# **2015** For the Year Ended December 31, 2015

Comprehensive Annual Financial Report



San Joaquin County Employees' Retirement Association

A Pension Trust Fund of the County of San Joaquin, California and Nine Special Districts

# Alluminating the Future



Comprehensive Annual Financial Report



San Joaquin County Employees' Retirement Association

A Pension Trust Fund of the County of San Joaquin, California and Nine Special Districts

# Aluminating the Future

#### **ISSUED BY:**

Annette St. Urbain, *Chief Executive Officer* Lily Cherng, CPA, *Retirement Financial Officer* 

# SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

 6 So. El Dorado Street
 (209) 468-2163

 Suite 400
 Fax (209) 468-0480

 Stockton, California 95202
 www.sjcera.org

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You have to find what sparks a light in you so that you in your own way can illuminate the world. } OPRAH WINFREY {

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# LETTER FROM CHAIR OF THE BOARD



On behalf of the Board of Retirement, I am pleased to present this Comprehensive Annual Financial Report for the San Joaquin County Employees' Retirement Association.

This CAFR is provided to all participating employers, and to the employee and retiree organizations that represent the members of SJCERA; the dedicated public employees who provide services, assistance, and support to the people of San Joaquin County. While the focus of this report is on information related to the financial status of the retirement system, it also highlights other changes that occurred during the year.

The Board is responsible for the administration of the retirement system in a manner that assures the prompt delivery of benefits and related services. As fiduciaries, the Board is responsible for prudently investing and managing pension trust assets to ensure proper funding of earned benefits and minimizing risk. We take seriously the trust you have placed in us to successfully discharge these duties on behalf of our members and their beneficiaries.

The Board completed an asset-liability study during 2015, which set the foundation for the long-term management structure of the investment portfolio. A key aspect of the study was the Board's consensus on defining and determining its tolerance for risk, which significantly impacts the selection of the policy mix of assets that comprise the strategic asset allocation for the investment program. The Board adopted a revised strategic asset allocation policy for SJCERA's investments, reorganizing the portfolio into more risk-aligned strategic asset classes, and adding a 20% allocation to a new Crisis Risk Offset (CRO) strategic class. The purpose of this new CRO class is to diversify and reduce overall portfolio risk, particularly offsetting significant drawdown risk during a growth crisis using liquid instruments available at scale for reasonable cost.

We thank the Audit Committee of the Board for its independent oversight of SJCERA's accounting and financial reporting as reflected in this CAFR.

We appreciate the dedicated effort of SJCERA staff and the partnership of our professional consultants and advisors who contribute to the continued successful operation of SJCERA.

aynd MCCy

Raymond McCray Chairperson, Board of Retirement



San Joaquin County Employees' Retirement Association

z 6 S. El Dorado Street, Suite 400 · Stockton, CA 95202 · (209) 468-2163 · (209) 468-0480 · www.sjcera.org

June 1, 2016

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

Dear Board Members:

As the Chief Executive Officer of the San Joaquin County Employees' Retirement Association (SJCERA), I am pleased to present the Comprehensive Annual Financial Report (CAFR) for the years ended December 31, 2015 and 2014.



This CAFR is intended to provide users with extensive and reliable information for making management decisions and determining compliance with legal provisions, and demonstrates the responsible management and stewardship of SJCERA. The management of SJCERA is responsible for both the accuracy of the data and the completeness and fairness of the presentation in this CAFR. To the best of management's knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the System. This *Letter of Transmittal* is presented as a narrative introduction, overview and analysis and should be read in conjunction with the *Management's Discussion and Analysis* included in the Financial Section of this CAFR.

# SJCERA AND ITS SERVICES

# SJCERA Mission Statement

We are trusted financial stewards committed to provide excellent service and lifetime retirement benefits to our members.

SJCERA was established by the San Joaquin County Board of Supervisors by Ordinance No. 485, dated June 28, 1946, and is governed by the California State Constitution and the County Employees Retirement Law of 1937 (CERL), California Government Code, Section 31450 et. seq. SJCERA is a multi-employer public employee retirement system that 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

# 4 San Joaquin County Employees' Retirement Association



- Tracy Public Cemetery District
- Waterloo-Morada Rural Fire Protection District

The SJCERA Board of Retirement is responsible for establishing policies governing the administration of the retirement plan, determining benefit allowances, 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 CERL and the bylaws, policies, and procedures adopted by the Board. The San Joaquin County Board of Supervisors, as the sponsor of the plan, may also adopt resolutions as authorized by the CERL that affect benefits of SJCERA members.

The SJCERA Board of Retirement is a nine-member board, with one alternate member. The County Treasurer serves as an ex-officio member. Four members are appointed by the San Joaquin County Board of Supervisors, one of which is a County Supervisor. Four members and the alternate member are participants in the plan and are elected by SJCERA members: Two are elected by active General members; one is elected by active Safety members; and two are elected by retired members, one of which is the alternate retired member and only votes in the absence of the retired member. With the exception of the County Treasurer, board members serve three-year terms with no term limits.

The terms of office for the elected Third Member Cindy Garman, Eighth Member Larry Mills, and Alternate Retired Member Richard Callistro, and appointed Fourth Member Michael Duffy expired June 30, 2015. Ms. Garman was elected by general members to serve a second term commencing July 1, 2015. Incumbents Larry Mills and Richard Callistro did not seek re-election. Retired former County Auditor-Controller Adrian Van Houten was elected by retired members to serve his first term as the Eighth Member commencing July 1, 2015. Retired member Margo Praus was appointed by the Board of Retirement to fill the vacant Alternate Retired Member position for the remainder of the current term ending June 30, 2018. Prior to her retirement, Ms. Praus served four successive terms as the elected Third Member from July 2000 through June 2012. Appointed Fourth Member Michael Duffy was reappointed by the Board of Supervisors to serve a second term commencing July 1, 2015. Katherine Miller, Chair of the Board of Supervisors, was appointed on September 15, 2015 to serve the remainder of the Sixth Member's term, filling the vacancy left by former County Supervisor Steve Bestolarides who was appointed as County Assessor/Recorder/County Clerk in August 2015.

Since January 1, 2013, state law requires all county retirement board members receive a minimum of 24 hours of board member education within the first two years of assuming office and for every subsequent two-year period the board member continues to serve on the board. SJCERA maintains a record of trustee education and posts an annual report on compliance with this requirement to its website.

The objectives of the Board's trustee education policy are to: 1) Enable trustees to gain the knowledge they need to carry out their fiduciary responsibilities and engage in effective group discussion, debate and decision making; 2) Provide new trustees with the general introductory knowledge they need to effectively participate in Board and Committee deliberations; and 3) Provide trustees opportunities to learn through networking with trustees and staff of other public retirement systems and learn of alternative approaches to common issues and problems.

# LETTER OF TRANSMITTAL HIGHLIGHTS OF YEAR 2015

The accounting and reporting standards from the Governmental Accounting Standards Board (GASB), Statements 67 & 68, impact plan administrators and participating employers of multiemployer governmental pension plans. GASB Statement No. 67, Financial Reporting for Pension Plans, replaced the requirements of GASB Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Benefit Plans, and also replaced the requirements of GASB Statement No. 50, Pension Disclosures. GASB 67 is effective for financial statements for fiscal years beginning after June 15, 2013. GASB Statement No. 68, Accounting and Financial Reporting for Pension, replaces GASB Statement No. 27, Accounting for Pensions by State and Local Governmental Employers. GASB 68 is effective for fiscal years beginning after June 15, 2014.

SJCERA adopted the provisions of GASB Statement No. 67, Financial Reporting for Pension Plans, for its December 31, 2014, financial statements. The objective of this statement is to improve financial reporting by state and local governmental pension plans. This new financial reporting standard also enhances accountability and transparency through revised and new note disclosures and required supplementary information. For additional information see pages 57-69.

For the County and special districts, the new financial reporting provisions of GASB Statement No. 68 are effective for the fiscal year ending June 30, 2015. The new standards require the County and special districts to recognize their proportionate share of the long-term obligation for pension benefits as a liability in their financial statements and to more comprehensively and comparably measure the annual costs of pension benefits. This proportionate share is based on the plan sponsors' long-term contribution effort. In order to assist participating employers in preparing their financial statements to reflect their proportionate share of the net pension liability, SJCERA's actuary prepares two schedules: Schedule of Cost Sharing Employer Allocations of Net Pension Liability and Schedule of Employer Pension Amounts Allocated by Cost Sharing Plans. For additional information see pages 73-74.

In March 2015, Pension Consulting Alliance (PCA) began its engagement as the Board's general investment consultant. PCA's first project for SJCERA was to conduct an asset/liability study in collaboration with Cheiron, the plan actuary. Additionally, the Board delegated the annual due diligence meetings with all of SJCERA's investment managers for 2015 to PCA, providing an opportunity for the new investment consultants to become familiar with SJCERA's existing investment managers and strategies.

The Board held its Tenth Annual Investment Manager Roundtable in August. Moderated by PCA, representatives from investment managers in each of SJCERA's asset classes and the consulting actuary gathered together to discuss SJCERA's portfolio and plan characteristics, manager outlook on capital markets, the lower return environment going forward, and risks in meeting investment and plan objectives. A new component of the event this year was smaller-group discussions between trustees and manager representatives on the topics of risk, leverage, and asset allocation enhancements/opportunities for SJCERA.



SJCERA held its fourth annual educational symposium with participating employers and active member labor representatives in September. Topics included a review of actuarial plan costs and funding and proposed contribution rates for calendar year 2016, summary of the 2015 Asset/ Liability Study process and results to date, GASB 67 & 68 overview and implementation, a brief discussion of pension reform ballot initiative(s), and helpful reminders on administrative and operational issues for employers and members.

Working with tax counsel Hanson Bridgett, SJCERA submitted its second remedial plan determination letter application during the Cycle E filing period to the Internal Revenue Service to maintain SJCERA's status as a qualified plan under the Internal Revenue Code.

The pension benefit provided by participating employers through SJCERA is an important component of total compensation, and impacts recruitment and retention of a knowledgeable, skilled, and experienced public work force to provide essential services, assistance, and support to the people of San Joaquin County.

The County and other participating employers continue efforts to negotiate increased member cost sharing as existing collective bargaining agreements come up for renewal. As the entity responsible for the administration and proper funding of earned pension benefits for our members and their beneficiaries, SJCERA will continue to serve as a trusted and impartial provider of information and expertise to plan sponsors and collective bargaining representatives.

The County and all SJCERA participating employers continue to contribute the full amount of the annual contribution required to appropriately fund accrued benefits for SJCERA members and their beneficiaries. During 2015, San Joaquin County established a Reserve for the Unfunded Pension Liability (R-15-135) to be funded with the amount remaining after the County's annual budget is structurally balanced and the Board of Supervisors' policy of annual contribution to the County's Contingency Reserve has been met. As of year-end 2015, this County reports this reserve total was \$4.1 million.

# **Financial Information**

SJCERA management acknowledges it is responsible for the entire contents of this CAFR, 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.

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.

Maintaining appropriate internal controls is the responsibility of management; however, management recognizes that no control or combination of controls can entirely free an organization from all error or misstatement. At their best, controls provide reasonable assurance such failings do not occur. The concept of reasonable assurance recognizes the cost of a control should not exceed benefits likely derived; the valuation of costs and benefits requires estimates and judgments by management. SJCERA management is confident the established internal controls and the interactions of those controls detect all significant occurrences and prevent noteworthy inaccuracies. SJCERA recognizes that even sound internal controls have inherent limitations. We believe that SJCERA's internal controls are designed to provide reasonable, but not absolute assurance.

# Actuarial Funding Status

SJCERA's funding objective is to satisfy all benefit commitments by following an actuarially prudent funding plan, obtaining superior investment returns consistent with established risk controls, and minimizing employer contributions to the retirement fund. The advantage of a well-funded plan is that the benefits earned by plan participants are funded during their working careers and not by future generations of taxpayers. To help reduce year-to-year volatility in employer contribution rates due to fluctuations in investment performance, SJCERA smooths the calculation of actuarial assets over a rolling five-year period. This not only stabilizes contribution rates but also improves the ability of employers to plan for possible future adjustments to the retirement contribution rates.

SJCERA engages a professional pension actuary to perform an annual actuarial valuation of the pension plan. The purpose of the annual valuation is to reassess the value of the benefit commitments and compare this to the assets expected to be available to support those commitments so employer and employee contribution rates can be adjusted accordingly. Economic assumptions are reviewed annually. The most recent annual actuarial valuation was performed by Cheiron as of January 1, 2015. This is the third year of a three-year phase-in of the cost impact of the actuarial assumption changes adopted by the Board in 2013 (lowered nominal rate of return by one-quarter percent to 7.50% and adopted generational mortality tables).

Additionally, every three years, a triennial experience study is performed and the non-economic assumptions are reviewed. The experience study compares the assumed rate at which SJCERA's members terminate employment, retire, become disabled, or die to the actual experience of the plan for the previous three years. If actual experience differs significantly from what was expected, the assumptions are adjusted as appropriate. The most recent triennial experience study was performed by Cheiron as of December 31, 2012.

The 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, 2015, the pension plan's actuarial accrued liability was \$3.7 billion, the actuarial value of assets was \$2.5 billion, and the unfunded actuarial liability (UAL) was \$1.2 billion. The funding status (ratio of plan assets to plan liabilities) was 66%. A more detailed discussion of funding is provided in the Actuarial Section of this report.



In 2009, the Board of Retirement deemed one-half of the unprecedented decline in market value of assets experienced in 2008 as an Extraordinary Actuarial Loss to be separately amortized as a level percentage of pay over a closed 30-year period. The Board also modified the funding policy for the plan to amortize the remaining UAL using a 20-year open period until January 1, 2014. For 2014, the Board adopted a 19-year closed amortization period. In 2015, the Board approved a change to its funding policy, establishing layered amortization for new changes in UAL over 15 years as a level percent of pay, with new amortization layers each year.

As of the January 1, 2015 valuation, there are three amortization layers: One-half of the 2008 investment losses amortized over a closed period of 30 years (24 years remaining); the remaining UAL as of December 31, 2014 being amortized over a closed period of 19 years (18 years remaining), and new additions to the UAL on and after January 1, 2015 amortized over 15 years. The single equivalent amortization period for these streams of payments is 20 years as of January 1, 2015. The amortization period for each unfunded actuarial liability will decrease each year.

The actual return on investments for calendar year 2015 was -2.15%. As of January 1, 2015, under the five-year smoothing method deferred losses exceed deferred gains by \$25 million. For the annual actuarial valuation as of January 1, 2016, deferred losses exceed deferred gains by \$195 million.

# Investments

The California Constitution and the CERL confer exclusive control and fiduciary responsibility for investing SJCERA's funds on the Board of Retirement. Board members are legally required to carry out their duties under a standard of care in California commonly known as the "prudent expert rule." The prudent expert rule requires fiduciaries to discharge their duties solely in the interest of the fund participants and beneficiaries with the degree of diligence, care and skill that a prudent person familiar with such retirement and investment matters would ordinarily exercise under similar circumstances in a like capacity.

The Board has adopted investment policies that establish the investment program goals, asset allocation, performance objectives, investment management policies, and risk controls on investments. These provide the framework for the management of SJCERA's investments and define the principal duties of the Board, custodian bank, and investment managers. The asset allocation is an integral part of the Board's investment policy and is designed to provide an optimal diversified mix of assets with return expectations that correspond to expected liabilities, while reducing overall risk. A summary of SJCERA's asset allocation can be found in the Investment Section of this report.

Under the CERL, the Board is authorized to invest in any form or type of investment deemed prudent in the informed opinion of the Board. The Board delegates much discretion to professional investment managers subject to investment policy and guidelines approved by the Board. SJCERA's assets are managed exclusively by external professional investment managers. The statement of investment policy outlines the responsibility for the investment of the fund

and the degree of risk that is deemed appropriate for the fund. Investment advisors are to execute the investment policy in accordance with the statutory authority, the Board policy and their respective guidelines, but are to use full discretion within the policy and guidelines.

The Board uses the services of a general investment consultant, Pension Consulting Alliance (PCA), and a real estate investment consultant, Courtland Partners, who, together with SJCERA staff, assist the Board in formulating investment policies and objectives, setting asset allocation, developing investment manager guidelines, and monitoring investment manager performance and compliance. The Board has a standing Real Estate Committee with delegated authority to make new or additional commitments of up to \$25 million to any single real estate investment opportunity with the recommendation of the real estate investment consultant and in accordance with the annual real estate investment implementation plan adopted by the Board.

In March 2015, The Board initiated an Asset/Liability Study with PCA and Cheiron, the plan's actuary. The purpose of the asset liability study is to set the foundation for the long-term strategic asset allocation of the investment portfolio to address the full financial condition of the plan and how it might be impacted by investment results. As part of the asset/liability study process, SJCERA's portfolio was reorganized into more risk-aligned strategic asset classes, and the Board included a new "crisis risk offset" strategic class in the portfolio modeling. The purpose of this new class is to provide significant return during a growth crisis using liquid instruments available at scale for reasonable cost. This would include strategies involving treasury rate duration, trend following, and liquid alternative risk premia.

Through an iterative process, the Board identified and weighted five key decision factors that define the objectives of the SJCERA portfolio relative to plan liabilities. These factors relate to improved funded status over the next 15 years while avoiding a funding status below a certain level, seeking lower average employer costs while avoiding employer cost spikes, and avoiding a two-year average return on assets that falls below 0%. The Board assigned the greatest weight to the goals of improving funded status and seeking lower average employer cost.

The PCA/Cheiron modeling process determines applicable base historical time series to infer future relative behavior, estimates forward-looking returns and volatilities, uses deterministic analysis of SJCERA liabilities, and performs thousands of Monte Carlo simulations of possible portfolios. The advantages of this method are that it is intuitive, allowing application of knowledge of history to understand potential future asset class behavior, which incorporates the "fat tails" (non-normal distributions) of history and reflects that correlations are variable from period to period, which impacts potential portfolio outcomes. Correlations are not an input to the model, since they are not constant over time. There is less tendency for the model to underestimate outlier events.

In September, the Board reviewed the initial model output showing the allocation that best meet the goals the Board defined for the portfolio (most likely to achieve desired outcomes while avoiding undesirable outcomes). The modeled policy portfolio has lower standard deviation, less growth exposure, and higher return-to-volatility ratio than the current policy targets. The Board adopted a revised strategic asset allocation for SJCERA in the last quarter of 2015, which will be effective beginning January 2016.



For the year ended December 31, 2015, the portfolio lost 2.15% before fees. The Board's economic assumptions anticipate a 7.50% annualized rate of return. SJCERA's annualized rate of return before fees was 4.9% over the last three years, 5.5% over the last five-years, and 3.7% over the last ten years.

The Investment Section of this report presents a summary of SJCERA's investment results, asset allocation, investment holdings, and other investment-related information.

