685	131,037,227	27,970	2.7%
01/01/2013	General	278	27	135	4,041	102,025,575	25,248	5.2%
	Safety	52	12	20	856	42,008,598	49,075	4.9%
	TOTAL	330	39	155	4,897	144,034,172	29,413	5.2%
01/01/2014	General	213	52	134	4,172	109,864,971	26,334	4.3%
	Safety	22	11	20	869	43,546,661	50,111	2.1%
	TOTAL	235	63	154	5,041	153,411,632	30,433	3.5%
01/01/2015	General	247	51	112	4,358	120,722,240	27,701	5.2%
	Safety	29	14	21	891	45,889,472	51,503	2.8%
	TOTAL	276	65	133	5,249	166,611,711	31,742	4.3%
01/01/2016	General	228	45	136	4,494	129,928,957	28,912	4.4%
	Safety	54	15	19	941	50,813,875	54,000	4.9%
	TOTAL	282	60	155	5,435	180,742,832	33,255	4.8%
01/01/2017	General	251	40	128	4,657	139,511,334	29,957	3.6%
	Safety	40	12	22	971	54,508,607	56,137	4.0%
	TOTAL	291	52	150	5,628	\$ 194,019,941	\$ 34,474	3.7%

Payroll figures represent year end monthly retirement benefits annualized and exclude Post-Employment. Healthcare benefit and benefits under the Class Action Settlement. The most current Actuarial Valuation was conducted on January 1, 2017 for the period ending December 31, 2016. The information in subsequent years is currently not available.

ACTUARIAL

CHART OF RETIREES AND BENEFICIARIES AVERAGE ANNUAL ALLOWANCE



RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM RETIREE PAYROLL

FISCAL YEAR	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT YEAR END		% INCREASE IN RETIREE ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	MEMBER COUNT	ANNUAL ALLOWANCE (IN 000'S) ¹	MEMBER COUNT	ANNUAL ALLOWANCE (IN 000'S)	MEMBER COUNT	ANNUAL ALLOWANCE (IN 000'S)		
2013	297	12,908	(153)	(3,530)	5,041	153,412	3.47%	30,433
2014	340	16,223	(132)	(3,029)	5,249	166,606	4.30%	31,741
2015	340	17,766	(155)	(3,651)	5,434	180,721	4.78%	33,258
2016	344	17,602	(150)	(3,867)	5,628	194,456	3.89%	34,551
2017	356	16,920	(162)	(4,333)	5,822	207,043	3.13%	35,631

¹Includes COLA amounts not included in previous year's Annual Allowance totals.

ACTUARIAL

SOLVENCY TEST

(DOLLARS IN THOUSANDS)								
ACTUARIAL VALUATION DATE	ACTUARIAL ACCRUED LIABILITY			TOTAL ACTUARIAL ACCRUED LIABILITY	ACTUARIAL VALUE OF ASSETS	PORTION OF ACCRUED LIABILITIES COVERED BY REPORTED ASSETS		
	(1) ACTIVE MEMBER CONTRIBUTIONS	(2) RETIREES AND BENEFICIARIES	(3) ACTIVE MEMBERS (EMPLOYER FINANCED PORTION)			(1)	(2)	(3)
1/1/2008	\$ 166,804	\$ 1,119,690	\$ 1,048,027	\$2,334,521	\$2,029,949	100%	100%	71.0%
1/1/2009	176,236	1,231,648	1,103,042	2,510,925	1,821,357	100%	100%	37.0%
1/1/2010	187,987	1,373,257	1,208,368	2,769,612	1,949,011	100%	100%	32.0%
1/1/2011	193,613	1,495,665	1,228,410	2,917,688	2,120,384	100%	100%	35.0%
1/1/2012	202,925	1,627,338	1,218,058	3,048,321	2,130,053	100%	100%	25.0%
1/1/2013	209,987	1,810,776	1,332,531	3,353,294	2,125,700	100%	100%	8.0%
1/1/2014	258,198	1,956,931	1,346,730	3,561,859	2,285,166	100%	100%	5.0%
1/1/2015	276,818	2,117,010	1,337,806	3,731,634	2,471,291	100%	100%	6.0%
1/1/2016	297,179	2,347,908	1,361,303	4,006,390	2,604,473	100%	98%	0.0%
1/1/2017	\$ 318,021	\$ 2,513,640	\$ 1,403,433	\$4,235,094	\$2,733,852	100%	96%	0.0%

This schedule excludes Post 4/1/82 Retiree Class Action Settlement Reserve and Unapportioned Earnings Reserve. The most current Actuarial Valuation was conducted on January 1, 2017 for the period ending December 31, 2016. The information in subsequent years is currently not available.

SCHEDULE OF FUNDING PROGRESS DEFINED BENEFIT PENSION PLAN

FOR THE LAST TEN FISCAL YEARS ENDED DECEMBER 31

(DOLLARS IN THOUSANDS)						
ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS ¹ (A)	ACTUARIAL LIABILITY (AL) (B)	UNFUNDED ACTUARIAL LIABILITY (UAL) (B-A)	FUNDED RATIO (A/B)	COVERED PAYROLL ² (C)	UAL AS A PERCENTAGE OF ANNUAL COVERED PAYROLL ((B-A)/C)
1/1/2017	\$ 2,733,852	\$ 4,235,094	\$ 1,501,242	64.6%	\$ 447,685	335.3%
1/1/2016	2,604,473	4,006,390	1,401,917	65.0%	413,552	339.0%
1/1/2015	2,471,291	3,731,634	1,260,343	66.2%	397,636	317.0%
1/1/2014	2,285,166	3,561,859	1,276,693	64.2%	388,691	328.5%
1/1/2013	2,125,700	3,353,294	1,227,594	63.4%	365,892	335.5%
1/1/2012	2,130,053	3,048,321	918,268	69.9%	356,419	257.6%
1/1/2011	2,120,384	2,917,688	797,304	72.7%	367,344	217.0%
1/1/2010	1,949,011	2,769,612	820,601	70.4%	385,442	212.9%
1/1/2009	1,821,357	2,510,925	689,568	72.5%	377,559	182.6%
1/1/2008	2,029,949	2,334,521	304,572	87.0%	367,361	82.9%

NOTE:

¹ The actuarial value of assets reflects the smoothing method that adjusts fair value differences between the assumed and the actual investment return over a 5-year period.

² Represents the annualization of active members' pay rates on December 31 as determined by the actuarial study.

ACTUARIAL

ASSUMED PROBABILITIES OF SEPARATION FROM ACTIVE MEMBERSHIP (GENERAL)

AGE	NON-DUTY DEATH	ORDINARY DISABILITY	SERVICE RETIREMENT ¹	DUTY DEATH	DUTY DISABILITY
GENERAL MEMBERS - MALE					
20	0.0002	0.000	0.000	0.000	0.001
25	0.0003	0.001	0.000	0.000	0.001
30	0.0005	0.001	0.000	0.000	0.001
35	0.0005	0.001	0.000	0.000	0.001
40	0.0007	0.001	0.000	0.000	0.004
45	0.0009	0.002	0.000	0.000	0.004
50	0.0014	0.002	0.040	0.000	0.002
55	0.0022	0.003	0.085	0.000	0.002
60	0.0034	0.003	0.150	0.000	0.002
65	0.0046	0.004	0.250	0.000	0.002
GENERAL MEMBERS - FEMALE					
20	0.0002	0.000	0.000	0.000	0.000
25	0.0002	0.001	0.000	0.000	0.000
30	0.0003	0.001	0.000	0.000	0.000
35	0.0004	0.001	0.000	0.000	0.001
40	0.0005	0.001	0.000	0.000	0.001
45	0.0006	0.002	0.000	0.000	0.001
50	0.0010	0.002	0.035	0.000	0.001
55	0.0015	0.003	0.035	0.000	0.002
60	0.0021	0.004	0.125	0.000	0.002
65	0.0029	0.005	0.250	0.000	0.003

¹ Lower rates assumed for members with less than 10 years of service, and higher rates assumed for members with at least 30 years of service.