# **Professional Services**

Professional consultants and investment managers are retained by the Board of Retirement to provide professional services that are essential to the effective and efficient operations of SJCERA. The consultants and investment managers retained by the Board are listed on page 18 of this report.

This report includes an opinion from SJCERA's independent auditors, a letter from its general investment consultant, and a letter of certification from SJCERA's retained actuary.

# Certificate of Achievement

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, 2014. The Certificate of Achievement, reproduced on page 13, is a national award recognizing excellence in the preparation of state and local government financial reports. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we will again submit it to GFOA for appraisal.

# Public Pension Coordinating Council

SJCERA received the Public Pension Coordinating Council (PPCC), Public Pension Standards Award, in recognition of meeting the professional standards for plan design and administration as set forth in the Public Pension Standards. This award is presented by the PPCC, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS) and the National Council on Teacher Retirement (NCTR).

# Acknowledgment

This report is intended to provide complete and reliable information as the basis for making management decisions, determining compliance with legal provisions, and demonstrating the Board's responsible stewardship of SJCERA. The compilation of this report reflects the combined and dedicated effort of the SJCERA staff, in particular Retirement Financial Officer Lily Cherng, Retirement Investment Accountant Felipa Maliwat, and Accounting Technician II Stephanie Connor.

I appreciate the Board of Retirement for its leadership and dedication, which provide the basis for a strong retirement system. I value the SJCERA staff and their commitment and consistent effort to provide excellent service to our members. We are proud to count ourselves among the many public employees who diligently serve the people of San Joaquin County. We are grateful for the partnership of our consultants and advisors, and the many people whose dedicated efforts assure the successful operation of SJCERA.

Respectfully submitted,

Annoth St. Main

Annette St. Urbain 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, 2014

K. Ener

Executive Director/CEO

# PUBLIC PENSION COORDINATING COUNCIL



Public Pension Coordinating Council

# Public Pension Standards Award For Funding and Administration 2015

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)

alan Helinell

Alan H. Winkle Program Administrator

# Introduction

# MEMBERS OF THE BOARD OF RETIREMENT AS OF DECEMBER 31, 2015



RAYMOND MCCRAY CHAIR APPOINTED BY BOARD OF SUPERVISORS



CINDY GARMAN VICE-CHAIR ELECTED BY GENERAL MEMBERS



MICHAEL RESTUCCIA SECRETARY APPOINTED BY BOARD OF SUPERVISORS



SHABBIR KHAN TREASURER TAX COLLECTOR EX-OFFICIO MEMBER



KATHERINE MILLER APPOINTED BY BOARD OF SUPERVISORS



MICHAEL DUFFY APPOINTED BY BOARD OF SUPERVISORS



ADRIAN VAN HOUTEN ELECTED BY RETIRED MEMBERS



J.C. WEYDERT ELECTED BY GENERAL MEMBERS



DAVID SOUZA ELECTED BY SAFETY MEMBERS



MARGO PRAUS ELECTED BY RETIRED MEMBERS - ALTERNATE

# SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION STAFF

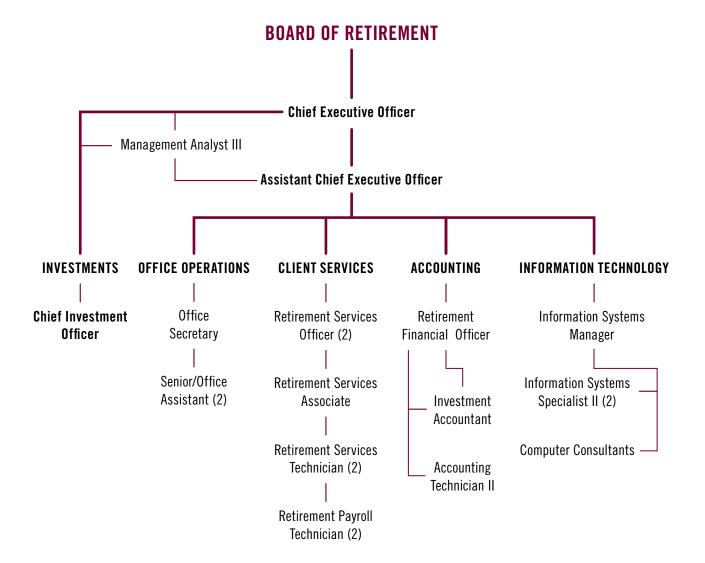


SEATED ROW:	Lily Cherng, Nancy Calkins, Annette St. Urbain, Patricia Pabst, Tallie Claypool
(left to right)	ratricia radsi, fame Claypool
MIDDLE ROW:	Mary Chris Johnson, Felipa Maliwat, Melinda DeOliveira, Beatriz Garcia, Debra Khan, Raquel Young, Ron Banez
BACK ROW:	Tim Ankcorn, Marissa Smith, Stephanie Conner, Andrea Ireland, Jordan Regevig, Greg Frank



ADMINISTRATIVE ORGANIZATION CHART

# San Joaquin County Employees' Retirement Association



# LIST OF PROFESSIONAL CONSULTANTS

# CONSULTING SERVICES

# Actuary

**Cheiron Actuaries** 

# Auditors

Brown Armstrong Accountancy Corporation

# Information Systems

IG, Incorporated

## Investment Consultants

Courtland Partners Pension Consulting Alliance

# Legal Counsel

Hanson, Bridgett, Marcus, Vlahos & Rudy Haydel and Ornellas Morrison & Foerster San Joaquin County Counsel

# INVESTMENT MANAGERS

#### Custodian

Northern Trust Company

# U.S. Equity

AMI Asset Management Bernzott Capital Advisors BlackRock Institutional Trust Co. Capital Prospects CastleArk Management Channing Capital Management EAM Investors InView Investment Management Keeley Asset Management Lee Munder Capital Group Legato Capital Management Pacific Ridge Capital Partners Rice Hall James & Associates Walthausen & Co.

# Non-US Equity

BlackRock Institutional Trust Co. PIMCO

# **Global Equity**

Kleinwort Benson Investors

# Fixed Income

Dodge & Cox Investment Managers DoubleLine Capital Mesa West Capital Prima Capital Advisors Stone Harbor Investment Partners

# Real Estate

Almanac Realty Investors Angelo Gordon & Co. BlackRock Institutional Trust Co. Colony Realty Partners Deutsche Asset & Wealth Management (RREEF) Greenfield Acquistion Partners INVESCO Advisers, Inc. Miller Global Properties Principal Financial Group Prologis Sarofim Realty Advisors Steelwave Walton Street Capital

#### Real Assets

**Bridgewater Associates** 

# Global Opportunistic Strategy

Bridgewater Associates Crestline Associates Marinus Capital Advisors Medley Capital Morgan Creek Capital Management Mount Lucas Management Ocean Avenue Capital Partners Raven Capital Management

# **Risk Parity**

Bridgewater Associates Parametric Engineered Portfolio Solutions PIMCO

## Short Term Investment/Currency Overlay

Parametric Engineered Portfolio Solutions STIF - Northern Trust Company

Note: Please refer to the Investment Section for a list of Investment Managers and the Schedule of Investment Management Fees.

# PUBLIC PENSION COORDINATING COUNCIL



Public Pension Coordinating Council

# Public Pension Standards Award For Funding and Administration 2015

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.

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

alan Helinell

Alan H. Winkle Program Administrator

# Introduction

# MEMBERS OF THE BOARD OF RETIREMENT AS OF DECEMBER 31, 2015



RAYMOND MCCRAY CHAIR APPOINTED BY BOARD OF SUPERVISORS



CINDY GARMAN VICE-CHAIR ELECTED BY GENERAL MEMBERS



MICHAEL RESTUCCIA SECRETARY APPOINTED BY BOARD OF SUPERVISORS



SHABBIR KHAN TREASURER TAX COLLECTOR EX-OFFICIO MEMBER



KATHERINE MILLER APPOINTED BY BOARD OF SUPERVISORS



MICHAEL DUFFY APPOINTED BY BOARD OF SUPERVISORS



ADRIAN VAN HOUTEN ELECTED BY RETIRED MEMBERS



J.C. WEYDERT ELECTED BY GENERAL MEMBERS



DAVID SOUZA ELECTED BY SAFETY MEMBERS



MARGO PRAUS ELECTED BY RETIRED MEMBERS - ALTERNATE

# SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION STAFF

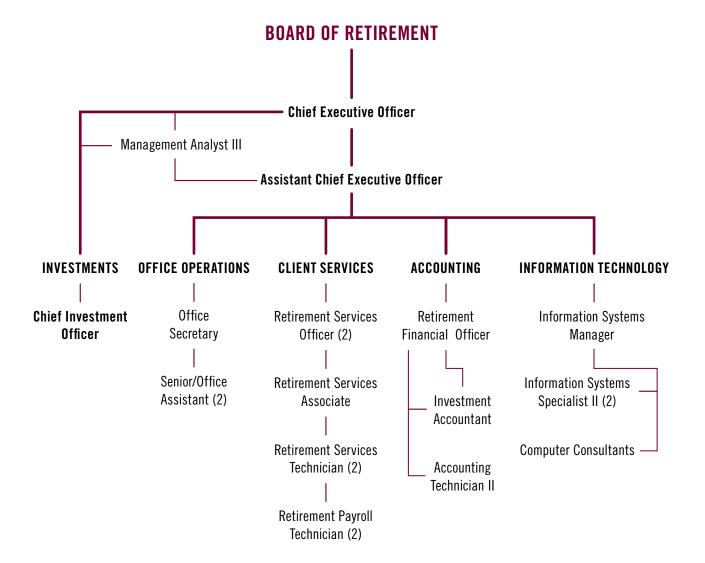


SEATED ROW:	Lily Cherng, Nancy Calkins, Annette St. Urbain, Patricia Pabst, Tallie Claypool
(left to right)	ratricia radsi, fame Claypool
MIDDLE ROW:	Mary Chris Johnson, Felipa Maliwat, Melinda DeOliveira, Beatriz Garcia, Debra Khan, Raquel Young, Ron Banez
BACK ROW:	Tim Ankcorn, Marissa Smith, Stephanie Conner, Andrea Ireland, Jordan Regevig, Greg Frank



ADMINISTRATIVE ORGANIZATION CHART

# San Joaquin County Employees' Retirement Association



# LIST OF PROFESSIONAL CONSULTANTS

# CONSULTING SERVICES

# Actuary

**Cheiron Actuaries** 

# Auditors

Brown Armstrong Accountancy Corporation

# Information Systems

IG, Incorporated

## Investment Consultants

Courtland Partners Pension Consulting Alliance

# Legal Counsel

Hanson, Bridgett, Marcus, Vlahos & Rudy Haydel and Ornellas Morrison & Foerster San Joaquin County Counsel

# INVESTMENT MANAGERS

#### Custodian

Northern Trust Company

# U.S. Equity

AMI Asset Management Bernzott Capital Advisors BlackRock Institutional Trust Co. Capital Prospects CastleArk Management Channing Capital Management EAM Investors InView Investment Management Keeley Asset Management Lee Munder Capital Group Legato Capital Management Pacific Ridge Capital Partners Rice Hall James & Associates Walthausen & Co.

# Non-US Equity

BlackRock Institutional Trust Co. PIMCO

# **Global Equity**

Kleinwort Benson Investors

# Fixed Income

Dodge & Cox Investment Managers DoubleLine Capital Mesa West Capital Prima Capital Advisors Stone Harbor Investment Partners

# Real Estate

Almanac Realty Investors Angelo Gordon & Co. BlackRock Institutional Trust Co. Colony Realty Partners Deutsche Asset & Wealth Management (RREEF) Greenfield Acquistion Partners INVESCO Advisers, Inc. Miller Global Properties Principal Financial Group Prologis Sarofim Realty Advisors Steelwave Walton Street Capital

#### Real Assets

**Bridgewater Associates** 

# Global Opportunistic Strategy

Bridgewater Associates Crestline Associates Marinus Capital Advisors Medley Capital Morgan Creek Capital Management Mount Lucas Management Ocean Avenue Capital Partners Raven Capital Management

# **Risk Parity**

Bridgewater Associates Parametric Engineered Portfolio Solutions PIMCO

## Short Term Investment/Currency Overlay

Parametric Engineered Portfolio Solutions STIF - Northern Trust Company

Note: Please refer to the Investment Section for a list of Investment Managers and the Schedule of Investment Management Fees.





There are two ways of spreading light: to be the candle or the mirror that reflects it. } EDITH WHARTON {

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#### INDEPENDENT AUDITOR'S REPORT

# BROWN ARMSTRONG

CERTIFIED PUBLIC ACCOUNTANTS

#### BAKERSFIELD OFFICE (MAIN OFFICE)

1200 TRUXTUN AVENUE SUITE 300 BAKERSFIELD, CA 93309 TEL 661.324.4971 FAX 661.324.4997 EMAIL info@bacpas.com

#### FRESNO OFFICE

7673 N. INGRAM AVENUE SUITE 101 FRESNO, CA 93711 TEL 559,476,3592 FAX 559,476,3593

#### PASADENA OFFICE

260 S. LOS ROBLES AVENUE SUITE 310 PASADENA, CA 91101 TEL 626204.6542

STOCKTON OFFICE

FAX 626.204.6547

5250 CLAREMONT AVENUE SUITE 150 STOCKTON, CA 95207 TEL 209,451,4833

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

# BROWN ARMSTRONG

Certified Public Accountants

#### INDEPENDENT AUDITOR'S REPORT

To the Members of the Board of Retirement of the San Joaquin County Employees' Retirement Association

#### **Report on the Financial Statements**

We have audited the accompanying Defined Benefit Pension Plan and Post-Employment Healthcare Agency Fund Statement of Fiduciary Net Position of the San Joaquin County Employees' Retirement Association (SJCERA) as of December 31, 2015, and 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 employer allocations for the years ended December 31, 2015 and 2014, and the schedule of employer pension amounts allocated by the cost sharing plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense, excluding that attributable to employer-paid member contributions (specified column totals) as of and for the year ending December 31, 2015, as listed as other information in the table of contents.

#### Management's Responsibility for the Financial Statements

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

#### Auditor's Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to SJCERA's preparation and fair presentation of the financial statements in order to design audit procedures

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#### INDEPENDENT AUDITOR'S REPORT

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.

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

#### Opinion

In our opinion, the financial statements and other information referred to above present fairly, in all material respects, the Fiduciary Net Position of the Defined Benefit Pension Plan and Post-Employment Healthcare Agency Fund of SJCERA as of December 31, 2015, and the changes in its Fiduciary Net Position for the year then ended in conformity with accounting principles generally accepted in the United States of America.

#### Other Matters

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management'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 and Other 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, as listed in the table of contents, and the introductory, investment, actuarial, and statistical sections 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.

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, 2014 financial statements, and our report dated June 4, 2015, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of December 31, 2014, 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, 2016, 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 grant 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 Secountancy Corporation

Bakersfield, California June 1, 2016

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# MANAGEMENT'S DISCUSSION AND ANALYSIS

The discussion and analysis of the San Joaquin County Employees' Retirement Association's (SJCERA) financial performance provides an overview of the financial activities for the year ended December 31, 2015. This discussion and analysis needs to be read in conjunction with SJCERA's financial statements, which follow this discussion.

# **Financial Highlights**

- Overall, SJCERA fund's return on fiduciary net position is -2.15%.
- SJCERA's fiduciary net position of \$2.4 billion at December 31, 2015, decreased by \$53.1 million, or 2.15%, as a result of this year's operation.
- SJCERA's funding objective is to meet long-term benefit obligations through contributions and investment income. As of January 1, 2015, the date of the last actuarial valuation, the funded ratio for the actuarial accrued liability was approximately 66.2%. In general, this indicates that for every dollar of benefits liability, SJCERA has \$0.66 of fiduciary net position to cover it. (Note 9c provides a more detailed explanation of recent changes in funded ratio.)
- Revenues for the year were \$132.4 million, a decrease of \$162.3 million, or 55.1%, from the prior year's \$294.8 million. The decrease was mainly caused by the decrease in unrealized gains in comparison to the prior year.
- Expenses for the year were \$185.5 million, an increase of \$15.6 million, or 9.2%, from the prior year's \$169.9 million. This increase was primarily due to the \$15.3 million increase in pension benefit payments to retirees.

# Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position

This annual financial report consists of two financial statements:

- 1. The Statement of Fiduciary Net Position provides a snapshot of account balances at year-end and indicates the assets available for future payments to retirees and any current liabilities that are owed at this time. The assets, less liabilities, give the reader a clear picture of what funds are available for future payments.
- **2.** The Statement of Changes in Fiduciary Net Position gives the reader a view of current year additions and deductions to SJCERA.

	2015	2014	INCREASE (Decrease) Amount	PERCENT Change
Cash and Receivables	\$ 235,841,691	\$ 262,580,689	\$ (26,738,998)	-10.18%
Investments	2,328,264,996	2,371,380,283	(43,115,287)	-1.82%
Other Assets	304,655	400,962	(96,307)	-24.02%
Total Assets	2,564,411,342	2,634,361,934	(69,950,592)	-2.66%
Total Liabilities	151,168,795	168,012,405	(16,843,610)	-10.03%
Total Fiduciary Net Position	\$ 2,413,242,547	\$ 2,466,349,529	\$ (53,106,982)	-2.15%

# 24 San Joaquin County Employees' Retirement Association



# MANAGEMENT'S DISCUSSION AND ANALYSIS

Together these two statements report SJCERA's fiduciary net position—the difference between assets and liabilities—as one way to measure SJCERA's financial position. Over time, increases and decreases in fiduciary net position are one indicator 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.

An important question asked about SJCERA's financial condition is, "Does SJCERA have sufficient assets to pay the pension benefits that have been promised to the membership?" The two financial statements provide information about SJCERA's activities in a way that helps answer this question. In summary, our current funding ratio, based on the January 1, 2015 valuation, is 66.2% and this means that SJCERA has \$0.66 for each \$1.00 of pension liability. The portion of the pension liability attributable to inactive members (retired or deferred) is fully funded by plan assets.

# Revenue - 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, 2015, totaled \$132.1 million. Of the total \$47.3 million in net investment loss, \$81.9 million is attributable to net depreciation in the fair value of investments.

The overall year 2015 revenues decreased by \$162.3 million from that of the prior year, primarily due to much depreciation in the fair value of investments when compared to the prior year.

The employers' contributions increased by \$13.7 million, or 10.0%, over the prior year, while employees' contributions increased by \$1.7 million, or 6.1%, over the prior year. The County of San Joaquin (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% 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.

	2015	2014	INCREASE (DECREASE) Amount	PERCENT Change
Employers' Contributions	\$ 150,371,556	\$ 136,686,133	\$ 13,685,133	10.01%
Members' Contributions	29,026,901	27,367,908	1,658,993	6.06%
Net Investment and Miscellaneous Income	(47,339,750)	110,728,303	(158,068,053)	-142.75%
Transfer between Plans	378,969	19,968,779	(19,589,810)	-98.10%
Total	\$ 132,437,676	\$ 294,751,123	\$ (162,313,447)	-55.07%

Below is the summary of the changes from year 2014 to year 2015.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

# 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 2015 totaled \$185.5 million, an increase of 9.2% over 2014. The increase is attributed to the additional benefit payments for retirees as well as the growth in the number and average amount of benefits paid to retirees.

	2015	2014	INCREASE (DECREASE) Amount	PERCENT Change
Benefit Payments	\$ 179,023,165	\$ 163,711,716	\$ 15,311,449	9.35%
Members Death Benefits	561,971	623,557	(61,586)	-9.88%
Refunds	1,883,777	1,535,698	348,079	22.67%
Administrative and Miscellaneous	4,075,745	4,042,986	32,759	0.81%
Total	\$ 185,544,658	\$ 169,913,957	\$ 15,630,701	9.20%

# 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 decreased 2.2% for 2015 from 2014; the net decrease in the fair value of investments was \$81.9 million versus the prior year's appreciation of investments of \$94.8 million. The investment section of Note 3d of this report reviews the result of investment activity for the year ended December 31, 2015.

# 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 Annette H. St. Urbain, Chief Executive Officer, 6 South El Dorado Street, Suite 400, Stockton, California 95202.

Respectfully Submitted,

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Annette H. St. Urbain Chief Executive Officer



STATEMENTS OF FIDUCIARY NET POSITION AVAILABLE FOR BENEFITS AS OF DECEMBER 31, 2015 AND 2014

#### SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION STATEMENT OF FIDUCIARY NET POSITION AS OF DECEMBER 31, 2015 (WITH COMPARATIVE TOTALS)

	2015		2014			
		Post-		Post-		
	Defined Demot	Employment	Defended	Employment		
	Defined Benefit	Healthcare	Defined Benefit	Healthcare		
Assets	Pension Plan	Agency Fund	Pension Plan	Agency Fund		
Cash and Cash Equivalents	\$ 79,806,039	\$-	\$ 86,304,586	\$ 76		
Cash Collateral - Securities Lending	147,105,961	Ψ -	164,195,271	φ 70 144		
Cash Conateral - Cecunites Lending	147,100,001		104,130,271			
Total Cash and Cash Equivalents	226,912,000		250,499,857	220		
Receivables						
Investment Income Receivables	3,103,370	-	2,664,983	3		
Contributions Receivable	3,041,118	-	8,960,303	-		
Securities Sold, Not Received - Domestic	2,720,987	-	420,303	- ,		
Other Investment Income Receivable	1,142	-	637	-		
Miscellaneous Receivables	63,074	-	34,606			
Retiree Sick Leave Bank Benefits Receivable	-	3,929	-	-		
Total Receivables	8,929,691	3,929	12,080,832	3		
Investments, at Fair Value						
Fixed Income	534,574,588	-	527,386,250	464		
U.S. and Non-U.S. Equities	797,876,067	-	891,844,719	785		
Global Equity	27,828,330	-	57,668,488	50		
Real Estate	265,514,852	-	253,709,478	223		
Real Asset	100,217,316	-	108,824,107	96		
Global Opportunistic Strategy	368,124,902	-	278,197,288	245		
Risk Parity	234,128,941		253,749,953	223		
Total Investments, at Fair Value	2,328,264,996		2,371,380,283	2,086		
Other Assets						
Prepaid Expenses	112,136	-	86,318	-		
Equipment and Fixtures, Net	192,519	-	314,644	-		
Total Assets	2,564,411,342	3,929	2,634,361,934	2,309		
Liabilities						
Securities Lending - Cash Collateral	147,105,961	-	164,195,271	144		
Securities Purchased, Not Paid	2,739,348	-	1,671,227	1		
Accrued Expenses and Other Payables	1,306,553	3,929	2,137,604	2		
Securities Lending Interest and Other Payables	16,933	-	8,303	-		
Retiree Sick Leave Bank Benefits Payable				2,162		
Total Liabilities	151,168,795	3,929	168,012,405	2,309		
Fiduciary Net Position Restricted for Pension Benefits	\$2,413,242,547	\$	\$2,466,349,529	\$		

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

# STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION AVAILABLE FOR BENEFITS AS OF DECEMBER 31, 2015 AND 2014

DEFINED BENEFIT PEN STATEMENT OF CHANGES IN FID FOR THE YEARS ENDED DECEMBER 31, 201	UCIARY NET POSITION		TALS)
	2015		2014
Additions			
Contributions	<b>A</b> 450.074.550	•	
Employers' Contributions Members' Contributions	\$ 150,371,556 29,026,901	\$	136,686,133 27,367,908
Total Contributions	179,398,457		164,054,041
Net Investment Income (Loss)			
Investment Income (Loss)			
Net Appreciation (Depreciation) in			
Fair Value of Investments	(81,873,012)		94,797,841
Interest	41,500,345		20,784,139
Dividends	4,613,426		2,680,448
Real Estate Income, Net	8,039,770		10,112,793
Investment Expenses	(20,220,393)		(18,209,091
Miscellaneous Investment Income	6,835		7,293
Net Investment Income (Loss),			
Before Securities Lending Income (Loss)	(47,933,029)		110,173,423
Securities Lending Income (Loss)	507 700		450.440
Earnings	527,763		450,412
Rebates	116,314		184,507
Fees	(160,288)		(157,231
Net Securities Lending Income (Loss)	483,789		477,688
Net Investment Income (Loss)	(47,449,240)		110,651,111
Miscellaneous Income	109,490		77,192
Transfer Between Plans	378,969		19,968,779
Total Additions	132,437,676		294,751,123
Deductions			
Benefit Payments	179,023,165		163,711,716
Death Benefits	561,971		623,557
Refunds of Members' Contributions	1,883,777		1,535,698
Administrative and Other Expenses			
General Administrative Expenses	3,710,047		3,636,863
Actuary Fees	151,893		161,342
Fund Legal Fees	213,805		244,781
Total Administrative and Other Expenses	4,075,745		4,042,986
Total Deductions	185,544,658		169,913,957
Changes in Fiduciary Net Position	(53,106,982)		124,837,166
Fiduciary Net Position Restricted for Pension Benefits			
Beginning of Year	2,466,349,529		2,341,512,363
End of Year		¢	
Ling of real	\$ 2,413,242,547	\$	2,466,349,529

The accompanying notes are an integral part of these 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 for the employees of the County and certain special districts within the County. SJCERA also administers the Post-Employment Healthcare Agency Fund. The Post-Employment Healthcare Agency Fund is an agency fund of SJCERA. 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 County Employees Retirement Law. SJCERA is administered by the Board of Retirement (Board). Pursuant to Government Code Section 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, 2015, were as follows:

Raymond McCray, Chair	Michael Duffy
Cindy Garman, Vice Chair	Katherine Miller
Michael Restuccia, Secretary	David Souza
Shabbir Khan, 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), Manteca-Lathrop 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.

The Public Employees' Pension Reform Act of 2013 (PEPRA) (Article 4, Chapter 21, Division 7 of Title I of the California Government Code) became operative on January 1, 2013. PEPRA is applicable to most public pension systems in California, and mandates new, lower benefit formulas and later retirement ages for employees entering public employment for the first time on or after January 1, 2013.

For SJCERA, the benefit structure in place prior to PEPRA is designated as "Tier I," and the benefits mandated by PEPRA are designated as "Tier II."

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, 2015 and 2014, is presented below:

	RETI	REES	BENEFI	CIARIES	ACT	IVE	DEFERRED		TO	TAL
	TIER I	TIER II	TIER I	TIER II	TIER I	TIER II	TIER I	TIER II	TIER I	TIER II
Year 2015										
General	3,892	3	598	-	3,710	1,421	1,208	86	9,408	1,510
Safety	764	-	177	-	699	94	156	6	1,796	100
Total	4,656	3	775	-	4,409	1,515	1,364	92	11,204	1,610

	RETI	REES	BENEFI	CIARIES	ACT	IVE	DEFERRED		TOTAL	
	TIER I	TIER II	TIER I	TIER II	TIER I	TIER II	TIER I	TIER II	TIER I	TIER II
Year 2014										
General	3,778	-	580	-	3,955	924	1,222	53	9,535	977
Safety	729	-	162	-	758	69	157	3	1,806	72
Total	4,507	-	742	-	4,713	993	1,379	56	11,341	1,049



### b. Plan Benefits

#### **ELIGIBILITY FOR RETIREMENT**

#### TIER I:

A Tier I 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 II:

A Tier II 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.

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

#### **RETIREE 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 optional settlement, if any, elected by the member.

#### TIER I:

For Tier I 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.

In accordance with a settlement agreement issued on August 22, 2001, SJCERA implemented Government Code Sections 31676.14 and 31664.1 to provide a 2.0% of final compensation for each year of service credit at age 55½ benefit formula for General Members of Tier I, and a 3.0% of final compensation for each year of service credit at age 50 benefit formula for Safety Members of Tier I, 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 2015, the annual compensation limit under Internal Revenue Code Section 401(a)(17) is \$265,000 and the annual benefit limit under Internal Revenue Code Section 415(b) is \$210,000. Tier I retirees whose statutory benefits from SJCERA would exceed the annual benefit limitation are eligible for the County's Replacement Benefits Plan.

#### TIER II:

For Tier II 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.

Tier II 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. 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. For 2015, these annual compensation limits are \$117,020 and \$140,424.

Active members receive a personalized Annual Member Statement that provides the member's accumulated member contributions and interest, years of service credit, and estimated projected retirement benefits based on various assumptions. Members may also use the benefit calculator on SJCERA's web site (www.sjcera.org) to estimate their projected retirement benefits under the various available retirement options.

#### **COST-OF-LIVING ADJUSTMENT (COLA)**

For both Tier I and Tier II members, 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%.

The change in CPI for calendar years 2014 and 2013 was 2.85% and 2.50%, respectively. Under the statutory requirements of the County Employees Retirement Law, this change must be rounded to the nearest half percent. Therefore, members received an increase in benefits of at least 3.0% in 2015, and at least 2.5% in 2014, based on the changes in the CPI. Therefore, members' accumulated carry-over balances as of April 1, 2015, remain the same as they were on April 1, 2014.

The Board implemented "Purchasing Power Protection" (PPP) benefits at the 75% level in 2000, and the 80% level in 2001 for allowances for retirees with an "initial retirement date" of April 1, 1982, or earlier, pursuant to Government Code Section 31874.3. A one-time permanent



increase as added to the monthly allowance amount to restore purchasing power to 80% of the purchasing power of the original allowance, determined as of April 1, 2001. The monthly allowances, including the PPP benefit, are adjusted each year by the annual COLA.

#### TERMINATED MEMBER'S DEFERRED ALLOWANCE AND WITHDRAWAL BENEFITS

A member with less than five years of credited service who terminates 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 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 with less than five years of service 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 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 a 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% of the retirement allowance to which the deceased member would have been entitled had the member retired on either a service retirement or non-service-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).

Upon the death of a retiree, the beneficiary receives a retirement benefit as determined by the optional settlement 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.

# NOTE 2 – POST-EMPLOYMENT HEALTHCARE AGENCY FUND

### a. Description

The Post-Employment Healthcare Agency Fund is used 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.

### b. Summary of Significant Accounting Policies

The Post-Employment Healthcare Agency Fund was established to account for the sick leave bank contribution for eligible members. In 2011, SJCERA filed a request for a plan determination letter and Voluntary Compliance Program (VCP) with the Internal Revenue Service (IRS). As the result of the IRS filing, the Board decided to "freeze" the Post-Employment Healthcare Agency Fund pending the response from the IRS. Participating employers are now funding Sick Leave Bank Benefits on a pay-as-you-go basis. Prior to 2011, participating employers were pre-funding these benefits. SJCERA continues its role as a third-party administrator of these benefits. SJCERA has determined that the proper presentation of this fund is as an agency fund, and not a trust fund.

SJCERA received a favorable plan determination letter from the IRS dated January 29, 2014, that by its own terms expired on January 31, 2014, at the end of the second remedial amendment Cycle C filing period. IRS Revenue Procedure 2012-50 provides that if Cycle E is elected as the plan's second remedial amendment cycle, the plan determination letter expiration date is extended to January 31, 2016, the end of the second Cycle E filing period. In 2014, the Board formally elected Cycle E as the second remedial amendment cycle for SJCERA. In compliance with SJCERA's VCP filing as approved by the IRS, \$19.9 million was transferred from the Post-Employment Healthcare Agency Fund to the Defined Benefit Pension Plan in 2014. The Post-Employment Healthcare Agency Fund is used 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.



# 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 of Retirement and considered as an independent entity, is a blended component unit of the County in accordance with Statement No. 14, as amended by Statement No. 39 and amended further by Statement No. 61, of the Governmental Accounting Standards Board (GASB). SJCERA's annual financial statements are included in the County's financial reports as a pension trust fund.

### c. Cash Equivalents

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

### THE NORTHERN TRUST COMPANY (NT)

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 shortterm 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:

INVESTMENTS	SOURCE
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, 2015 and 2014.
Mortgages	Equivalent pricing to comparable Government National Mortgage Association (GNMA).
Real estate equity funds	Fair value as provided by real estate fund manager unless an alternative value has been determined by the Board per SJCERA's Real Estate Investment Policy.
Real estate title holding corporations and limited liability companies	Fair value of the investment as provided by fund managers.
Private equity	Fair 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.

### e. Foreign Currency Transactions

Foreign currency transactions are translated into U.S. dollars on the following basis:

- **1.** Fair value of investment securities at the daily rates of exchange on December 31, 2015 and 2014; and
- **2.** Purchases and sales of investment securities, dividend and interest income, and certain expenses at the rates of exchange prevailing on the respective dates when such transactions were incurred.

Gains and losses on investments that are due to changes in foreign exchange rates and market prices of the investments are accounted for in the net appreciation/(depreciation) in fair value of investments in the Statement of Changes in Fiduciary Net Position.

Realized and unrealized gain/(loss) from foreign currency related transactions, such as gains and losses between trade and settlement dates on securities transactions, gains and losses arising from the sales of foreign currency, and gains and losses between the ex-date and the payment date on dividends and foreign withholding taxes, are also accounted for in net appreciation/(depreciation) in fair value of investments in the Statement of Changes in Fiduciary Net Position.



### f. Forward Foreign Currency Exchange Contracts

A forward foreign currency exchange contract is a commitment to purchase or sell a foreign currency at the settlement date at a negotiated rate. During the year, the investment managers utilize forward contracts as a hedge in connection with portfolio purchases and sales of securities denominated in foreign currencies. Forward contracts are valued at the prevailing forward exchange rate of the underlying currencies. Gain/(loss) is recorded on the trade date. Realized and unrealized gains and losses due to the difference between the value of the forward contract to buy and the forward contract to sell are included in net appreciation/(depreciation) in fair value of investments in the Statement of Changes in Fiduciary Net Position.

### g. Securities Transactions and Related Investment Income

Security transactions are accounted for on a trade date basis. Interest income is recognized when earned and dividend income is recognized on the ex-dividend date. Stock dividends or stock splits are recorded as memo items and do not affect the total value of the securities.

Pursuant to GASB Statements No. 25 and No. 26, realized gains and losses on investments sold during the year are not displayed separately in the financial statements. Instead, the realized gains and losses, along with unrealized gains and losses on investments, are reported as "net appreciation/(depreciation) in fair value of investments."

The realized gain/(loss) on the sale of securities was computed as the difference between the proceeds of sale in 2015 and the carrying cost of the securities at December 31, 2015, or the original cost of the securities acquired during 2015. The calculation of realized gains/(losses) is independent of the calculation of net appreciation/(depreciation) in the fair value of plan investments. Unrealized gain/(loss) on investments sold in the current year that had been held for more than one year were included in the net appreciation/(depreciation) reported in prior years and the current year.

### h. Method Used in Allocating Investments between the Defined Benefit Pension Plan and the Post-Employment Healthcare Agency Fund

SJCERA allocates the investments held at December 31, 2015 and 2014, 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, 2015 and 2014.

### i. Capital Assets

Capital assets, mainly leasehold improvements, furniture, and equipment, acquired by SJCERA are capitalized at cost. Depreciable capital assets are depreciated using the straightline method over estimated useful lives of 4 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 years 2015 and 2014 is presented below:

2015	BALANCE 12/31/2014	ADDITIONS	DELETIONS	BALANCE 12/31/2015
Original Cost	\$ 1,511,660	\$ 23,423	\$ (3,017)	\$ 1,532,066
Accumulated Amortization				
and Depreciation	(1,197,016)	(145,548)	3,017	(1,339,547)
Net Book Value	\$ 314,644	\$ (122,125)	\$ -	\$ 192,519

2014	BALANCE 12/31/2013	ADDITIONS	DELETIONS	BALANCE 12/31/2014
Original Cost	\$ 1,531,952	\$ 8,412	\$ (28,704)	\$ 1,511,660
Accumulated Amortization and Depreciation	(1,104,489)	(121,231)	28,704	(1,197,016)
Net Book Value	\$ 427,463	\$ (112,819)	\$ -	\$ 314,644

Depreciation expense for the years ended December 31, 2015 and 2014, was \$145,548 and \$121,231, respectively.

### j. Operating Lease

SJCERA leases office space for the administration of the plans. SJCERA administration relocated in June 2009 from the 7th floor of 6 S. El Dorado Street in Stockton to the 4th floor. The new lease specifies the actual rate for each year of term. Total rent expense under this agreement for the current year was \$272,831. 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 \$1,046,737.

YEAR ENDED DECEMBER 31,	TOTAL
2016	257,969
2017	264,338
2018	270,708
2019	253,722
	\$ 1,046,737



### k. Unpaid Compensated Absences for Administration Employees

SJCERA accrues as a liability the vacation and other leave benefits earned by its employees. Accrued vacation hours that will be paid in cash to employees upon retirement is also accrued as a liability by SJCERA.

### I. Investment Income Receivable

Interest receivable consists of interest earned, but not received, as of December 31, 2015 and 2014, on debt securities, short-term investment funds, and securities lending.

Dividends receivable are those dividends declared, but not received, as of December 31, 2015 and 2014, on stocks owned by SJCERA on the ex-dividend date.

### m. Contribution Receivable

County, district, and member contributions made in the following year for the current year were accrued in accordance with accounting principles generally accepted in the United States of America. 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.

### n. Securities/Foreign Exchange – Sold, Not Received and Purchased, Not Paid

The accrual basis of accounting requires that securities and foreign exchange purchase and sale transactions be recorded on a trade-date basis. Unsettled securities and foreign exchange transactions were accrued at year-end as either receivables or payables.

### o. Miscellaneous Receivables

Other receivables at December 31, 2015 and 2014, consist mainly of overpaid benefit payments to be recovered from retirees or their beneficiaries.