The probabilities for each cause of separation represent the likelihood that a given member will separate at a particular age for the indicated reason. As an example, if the probability of separation of a male general member at age 50 is 0.040, that indicates that 4% of active general members are expected to separate from service during the year. Rates of Duty and Non-Duty Death are for active members who reach the given age during 2017.

ASSUMED PROBABILITIES OF SEPARATION FROM ACTIVE MEMBERSHIP (SAFETY)

AGE	NON-DUTY DEATH	ORDINARY DISABILITY	SERVICE RETIREMENT ¹	DUTY DEATH	DUTY DISABILITY
SAFETY MEMBERS - MALE					
20	0.0002	0.000	0.000	0.000	0.000
25	0.0003	0.000	0.000	0.001	0.001
30	0.0005	0.000	0.000	0.001	0.001
35	0.0005	0.000	0.000	0.001	0.002
40	0.0007	0.000	0.000	0.001	0.004
45	0.0009	0.000	0.050	0.001	0.008
50	0.0014	0.001	0.150	0.001	0.014
55	0.0022	0.001	0.300	0.001	0.014
SAFETY MEMBERS - FEMALE					
20	0.0002	0.000	0.000	0.000	0.000
25	0.0002	0.000	0.000	0.001	0.001
30	0.0003	0.000	0.000	0.001	0.001
35	0.0004	0.000	0.000	0.001	0.002
40	0.0005	0.000	0.000	0.001	0.004
45	0.0006	0.000	0.050	0.001	0.009
50	0.0010	0.001	0.150	0.001	0.014
55	0.0015	0.001	0.300	0.002	0.014

¹ Lower rates assumed for members with less than 20 years of service.

The probabilities for each cause of separation represent the likelihood that a given member will separate at a particular age for the indicated reason. As an example, if the probability of separation of a male safety member at age 50 is 0.150, that indicates that 15% of active safety members are expected to separate from service during the year.

ACTUARIAL

SALARY INCREASE, TERMINATION, AND WITHDRAWAL ASSUMPTIONS

YEARS OF SERVICE	SALARY INCREASE		WITHDRAWAL		TERMINATION	
	GENERAL	SAFETY	GENERAL	SAFETY	GENERAL ¹	SAFETY ²
0	0.0934	0.1037	0.105	0.060	0.070	0.040
1	0.0831	0.0934	0.066	0.047	0.044	0.031
2	0.0728	0.0831	0.060	0.035	0.040	0.023
3	0.0624	0.0728	0.047	0.030	0.031	0.020
4	0.0521	0.0624	0.041	0.027	0.027	0.018
5	0.0470	0.0547	0.019	0.002	0.044	0.018
6	0.0418	0.0444	0.018	0.002	0.042	0.016
7	0.0392	0.0444	0.014	0.002	0.032	0.014
8	0.0367	0.0444	0.014	0.002	0.032	0.014
9	0.0367	0.0444	0.011	0.002	0.026	0.014
10	0.0367	0.0444	0.011	0.001	0.026	0.007
11	0.0367	0.0444	0.008	0.001	0.019	0.007
12	0.0367	0.0444	0.008	0.001	0.019	0.007
13	0.0367	0.0444	0.008	0.001	0.018	0.007
14	0.0367	0.0444	0.008	0.001	0.018	0.007
15	0.0367	0.0444	0.003	0.000	0.023	0.008
16	0.0367	0.0444	0.003	0.000	0.023	0.008
17	0.0367	0.0444	0.003	0.000	0.023	0.008
18	0.0367	0.0444	0.003	0.000	0.023	0.008
19	0.0367	0.0444	0.003	0.000	0.023	0.008
20	0.0367	0.0444	0.001	0.000	0.009	0.000
21	0.0367	0.0444	0.001	0.000	0.009	0.000
22	0.0367	0.0444	0.001	0.000	0.009	0.000
23	0.0367	0.0444	0.001	0.000	0.009	0.000
24	0.0367	0.0444	0.001	0.000	0.009	0.000
25	0.0367	0.0444	0.001	0.000	0.009	0.000
26	0.0367	0.0444	0.001	0.000	0.009	0.000
27	0.0367	0.0444	0.001	0.000	0.009	0.000
28	0.0367	0.0444	0.001	0.000	0.009	0.000
29	0.0367	0.0444	0.001	0.000	0.009	0.000
30+	0.0315	0.0444	0.000	0.000	0.000	0.000

¹ 25% of General Terminations are assumed to be reciprocal.

² 50% of Safety Terminations are assumed to be reciprocal.

ACTUARIAL VALUE OF ASSETS AND RESERVES

The actuarial value of assets represents a “smoothed” value developed by the actuary to reduce the volatile results, which could develop due to short-term fluctuations in the fair value of assets. For this System, the actuarial value of assets is calculated by recognizing the deviation of actual investment returns compared to the expected return over a five-year period.

The dollar amount of the expected return on the fair value of assets is determined using the actual contributions, administrative expense (beginning in 2013), and benefit payments during the year. Any difference between this amount and the actual investment earnings is considered a gain or loss. However, in no event will the actuarial value of assets be less than 80% or more than 120% of fair value on the valuation date. The following table shows the development of the actuarial asset value.

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS AS OF JANUARY 1, 2017									
YEAR	(A) CONTRIBUTIONS	(B) BENEFITS	(C) ADMIN. EXPENSE	(D) HEALTHCARE FUND TRANSFER	(E) EXPECTED RETURN	(F) ACTUAL RETURN	(G)=(F)–(E) ADDITIONAL EARNINGS	(H) NOT RECOGNIZED	(I)=(G)X(H) UNRECOGNIZED EARNINGS
2013	\$ 142,184,201	\$155,401,819	\$4,134,716	\$ 0	\$161,392,211	\$198,449,237	\$ 37,057,026	20%	\$ 7,411,405
2014	164,054,041	165,870,971	4,042,986	19,968,779	176,895,311	110,728,303	(66,167,008)	40%	(26,466,803)
2015	179,398,457	181,468,912	4,075,745	378,969	184,778,322	(47,339,751)	(232,118,073)	60%	(139,270,844)
2016	189,239,931	194,719,177	4,369,744	293,779	178,243,779	151,114,788	(27,128,991)	80%	(21,703,193)
(1)	Total Unrecognized Dollars								(180,029,435)
(2)	Fair Value of Assets as of December 31, 2016								2,554,802,124
(3)	Preliminary Actuarial Value of Assets as of December 31, 2016: [(2) - (1)]								2,734,831,559
(4)	Corridor Limits								
	a. 80% of Net Fair Value								2,043,841,699
	b. 120% of Net Fair Value								3,065,762,549
(5)	Actuarial Value of Assets after Corridor								2,734,831,559
(6)	Ratio of Actuarial Value to Fair Value [(5) ÷ (2)]								107.05%
(7)	Market Stabilization Designation [(2) – (5)]								(180,029,435)
(8)	Special (Non Valuation) Reserves:								
	Class Action Settlement – Post 4/1/1982								915,393
	Contingency								0
	Undistributed Earnings Reserve								0
	Total Special Reserves								915,393
(9)	PENSION RESERVES AT ACTUARIAL VALUE (VALUATION ASSETS) [(5) - (8)*(6)]								\$2,733,851,661

SUMMARY OF MAJOR PLAN PROVISIONS

MEMBERSHIP

Membership is mandatory upon appointment to a full-time, permanent position with the County or other participating employer. Persons who commence covered employment at age 60 or older may irrevocably elect to waive membership in SJCERA.

Tier 1 - Employees who established and maintain membership in SJCERA prior to January 1, 2013, and other eligible employees as defined by law, participate in the defined benefit formula that was in place before January 1, 2013, termed "SJCERA Tier 1."

Tier 2 - Employees who establish membership in SJCERA on or after January 1, 2013, who are subject to the provisions of the Public Employees' Pension Reform Act of 2013 (Article 4 (commencing with Section 7522, et seq.) of Chapter 21 of Division 7 of Title 1 of the Government Code), also known as "PEPRA," participate in the defined benefit formula prescribed by PEPRA for these employees, termed "SJCERA Tier 2."

FINAL AVERAGE SALARY

For Tier 1 members, final compensation for purposes of computing a retirement allowance is the average monthly salary for the highest twelve consecutive months of employment. In addition to base salary, final compensation may include other items defined as compensation earnable for retirement purposes. Overtime pay is excluded.

For Tier 2 members, final compensation for purposes of computing a retirement allowance is the average monthly salary for the highest thirty-six consecutive months of employment. In addition to base salary, final compensation may include other items defined as pensionable compensation. Allowances, incentives, employer contributions to deferred compensation, annual leave cash outs and overtime pay are excluded.

CONTRIBUTIONS

Member contributions are based upon membership category, General or Safety, are expressed as a percentage of covered payroll, and are deducted from employees' earnings on a biweekly basis. Collective bargaining agreements and employment resolutions may also specify terms that affect members' retirement contributions.

Tier 1 members pay contributions also based upon the age at which the employee entered SJCERA membership. Members of Tier 1 employed prior to March 7, 1973, and all Safety members of Tier 1 stop paying member contributions when they have 30 years of service credit, but continue to accrue retirement service credit for subsequent active employment subject to membership.

Tier 2 members pay contributions equal to one-half of the normal cost of their applicable benefits.

SUMMARY OF MAJOR PLAN PROVISIONS

Member contributions are credited with interest semi-annually. Upon termination of employment prior to retirement, a member may elect to withdraw his or her accumulated member contributions and interest, terminating SJCERA membership and forfeiting all related rights and benefits.

VESTING

A member with five years of retirement service credit is vested in the plan as long as accumulated member contributions remain on deposit with SJCERA.

SERVICE RETIREMENT

TIER 1 MEMBERS:

For retirements effective January 1, 2001 and later, retirement benefits are as provided under Sections 31676.14 and 31664.1 of the County Employees' Retirement Law.

A Tier 1 member may retire for service at age 50 or older with five years of service credit, and at least ten years has elapsed since the date of membership. A General Member may retire at any age with 30 or more years of service. A Safety Member may retire at any age with 20 or more years of service.

Tier 1 provides a 2.0% of final compensation for each year of service credit at age 55½ benefit formula for General Members, and a 3.0% of final compensation for each year of service credit at age 50 benefit formula for safety members of Tier 1. Social Security integration reduces benefits by one-third on the first \$350 of monthly final average salary. The maximum benefit payable is the lesser of 100% of final average salary or the federal annual compensation limit under Internal Revenue Code Section 401(a)(17), if applicable.

TIER 2 MEMBERS:

Tier 2 Members – Retirement benefits are as provided under Sections 7522.20 and 7522.25(d) of PEPR.

A Tier 2 member may retire for service with five years of service credit upon attaining the minimum retirement age: Age 52 for General Members, and Age 50 for Safety Members.

Tier 2 provides a 2% of final compensation for each year of service credit at age 62 benefit formula for General Members, and a 2.7% of final compensation for each year of service credit at age 57 benefit formula for Safety Members. PEPR specifies the maximum annual compensation that may be used to calculate retirement benefits. A lower limit applies to members whose service under SJCERA is also covered by Social Security, and a higher limit applies to members whose service under SJCERA is not covered by Social Security. These limits are adjusted annually based on changes in the Consumer Price Index.

Any member of SJCERA, regardless of benefit tier, may retire at age 70 with no minimum service credit requirement.

SUMMARY OF MAJOR PLAN PROVISIONS

DISABILITY RETIREMENT

Members with five years of service credit, regardless of age, are eligible to apply for a non-service connected disability retirement. If granted, the benefit is the greater of:

- 1) 1.5% of final average salary for General Members, or 1.8% for final average salary for Safety Members, for each year of service, not to exceed 33 $\frac{1}{3}$ % of final average salary, or
- 2) the amount of the member's service retirement benefit, if the member is eligible to retire for service.

Any active member, regardless of years of service credit, is eligible to apply for a service-connected disability retirement. If granted, the benefit is the greater of:

- 1) 50% of the member's final average salary, or
- 2) the amount of the member's service retirement benefit, if the member is eligible to retire for service.

DEATH BENEFITS

Basic Death Benefit - The beneficiary of a member who dies prior to attaining five years of credited service receives a refund of the member's accumulated contributions and interest plus one month's salary for each full year of service, up to a maximum of six months' salary.

If the death occurs after the member attained five years of credited service and is not the result of a service-related injury or disease, the surviving spouse or minor children may elect to receive, in lieu of the Basic Death Benefit, either 60% of the retirement allowance to which the deceased member would have been entitled had the member retired for service or non-service-connected disability on the date of death, or a lump sum payment of six months' salary and a reduced monthly retirement benefit. The monthly allowance payable to a minor child is discontinued when the child marries or attains age 18, or age 22 if a full-time student.

Upon the death of a retiree, the beneficiary may receive a continuance of 100%, 60%, or 50% of the deceased member's retirement benefit as determined by the type of retirement and benefit option elected by the member. The beneficiary also receives a \$5,000 lump-sum death benefit.

COST-OF-LIVING BENEFITS

All monthly allowances are eligible for an annual cost-of-living adjustment (COLA) based on the change in the Consumer Price Index (CPI) for the San Francisco-Oakland-San Jose area for the previous calendar year, up to a maximum of 3.0%. When the CPI exceeds 3.0% in any year, the difference between the actual change in CPI (rounded to the nearest one-half percent) and the 3.0% ceiling is "accumulated" for future years when the change is less than 3.0%.

SUMMARY OF STATISTICAL DATA

This section of the Comprehensive Annual Financial Report provides additional historical perspective, context, and detail in order to provide a more comprehensive understanding of this year's financial statements, note disclosures, and supplementary information.