### p. 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.

### q. Implementation of Accounting Standards

In February 2015, GASB issued Statement No. 72, *Fair Value Measurement and Application*, which provides guidance for determining a fair value measurement for financial reporting

purposes. The statement establishes a hierarchy of inputs to valuation techniques used to measure fair value and the application to certain investments. GASB Statement No. 72 will be effective for periods beginning after June 15, 2015. SJCERA will implement GASB Statement No. 72 in its December 31, 2016, financial statements.

# NOTE 4 – CASH AND INVESTMENTS

### a. Investment Securities Lending

Under provisions of State statutes, SJCERA, along with other NT clients, participate in NT's pooled security lending program. Under the agreement, NT is authorized to lend securities of SJCERA that it holds to certain SJCERA approved security borrowers. NT does not have the ability to pledge or sell collateral securities absent a borrower default.

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 versus collateral valued at 102% of the fair value of the securities plus any accrued interest. Non-U.S. securities are loaned versus collateral valued at 105% of the fair value of the securities plus any accrued interest.

DECEMBER 31, 2015	FAIR VALUE OF Securities lent	CASH Collateral value	NON-CASH Collateral value
U.S. Equities	\$ 102,110,149	\$ 102,716,394	\$ 2,432,696
U.S. Debt Securities	47,480,291	43,834,952	4,814,436
Total U.S. Securities	149,590,440	146,551,346	7,247,132
Non-U.S. Equities	12,189,597	554,615	12,551,506
Total Non-U.S. Securities	12,189,597	554,615	12,551,506
Total	\$ 161,780,037	\$ 147,105,961	\$ 19,798,638

At December 31, 2015 and 2014, SJCERA had the following securities out-on-loan:

DECEMBER 31, 2014	FAIR VALUE OF Securities lent	CASH Collateral value	NON-CASH Collateral value
U.S. Equities	\$ 105,572,197	\$ 108,256,343	\$ 266,395
U.S. Debt Securities	54,843,320	55,939,072	148,845
Total U.S. Securities	160,415,517	164,195,415	415,240
Non-U.S. Equities	18,457,990	-	19,890,011
Total Non-U.S. Securities	18,457,990	-	19,890,011
Total	\$ 178,873,507	\$ 164,195,415	\$ 20,305,251

### **40** San Joaquin County Employees' Retirement Association



The cash collateral is reported on the financial statements as an asset and as a liability of SJCERA while the non-cash collateral is reported neither as an asset nor a liability in accordance with 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. In November 2009, NT made the first partial reversal of collateral deficiency; then in March 2010, NT made another reversal for remaining collateral deficiency payable. These two reversals basically eliminated the original security lending deficiency which occurred in 2008. SJCERA's pro-rata share of net income derived from NT's pooled security lending transactions in 2015 and 2014 was \$483,789 and \$477,688, respectively.

### b. Cash and Short-Term Investments

The carrying value of cash and short-term investments at December 31, 2015 and 2014, consists of the following:

	2015 AMOUNT	2014 AMOUNT
Cash and Cash Equivalents - Custodian	\$ 78,204,993	\$ 85,584,832
Cash and Cash Equivalents - County Treasury	1,601,046	719,830
Total Cash and Cash Equivalents	79,806,039	86,304,662
Cash and Cash Equivalents - Custodian-Securities Lending	147,105,961	164,195,415
Total	\$226,912,000	\$250,500,077

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### c. Long-Term Investments

SJCERA owned the following long-term investments at December 31, 2015 and 2014, contained in both the pension trust and healthcare agency fund:

		2015 FAIR VALUE	2014 FAIR VALUE
INVESTMENTS - CATEGORIZED			
Fixed Income	\$	534,574,588	\$ 527,386,714
U.S. Equities		432,603,256	474,869,483
Non-U.S. Equities		365,272,811	416,976,021
Global Equity		27,828,330	57,668,538
Real Estate		265,514,852	253,709,701
Real Asset		100,217,316	108,824,203
Global Opportunistic Strategy		368,124,902	278,197,533
Risk Parity		234,128,941	253,750,176
<b>Total Investments - Categorized</b>	\$	2,328,264,996	\$ 2,371,382,369
INVESTMENTS - NOT CATEGORIZED			
INVESTMENTS HELD BY BROKER-DEALERS UNDER	SEC	URITIES LOANS	
U.S. Equities	\$	102,716,394	\$ 108,256,343
Non-U.S. Equities		554,615	-
U.S. Debt Securities		43,834,952	55,939,072
Total Investments Held by Broker-Dealers			
Under Securities Loans		147,105,961	164,195,415
Total Investments	\$	2,475,370,957	\$ 2,535,577,784

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

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

#### **CREDIT RISK**

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. SJCERA 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 credit risk, credit quality guidelines have been established for our separately managed accounts.



QUALITY RATINGS	2015 FAIR VALUE	2014 FAIR VALUE
AAA	\$ 10,431,182	\$ 10,764,754
АА	7,509,196	7,431,235
А	21,019,759	26,063,271
BBB	40,776,173	39,659,648
BB	24,624,908	22,871,774
В	13,581,007	14,589,032
CCC	3,722,948	8,287,738
CC	4,516,290	1,614,774
D	18,398,004	16,218,860
Not Rated	236,766,197	231,673,030
	381,345,664	379,174,116
U.S. Government Agencies - Implied AAA (FNMA, FHLB, FHLMC, FFCB, SLMA, Other)	153,228,924	148,212,598
Total Investments in Fixed Income Securities	\$ 534,574,588	\$ 527,386,714

The list of investments exposed to those risks and the corresponding credit ratings from Standard & Poor's (S&P) at December 31, 2015 and 2014, is as follows:

#### **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 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 are all held in the County's name.

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

#### **INVESTMENTS:**

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, SJCERA would not be able to recover the value of the investment or collateral securities that are in possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in 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.

#### **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, 2015 and 2014, for separately managed investment accounts, SJCERA did not hold any investments in any one issuer that would represent five percent (5%) or more of total investments.

#### **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.

2015 INVESTMENT TYPE	2015 FAIR VALUE	WEIGHTED AVERAGE MATURITY – YEARS
U.S. GOVERNMENT AND AGENCY INSTRUMENTS		
U.S. Government Mortgages	\$ 89,000,3	380 23.12
U.S. Government Bonds	24,804,1	1.60
U.S. Government-Issued Commercial Mortgage-Backed	245,5	598 1.90
Index Linked Government Bonds	56,455,1	8.63
Municipal/Revenue Bonds	4,230,4	i63 19.75
Agency	680,0	8.92
Short-Term Bills and Notes	9,334,5	0.19
	\$ 184,750,3	511
CORPORATE SECURITIES		
Asset Backed Securities	14,384,9	064 14.54
Bank Loans	19,974,0	030 4.88
Commercial Mortgage-Backed	9,206,2	290 17.82
Corporate and Other Credit	79,413,4	<b>É</b> 71 11.47
Non-Government Backed Collateralized Mortgage Obligations (CMOs)	56,568,1	21.10
	\$ 179,546,8	574
REAL ESTATE FINANCING	\$ 170,277,4	
Total Fixed Income Securities	\$ 534,574,5	88

As of December 31, 2015 and 2014, SJCERA had the following investments:



2014 INVESTMENT TYPE	2	014 FAIR VALUE	WEIGHTED AVERAGE Maturity – years
U.S. GOVERNMENT AND AGENCY INSTRUMENTS			
U.S. Government Mortgages	\$	89,983,208	23.28
U.S. Government Bonds		16,639,006	1.48
U.S. Government-Issued Commercial Mortgage-Backed		276,835	2.91
Index Linked Government Bonds		60,000,476	8.90
Municipal/Revenue Bonds		3,948,983	12.58
Agency		469,221	3.69
Short-Term Bills and Notes		9,339,159	0.23
	\$	180,656,888	
CORPORATE SECURITIES			
Asset Backed Securities		17,639,630	12.75
Bank Loans		20,803,376	5.06
Commercial Mortgage-Backed		4,644,625	19.39
Corporate and Other Credit		81,757,738	10.90
Non-Government Backed Collateralized Mortgage Obligations (CMOs)		51,572,544	21.87
	\$	176,417,913	
REAL ESTATE FINANCING	\$	170,311,913	-
Total Fixed Income Securities	\$	527,386,714	

#### 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 investment managers may invest in international securities in accordance with their investment guidelines pertaining to these types of investments.

Currency hedging on an un-leveraged 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 issue 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. Cross hedging is allowed. Permitted instruments are the use of 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, 2015 and 2014, is as follows:

CURRENCY	2015 FAIR VALUE	2014 FAIR VALUE
Australian Dollar	\$ 19,311	\$ 433,048
Brazilian Real	949,276	2,122,913
British Pound Sterling	18,003,137	16,405,575
Canadian Dollar	806,617	874,948
Euro Currency	12,389,204	15,773,726
Israel Skekel	140,983	397,502
Japanese Yen	75,101	-
Norwegian Krone	426,210	1,608,167
Singapore Dollar	589,811	1,757,105
South Africa Rand	-	361,358
Swiss Franc	710,702	1,869,517
Total	\$ 34,110,352	\$ 41,603,859

### d. Summary of Investment Policy

The County Employees Retirement Law 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.



### 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, in the judgment of management, 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. In management's opinion, 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.

**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, 2015 and 2014, collateral for derivatives was \$56.5 million and \$45.1 million, respectively. This represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform as contracted.

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The following Credit Risk Analysis schedule discloses the counterparty credit ratings of SJCERA's derivative investments as December 31, 2015 and 2014.

### 2015 CREDIT RISK ANALYSIS (AS OF DECEMBER 31, 2015)

	S & P Credit Rating				
DERIVATIVE TYPE	A+		TOTAL FAIR VALUE		
Swap Agreements	(88,546)		(88,546)		
Total	\$ (88,546)	\$	(88,546)		

#### 2014 CREDIT RISK ANALYSIS (AS OF DECEMBER 31, 2014)

	S & P Credit Rating					
DERIVATIVE TYPE	A+		TOTAL FAIR VALUE			
Swap Agreements	(19,339)		(19,339)			
Total	\$ (19,339)	\$	(19,339)			

**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.

#### 2015 INTEREST RATE RISK (AS OF DECEMBER 31, 2015)

GLOBAL BONDS	FUTURES CONTRACTS	OPTION CONTRACTS
Canadian Government Bond	\$ 26,096,989	\$ -
Long Gilt	4,300,639	-
Japanese Government Bond	29,752,215	-
Euro Bond	29,838,447	149,930
U.S. Ten Year Notes	(1,384,969)	-
Total	\$ 88,603,321	\$ 149,930

### 2014 INTEREST RATE RISK (AS OF DECEMBER 31, 2014)

GLOBAL BONDS	FUTURES CONTRACTS	OPTION CONTRACTS
Canadian Government Bond	\$ 19,305,923	\$ -
Long Gilt	19,750,277	-
Japanese Government Bond	19,726,704	-
Euro Bond	19,239,860	-
U.S. Ten Year Notes	19,526,719	251,219
Total	\$ 97,549,483	\$ 251,219



SJCERA measures derivative interest rate risk using duration with varying maturities of less than three months to more than 10 years. At December 31, 2015 and 2014, SJCERA had the following investment derivative interest rate risks:

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	\$ 57,002	\$ -	\$ 30,246	\$ 25,406	\$ 1,350	\$-	\$-	\$-
Swap Agreements	-	(148)	-	-	-	(59)	-	(89)
Rights/Warrants	1	1	1	-	-	-	-	-
Total	\$ 57,003	\$ (147)	\$ 30,247	\$ 25,406	\$ 1,350	\$ (59)	\$-	\$ (89)

# 2015 INTEREST RATE RISK ANALYSIS (AS OF DECEMBER 31, 2015) (DOLLARS IN THOUSANDS)

### 2014 INTEREST RATE RISK ANALYSIS (AS OF DECEMBER 31, 2014)

(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	\$ 38,579	\$-	\$(29,114)	\$ 66,457	\$ 1,236	\$-	\$-	\$-
Swap Agreements	-	218	-	-	-	237	-	(19)
Total	\$ 38,579	\$ 218	\$(29,114)	\$ 66,457	\$ 1,236	\$ 237	\$ -	\$ (19)

**Foreign Currency Risk:** Foreign currency risk is the risk that changes in currency exchange rates will adversely affect the fair market 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, 2015 and 2014, SJCERA had the derivative foreign currency exposures listed in the table below.

#### 2015 FOREIGN CURRENCY RISK ANALYSIS (AS OF DECEMBER 31, 2015)

CURRENCY	FUTURES Contracts	UITY CONTRACTS TION CONTRACTS	·	INTEREST RATE Contracts
Australian Dollar	\$ (22,742,580)	\$ 60,300	\$	-
Canadian Dollar	(15,681,488)	(876,424)		6,462,436
Euro Currency	(16,785,456)	156,275		-
British Pound Sterling	(15,640,943)	-		-
Japanese Yen	(14,269,406)	(72,006)		6,194,771
Swiss Franc	-	531,788		_
Total	\$ (85,119,873)	\$ (200,067)	\$	(12,657,207)

CURRENCY	FUTURES Contracts	IITY CONTRACTS Ion contracts	INTEREST RATE Contracts
Australian Dollar	\$ (8,188,759)	\$ 492,350	\$ -
Canadian Dollar	(8,481,971)	(4,705,582)	-
Euro Currency	(8,304,254)	590,450	-
British Pound Sterling	(8,551,990)	-	-
Japanese Yen	(8,656,165)	905,000	-
Total	\$ (42,183,139)	\$ (2,717,782)	\$ -

#### 2014 FOREIGN CURRENCY RISK ANALYSIS (AS OF DECEMBER 31, 2014)

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. 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.

**Forward Contracts:** A forward contract represents an agreement to buy or sell an underlying asset at a specified date in the future at a specified price. Payment for the transaction is delayed until the settlement or expiration date. A forward contract is a non-standardized contract that is tailored to each specific transaction. Forward contracts are privately negotiated and are intended to be held until the settlement date. Currency forward contracts are used to control currency exposure and facilitate the settlement of international security purchase and sale transactions.

**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.



The Investment Derivatives schedule listed below reports the fair value balances, changes in fair value, and notional amounts of derivatives outstanding as of and for the years ended December 31, 2015 and 2014, classified by type.

	2015	ō	2014	2015/2014	
DERIVATIVE TYPE	NOTIONAL AMOUNT	FAIR VALUE	FAIR VALUE	CHANGE IN Fair Value	
Futures Contracts	\$ (21,732,181)	\$ 7,597,875	\$ 7,308,921	\$ 288,954	
Option Contracts	3,444,417	1,677,626	4,412,704	(2,735,078)	
Swap Agreements	-	(146,786)	217,318	(364,104)	
Total	\$ (18,287,764)	\$ 9,128,715	\$11,938,943	\$ (2,810,228)	

#### INVESTMENT DERIVATIVES (AS OF DECEMBER 31, 2015 AND 2014)

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 investment managers or SJCERA's custodian bank.

# 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% 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.

Contribution rates are calculated by the actuary using the Entry Age Normal Funding Method (Cost Method) and the Actuarial Asset Valuation Method, consistent with the Board's Funding and Reserve Policies. The required contribution rates are expressed as a percentage of covered payroll. The 2015 and 2014 contribution rates were determined using the actuarial valuations performed as of January 1, 2014 and 2013, respectively.

The Actuarial Experience Study as of December 31, 2012, recommended significant contribution increases due to improving mortality rates and reducing the expected long-term rate of inflation, which also reduces the expected return on plan assets. The County requested, and the Board agreed, that employer contribution rates will increase by at least 2.97% per year (plus interest on any contribution shortfall from the full employer rates) in 2015 and 2016 to phase in the impact of the assumption changes adopted by the Board. This phase in of rate increases is consistent with model practice specified by the California Actuarial Advisory Panel (CAAP).

### **Employer Contributions**

The required employer contribution rates including Normal Cost and amortization of the UAL were determined by using the valuation report as of January 1, 2014. In 2015, the SJCERA Board of Retirement 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, 2015: The 2008 Extraordinary Actuarial Loss being amortized over a closed 30-year period, with 24 years remaining as of January 1, 2015; the remaining UAL as of December 31, 2014, being amortized over a closed 19-year period with 18 years remaining as of January 1, 2015; and new additions to the UAL on and after January 1, 2015, being amortized over 15 years. The single amortization period for these streams of payments is 20 years as of January 1, 2015. The amortization period for each unfunded actuarial liability layer will decrease each year.

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# EMPLOYER RETIREMENT CONTRIBUTION RATES

Expressed as a Percentage of Active Member Payroll

	2015 (Per 1/1/2014 Valuation)			2014 (Per 1/1/2013 Valuation)			
	Normal Cost	UAL Amortization	Total	Normal Cost	UAL Amortization	Total	
<b>TIER I</b> FOR GENERAL MEMBERS							
Paying Basic Rate Only (G.C. 31621.3)	17.21%	20.09%	37.30%	16.98%	16.92%	33.90%	
Paying Basic Rate with COLA Cost Share	15.02%	20.09%	35.11%	14.89%	16.92%	31.81%	
Paying 114% of Basic Rate with COLA Cost Share	14.55%	20.09%	34.64%	14.42%	16.92%	31.34%	
FOR SAFETY MEMBERS							
Paying Basic Rate Only (G.C. 31639.5)	30.40%	38.40%	68.80%	30.01%	32.32%	62.33%	
Paying Basic Rate with COLA Cost Share	26.20%	38.40%	64.60%	26.25%	32.32%	58.57%	
Paying 133% of Basic Rate with COLA Cost Share	24.72%	38.40%	63.12%	24.84%	32.32%	57.16%	
COMPOSITE TOTAL FOR GENE	RAL AND SA	AFETY COMBI	NED				
Paying Basic Rate Only (G.C. 31621.3)	19.64%	23.42%	43.06%	19.30%	19.63%	38.93%	
Paying Basic Rate with COLA Cost Share	17.08%	23.42%	40.50%	16.92%	19.67%	36.59%	
Paying 114%/133% of Basic Rate with COLA Cost Share	16.42%	23.42%	39.84%	16.28%	19.67%	35.95%	
TIER II							
For General Members	9.38%	20.09%	29.47%	8.82%	16.92%	25.74%	
For Safety Members	15.59%	38.40%	53.99%	14.49%	32.32%	46.81%	
Composite Total for General and Safety Combined	9.60%	20.74%	30.34%	9.80%	19.63%	29.43%	

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 six years are as follows:

CONTRIBUTION YEAR	TIER I	TIER II
2015	39.84% - 43.06%	30.34%
2014	36.59% - 38.93%	29.43%
2013	32.66% - 35.12%	29.43%
2012	29.30% - 32.04%	-
2011	31.92%	-
2010	28.91%	-

### **Member Contributions**

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

Tier I members pay contributions based upon their membership category, General or Safety, and age at entry into membership. All Safety members of Tier I, and General members of Tier I 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 II members pay contributions based upon their membership category equal to one-half of the normal cost of the applicable benefits.