This section provides supplementary information according to Governmental Accounting Standards Board (GASB) Statement No. 44, which establishes and modifies required data by providing multi-year trend information to provide an understanding of how the organization's financial activities and positions have changed over time. The Statistical Information is presented to include two main categories required by pension plans: Financial Trends Information and Operating Information.

FINANCIAL TRENDS

Ten-year Trend Information is presented to assist users in understanding how the Plan's financial position has changed over time and provides historical information as to total plan net position and total changes in plan net position, the Plan's additions by source, deductions by type, benefits and refunds by type (service retirement, disability retirement, survivors/beneficiaries benefits, refunds and death benefits).

- *Schedule of Fiduciary Net Position* (page 94)
- *Schedule of Changes in Fiduciary Net Position* (page 95)
- *Schedule of Revenues by Source and Expense by Type* (page 96)
- *Schedule of Benefit Expenses by Type* (page 97)
- *Schedule of Retired Members by Type* (page 98)

OPERATING INFORMATION

Operating Information is intended to provide information about operations and resources to assist readers in using financial statement information to understand and assess a government's economic condition. The following schedules present the average monthly benefit, average final salary, organized in five-year increments of credit service and since retirement, as well as the participating employers and their corresponding covered employees.

- *Schedule of Average Monthly Benefit Payments by Number of Years of Credited Service* (pages 99-102)
- *Schedule of Average Monthly Benefit Payments by Number of Years since Retirement* (pages 103-105)
- *Schedule of Participating Employers for Last Ten Years* (page 106)

STATISTICAL

SCHEDULE OF FIDUCIARY NET POSITION

For the last ten fiscal years ended December 31

	(DOLLARS IN THOUSANDS)									
	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
ASSETS										
Cash and Cash Equivalents	\$ 185,216	\$ 225,343	\$ 226,912	\$ 250,500	\$ 169,701	\$ 208,032	\$ 195,648	\$ 183,531	\$ 233,929	\$ 242,165
Receivables	8,862	10,524	8,930	12,081	28,491	11,152	9,587	34,581	14,516	22,770
Investments	2,773,701	2,463,816	2,328,265	2,371,380	2,256,908	2,054,715	1,851,212	1,842,483	1,588,186	1,374,011
Prepaid Expenses	90	127	112	86	82	101	91	75	70	76
Equipment and Fixtures, Net	74	116	192	315	427	487	572	635	729	83
TOTAL ASSETS	2,967,943	2,699,926	2,564,411	2,634,362	2,455,610	2,274,487	2,057,110	2,061,305	1,837,430	1,639,105
LIABILITY										
Securitized Lending - Cash Collateral	\$ 86,901	\$ 141,349	\$ 147,106	\$ 164,195	\$ 107,127	\$ 108,958	\$ 104,691	\$ 113,171	\$ 108,791	\$ 78,631
Securities Purchased, Not Paid	173	2,542	2,739	1,671	5,433	3,783	1,455	16,858	5,878	11,640
Accrued Expenses and Other Payables	1,475	1,170	1,306	2,138	1,538	1,329	1,019	1,278	1,080	1,785
Securities Lending Interest and Other Expense	105	63	17	8	-	2	-	12	7	-
TOTAL LIABILITIES	\$ 88,654	\$ 145,124	\$ 151,168	\$ 168,012	\$ 114,097	\$ 114,072	\$ 107,165	\$ 131,319	\$ 115,756	\$ 92,056
FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS	2,879,289	2,554,802	2,413,243	2,466,350	2,341,513	2,160,415	1,949,945	1,929,986	1,721,674	1,547,049

SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

For the last ten fiscal years ended December 31

	(DOLLARS IN THOUSANDS)									
	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
CONTRIBUTIONS										
Member Contributions	\$ 33,635	\$ 30,117	\$ 29,027	\$ 27,368	\$ 22,690	\$ 19,900	\$ 14,041	\$ 13,098	\$ 13,013	\$ 13,051
Employer Contributions:										
Retirement Plan	200,052	159,123	150,372	136,686	119,494	108,063	112,892	104,452	97,806	94,163
Post-Employment Health Plan	-	-	-	-	-	-	0	0	4,202	4,083
Investment Income	299,882	151,031	(47,449)	110,651	198,173	230,954	29,262	217,123	182,006	(666,774)
Miscellaneous	78	84	109	77	72	62	68	46	12	14
Transfers Between Plan	365	294	379	19,969	204	339	154	166	84	106
TOTAL ADDITIONS	\$534,012	\$340,648	\$132,438	\$294,751	\$340,633	\$359,317	\$156,417	\$334,885	\$ 297,123	\$(555,357)
Benefits	\$ 203,109	\$ 192,732	\$ 179,585	\$ 164,335	\$ 154,233	\$ 143,669	\$ 131,642	\$ 121,641	\$ 112,647	\$ 104,068
Post-Employment Health Benefits	-	0	0	0	0	0	0	0	3,431	3,679
Administrative Expenses	4,119	4,370	4,076	4,043	4,135	3,869	3,749	3,682	3,527	3,458
Refunds	2,298	1,987	1,884	1,536	1,169	1,309	1,068	1,251	1,038	1,254
Miscellaneous	0	0	0	0	0	0	0	0	0	0
Transfers Between Plan	0	0	0	0	-	-	-	-	84	106
TOTAL DEDUCTIONS	\$209,526	\$199,089	\$185,545	\$169,914	\$159,537	\$148,848	\$136,459	\$126,573	\$120,727	\$ 112,565
CHANGE IN FIDUCIARY NET POSITION	\$324,487	\$141,560	\$ (53,107)	\$124,836	\$181,097	\$210,469	\$ 19,958	\$208,312	\$ 176,396	\$(667,922)

STATISTICAL

SCHEDULE OF REVENUE BY SOURCE AND EXPENSES BY TYPE

SCHEDULE OF REVENUE BY SOURCE

YEAR ENDED	MEMBER CONTRIBUTIONS	EMPLOYER CONTRIBUTIONS		INVESTMENT INCOME	MISC	TRANSFER BETWEEN PLANS	TOTAL
		RETIREMENT PLAN	POST EMPLOYMENT HEALTH PLAN				
2008	\$ 13,050,906	\$ 94,162,866	\$ 4,083,235	\$ (666,774,282)	\$ 14,156	\$ 105,663	\$ (555,357,456)
2009	13,012,755	97,805,585	4,202,490	182,006,435	12,091	84,032	297,123,388
2010	13,098,043	104,451,673	0	217,123,404	46,407	165,625	334,885,152
2011	14,040,773	112,891,701	0	29,262,231	68,107	154,232	156,417,044
2012	19,900,088	108,062,510	0	230,953,847	61,657	339,344	359,317,446
2013	22,689,882	119,494,319	0	198,172,396	72,467	204,375	340,633,439
2014	27,367,908	136,686,133	0	110,651,111	77,192	19,968,779	294,751,123
2015	29,026,901	150,371,556	0	(47,449,240)	109,490	378,969	132,437,676
2016	30,117,408	159,122,523	0	151,031,174	83,614	293,779	340,648,498
2017	33,634,906	200,051,742	-	299,882,451	78,242	364,714	534,012,055

SCHEDULE OF EXPENSES BY TYPE

YEAR ENDED	BENEFITS	EMPLOYER CONTRIBUTIONS		REFUNDS	MISC	TRANSFER BETWEEN PLANS	TOTAL
		POST EMPLOYMENT HEALTH BENEFITS	ADMINISTRATIVE EXPENSES				
2006	\$ 84,863,279	\$ 3,811,464	\$ 3,065,859	\$ 1,035,866	\$ 671	\$ 112,386	\$ 92,889,525
2007	91,115,158	3,764,679	3,555,503	1,042,459	0	123,808	99,601,607
2008	104,068,212	3,679,325	3,458,096	1,253,610	0	105,663	112,564,906
2009	112,646,911	3,430,517	3,527,196	1,038,467	0	84,032	120,727,123
2010	121,640,992	0	3,681,545	1,250,644	0	0	126,573,181
2011	131,641,539	0	3,748,948	1,067,734	0	0	136,458,221
2012	143,669,140	0	3,869,321	1,308,900	0	0	148,847,361
2013	154,232,885	0	4,134,716	1,168,934	0	0	159,536,535
2014	164,335,273	0	4,042,986	1,535,698	0	0	169,913,957
2015	179,585,136	0	4,075,745	1,883,777	0	0	185,544,658
2016	192,732,311	0	4,369,744	1,986,866	0	0	199,088,921
2017	203,109,466	0	4,118,578	2,297,504	0	0	209,525,548

SCHEDULE OF BENEFIT EXPENSES BY TYPE

YEAR END	PLAN TYPE	SERVICE RETIREMENT PAYROLL	DISABILITY RETIREMENT PAYROLL	SURVIVORS AND BENEFICIARIES	REFUNDS OF MEMBERS' CONTRIBUTIONS	DEATH BENEFITS	TOTAL
2008	General	\$ 58,899,375	\$ 6,149,648	\$ 6,399,648	\$ 1,091,876	\$ 398,092	\$ 72,938,639
	Safety	20,666,770	6,913,845	2,994,840	161,734	55,000	30,792,189
	TOTAL	\$ 79,566,145	\$ 13,063,493	\$ 9,394,488	\$ 1,253,610	\$ 453,092	\$ 103,730,828
2009	General	65,145,084	6,712,540	7,129,980	914,476	517,085	80,419,165
	Safety	21,763,980	7,311,808	3,500,406	123,289	45,000	32,744,483
	TOTAL	\$ 86,909,064	\$ 14,024,348	\$ 10,630,386	\$ 1,037,765	\$ 562,085	\$ 113,163,648
2010	General	71,097,399	7,044,294	7,789,890	1,159,876	511,293	87,602,752
	Safety	24,861,690	7,618,760	3,874,365	90,768	0	36,445,583
	TOTAL	\$ 95,959,089	\$ 14,663,054	\$ 11,664,255	\$ 1,250,644	\$ 511,293	\$ 124,048,335
2011	General	77,067,730	7,136,889	8,549,504	1,016,661	537,007	94,307,791
	Safety	26,462,625	7,889,616	3,963,168	51,073	35,000	38,401,482
	TOTAL	\$ 103,530,355	\$ 15,026,505	\$ 12,512,672	\$ 1,067,734	\$ 572,007	\$ 132,709,273
2012	General	82,676,254	9,694,257	8,823,169	1,150,943	503,221	102,847,844
	Safety	27,151,058	10,311,212	4,405,737	157,957	104,232	42,130,196
	TOTAL	\$ 109,827,312	\$ 20,005,469	\$ 13,228,906	\$ 1,308,900	\$ 607,453	\$ 144,978,040
2013	General	95,109,549	5,667,332	8,876,109	900,756	572,733	111,126,479
	Safety	31,116,346	8,938,667	3,912,149	268,178	40,000	44,275,339
	TOTAL	\$ 126,225,895	\$ 14,605,999	\$ 12,788,257	\$ 1,168,934	\$ 612,733	\$ 155,401,817
2014	General	100,668,155	8,493,931	9,401,576	1,427,885	548,606	120,540,152
	Safety	31,407,516	9,555,857	4,184,681	107,813	74,951	45,330,819
	TOTAL	\$ 132,075,671	\$ 18,049,788	\$ 13,586,257	\$ 1,535,698	\$ 623,557	\$ 165,870,971
2015	General	110,694,430	8,608,271	9,864,262	1,584,403	449,742	131,201,108
	Safety	35,096,063	10,179,970	4,580,169	299,374	112,229	50,267,805
	TOTAL	\$ 145,790,493	\$ 18,788,241	\$ 14,444,431	\$ 1,883,777	\$ 561,971	\$ 181,468,913
2016	General	118,912,565	8,650,277	10,544,504	1,840,117	563,769	140,511,231
	Safety	38,262,562	10,660,155	5,083,479	146,749	55,000	54,207,945
	TOTAL	\$ 157,175,127	\$ 19,310,432	\$ 15,627,983	\$ 1,986,866	\$ 618,769	\$ 194,719,177
2017	General	126,046,097	8,807,111	10,729,415	2,108,790	656,206	148,347,619
	Safety	40,336,132	11,088,325	5,401,180	188,714	45,000	57,059,351
	TOTAL	\$ 166,382,229	\$ 19,895,436	\$ 16,130,595	\$ 2,297,504	\$ 701,206	\$ 205,406,970

STATISTICAL

SCHEDULE OF RETIRED MEMBERS BY TYPE

ACTUARIAL VALUATION DATE	PLAN TYPE	MEMBERS WITH SERVICE RETIREMENTS	MEMBERS WITH DISABILITY RETIREMENTS	SURVIVORS AND BENEFICIARIES	TOTAL
01/01/2008	General	2,430	341	467	3,238
	Safety	389	173	106	668
	TOTAL	2,819	514	573	3,906
01/01/2009	General	2,547	355	486	3,388
	Safety	409	183	118	710
	TOTAL	2,956	538	604	4,098
01/01/2010	General	2,654	373	495	3,522
	Safety	420	184	126	730
	TOTAL	3,074	557	621	4,252
01/01/2011	General	2,799	383	515	3,697
	Safety	469	188	135	792
	TOTAL	3,268	571	650	4,489
01/01/2012	General	2,946	381	544	3,871
	Safety	485	190	139	814
	TOTAL	3,431	571	683	4,685
01/01/2013	General	3,113	387	541	4,041
	Safety	514	195	147	856
	TOTAL	3,627	582	688	4,897
01/01/2014	General	3,227	388	557	4,172
	Safety	516	199	154	869
	TOTAL	3,743	587	711	5,041
01/01/2015	General	3,385	393	580	4,358
	Safety	524	205	162	891
	TOTAL	3,909	598	742	5,249
01/01/2016	General	3,506	390	598	4,494
	Safety	554	210	177	941
	TOTAL	4,060	600	775	5,435
01/01/2017	General	3,655	399	603	4,657
	Safety	572	215	184	971
	TOTAL	4,227	614	787	5,628

Figures are extracted from actuarial reports which include individuals receiving divorce settlement payments.

The most current Actuarial Valuation was conducted as of January 1, 2017 for the period ending December 31, 2016.

The information in subsequent years is currently not available.