In 2015, member contributions totaled \$29,026,901, and employer contributions totaled \$150,371,556. For 2014, member contributions totaled \$27,367,908, and employer contributions totaled \$136,686,133. Employee contributions increased by \$1.7 million, or 6.06%, over the prior year, and employer contributions increased by \$13.7 million, or 10.01%, over the prior year.

# NOTE 7 – TEN-YEAR HISTORICAL TREND INFORMATION

The ten-year historical trend information, designed to provide information about SJCERA's progress made in accumulating sufficient assets to pay pension benefits when due, is presented in the notes to the financial statements.



# NOTE 8 – FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS

As required by the County Employees Retirement Law 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. For 2015, the Unappropriated Earnings Reserves were not sufficient to fully credit interest earnings at the 7.5% assumption rate for all of the reserves. In addition, there were no excess earnings to fund the Contingency Reserve in 2015. During 2014, there were excess earnings to fund the Contingency Reserve at 0.55% of fair value of the total assets at December 31, 2014.

### 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. For 2015 and 2014, the assumption rates were 7.5% compounded semi-annually, for each year. Earnings are credited to all appropriate active and deferred member accounts semi-annually. Upon retirement, a member's accumulated contributions are transferred from this reserve to the Retired Members' Annuity Reserve.

### 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. Upon a member's retirement, an actuarially determined amount of the member's vested interest is transferred from the Employer Advance Reserves to the Retired Members' Pension Reserve.

### c. 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 to the Retired Members' Pension Reserve account.

From these reserves, SJCERA pays benefits in amounts computed in accordance with the County Employees Retirement Law. Interest earnings are also credited to the reserves semi-annually at the assumed nominal rate of return adopted by the Board, if sufficient Unappropriated Earnings Reserve funds exist.

The reserves at December 31, 2015, include the authorized "Purchasing Power" benefit reserve of \$3.6 million 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.

### d. 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 County Employees Retirement Law 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. The Contingency Reserve is 0.00% and 0.55% of the fair value of total assets at December 31, 2015 and 2014, respectively.

### e. Market Stabilization Designation Reserve

This "designation" account is used to further minimize the impact of the fluctuations in the market 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.

### f. 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.

g. A summary of reserved and designated net position at December 31, 2015, and December 31, 2014, is as follows:

	2015	2014
RESERVES		
Active and Deferred Members	\$ 300,964,754	\$ 280,034,697
Employer Advance	1,011,284,355	921,181,034
Retired Members	1,292,518,422	1,270,275,484
Class Action Settlement - Post-4/1/82	3,644,507	6,338,007
Contingency	-	13,458,427
Market Stabilization Designation	(195,169,491)	(24,938,120)
Total Reserves	\$ 2,413,242,547	\$ 2,466,349,529

# Financial

### NOTES TO THE FINANCIAL STATEMENTS

# NOTE 9 – 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, 2015. Measurements as of the reporting date are based on the fair value of assets as of December 31, 2015, and the Total Pension Liability as of the valuation date, January 1, 2015, updated to December 31, 2015. 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, 2015. 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 (i.e., the pension plan's liability determined in accordance with GASB Statement No. 67 less the fiduciary net position) is shown below:

	INCREASE (DECREASE)					
PLAN	TOTAL PENSION Liability (A)	PENSION PLAN Fiduciary Net Position (B)	NET PENSION Liability (A-B)			
Balance at December 31, 2014	\$ 3,783,844,864	\$ 2,466,349,529	\$ 1,317,495,335			
CHANGES FOR THE YEAR						
Service Cost	94,377,630	-	94,377,630			
Interest	280,581,484	-	280,581,484			
Changes of Benefits	-	-	-			
Changes of Assumptions	_	-	-			
Differences Between Expected and Actual Experience	(25,752,670)	-	(25,752,670)			
Contributions - Employer	-	150,371,556	(150,371,556)			
Contributions - Employee	-	29,026,901	(29,026,901)			
Net Investment Income	-	(47,339,750)	47,339,750			
Transfer Between Plans	-	378,969	(378,969)			
Benefit Payments, Including Refunds of Employee Contributions	(181,468,913)	(181,468,913)	-			
Administrative Expenses	-	(4,075,745)	4,075,745			
Net Changes	167,737,531	(53,106,982)	220,844,513			
Balance at December 31, 2015	\$ 3,951,582,395	\$ 2,413,242,547	\$ 1,538,339,848			

#### CHANGE IN COLLECTIVE NET PENSION LIABILITY

The Net Pension Liability was measured as of December 31, 2015 and 2014, and determined based upon rolling forward the Total Pension Liability from actuarial valuations as of January 1, 2015 and 2014, respectively.

### 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 substantive plan (the plan as understood by the employers and plan members) 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, 2015, 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, 2015 actuarial valuation, the Entry Age Normal Funding Method (Cost Method) was used. The actuarial assumptions include a 7.50% investment rate of return, annual inflation rate of 3.00% per year, and projected salary increases at 3.25% per year. The actuarial value of the plan's assets was based on a 5-year smoothing of actual versus expected returns.

In 2015, the SJCERA Board of Retirement 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, 2015: The 2008 Extraordinary Actuarial Loss being amortized over a closed 30-year period, with 24 years remaining as of January 1, 2015; the remaining UAL as of December 31, 2014, being amortized over a closed 19-year period with 18 years remaining as of January 1, 2015; and new additions to the UAL on and after January 1, 2015, being amortized over 15 years. The single amortization period for these streams of payments is 20 years as of January 1, 2015. The amortization period for each unfunded actuarial liability layer will decrease each year.

The total pension liability for the pension plan was determined by actuarial valuation as of January 1, 2015, and accepted actuarial procedures were applied to roll-forward the total pension liability to December 31, 2015.



Key methods and assumptions used in the latest actuarial valuations are presented below:

Valuation Date	January 1, 2015				
Actuarial Cost Method	Entry Age Normal				
Amortization Method	Level Percentage of Payroll with Separate Amortization Periods for Extraordinary Actuarial Gains or Losses				
<b>Remaining Amortization Period</b>	2008 Extraordinary Actuarial Loss - 24 years				
	Remaining UAL as of January 1, 2015 - 18 years				
	Subsequent Unexpected Changes in UAL after January 1, 2015 - 15 years				
	Single Equivalent Period as of January 1, 2015 - 20 years				
Asset Valuation Method	Smoothed Actuarial Value (5 years) 80%-120% Asset Corridor				
ACTUARIAL ASSUMPTIONS:					
Discount Rate	7.5%, Net of Pension Plan Investment Expenses, Including Inflation				
<b>Projected Salary Increases</b>	3.25%, Plus Service-Based Rates				
General Inflation Rate	3.00%				
Cost-of-Living Adjustments	2.60% Per Year Assumed				
Healthy Mortality	Sex distinct Retired Pensioner (RP) 2000 Combined Healthy Tables, published by the Society of Actuaries, with Generational Projection using Projection Scale BB.				
Disabled Mortality	Sex distinct Retired Pensioner (RP) 2000 Combined Healthy Tables, published by the Society of Actuaries, with Generational Projection using Projection Scale BB, set-forward eight years for males and females.				

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### 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, 2015, the pension plan's actuarial accrued liability was \$3.7 billion; the actuarial value of assets was \$2.5 billion, resulting in an unfunded accrued liability (UAL) of \$1.2 billion. The covered payroll (annual payroll of active employees covered by the plan) was \$398 million, and the ratio of the UAL to the covered payroll was 317%.

As of the annual actuarial valuation January 1, 2015, the funded status increased to 66.2% from 64.2% as of the annual actuarial valuation January 1, 2014. The Extraordinary Actuarial Loss of 2008 adversely affected the funded ratio from 2009 to 2013. In addition, for January 1, 2013 valuation assumption changes were made that reflects lower expected future returns on assets and improved mortality, lessening the impact of recent asset gains on the funded ratio.

The schedule of funding progress is presented to provide multi-year trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

ACTUARIAL Valuation Date	ACTUARIAL VALUE OF ASSETS' (A)	ACTUARIAL Liability (AL) (B)	UNFUNDED Actuarial Liability (UAL) (B-A)	FUNDED Ratio (A/B)	COVERED Payroll² (C)	UAL AS A PERCENTAGE OF ANNUAL COVERED PAYROLL ((B-A)/C)
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%
1/1/2007	1,869,717	2,149,938	280,221	87.0%	340,828	82.2%
1/1/2006	1,727,033	1,935,818	208,785	89.2%	309,692	67.4%

### SCHEDULE OF FUNDING PROGRESS DEFINED BENEFIT PENSION PLAN For the Last Ten Fiscal Years Ended December 31 (Dollars in Thousands)

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

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



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 2015 and the arithmetic long-term expected real rates of return:

ASSET CLASS	TARGET ALLOCATION	ARITHMETIC Long-term expected Real rate of return
Fixed Income	24.00%	3.55%
U.S. Equities	16.25%	9.00%
Non-U.S. Equities	16.25%	9.75%
Global Equity	1.50%	9.35%
Real Estate	10.00%	11.15%
Real Assets	7.00%	7.00%
Global Opportunistic Strategy	15.00%	7.40%
Risk Parity	10.00%	8.00%
Total	100.00%	

### e. Discount Rate

The discount rate used to measure the total pension liability was 7.50% as of December 31, 2015 and 2014, respectively. 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 both December 31, 2015 and 2014.

### f. Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of SJCERA as of December 31, 2015, calculated using the discount rate of 7.50%, 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 (6.50%) or one percentage point higher (8.50%) than the current rate:

	1% DECREASE (6.50%)	C	URRENT DISCOUNT Rate (7.50%)	1% INCREASE (8.50%)
Total Pension Liability	\$ 4,479,606,003	\$	3,951,582,395	\$ 3,516,662,896
Pension Plan Fiduciary Net Position	2,413,242,547		2,413,242,547	2,413,242,547
Collective Net Pension Liability	\$ 2,066,363,456	\$	1,538,339,848	\$ 1,103,420,349
Fiduciary Net Position as a Percentage of the Total Pension Liability	53.9%		61.1%	68.6%

### g. Rate of Return

For the year ended December 31, 2015, the annual money-weighted rate of return on investments, net of investment expense, was -2.06%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

# NOTE 10 – 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.

# NOTE 11 – 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%) of SJCERA's actuarial accrued liability. The actual administration expense for years 2015 and 2014 was 0.10% and 0.11% of the actuarial accrued liability, respectively. SJCERA was in compliance with this requirement during 2015 and 2014.

# NOTE 12 – PENDING LITIGATION

There is no pending litigation impacting SJCERA as of December 31, 2015.



#### NOTES TO THE FINANCIAL STATEMENTS

## NOTE 13 – 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 \$329.4 million and \$198.1 million at December 31, 2015 and 2014, respectively.

In the normal course of its activities, SJCERA may be named in various claims and legal actions. On May 27, 2016, SJCERA received a demand letter on behalf of the San Joaquin County Correctional Officers Association stating intent to initiate legal action against SJCERA related to pensionable compensation. Based upon counsel and management's opinion, the outcome of this matter is not expected to have a material adverse effect on SJCERA's financial position or change in fiduciary net position.

## NOTE 14 – SUBSEQUENT EVENTS

SJCERA has evaluated subsequent events through June 1, 2016, the date on which the financial statements were available to be issued. There are no pending subsequent events other than the following:

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, effective beginning January 2016. The portfolio was reorganized into more risk-aligned strategic asset classes, and the Board added a 20% allocation to a new Crisis Risk Offset (CRO) strategic class. The purpose of this new CRO class is to provide significant return during a growth crisis using liquid instruments available at scale for reasonable cost. This would include strategies involving treasury rate duration, systematic trend following, and liquid alternative risk premia.

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#### NOTES TO THE FINANCIAL STATEMENTS

	SSET ALLOCATION POLICY Through 2015)		ASSET ALLOCAT (Beginning 201		
POLICY Allocation Percentage	ASSET CLASS	ASSET CLASS	POLICY Allocation Percentage	PURPOSE	MAIN RISK Exposures
16.25%	U.S. Public Equity				
16.25%	Non-U.S. Public Equity	Global Public Equity <sup>1</sup>	30.00%	Return	Growth,
1.50%	Global Public Equity	Stobal I ablie Equity	J0.0070	Return	Currency
24.00%	U.S. Fixed Income	Stable Fixed Income	10.00%	Income, Stability	Interest Rates
		Credit	14.00%	Income, Growth	Growth
15.00% 10.00%	Global Opportunistic <sup>2</sup> Real Estate	Private Appreciation <sup>3</sup>	12.00%	Return	Growth
10.00%	Risk Parity				Growth,
7.00%	Real Assets	Risk Parity	14.00%	Balanced Return	Interest Rates, Inflation
		Crisis Risk Offset (CRO) <sup>5</sup> Long Duration Systematic Trend Following Alternative Risk Premia	20.00%	Return and Liquidity During a Growth Crisis	Interest Rates, Variable Based on Trends Alternative Risk Factors
100.00%			100.00%		

<sup>1</sup> Includes 3% public real estate securities

<sup>2</sup> Existing strategies reallocated to "Credit" and "Private Appreciation" classes

<sup>3</sup> Includes 7% private real estate equity investments

<sup>4</sup> Discontinued as a separate asset class

<sup>5</sup> New asset class

Performance measurement and reporting using the revised strategic asset allocation will begin with the first quarter of 2016.

Effective January 1, 2016, Courts left the County payroll system and established their own via ADP. Implementation with regard to data to SJCERA is in progress, but SJCERA has received member and employer contributions for each pay cycle since conversion.



**REQUIRED SUPPLEMENTARY INFORMATION** 

# SCHEDULE OF CHANGES IN NET PENSION LIABILITY

AND RELATED RATIOS FOR THE YEAR ENDED DECEMBER 31, 2015

	DECEMBER 31, 2015*	DECEMBER 31, 2014*
TOTAL PENSION LIABILITY		
Service Cost	\$ 94,377,630	\$ 90,429,416
Interest (Includes Interest on Service Cost)	280,581,484	266,668,435
Change of Benefit Terms	-	-
Differences Between Expected and Actual Experience	(25,752,670)	-
Changes of Assumptions	-	-
Benefit Payments, Including Refunds		
of Employee Contributions	(181,468,913)	(165,870,971)
Net Change in Total Pension Liability	167,737,531	191,226,880
Total Pension Liability - Beginning	3,783,844,864	3,592,617,984
Total Pension Liability - Ending (a)	\$3,951,582,395	\$3,783,844,864
FIDUCIARY NET POSITION		
Contributions - Employer	\$ 150,371,556	\$ 136,686,133
Contributions - Employee	29,026,901	27,367,908
Net Investment Income (Loss)	(47,449,240)	110,651,111
Miscellaneous Income	109,490	77,192
Transfer Between Plans	378,969	19,968,779
Benefit Payments, Including Refunds of Employee Contributions	(181,468,913)	(165,870,971)
Administrative Expenses	(4,075,745)	(4,042,986)
Net Change in Fiduciary Net Position	(53,106,982)	124,837,166
Fiduciary Net Position - Beginning	2,466,349,529	2,341,512,363
Fiduciary Net Position - Ending (b)	\$2,413,242,547	\$2,466,349,529
Fiduciary Net Pension Liability - Ending (a)-(b)	\$1,538,339,848	\$1,317,495,335
Fiduciary Net Position as a Percentage of the Total Pension Liability	61.07%	65.18%
Covered Employee Payroll**	\$ 396,136,470	\$ 376,030,944
Fiduciary Net Position Liability as a Percentage of Covered Employee Payroll	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 for 2015 and 2014.

## REQUIRED SUPPLEMENTARY INFORMATION

# SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYERS AND OTHER CONTRIBUTING SOURCES DEFINED BENEFIT PENSION PLAN

FOR THE TEN YEARS ENDING DECEMBER 31, 2015

#### 2015-2011

	2015	2014	2013	2012	2011
Actuarially Determined					
Contributions	\$150,371,556	\$136,686,133	\$119,494,319	\$108,062,510	\$112,891,701
Contributions in Relation to the Actuarially					
Determined Contribution	150,371,556	136,686,133	119,494,319	108,062,510	112,891,701
Contribution					
Deficiency / (Excess)	\$ -	\$-	\$ -	\$-	\$ -
Covered Employee					
Payroll*	\$396,136,470	\$376,030,944	\$362,650,568	\$356,419,000	\$367,344,000
Contributions as a					
Percentage of Covered					
Employee Payroll	37.96%	36.35%	32.95%	30.32%	30.73%

2010-2006

	2010	2009	2008	2007	2006
Actuarially Determined					
Contributions	\$104,451,673	\$ 97,805,585	\$ 94,162,866	\$ 85,686,698	\$ 73,611,841
Contributions in Relation to the Actuarially Determined Contribution	104,451,673	97,805,585	94,162,866	85,686,698	73,611,841
	104,431,075	97,803,383	94,102,000	03,000,090	/ 3,011,041
Contribution					
Deficiency / (Excess)	\$-	\$-	\$-	\$-	\$-
Covered Employee					
Payroll*	\$384,442,000	\$377,559,000	\$367,561,000	\$340,828,000	\$309,692,000
Contributions as a					
Percentage of Covered					
Employee Payroll	27.10%	25.90%	25.62%	25.14%	23.77%

\* Covered Employee Payroll reported by plan sponsors for 2013, 2014, and 2015. Previous years' amounts are based on projected payroll from the actuarial valuation reports.



**REQUIRED SUPPLEMENTARY INFORMATION** 

# SCHEDULE OF INVESTMENT RETURNS

FOR THE YEAR ENDED DECEMBER 31, 2015

	DECEMBER 31, 2015*	DECEMBER 31, 2014*
Annual Money-Weighted Rate of Return, Net of Investment Expense	-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 market 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 in the Schedule of Employer Contributions:

Valuation Date	January 1, 2014
Timing	Actuarially determined contribution rates are calculated based on the actuarial valuation one year prior to the beginning of the plan year.
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	25 Years for 2008 Extraordinary Loss, 19 Years for Remaining UAL (21 Year Single Equivalent Period)
Asset Valuation Method	Excessive Earnings Smoothed Actuarial Value (5 years) 80%-120% Asset Corridor
ACTUARIAL ASSUMPTIONS:	
Discount Rate	7.50%
Projected Salary Increases	3.25%, plus merit component based on employee classification and years of service
General Inflation Rate	3.00%
Cost-of-Living Adjustments	2.60%
Healthy Mortality	Sex distinct Retired Pensioner (RP) 2000 Combined Healthy Tables, published by the Society of Actuaries, with Generational Projection using Projection Scale BB.
Disabled Mortality	Sex distinct Retired Pensioner (RP) 2000 Combined Healthy Tables, published by the Society of Actuaries, with Generational Projection using Projection Scale BB, set-forward eight years for males and females.

A complete description of the methods and assumptions used to determine contribution rates for the year ending December 31, 2015, can be found in the January 1, 2014, actuarial valuation report.



#### NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

## NOTE 2 - CHANGES OF ASSUMPTIONS

In 2013, Cheiron Actuaries recommended minor changes in demographic assumptions for rates of retirement, disability, and termination and a more significant change in mortality rates by using mortality projection Scale BB that incorporates an automatic expectation of future improvements in mortality. In addition, the actuary recommended changes in economic assumptions to reduce the long-term inflation rate from 3.25% to 3.00%, and maintain the Real Rate of Return at 4.5%, resulting in a decrease in the Nominal Rate of Return from 7.75% to 7.50%. The Board of Retirement approved the recommended changes in demographic and economic assumptions as presented by Cheiron Actuaries and discussed in the Actuarial Experience Study report for January 1, 2010, through December 31, 2012. New Governmental Accounting Standards Board standards require that administrative expenses are no longer used to reduce the discount rate, but are instead included in the plan cost as a separate item. The Board of Retirement approved the employer's request to defer for 2014 and phase-in for 2015 and 2016 the impact of the actuarial assumption changes on employer contribution rates.

In 2015, the SJCERA Board of Retirement 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, 2015: The 2008 Extraordinary Actuarial Loss being amortized over a closed 30-year period, with 24 years remaining as of January 1, 2015; the remaining UAL as of December 31, 2014, being amortized over a closed 19-year period with 18 years remaining as of January 1, 2015; and new additions to the UAL on and after January 1, 2015, being amortized over 15 years. The single amortization period for these streams of payments is 20 years as of January 1, 2015. The amortization period for each unfunded actuarial liability layer will decrease each year.

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### OTHER SUPPLEMENTARY INFORMATION

# SCHEDULE OF ADMINISTRATIVE EXPENSES FOR THE YEARS ENDING DECEMBER 31, 2015 AND 2014

	2015	2014
PERSONNEL SERVICES		
Staff Salaries	\$ 1,320,146	\$ 1,400,357
Cafeteria Benefits	157,579	152,021
Insurance	226,066	238,662
Social Security	98,718	96,221
Retirement	547,967	482,792
Total Personnel Services	2,350,476	2,370,053
PROFESSIONAL SERVICES		
Professional and Specialized Services	585,247	583,950
Allocated Department Costs	19,339	23,550
Total Professional Services	604,586	607,500
COMMUNICATIONS		
Postage	25,357	25,170
Telephone	16,420	17,860
Travel	66,878	65,196
Total Communications	108,655	108,226
RENTALS/EQUIPMENT		
Office Space and Equipment	272,831	201,876
Equipment	6,440	10,545
Depreciation-Equipment	145,548	121,231
Equipment Leasing	17,530	17,047
Total Rentals/Equipment	442,349	350,699
MISCELLANEOUS		
Office Supplies/Expense	76,131	75,441
Subscriptions and Periodicals	4,365	12,193
Memberships	9,584	9,226
Maintenance	1,930	8,996
Insurance	111,971	94,529
Total Miscellaneous	203,981	200,385
Total Administrative Expense	\$ 3,710,047	\$ 3,636,863



#### OTHER SUPPLEMENTARY INFORMATION

# SCHEDULE OF INVESTMENT EXPENSES FOR THE YEARS ENDING DECEMBER 31, 2015 AND 2014

	2015	2014
INVESTMENT MANAGEMENT FEES		
Fixed Income	\$ 2,488,978	\$ 2,433,468
U.S. Equity	1,352,023	1,296,248
Non-U.S. Equity	937,509	852,669
Global Equity	192,778	255,848
Real Estate - Private Managers	3,781,188	3,813,646
Real Estate - Investment Trust	182,103	289,865
Real Assets	537,827	730,137
Global Opportunistic	8,270,017	5,147,253
Risk Parity	1,312,331	1,248,087
Short Term Investments/Cash and Equivalents	195,012	208,781
Total Investment Management Fees	19,249,766	16,276,002
OTHER INVESTMENT FEES AND EXPENSES		
Custodian Fees	282,059	271,385
Investment Consultant Fees	564,646	472,780
Miscellaneous Investment Expense	70,520	282,184
Notional Interest Expense	53,402	906,740
Total Investment Fees and Interest Expenses	970,627	1,933,089
Total Investment Expenses	\$ 20,220,393	\$ 18,209,091

# SCHEDULE OF PAYMENTS TO CONSULTANTS FOR THE YEARS ENDING DECEMBER 31, 2015 AND 2014

	2015	2014
NATURE OF SERVICE		
Actuarial-Retainer and Valuation	\$ 151,893	\$ 161,342
Audit	60,705	60,705
Legal Counsel-Processing of Disabilities	213,805	244,781
Business Technology Services	109,900	120,400
Total Payments to Consultants	\$ 536,303	\$ 587,228

### OTHER SUPPLEMENTARY INFORMATION

# STATEMENT OF CHANGES IN ASSETS AND LIABILITIES POST-EMPLOYMENT HEALTHCARE AGENCY FUND FOR THE YEAR ENDED DECEMBER 31, 2015

	JAN	BALANCE Uary 1, 2015	ADDITIONS	DELETIONS	DE	BALANCE Cember 31, 2015
ASSETS						
Cash and Cash Equivalents	\$	76	\$ -	\$ (76)	\$	-
Cash Collateral - Securities Lending		144	-	(144)		-
Receivables		3	4,140,309	(4,136,383)		3,929
Investments		2,086	-	(2,086)		-
Total Assets	\$	2,309	\$ 4,140,309	\$ (4,138,689)	\$	3,929
LIABILITIES						
Securities Lending - Cash Collateral	\$	144	\$ -	\$ (144)	\$	-
Securities Purchased, Not Paid		1	-	(1)		-
Accrued Expense and Other Payables		2	-	(2)		_
Securities Lending Interest and Other Expense		_	-			_
Retiree Sick Leave Bank Benefits Payable		2,162	4,139,856	(4,138,089)		3,929
Total Liabilities	\$	2,309	\$ 4,139,856	\$ (4,138,236)	\$	3,929



OTHER INFORMATION

# SCHEDULE OF COST SHARING EMPLOYER ALLOCATIONS FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	DECEMBE	R 31, 2015	DECEMBE	R 31, 2014
EMPLOYER	PROPORTIONATE Share (1)	NET PENSION Liability (2)	PROPORTIONATE Share (1)	NET PENSION Liability <sup>(2)</sup>
County of San Joaquin	93.9134%	\$1,444,707,255	94.2002%	\$1,241,083,242
Superior Courts	3.7061%	57,012,413	3.4414%	45,340,284
Manteca-Lathrop Rural Fire Protection District	1.0494%	16,143,338	1.0103%	13,310,655
Waterloo-Morada Rural Fire Protection District	0.4405%	6,776,387	0.4405%	5,803,567
Tracy Public Cemetery District	0.0382%	587,646	0.0435%	573,110
SJC Mosquito and Vector Control District	0.5265%	8,099,359	0.5218%	6,874,691
SJC Historical Society and Museum	0.0287%	441,504	0.0281%	370,216
Mountain House Community Services Dist	0.2869%	4,413,497	0.2931%	3,861,579
Local Agency Formation Commission	0.0000%	-	0.0075%	98,812
San Joaquin County Law Library	0.0103%	158,449	0.0136%	179,179
Total	100.0000%	\$1,538,339,848	100.0000%	\$1,317,495,335

<sup>(1)</sup> 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.

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

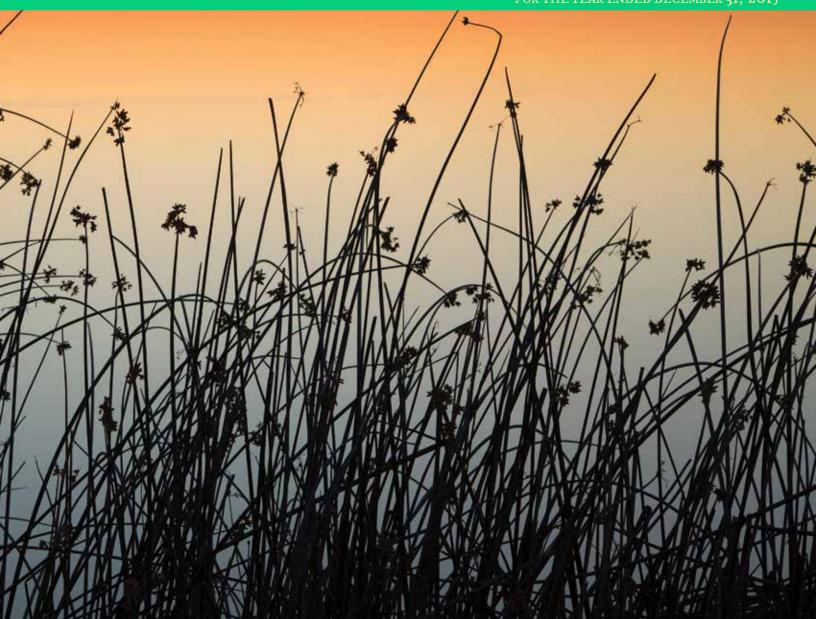
SCHEDULE OF EMPLOYER PENSION AMOUNTS ALLOCATED BY COST SHARING PLAN as of december 31, 2015

		DE	DEFERRED OUTFLO	WS	<b>OF RESOURCES</b>	), ES	DEF	ERRED IN	IFLOWS OF	DEFERRED INFLOWS OF RESOURCES	ES	PEN	PENSION EXPENSE	NSE
EMPLOYER	NET PENSION Liability	DIFFERENCES BETWEEN Expected And actual Experience	DIFFERENCES BETWEEN PROJECTED AND ACTUAL INVESTMENT EARNINGS	CHANGES OF Assumptions	CHANGES IN PROPORTION DIFFERENCES BETWEEN BETWEEN CONTRIBUTIONS PROPORTIONATE PENSION EXPENSE	TOTAL DEFERRED OUTFLOWS OF Resources	DIFFERENCES Between Expected And Actual Economic Experience	DIFFERENCES BETWEEN PROJECTED AND ACTUAL INVESTMENT EARNINGS	CHANGES OF Assumptions	CHANGES IN PROPORTION AND Differences Between Contributions Proportionate Pension Expense	TOTAL DEFERRED Sinflows of Resources	PROPORTIONAL Share of Plan Pension Expense	NET AMORTIZATION OF DEFERED Amounts From Changes In Proportionate Share of Pension Expense	TOTAL PENSION Expense
County of San Joaquin	\$1,444,707,255	' \$\$	\$211,235,342	' \$	- \$5	\$211,235,342	\$ 19,348,167	۰ چ	-	\$ 3,721,013	3,721,013 \$23,069,180	\$ 205,873,435	\$	(988,705) <b>\$204,884,730</b>
Superior Courts	57,012,413		8,335,970	1	3,594,307	11,930,277	763,536	1	1		763,536	8,124,373	960,791	9,085,164
Manteca- Lathrop Rural Fire Protection District	16,143,338	1	2,360,370	1	431,822	2,792,192	216,199	1	1	40,884	257,083	2,300,455	99,351	2,399,806
Waterloo- Morada Rural Fire Protection District	6,776,387	1	990,798	1	106,019	1,096,817	90,752	1	1	53,074	143,826	965,648	20,709	986,357
Tracy Public Cemetery District	587,646		85,922	1	38,004	123,926	7,870	1	1	59,502	67,372	83,741	(2,217)	81,524
SJC Mosquito and Vector Control District	8,099,359	1	1,184,234	1	71,129	1,255,363	108,470	1	1	7,719	116,189	1,154,174	17,547	1,171,721
SJC Historical Society and Museum	441,504		64,554	1	7,171	71,725	5,913	1	1	737	6,650	62,915	1,556	64,471
Mountain House Community Services District	4,413,497	1	645,312	1	1	645,312	59,108	1	1	233,081	292,189	628,931	(73,577)	555,354
Local Agency Formation Commission	ı	1	I	1	68,106	68,106	1	1	1	212,852	212,852	1	(43,046)	(43,046)
San Joaquin County Law Library	158,449	ı	23,167	ı	45,700	68,867	2,122	ı	1	33,401	35,523	22,579	7,591	30,170
Totals \$	\$ 1,538,339,848	- \$	\$224,925,669	- \$	\$ 4,362,258	4,362,258 \$229,287,927	\$ 20,602,137	- \$	-	\$ 4,362,263	4,362,263 \$24,964,400	\$ 219,216,251	- \$	\$ 219,216,251

#### OTHER INFORMATION







Look closely at the present you are constructing. It should look like the future you are dreaming } ALICE WALKER {

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#### INDEPENDENT CONSULTANT'S REPORT

PECA PENSION CONSULTING ALLIANCE

May 11, 2016

Board of Trustees San Joaquin County Employee's 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 Employee's Retirement Association (SCERA) for periods ending December 31, 2015.

#### **SJCERA - Total Fund Performance**

As of December 31, 2015, the SCJERA Portfolio had approximately \$2.4 billion in total assets, a decrease of roughly (\$69.4) million for the fiscal year due to cash flows and investment results. The SCJERA Total Fund generated a net of fees return of minus (1.4%) for the year, matching its policy benchmark. Negative performance for the year was primarily driven by poor returns within the US Equity, Non-US Equity, Global Equity, Real Asset and Risk Parity portfolios. Performance from the more illiquid classes (Opportunistic and Real Estate) produced the best overall performance during the year. Each quarter, the System reviews the performance of the total fund along with the underlying strategic classes and individual managers versus their appropriate benchmarks. In 2015, SJCERA met its primary goal of ensuring sufficient funds available to make scheduled benefit payments.

#### **Market Conditions**

After a slow start to the year and a rough third quarter, equity markets bounced back in the fourth quarter brining global equities global equities (MSCI ACWI) to a less negative return of minus (1.8%) for the year. Within global equities, US equities outperformed Non-US equities as the global decline in demand for commodities placed significant downward pressure on emerging markets during the year. The Fed's long-awaited rate hike finally became a reality in December. The resulting increase in rates led to a flattening of the yield curve resulting in negative fourth quarter returns for nearly all domestic fixed income indices. For the full one-year period, the Barclays Aggregate Bond Index returned 0.6%. Most other bond segments produced a positive return with the exception of High Yield which, similarly to Emerging Markets, was impacted by the continued fall in commodity prices due to the Energy and Metals/Mining sector's large role in the U.S. High Yield market.

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

SJCERA performed an extensive review of its asset allocation during the year. At its October 23, 2015 Financial Meeting, the Board of Retirement selected a new strategic asset allocation effective on January 1, 2016. The new strategic asset allocation reduces the 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. During 2016, SJCERA portfolio is transitioning to the new strategic asset allocation which will be reflected in next year's report. Periodic reviews of the strategic asset allocation should 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, 2015:

	Annualized				
Asset Class	1-Year	3-Year	5-Year	10-Year	
US Equity	-0.8	14.0	11.2	5.5	
US Equity Benchmark <sup>1</sup>	0.5	14.7	12.2	7.4	
International Equity	-8.5	1.5	1.4	3.3	
MSCI ACWI ex US Index	-5.3	1.9	1.5	3.4	
Global Equity	-16.1	-1.9			
MSCI World Index	-0.3	10.2			
Fixed Income	2.3	3.4	5.4	5.4	
Fixed Income Benchmark <sup>2</sup>	1.4	2.0	3.3	4.3	
Real Estate (lagged)	12.6	13.4	15.9	2.4	
Real Estate Benchmark <sup>3</sup>	12.9	11.1	11.8	8.2	
Real Assets	-7.4	-4.0	-1.1		
Real Assets Benchmark <sup>4</sup>	-4.7	-6.8	-3.0		
Global Opportunistic	11.9	8.4	3.7		
Global Opportunistic Benchmark⁵	9.0	8.2	6.4		
Risk Parity	-9.0	-7.8			
Risk Parity Benchmark <sup>6</sup>	2.8	-1.7			
Cash	0.1	0.0	0.1	1.3	
91-Day T-Bill	0.1	0.1	0.1	1.2	
Total Fund, Gross of Fees Total Fund, Net of Fees	-0.5 -1.4	<b>4.9</b> 4.6	<b>5.5</b> 5.0	<b>3.7</b> 4.4	
Policy Benchmark <sup>7</sup>	-1.4	4.2	5.0	3.3	

<sup>1</sup> 8/2011-Present = 100% Russell 3000; 6/2009-7/2011 = 83% Russell 1000, 17% Russell 2000; 10/2007-5/2009 = 85% Russell 1000, 15% Russell 2000; 1/2005-9/2007 = 80% Russell 1000, 20% Russell 2000

<sup>2</sup> 4/2014-Present = 60.8% Barclays Aggregate, 16.7% 3-Month LIBOR, 12.5% 9 percent annual, 10% S&P/LSTA Leveraged Loan; 4/2012-3/2014 = 16.7% 3-Month LIBOR, 12.5% 9 percent annual, 70.8% BC Aggregate; 8/2011-3/2012 = 21% 3-Month LIBOR, 10% 9 Percent annual, 69% BC Aggregate; 1/2005-7/2011 = 12% 3-Month LIBOR, 9% 9 percent annual, 59% BC Aggregate, 20% BC Intermediate Government

<sup>3</sup> 10/2012-Present = 10% FTSE NAREIT Developed ex US, 15% FTSE NAREIT Equity REIT, 75% NCREIF ODCE Net + 1%; 9/2012 = 10% FTSE NAREIT Developed ex US, 20% FTSE NAREIT Equity REIT, 70% NCREIF Property; 10/2007-8/2012 = 20% FTSE NAREIT Developed ex US, 10% GPR General Property, 70% NCREIF Property; 1/2005-9/207 = 25% FTSE NAREIT Developed ex US, 15% GPR General Property, 60% NCREIF Property

<sup>4</sup> 8/2011-Present = 58% Bridgewater RA Custom, 42% Schroder Custom; 1/2010-7/2011 = 54% Bridgewater RA Custom, 46% Schroder Custom; 7/2009-12/2009 = 46% Bloomberg Commodity, 54% Bridgewater RA Custom; 6/2009 = 46% Bloomberg Commodity, 23% Bridgewater RA Custom, 31% Citigroup 2-Year Treasury; 4/2009-5/2009 = 100% Bridgewater RA Custom

<sup>5</sup> 4/2012-Present = 100% 9 percent annual, 8/2011-3/2012 = 50% 91-Day T-Bill, 50% Annual LIBOR; 1/2010-7/2011 = 100% Annual LIBOR; 9/2009-12/2009 = 100% 4-month LIBOR

6 12/2013-Present = 70% 91-Day T-Bill 6%, 30% Parametric Clifton Custom; 4/2012-11/2013 = 50% 91-Day T-Bill 6%, 50% Parametric Clifton Custom

<sup>7</sup> Policy Benchmark currently consists of 16.25% US Equity Benchmark (BM), 16.25% Intl Equity BM, 1.5% Global Equity BM, 24% Fixed Income BM, 10% Real Estate BM, 7% Real Assets BM, 15% Global Opportunistic BM, and 10% Risk Parity BM. Data prior to January 1, 2015, was provided by SIS.