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS BY NUMBER OF YEARS OF CREDITED SERVICE

RETIREMENT EFFECTIVE DATE	NUMBER OF YEARS COUNTY SERVICE CREDIT						
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER
2011							
Retirees							
GENERAL MEMBERS							
Average Benefits	\$ 470	\$ 1,205	\$ 1,464	\$ 2,615	\$ 3,302	\$ 3,968	\$ 4,670
Average Final Compensation	\$ 5,518	\$ 5,903	\$ 4,928	\$ 6,463	\$ 6,110	\$ 5,541	\$ 5,570
Count	12	26	56	27	41	16	39
SAFETY MEMBERS							
Average Benefits	\$ 922	\$ 1,112	\$ 2,551	\$ 3,970	\$ 7,499	\$ 7,790	\$ 10,586
Average Final Compensation	\$ 9,746	\$ 4,483	\$ 5,290	\$ 7,767	\$ 10,430	\$ 9,162	\$ 10,797
Count	2	6	3	3	4	5	3
Survivors/QDROs							
GENERAL MEMBERS							
Average Benefits	\$ 622	\$ 890	\$ 773	\$ 1,367	\$ 1,838	\$ 2,039	\$ 3,281
Average Final Compensation	\$ 9,807	\$ 4,816	\$ 3,578	\$ 4,371	\$ 4,108	\$ 3,364	\$ 5,366
Count	5	9	11	10	5	5	5
SAFETY MEMBERS							
Average Benefits	\$ 825	\$ 859	\$ 1,591	\$ 3,334	\$ 0	\$ 0	\$ 3,829
Average Final Compensation	\$ 9,779	\$ 4,960	\$ 2,795	\$ 9,010	\$ 0	\$ 0	\$ 5,257
Count	1	1	2	1	0	0	1
2012							
Retirees							
GENERAL MEMBERS							
Average Benefits	\$ 517	\$ 1,077	\$ 1,481	\$ 2,129	\$ 2,729	\$ 4,198	\$ 6,317
Average Final Compensation	\$ 7,532	\$ 5,925	\$ 5,233	\$ 4,900	\$ 5,338	\$ 6,449	\$ 7,295
Count	19	31	56	36	42	30	44
SAFETY MEMBERS							
Average Benefits	\$ 429	\$ 2,194	\$ 3,026	\$ 4,186	\$ 5,302	\$ 9,183	\$ 13,206
Average Final Compensation	\$ 6,793	\$ 5,812	\$ 6,636	\$ 8,124	\$ 7,306	\$ 13,360	\$ 13,606
Count	4	5	7	3	14	11	5
Survivors/QDROs							
GENERAL MEMBERS							
Average Benefits	\$ 331	\$ 1,189	\$ 1,017	\$ 1,525	\$ 1,274	\$ 3,105	\$ 2,783
Average Final Compensation	\$ 4,482	\$ 3,558	\$ 2,664	\$ 2,604	\$ 3,639	\$ 4,794	\$ 3,940
Count	4	4	8	3	1	2	4
SAFETY MEMBERS							
Average Benefits	\$ 0	\$ 1,039	\$ 2,423	\$ 3,450	\$ 3,573	\$ 3,206	\$ 4,887
Average Final Compensation	\$ 0	\$ 6,972	\$ 7,561	\$ 1,358	\$ 1,776	\$ 3,836	\$ 6,169
Count	0	2	2	2	1	3	2

STATISTICAL

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS BY NUMBER OF YEARS OF CREDITED SERVICE

RETIREMENT EFFECTIVE DATE	NUMBER OF YEARS COUNTY SERVICE CREDIT						
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER
2013							
Retirees							
GENERAL MEMBERS							
Average Benefits	\$ 433	\$ 1,410	\$ 1,589	\$ 2,556	\$ 3,149	\$ 4,241	\$ 5,837
Average Final Compensation	\$ 7,695	\$ 7,279	\$ 5,787	\$ 6,125	\$ 6,132	\$ 6,467	\$ 6,718
Count	10	25	40	35	35	26	29
SAFETY MEMBERS							
Average Benefits	\$ 1,165	\$ 1,435	\$ 2,621	\$ 3,501	\$ 4,260	\$ 11,134	\$ 9,279
Average Final Compensation	\$ 9,478	\$ 7,434	\$ 6,316	\$ 7,044	\$ 5,599	\$ 13,945	\$ 9,670
Count	3	2	7	4	1	2	2
Survivors/QDROs							
GENERAL MEMBERS							
Average Benefits	\$ 687	\$ 1,000	\$ 883	\$ 1,182	\$ 2,063	\$ 1,572	\$ 2,985
Average Final Compensation	\$ 3,804	\$ 4,531	\$ 3,953	\$ 3,163	\$ 3,722	\$ 1,821	\$ 3,681
Count	6	9	15	7	5	2	5
SAFETY MEMBERS							
Average Benefits	\$ 650	\$ 3,101	\$ 1,385	\$ 2,012	\$ 1,918	\$ 3,745	\$ 4,936
Average Final Compensation	\$ 4,955	\$ 10,868	\$ 2,506	\$ 3,966	\$ 2,525	\$ 6,184	\$ 5,381
Count	3	1	2	1	2	1	1
2014							
Retirees							
GENERAL MEMBERS							
Average Benefits	\$ 461	\$ 1,237	\$ 1,775	\$ 2,567	\$ 4,363	\$ 4,570	\$ 6,392
Average Final Compensation	\$ 8,494	\$ 6,593	\$ 5,772	\$ 6,380	\$ 7,652	\$ 6,782	\$ 7,760
Count	13	28	50	46	26	43	39
SAFETY MEMBERS							
Average Benefits	\$ 1,715	\$ 2,429	\$ 3,207	\$ 4,546	\$ 3,993	\$ 7,239	\$ 11,302
Average Final Compensation	\$ 7,439	\$ 6,281	\$ 6,826	\$ 8,863	\$ 6,031	\$ 8,897	\$ 11,762
Count	2	3	5	5	4	7	1
Survivors/QDROs							
GENERAL MEMBERS							
Average Benefits	\$ 478	\$ 1,016	\$ 1,007	\$ 935	\$ 2,002	\$ 1,153	\$ 2,941
Average Final Compensation	\$ 5,752	\$ 4,218	\$ 2,698	\$ 2,835	\$ 4,914	\$ 2,966	\$ 8,069
Count	12	6	13	4	6	1	5
SAFETY MEMBERS							
Average Benefits	\$ 2,030	\$ 2,464	\$ 2,890	\$ 3,326	\$ 3,002	\$ 3,282	\$ 0
Average Final Compensation	\$ 9,251	\$ 8,582	\$ 5,516	\$ 4,818	\$ 2,992	\$ 4,429	\$ 0
Count	2	3	4	1	2	2	0

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS BY NUMBER OF YEARS OF CREDITED SERVICE

RETIREMENT EFFECTIVE DATE	NUMBER OF YEARS COUNTY SERVICE CREDIT						
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER
2015							
Retirees							
GENERAL MEMBERS							
Average Benefits	\$ 319	\$ 969	\$ 1,877	\$ 2,334	\$ 3,290	\$ 4,418	\$ 5,705
Average Final Compensation	\$ 5,983	\$ 5,857	\$ 6,166	\$ 5,409	\$ 5,854	\$ 6,614	\$ 6,691
Count	14	26	40	43	26	27	38
SAFETY MEMBERS							
Average Benefits	\$ 585	\$ 2,212	\$ 3,041	\$ 3,959	\$ 6,341	\$ 8,438	\$ 10,290
Average Final Compensation	\$ 7,403	\$ 6,103	\$ 6,469	\$ 6,943	\$ 8,580	\$ 9,869	\$ 11,511
Count	2	3	6	3	11	23	2
Survivors/QDROs							
GENERAL MEMBERS							
Average Benefits	\$ 576	\$ 989	\$ 1,002	\$ 1,803	\$ 3,042	\$ 2,827	\$ 5,276
Average Final Compensation	\$ 3,420	\$ 6,179	\$ 3,344	\$ 4,974	\$ 7,108	\$ 6,234	\$ 5,851
Count	6	10	11	3	5	2	5
SAFETY MEMBERS							
Average Benefits	\$ 530	\$ 2,019	\$ 2,184	\$ 1,970	\$ 2,767	\$ 5,547	\$ 5,026
Average Final Compensation	\$ 6,053	\$ 11,396	\$ 9,909	\$ 3,888	\$ 3,983	\$ 8,256	\$ 5,406
Count	2	1	2	1	3	3	3
2016							
Retirees							
GENERAL MEMBERS							
Average Benefits	\$ 310	\$ 1,410	\$ 1,816	\$ 2,607	\$ 3,457	\$ 4,047	\$ 5,986
Average Final Compensation	\$ 6,616	\$ 6,159	\$ 6,368	\$ 6,088	\$ 6,269	\$ 5,888	\$ 7,069
Count	21	27	52	50	22	31	41
SAFETY MEMBERS							
Average Benefits	\$ 3,817	\$ 1,759	\$ 2,546	\$ 6,290	\$ 5,510	\$ 10,275	\$ 10,494
Average Final Compensation	\$ 7,634	\$ 5,986	\$ 6,353	\$ 11,453	\$ 8,566	\$ 12,432	\$ 11,081
Count	1	6	6	3	7	14	2
Survivors/QDROs							
GENERAL MEMBERS							
Average Benefits	\$ 313	\$ 858	\$ 1,065	\$ 1,877	\$ 2,207	\$ 1,763	\$ 2,769
Average Final Compensation	\$ 5,727	\$ 4,674	\$ 4,527	\$ 3,984	\$ 7,223	\$ 4,176	\$ 3,314
Count	5	7	11	7	2	4	1
SAFETY MEMBERS							
Average Benefits	\$ 495	\$ 2,235	\$ 1,253	\$ 1,661	\$ 4,086	\$ 5,943	\$ 4,712
Average Final Compensation	\$ 7,339	\$ 9,643	\$ 3,843	\$ 2,755	\$ 5,646	\$ 8,004	\$ 4,804
Count	2	4	1	1	1	1	2

STATISTICAL

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS BY NUMBER OF YEARS OF CREDITED SERVICE

RETIREMENT EFFECTIVE DATE	NUMBER OF YEARS COUNTY SERVICE CREDIT						
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER
2017							
Retirees							
GENERAL MEMBERS							
Average Benefits	\$ 377	\$ 1,420	\$ 2,070	\$ 2,325	\$ 3,951	\$ 4,678	\$ 6,187
Average Final Compensation	\$ 9,793	\$ 6,878	\$ 6,534	\$ 5,719	\$ 6,851	\$ 6,763	\$ 7,391
Count	23	36	42	48	22	31	33
SAFETY MEMBERS							
Average Benefits	\$ 787	\$ 1,223	\$ 2,529	\$ 3,318	\$ 5,973	\$ 7,370	\$ 9,169
Average Final Compensation	\$ 9,859	\$ 5,688	\$ 6,385	\$ 6,311	\$ 9,021	\$ 9,265	\$ 9,050
Count	5	4	7	8	6	8	1
Survivors/QDROs							
GENERAL MEMBERS							
Average Benefits	\$ 678	\$ 1,055	\$ 1,622	\$ 1,126	\$ 1,850	\$ 1,779	\$ 5,139
Average Final Compensation	\$ 5,110	\$ 4,344	\$ 4,225	\$ 3,696	\$ 4,288	\$ 1,841	\$ 6,188
Count	12	9	10	6	5	2	3
SAFETY MEMBERS							
Average Benefits	\$ 667	\$ 2,413	\$ 1,292	\$ 0	\$ 0	\$ 3,922	\$ 6,511
Average Final Compensation	\$ 5,605	\$ 6,311	\$ 3,454	\$ 0	\$ 0	\$ 4,565	\$ 2,765
Count	2	3	2	0	0	2	2

Average Final Compensation is not available prior to 2011 on a historical basis due to system constraints.

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS BY NUMBER OF YEARS SINCE RETIREMENT

GENERAL AND SAFETY MEMBERS

YEAR END		NUMBER OF YEARS SINCE RETIREMENT						
		0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER
2008	Average Benefit	\$ 2,458	\$ 2,294	\$ 1,802	\$ 1,785	\$ 1,653	\$ 1,294	\$ 952
	Number of Retirees	1,285	1,073	659	479	303	168	131
2009	Average Benefit	\$ 2,549	\$ 2,408	\$ 1,959	\$ 1,846	\$ 1,723	\$ 1,527	\$ 1,339
	Number of Retirees	1,312	1,083	729	506	307	170	145
2010	Average Benefit	\$ 2,569	\$ 2,565	\$ 2,052	\$ 1,972	\$ 1,764	\$ 1,602	\$ 1,329
	Number of Retirees	1,384	1,153	790	502	319	185	156
2011	Average Benefit	\$ 2,639	\$ 2,564	\$ 2,199	\$ 2,006	\$ 1,870	\$ 1,743	\$ 1,364
	Number of Retirees	1,430	1,190	838	522	333	196	\$ 176
2012	Average Benefit	\$ 2,798	\$ 2,591	\$ 2,473	\$ 2,075	\$ 1,839	\$ 1,874	\$ 1,376
	Number of Retirees	1,515	1,185	947	545	334	194	177
2013	Average Benefit	\$ 2,840	\$ 2,755	\$ 2,609	\$ 2,049	\$ 2,029	\$ 1,881	\$ 1,348
	Number of Retirees	1,520	1,211	990	577	372	208	163
2014	Average Benefit	\$ 2,961	\$ 2,873	\$ 2,706	\$ 2,223	\$ 2,106	\$ 1,899	\$ 1,477
	Number of Retirees	1,609	1,224	987	642	404	209	174
2015	Average Benefit	\$ 3,139	\$ 2,918	\$ 2,921	\$ 2,333	\$ 2,221	\$ 1,995	\$ 1,566
	Number of Retirees	1,587	1,291	1,046	692	412	212	194
2016	Average Benefit	\$ 3,254	\$ 3,057	\$ 2,960	\$ 2,532	\$ 2,285	\$ 2,022	\$ 1,765
	Number of Retirees	1,606	1,351	1,073	742	428	234	194
2017	Average Benefit	\$ 3,178	\$ 3,236	\$ 3,023	\$ 2,874	\$ 2,350	\$ 2,084	\$ 1,750
	Number of Retirees	1,605	1,434	1,067	831	452	245	188

STATISTICAL

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS BY NUMBER OF YEARS SINCE RETIREMENT