Sincerely,

Pension Consulting Olliance, Inc.



### ASSET ALLOCATION AS OF DECEMBER 31, 2015

	INVESTMENT	ACTUAL Allocation	TARGET Allocation
Fixed Income	\$ 534,574,588	22.3%	24.00%
U.S. Equity	432,603,256	18.0%	16.25%
Non U.S. Equity	365,272,811	15.1%	16.25%
Global Equity	27,828,330	1.2%	1.50%
Real Estate (Private)	211,590,425	8.7%	7.50%
Real Estate Investment Trust	53,924,427	2.3%	2.50%
Real Assets	100,217,316	4.1%	7.00%
Global Opportunistic	368,124,902	15.2%	15.00%
Risk Parity	234,128,941	9.8%	10.00%
Short Term Investment/Cash/Cash Equivalents	79,806,039	3.3%	0.00%
Total	\$2,408,071,035	100.0%	100.00%



FIXED INCOME	24.00%
U.S. EQUITY	1 <b>6.25</b> %
NON U.S. EQUITY	1 <b>6.2</b> 5%
GLOBAL EQUITY	1.50%
REAL ESTATE ( PRIVATE)	7.50%
REAL ESTATE INVESTMENT TRUST	2.50%
REAL ASSETS	7.00%
GLOBAL OPPORTUNISTIC	15.00%
RISK PARITY	10.00%
SHORT TERM INVESTMENT/ CASH/CASH EQUIVALENTS	0.00%
	U.S. EQUITY NON U.S. EQUITY GLOBAL EQUITY REAL ESTATE ( PRIVATE) REAL ESTATE INVESTMENT TRUST REAL ASSETS GLOBAL OPPORTUNISTIC RISK PARITY SHORT TERM INVESTMENT/



#### LIST OF LARGEST ASSETS HELD

#### LARGEST STOCK HOLDINGS (BY MARKET VALUE) DECEMBER 31, 2015

	SHARES	STOCKS	MARKET VALUE
1	16,569	LIGAND PHARMACEUTICALS INCORPORATED CL BCOMMON STOCK	\$ 1,796,410.98
2	45,504	SYNCHRONOSS TECHNOLOGIES INC COM STK	1,603,105.92
3	103,812	LIFELOCK INC COM	1,489,702.20
4	11,140	LITTELFUSE INC COM	1,192,091.40
5	23,014	ADVISORY BRD CO COM	1,141,724.54
6	9,767	STAMPS COM INC COM NEW	1,070,560.87
7	21,046	ALLETE INC COM NEW	1,069,768.18
8	30,349	PRA GROUP INC COM	1,052,806.81
9	30,564	CARDTRONICS INC COM STK	1,028,478.60
10	38,300	CITIGROUP CAP XIII 7.875% TR PFD SECS FIXED/FLTG	995,417.00

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

### LARGEST BOND HOLDINGS (BY MARKET VALUE)

DECEMBER 31, 2015

	PAR	BONDS	MARKET VALUE
1	7,965,000.00	US TSY INFL IX TREAS BD 0.625 01-15-2024	\$ 8,026,886.28
2	728,896.85	MFO STONE HBR INVT FDS EMERGING MKTS DEBT FD INSTL CL	6,909,942.16
3	2,753,900.00	UK(GOVT OF) 1.875% I/L STK 22/11/22 GBP	6,074,395.31
4	1,193,400.00	UK(GOVT OF) 2.5% I/L GILT 17/07/24 GBP	5,850,450.95
5	4,710,000.00	US TREAS NTS INDEX LINKED 1.875 DUE 07-15-2019 REG	5,563,271.99
6	4,750,000.00	UNITED STATES TREAS NTS DTD 03/31/2015 .5% DUE 03-31-2017 REG	4,728,292.50
7	2,400,000.00	UNITED STATES OF AMER TREAS BONDS 04-15-2028	4,613,574.16
8	2,666,700.00	UK(GOVT OF) 0.125% IDX LKD 22/03/24 GBP	4,464,538.08
9	4,200,000.00	UTD STATES TREAS .75% DUE 03-15-2017	4,193,931.00
10	3,874,671.14	FEDERAL HOME LN MTG CORP CMO SER 3998 CLAZ 4 02-15-2042	4,162,384.84

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



## SCHEDULE OF INVESTMENT FEES

		2015		2014
INVESTMENT MANAGEMENT FEES				
Fixed Income	\$	2,488,978	\$	2,433,468
U.S. Equity		1,352,023		1,296,248
NON U.S. Equity		937,509		852,669
Global Equity		192,778		255,848
Real Estate - Private Managers		3,781,188		3,813,646
Real Estate - Investment Trust		182,103		289,865
Real Assets		537,827		730,137
Global Opportunistic		8,270,017		5,147,253
Risk Parity		1,312,331		1,248,087
Short Term Investments/Cash & Equivalents		195,012		208,781
	\$	19,249,766	\$	16,276,002
OTHER INVESTMENT FEES				
Custodian Fees		282,059		271,385
Investment Consultant Fees		564,646		472,780
Miscellaneous Investment Expense		70,520		282,184
Notional Interest Expense		53,402		906,740
	\$	970,627	\$	1,933,089
Total Investment Expenses	\$	20,220,393	\$	18,209,091
SECURITY LENDING FEES				
Security Lending Fees and Interest Expense		160,288		157,231
Total Investment Peece and Providence	å	20.200 (01	ø	10 266 200
Total Investment Fees and Expenses	\$	20,380,681	\$	18,366,322

## ${\tt SCHEDULE \ OF \ FEES \ AND \ COMMISSIONS}$

FOR THE YEAR ENDED DECEMBER 31, 2015

	BROKER	TOTAL Commissions	PERCENTAGE OF TOTAL COMMISSIONS
1	TOURMALINE PARTNERS LLC	63,605	17.38%
2	GOLDMAN SACHS & COMPANY	20,865	5.70%
3	KNIGHT EQUITY MARKETS LP	18,896	5.16%
4	NORTHERN TRUST CO	14,441	3.95%
5	BARCLAYS CAPITAL	13,591	3.71%
6	MERRILL LYNCH PIERCE FENNER & SMITH	12,069	3.30%
7	JONESTRADING INST SERV	11,758	3.21%
8	JEFFERIES & COMPANY	9,637	2.63%
9	CAP INSTITUTIONAL SERVICES INC	9,037	2.47%
10	STIFEL NICOLAUS AND COMPAN	8,476	2.32%
11	OTHERS*	183,650	50.17%
	Grand Total	\$ 366,024	100.00%

\* Includes approximately 146 additional firms, each with less than 2% of total commissions.



#### INVESTMENT SUMMARY

	FAIR VALUE December 31, 2015	PERCENTAGE OF FAIR VALUE
FIXED INCOME		
Double Line Capital	109,874,939	4.6%
Dodge & Cox	110,234,828	4.6%
Mesa West Real Estate Income II	34,170	0.0%
Mesa West Real Estate Income III	30,485,580	1.3%
Prima Capital Advisors	137,431,883	5.7%
Stone Harbor Emerging Market Debt	86,369,314	3.6%
Stone Harbor Leveraged Loan Fund	60,143,874	2.5%
Total Fixed Income	\$ 534,574,588	22.3%
U.S. EQUITY		
BlackRock R1000 Index	281,140,058	11.7%
Capital Prospects	72,635,548	3.0%
Legato Capital Management	78,827,650	3.3%
Total U.S. Equity	\$ 432,603,256	18.0%
NON-U.S. EQUITY		
BlackRock MSCI World Ex-US	147,788,818	6.1%
PIMCO	152,038,582	6.3%
PIMCO	65,445,411	2.7%
Total Non-U.S. Equity	\$ 365,272,811	15.1%
GLOBAL EQUITY		
Kleinwort Benson	27,828,330	1.2%
Total Global Equity	\$ 27,828,330	1.2%
REAL ESTATE - PRIVATE MANAGERS		
Almanac Realty Securities VI	10,412,527	0.4%
Angelo Gordon & Co.	3,185,850	0.1%
Colony Realty Parners III	19,883,260	0.8%
Colony Realty Parners IV	19,492,108	0.8%
Greenfield Acquisition Partners V	4,047,984	0.2%
Greenfield Acquisition Partners VI	15,248,154	0.6%
Greenfield Acquisition Partners VII	12,645,829	0.5%
Legacy Partners Realty Fund II	1,000	0.0%
Legacy Partners Realty Fund III	7,593,317	0.3%
Miller Global Fund V	5,906,146	0.2%
Miller Global Fund VI	16,147,851	0.7%
Miller Global Fund VII	8,955,240	0.4%
Principal US Property	20,528,658	0.9%
Prologis Targeted US Logistics Fund	38,283,485	1.6%
Deutsche Asset & Wealth Mgt (RREEF America REIT III)	3,024,682	0.1%
Sarofim Multifamily Partners II	3,872,145	0.2%
Walton Street Fund V	13,158,713	0.5%
Walton Street Fund VI	9,203,476	0.4%
Total Real Estate - Private Managers	\$ 211,590,425	8.7%

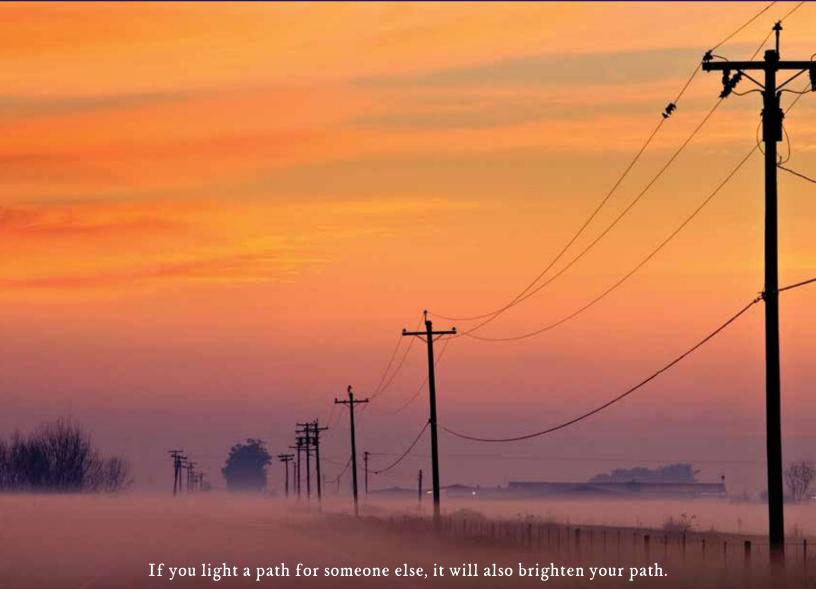
(Continued on page 84)

## INVESTMENT SUMMARY

	DE	FAIR VALUE Cember 31, 2015	PERCENTAGE OF Fair Value
REAL ESTATE - INVESTMENT TRUST			
Blackrock Developed Ex-U.S. RE Index Fund		23,166,431	1.0%
Invesco U.S. RE Securities		30,757,996	1.3%
Total Real Estate-Investment Trust	\$	53,924,427	2.3%
REAL ASSETS			
Bridgewater Real Asset		100,217,316	4.1%
Total Real Assets	\$	100,217,316	4.1%
GLOBAL OPPORTUNISTIC			
Bridgewater Pure Alpha		88,123,002	3.7%
Crestline Opportunity Fund II		34,808,125	1.4%
Marinus Opportunities Domestic Fund		46,913,177	1.9%
Medley Opportunity Fund II		52,992,304	2.2%
Morgan Creek Partners III		6,299,737	0.3%
Morgan Creek Partners V		8,541,272	0.4%
Morgan Creek Partners VI		5,502,479	0.2%
Mount Lucas Managed Futures		56,535,349	2.3%
Ocean Avenue Fund II		19,358,236	0.8%
Raven Asset-Based Opportunity Fund II		39,114,635	1.6%
Raven Asset-Based Opportunity Fund III		9,936,586	0.4%
Total Global Opportunistic	\$	368,124,902	15.2%
RISK PARITY			
Bridgewater All-Weather		148,345,846	6.2%
Parametric Global Balanced Risk Contraction Portfolio		85,783,095	3.6%
Total Risk Parity	\$	234,128,941	9.8%
SHORT TERM INVESTMENTS/CASH/CASH EQUIVALENTS			
Parametric Policy Implementation Overlay Service		19,900,760	0.8%
STIF - Northern Trust		59,905,279	2.5%
Total Short Term Investments	\$	79,806,039	3.3%
Total	\$ 2	2,408,071,035	100%







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Actuarial

Classic Values, Innovative Advice

#### ACTUARY'S CERTIFICATION LETTER

# -CHEIRON 🧩

May 19, 2015

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, 2014. This letter includes references to two documents produced by Cheiron for the Plan: the Actuarial Valuation Report as of January 1, 2014 (transmitted August 13, 2014) and the GASB 67/68 Report as of December 31, 2014 (transmitted in draft form May 8, 2015).

#### Actuarial Valuation Report as of January 1, 2014

The purpose of the annual Actuarial Valuation Report as of January 1, 2014 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 2015. The prior review was conducted as of January 1, 2013, and included recommended contribution rates for the year 2014.

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, 2014), the amortization period is 25 years for half of the 2008 investment loss and 19 years for the remaining UAL.

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 May 19, 2015 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, 2014 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
- Retirees and Beneficiaries Added to and Removed from Retiree Payroll
- Solvency Test
- Schedule of Funding Progress
- 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, 2010 through December 31, 2012, 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 2015.

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, 2014

The purpose of GASB 67/68 Report as of December 31, 2014, 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, 2014, actuarial valuation updated to the measurement date of December 31, 2014. 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 also based on the actuarial valuation as of January 1, 2014. The December 31, 2013, 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, 2014.

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. In future

CHEIRON #

Actuarial

ACTUARY'S CERTIFICATION LETTER

Board Members May 19, 2015 Page 3

years, liability gains and losses will be reported reflecting the liability gains and losses between actuarial valuation dates as well as any significant events during the update period.

Please refer to our GASB 67 report as of December 31, 2014, 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, 2014, 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.

These reports are for the use of the Plan, the participating employers, and their auditors in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of these reports is not an intended user and is considered a third party.

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. They are not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

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.

CHEIRON J

#### ACTUARY'S CERTIFICATION LETTER

Board Members May 19, 2015 Page 4

Respectfully Submitted, Cheiron

Roberto alu

Robert T. McCrory, FSA, MAAA Principal Consulting Actuary 703-893-1456 x1138 rmccrory@cheiron.us

Irahen Schrief

Graham Schmidt, ASA, MAAA Consulting Actuary 703-893-1456 x1137 gschmidt@cheiron.us

Actuarial

#### 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, 2015 for the period ending December 31, 2014.

An Experience Analysis is completed once every three years. The most recent Experience Analysis was conducted on November 1, 2013 for the years 2010 through 2012.

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 24 years remaining as of January 1, 2015. The remainder of the Plan's UAL as of January 1, 2014 is being amortized over a closed 18 year period as of January 1, 2015, decreasing by one year in each annual valuation report. All subsequent unexpected change in the UAL after January 1, 2015 is amortized over a 15 year closed period, beginning from the date the change is measured.
	The annual rate of return on all Plan assets is assumed to be 7.50%, net of investment expenses.
Inflation Assumption	3.00% per annum
Administrative Expenses	Administrative expenses are assumed to be \$4,243,600 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 3.00% 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 market 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 market value.

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Healthy Member Mortality	Mortality rates for active members, retirees, beneficiaries, terminated vested and reciprocal members are based on the sex distinct Retired Pensioner (RP) 2000 Combined Healthy Tables, published by the Society of Actuaries, with Generational Projection using Projection Scale BB.
Disabled Member Mortality	Mortality rates for disabled members are based on the sex distinct Retired Pensioner (RP) 2000 Combined Healthy Tables, published by the Society of Actuaries, with Generational Projection using Projection Scale BB, set-forward eight years for males and females.
Vested Termination Rates	Rates vary by service and classification (See <i>Probabilities of Separation Schedule</i> ).
Withdrawal Rates	Rates vary by service and classification (See <i>Probabilities of Separation Schedule</i> ).
Disability Rates	Rates vary by age, gender and classification (See <i>Probabilities of Separation Schedule</i> ).
Duty Disability Rates	Rates vary by age, gender and classification (See <i>Probabilities of Separation Schedule</i> ).
Service Retirement Rates	Rates vary by age, service, gender and classification (See <i>Probabilities</i> of <i>Separation Schedule</i> ).
Family Composition	50% of female members and 70% of male members are assumed to be married. Male spouses are assumed to be three years older than their wives.
Vested Terminations	No terminations are assumed for participants who are eligible for retirement. 50% of all General Member terminations with less than five years of service are assumed to take a refund of contributions, as well as 35% of those with five to fourteen years of service.
	20% 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.
	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.
Deferral Age for	Vested terminated General Members are assumed to begin receiving benefits at age 58 terminated. Safety Members are assumed to begin
Vested Terminators	receiving benefits at age 53.