GENERAL MEMBERS

YEAR END		NUMBER OF YEARS SINCE RETIREMENT						
		0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER
2008	Average Benefit	\$ 2,133	\$ 1,835	\$ 1,557	\$ 1,586	\$ 1,474	\$ 1,004	\$ 830
	Number of Retirees	1,068	839	555	414	265	135	112
2009	Average Benefit	\$ 2,278	\$ 1,923	\$ 1,632	\$ 1,683	\$ 1,524	\$ 1,250	\$ 1,073
	Number of Retirees	1,108	850	598	433	271	143	119
2010	Average Benefit	\$ 2,269	\$ 2,093	\$ 1,696	\$ 1,806	\$ 1,549	\$ 1,379	\$ 1,015
	Number of Retirees	1,149	912	640	428	285	157	126
2011	Average Benefit	\$ 2,349	\$ 2,168	\$ 1,737	\$ 1,799	\$ 1,649	\$ 1,506	\$ 1,050
	Number of Retirees	1,198	976	654	444	289	169	141
2012	Average Benefit	\$ 2,456	\$ 2,285	\$ 1,893	\$ 1,868	\$ 1,614	\$ 1,617	\$ 1,108
	Number of Retirees	1,267	992	721	467	283	166	145
2013	Average Benefit	\$ 2,572	\$ 2,370	\$ 2,062	\$ 1,787	\$ 1,855	\$ 1,623	\$ 1,003
	Number of Retirees	1,297	1,000	762	485	319	177	132
2014	Average Benefit	\$ 2,689	\$ 2,566	\$ 2,133	\$ 1,847	\$ 1,950	\$ 1,628	\$ 1,158
	Number of Retirees	1,371	1,030	767	524	342	180	144
2015	Average Benefit	\$ 2,821	\$ 2,577	\$ 2,359	\$ 1,942	\$ 2,036	\$ 1,763	\$ 1,269
	Number of Retirees	1,353	1,066	821	560	345	188	160
2016	Average Benefit	\$ 2,887	\$ 2,721	\$ 2,483	\$ 2,005	\$ 2,085	\$ 1,778	\$ 1,428
	Number of Retirees	1,358	1,125	878	576	360	201	159
2017	Average Benefit	\$ 2,884	\$ 2,836	\$ 2,659	\$ 2,201	\$ 2,112	\$ 1,872	\$ 1,331
	Number of Retirees	1,357	1,195	887	628	384	204	151

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS BY NUMBER OF YEARS SINCE RETIREMENT

SAFETY MEMBERS

YEAR END		NUMBER OF YEARS SINCE RETIREMENT						
		0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER
2008	Average Benefit	\$ 4,056	\$ 3,940	\$ 3,109	\$ 3,055	\$ 2,904	\$ 2,481	\$ 1,673
	Number of Retirees	217	234	104	65	38	33	19
2009	Average Benefit	\$ 4,022	\$ 4,178	\$ 3,453	\$ 2,811	\$ 3,220	\$ 2,997	\$ 2,553
	Number of Retirees	204	233	131	73	36	27	26
2010	Average Benefit	\$ 4,033	\$ 4,353	\$ 3,570	\$ 2,931	\$ 3,567	\$ 2,848	\$ 2,646
	Number of Retirees	235	241	150	74	34	28	30
2011	Average Benefit	\$ 4,134	\$ 4,371	\$ 3,841	\$ 3,183	\$ 3,322	\$ 3,223	\$ 2,633
	Number of Retirees	232	214	184	78	44	27	35
2012	Average Benefit	\$ 4,543	\$ 4,164	\$ 4,322	\$ 3,312	\$ 3,086	\$ 3,397	\$ 2,589
	Number of Retirees	248	193	226	78	51	28	32
2013	Average Benefit	\$ 4,398	\$ 4,581	\$ 4,437	\$ 3,431	\$ 3,076	\$ 3,354	\$ 2,813
	Number of Retirees	223	211	228	92	53	31	31
2014	Average Benefit	\$ 4,526	\$ 4,505	\$ 4,705	\$ 3,896	\$ 2,968	\$ 3,582	\$ 3,013
	Number of Retirees	238	194	220	118	62	29	30
2015	Average Benefit	\$ 4,975	\$ 4,531	\$ 4,975	\$ 3,990	\$ 3,171	\$ 3,814	\$ 2,964
	Number of Retirees	234	225	225	132	67	24	34
2016	Average Benefit	\$ 5,266	\$ 4,730	\$ 5,104	\$ 4,364	\$ 3,345	\$ 3,506	\$ 3,295
	Number of Retirees	248	226	195	166	68	33	35
2017	Average Benefit	\$ 4,788	\$ 5,234	\$ 4,819	\$ 4,956	\$ 3,691	\$ 3,140	\$ 3,459
	Number of Retirees	248	239	180	203	68	41	37

STATISTICAL

SCHEDULE OF PARTICIPATING EMPLOYERS

For the last ten fiscal years ended December 31

	2017		2016		2015		2014		2013		2012	2011	2010	2009	2008	2007
	TIER I	TIER II	TIER I	TIER II	TIER I	TIER II	TIER I	TIER II	TIER I	TIER II						
COUNTY OF SAN JOAQUIN																
General Members	2,962	2,050	3,205	1,717	4,614	1,416	4,864	918	5,138	507	5,379	5,308	5,476	5,712	5,970	5,964
Safety Members	596	204	622	138	800	85	861	59	881	12	901	920	945	1,026	1,005	960
TOTAL	3,558	2,254	3,827	1,855	5,414	1,501	5,725	977	6,019	519	6,280	6,228	6,421	6,738	6,975	6,924
SUPERIOR COURT																
General Members	194	105	202	101	255	66	263	38	269	20	289	326	357	375	369	334
Safety Members	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	194	105	202	101	255	66	263	38	269	20	289	326	357	375	369	334
LATHROP-MANTECA RURAL FIRE PROTECTION DISTRICT																
General Members	1	2	1	2	1	1	1	1	1	0	1	0	0	1	2	2
Safety Members	25	7	25	8	41	8	42	7	43	3	45	39	41	43	44	48
TOTAL	26	9	26	10	42	9	43	8	44	3	46	39	41	44	46	50
WATERLOO-MORADA RURAL FIRE PROTECTION DISTRICT																
General Members	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
Safety Members	11	6	12	6	14	7	12	6	13	5	15	15	17	17	17	19
TOTAL	11	6	12	6	14	7	12	6	13	5	15	15	18	18	18	20
OTHER SPECIAL DISTRICTS (GENERAL MEMBERS)																
Tracy Public Cemetery District	2	4	2	4	5	5	5	4	6	3	6	8	7	8	7	6
SJC Mosquito & Vector Control District	23	11	26	9	30	8	32	7	38	2	38	38	37	39	36	36
SJC Historical Society & Museum	1	0	2	0	2	0	2	0	2	0	2	2	2	2	2	6
Mountain House Community Services District	6	17	6	13	10	11	9	9	13	5	16	14	14	16	23	17
Local Agency Formation Commission	0	0	0	0	0	0	0	0	1	0	1	1	2	2	3	2
San Joaquin County Law Library	1	1	1	0	1	0	1	0	2	0	2	1	1	1	1	1
TOTALS	33	33	37	26	48	24	49	20	62	10	65	64	63	68	72	68
GRAND TOTAL	3,822	2,407	4,104	1,998	5,773	1,607	6,092	1,049	6,407	557	6,695	6,672	6,900	7,243	7,480	7,396

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Design Forge



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