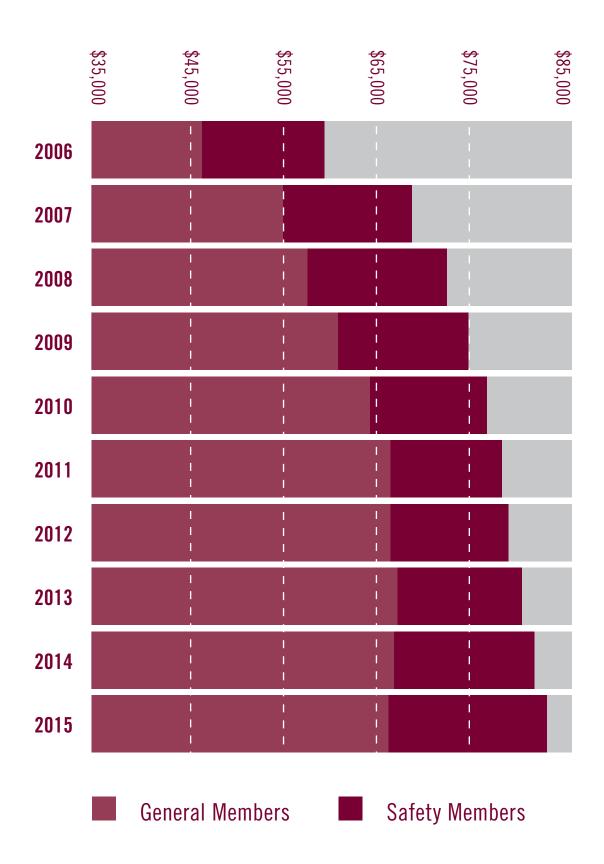
#### SCHEDULE OF ACTIVE MEMBER VALUATION DATA

ACTUARIAL Valuation Date	PLAN TYPE	MEMBERS	ANNUAL Payroll		AVERAGE Annual Salary	AVERAGE Salary Increase
			1			
	General	5,210	242,654,000		46,575	6.5%
	Safety	835	49,623,000		59,429	3.95%
01/01/2006	Total	6,045	\$ 292,277,000	\$	48,350	1.18%
	General	5,234	288,178,806		55,059	18.22%
	Safety	820	56,293,820		68,651	15.52%
01/01/2007	Total	6,054	\$ 344,472,626	\$	56,900	17.68%
	General	<b>5</b> 252	200 772 100		<b>57 (0)</b>	4760/
	Safety	5,353	308,773,122		57,682	4.76%
01/01/2008	Total	871 <b>6,224</b>	62,988,014 <b>\$ 371,761,136</b>	\$	72,317	5.34% <b>4.97%</b>
01/01/2008	Iotai	0,224	<b>₽</b> 5/1,/01,150	₽	59,730	4.9/%
	General	5,180	315,202,954		60,850	5.49%
	Safety	900	67,127,759		74,586	3.14%
01/01/2009	Total	6,080	\$ 382,330,713	\$	62,883	5.28%
	General	4,990	320,526,792		64,234	5.56%
	Safety	925	70,801,157		76,542	2.62%
01/01/2010	Total	5,915	\$ 391,327,949	\$	66,159	5.21%
	General	4,643	308,183,424		66,376	3.33%
	Safety	830	64,817,396		78,093	2.03%
01/01/2011	Total	5,473	\$ 373,000,820	\$	<b>68,153</b>	<u>3.01%</u>
01/01/2011	10141	),1/J	φ 575,000,020	₩ <b>₽</b>	00,199	5.0170
	General	4,441	298,308,687		67,172	1.20%
	Safety	813	64,041,814		78,772	0.87%
01/01/2012	Total	5,254	\$ 362,350,501	\$	68,967	1.19%
	General	4,492	301,505,122		67,120	-0.08%
	Safety	803	64,386,900		80,183	1.79%
01/01/2013	Total	5,295	\$ 365,892,022	\$	69,101	0.19%
, ,					, ,	
	General	4,748	316,885,044		66,741	-0.57%
	Safety	805	65,640,055		81,540	1.69%
01/01/2014	Total	5,553	\$ 382,525,099	\$	68,886	-0.31%
	General	4,879	322,836,680		66,169	-0.86%
	Safety	827	68,491,483		82,819	1.57%
01/01/2015	Total	5,706	\$ 391,328,163	\$	68,582	-0.44%

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, 2015 for the period ending December 31, 2014. The information in subsequent years is currently not available.

#### CHART OF ACTIVE MEMBER AVERAGE ANNUAL SALARY



Actuarial

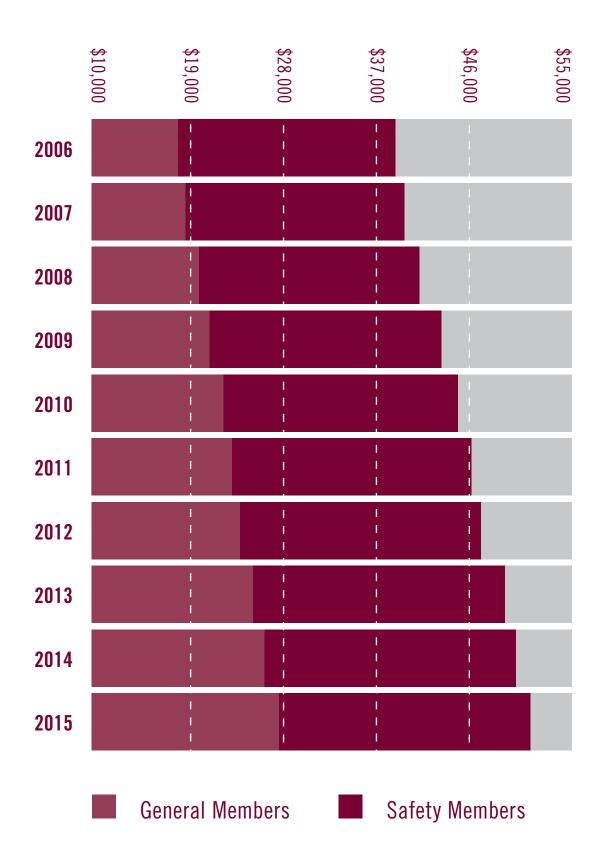
#### SCHEDULE OF RETIREES AND BENEFICIARIES VALUATION DATA

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
	General	204	29	111	2,978	54,058,708	18,153	6.5%
	Safety	35	4	12	604	23,396,038	38,735	4.2%
01/01/2006	Total	239	33	123	3,582	\$77,454,746	\$ 21,623	5.9%
	General	190	41	102	3,107	58,634,478	18,872	4.0%
	Safety	31	8	11	632	25,003,422	39,562	2.1%
01/01/2007	Total	221	49	113	3,739	\$83,637,900	\$ 22,369	3.5%
	General	199	31	99	3,238	65,213,731	20,140	6.7%
	Safety	38	6	8	<u> </u>	27,396,329	41,012	3.7%
01/01/2008		237	37	107	3,906	, , , ,	\$ 23,710	<b>6.0%</b>
	[	1	1		,-	,		/ 00/
	General	203	30	83	3,388	71,488,335	21,100	4.8%
01/01/0000	Safety	50	10	18	710	30,575,540	43,064	5.0%
01/01/2009	Total	253	40	101	4,098	\$102,063,875	\$ 24,906	5.0%
	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%
01/01/2010	Total	231	38	115	4,252	\$111,564,034	\$ 26,238	5.3%
	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%
01/01/2011	Total	307	40	110	4,489	\$122,285,816	\$ 27,241	3.8%
	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%
01/01/2012		272	46	122		\$131,037,227	\$ 27,970	2.7%
	General	278	27	135	4,041	102,025,575	25,248	5.2%
	Safety	52	12	20	4,041	42,008,598	49,075	4.9%
01/01/2013		330	39	155		\$144,034,172	\$ 29,413	<b>5.2%</b>
			1					
01/01/001/	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%
01/01/2014	Iotal	235	63	154	5,041	\$153,411,632	\$ 30,433	3.5%
	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%
01/01/2015	Total	276	65	133	5,249	\$166,611,711	\$31,742	4.3%

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, 2015 for the period ending December 31, 2014. The information in subsequent years is currently not available.



# 96 San Joaquin County Employees' Retirement Association

Actuarial

### RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM RETIREE PAYROLL

FISCAL Year	BEGINNING Of year	ADDED During Year	ANNUAL Allowances Added (in 000's) <sup>1</sup>	REMOVED During Year	ANNUAL Allowances Removed (In 000'S) <sup>1</sup>	END OF Year	ANNUAL Retirement Payroll (in 000's)	AVERAGE ALLOWANCE PERCENTAGE INCREASE	AVERAGE Annual Allowance
2010	4,252	353	\$ 12,918	116	\$ 2,196	4,489	\$ 122,286	3.82%	\$ 27,241
2011	4,489	318	11,544	122	2,793	4,685	131,037	2.67%	27,969
2012	4,685	361	16,400	149	3,403	4,897	144,034	5.16%	29,413
2013	4,897	297	12,908	153	3,530	5,041	153,412	3.47%	30,433
2014	5,041	340	16,223	132	3,029	5,249	166,606	4.30%	31,741
2015	5,249	340	17,766	155	3,651	5,434	180,721	4.78%	33,258

<sup>1</sup>Includes COLA amounts not included in previous year's Annual Allowance totals.

#### SOLVENCY TEST

(DOLLARS IN THOUSANDS)										
	ACTUAR	IAL ACCRUED LIA								
ACTUARIAL VALUATION	(1) (2) Active Retirees Member And Contributions Beneficiaries		(3) ACTIVE MEMBERS (EMPLOYER FINANCED DODTION)	TOTAL Actuarial Accrued	ACTUARIAL VALUE OF	PORTION OF ACCRUED Liabilities covered by reported assets				
DATE	CONTRIBUTION2	BENEFICIARIES	PORTION)	LIABILITY	ASSETS	(1)	(2)	(3)		
1/1/2006	147,953	904,208	883,657	1,935,818	1,727,033	100%	100%	76.4%		
1/1/2007	159,100	1,023,296	967,542	2,149,938	1,869,717	100%	100%	71.0%		
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%		

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, 2015 for the period ending December 31, 2014. The information in subsequent years is currently not available.

Actuarial

### SCHEDULE OF FUNDING PROGRESS DEFINED BENEFIT PENSION PLAN FOR THE LAST TEN FISCAL YEARS ENDED DECEMBER 31

		(D0	LLARS IN THOUSA	NDS)		
ACTUARIAL Valuation Date	ACTUARIAL VALUE OF ASSETS' (A)	ACTUARIAL ACCRUED LIABILITY (AAL) (B)	UNFUNDED Actuarial Liability (UAL) (B-A)	FUNDED Ratio (A/B)	COVERED Payroll <sup>2</sup> (C)	UAL AS A PERCENTAGE OF ANNUAL COVERED PAYROLL ((B-A)/C)
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%
1/1/2007	1,869,717	2,149,938	280,221	87.0%	340,828	82.2%
1/1/2006	1,727,033	1,935,818	208,785	89.2%	309,692	67.4%

NOTE: The actuarial value of assets reflects the smoothing method that adjusts market value differences between the struct every a 5-year period.

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

AGE	NON-DUTY Death	ORDINARY Disability	SERVICE Retirement <sup>1</sup>	DUTY DEATH	DUTY DISABILITY
General Me	embers - Male				
20	0.0003	0.000	0.000	0.000	0.001
25	0.0003	0.001	0.000	0.000	0.001
30	0.0004	0.001	0.000	0.000	0.001
35	0.0007	0.001	0.000	0.000	0.001
40	0.0010	0.001	0.000	0.000	0.004
45	0.0014	0.002	0.000	0.000	0.004
50	0.0019	0.002	0.050	0.000	0.002
55	0.0033	0.003	0.050	0.000	0.002
60	0.0052	0.003	0.150	0.000	0.002
65	0.0082	0.004	0.300	0.000	0.002
General Me	embers - Female				
20	0.0002	0.000	0.000	0.000	0.000
25	0.0002	0.001	0.000	0.000	0.000
30	0.0002	0.001	0.000	0.000	0.000
35	0.0004	0.001	0.000	0.000	0.001
40	0.0006	0.001	0.000	0.000	0.001
45	0.0010	0.002	0.000	0.000	0.001
50	0.0015	0.002	0.020	0.000	0.001
55	0.0023	0.003	0.040	0.000	0.002
60	0.0035	0.004	0.100	0.000	0.002
65	0.0063	0.005	0.250	0.000	0.003

### ASSUMED PROBABILITIES OF SEPARATION FROM ACTIVE MEMBERSHIP (GENERAL)

<sup>1</sup> 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 0.050, that indicates that 5% of active general members are expected to separate from service during the year.



### ASSUMED PROBABILITIES OF SEPARATION FROM ACTIVE MEMBERSHIP (SAFETY)

AGE	NON-DUTY Death	ORDINARY Disability	SERVICE Retirement <sup>1</sup>	DUTY DEATH	DUTY Disability
Safety Mer	nbers - Male				
20	0.0002	0.000	0.000	0.002	0.000
25	0.0002	0.000	0.000	0.002	0.001
30	0.0002	0.000	0.000	0.002	0.001
35	0.0004	0.000	0.000	0.002	0.002
40	0.0006	0.000	0.000	0.003	0.004
45	0.0009	0.001	0.050	0.004	0.008
50	0.0014	0.001	0.150	0.005	0.014
55	0.0026	0.002	0.300	0.007	0.023
Safety Mer	nbers - Female				
20	0.0001	0.000	0.000	0.001	0.000
25	0.0001	0.000	0.000	0.001	0.001
30	0.0001	0.000	0.000	0.001	0.001
35	0.0002	0.000	0.000	0.002	0.002
40	0.0003	0.000	0.000	0.003	0.004
45	0.0006	0.001	0.050	0.004	0.008
50	0.0010	0.003	0.150	0.005	0.014
55	0.0017	0.005	0.300	0.006	0.023

<sup>1</sup> 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.

	Salary I	ncrease	Witho	lrawal	Termi	nation
YEARS OF Service	GENERAL	SAFETY	GENERAL	SAFETY	GENERAL	SAFETY
0	0.0724	0.0824	0.064	0.018	0.064	0.070
1	0.0724	0.0824	0.050	0.016	0.050	0.062
2	0.0724	0.0824	0.050	0.012	0.050	0.046
3	0.0724	0.0824	0.039	0.006	0.039	0.022
4	0.0724	0.0824	0.024	0.006	0.024	0.022
5	0.0424	0.0524	0.016	0.002	0.029	0.018
6	0.0424	0.0524	0.016	0.002	0.029	0.018
7	0.0424	0.0524	0.016	0.002	0.029	0.018
8	0.0424	0.0524	0.013	0.002	0.024	0.018
9	0.0424	0.0524	0.011	0.002	0.020	0.018
10	0.0424	0.0524	0.007	0.001	0.013	0.009
11	0.0424	0.0524	0.007	0.001	0.013	0.009
12	0.0424	0.0524	0.007	0.001	0.013	0.009
13	0.0424	0.0524	0.007	0.001	0.013	0.009
14	0.0424	0.0524	0.007	0.001	0.013	0.009
15	0.0424	0.0524	0.000	0.000	0.020	0.010
16	0.0424	0.0524	0.000	0.000	0.020	0.010
17	0.0424	0.0524	0.000	0.000	0.020	0.010
18	0.0424	0.0524	0.000	0.000	0.020	0.010
19	0.0424	0.0524	0.000	0.000	0.020	0.010
20	0.0424	0.0524	0.000	0.000	0.010	0.000
21	0.0424	0.0524	0.000	0.000	0.010	0.000
22	0.0424	0.0524	0.000	0.000	0.010	0.000
23	0.0424	0.0524	0.000	0.000	0.010	0.000
24	0.0424	0.0524	0.000	0.000	0.010	0.000
25	0.0424	0.0524	0.000	0.000	0.010	0.000
26	0.0424	0.0524	0.000	0.000	0.010	0.000
27	0.0424	0.0524	0.000	0.000	0.010	0.000
28	0.0424	0.0524	0.000	0.000	0.010	0.000
29	0.0424	0.0524	0.000	0.000	0.010	0.000
30+	0.0325	0.0524	0.000	0.000	0.000	0.000

### SALARY INCREASE, TERMINATION, AND WITHDRAWAL ASSUMPTIONS

f**etu**arial

### 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 market 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 market 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 market value on the valuation date. The following table shows the development of the actuarial asset value.

	(a)	(b)	(c)	(d)	(e)	(f)	(g)=(f)–(e)	(h)	(i)=(g)x(h)	
YEAR	CONTRIBUTIONS	BENEFITS	ADMINISTRATIVE EXPENSE	HEALTHCARE	EXPECTED Return	ACTUAL Return	ADDITIONAL Earnings	NOT Recognized	UNRECOGNIZED Earnings	
2011	126,932,474	132,709,273	0	0	150,952,879	25,735,622	(125,217,257)	20%	(25,043,451)	
2012	127,962,598	144,978,040	0	0	150,473,721	227,485,527	77,011,806	40%	30,804,722	
2013	142,184,201	155,401,819	4,134,716	0	161,392,211	198,449,237	37,057,026	60%	22,234,216	
2014	164,054,041	165,870,971	4,042,986	19,968,779	176,895,311	110,728,303	(66,167,008)	80%	(52,933,607)	
	(1)	Total Unrec	cognized Doll	ars					(24,938,120)	
	(2)	Market Valı	ie of Assets a	s of Decemb	er 31, 2014			2	,466,349,529	
	(3)	014 [(2) - (1)]	2	,491,287,649						
	(4)	Corridor Li	mits							
		a. 80%	6 of Net Market	t Value				1,973,079,62		
		b. 120	% of Net Marke	et Value				2,959,619,43		
	(5)	Actuarial V	alue of Assets	after Corri	dor			2	,491,287,649	
	(6)	Ratio of Act	tuarial Value	to Market V	alue [(5) ÷	(2)]			101.01%	
	(7)	Market Stal	bilization Des	signation [(2	) – (5)]				(24,938,120)	
	(8)	Special (No	n Valuation)	<b>Reserves:</b>						
		Class	Action Settlem	ent – Post 4/1	1/1982				6,338,007	
		Contir	ngency						13,458,426	
		Undist	tributed Earnin		0					
		Total Specia	al Reserves						19,796,433	
	(9)	Pension Re	serves at Actu	arial Value	(Valuation	Assets) [(5)	- (8)*(6)]	\$2.4	471,291,047	

### 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 I."

**Tier II** - 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 II."

### **Final Average Salary**

For Tier I 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 II 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 I members pay contributions also based upon the age at which the employee entered SJCERA membership. Members of Tier I employed prior to March 7, 1973, and all Safety members of Tier I 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 II members pay contributions equal to one-half of the normal cost of their applicable benefits.

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



SUMMARY OF MAJOR PLAN PROVISIONS

### Service Retirement

### **Tier I 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 I 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 I provides a 2.0% of final compensation for each year of service credit at age 55 <sup>1</sup>/<sub>2</sub> 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 I. 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 II Members:**

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

A Tier II 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 II 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. 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. The maximum benefit payable is 100% of final average salary.

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

### **Disability Retirement**

Members with 5 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 <sup>1</sup>/<sub>3</sub>% 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.

#### SUMMARY OF MAJOR PLAN PROVISIONS

### **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-serviceconnected 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 optional settlement 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%.





Being fully present is the best guarantee for a bright future. } GUY FINLEY {

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### 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 110)
- Schedule of Changes in Fiduciary Net Position (page 111)
- Schedule of Revenues by Source and Schedule of Expense by Type (page 112)
- Schedule of Benefit Expenses by Type (page 113)
- Schedule of Retired Members by Type (page 114)

### **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 115-117)
- Schedule of Average Monthly Benefit Payments by Number of Years since Retirement (pages 118-120)
- Schedule of Participating Employers for Last Ten Years (page 121)

### SCHEDULE OF FIDUCIARY NET POSITION

FOR THE LAST TEN FISCAL YEARS ENDED DECEMBER 31

				(D	OLLARS IN	THOUSAN	DS)			
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
ASSETS										
Cash and Cash Equivalents	\$ 226,912	\$ 250,500	\$ 169,701	\$ 208,032	\$ 195,648	\$ 183,531	\$ 233,929	\$ 242,165	\$ 318,666	\$ 293,923
Receivables	8,930	12,081	28,491	11,152	9,587	34,581	14,516	22,770	19,977	90,603
Investments	2,328,265	2,371,380	2,256,908	2,054,715	1,851,212	1,842,483	1,588,186	1,374,011	2,077,174	1,970,624
Prepaid Expenses	112	86	82	101	91	75	70	76	73	66
Equipment and Fixtures, Net	192	315	427	487	572	635	729	83	130	223
Total Assets	\$2,564,411	\$2,634,362	\$2,455,610	\$2,274,487	\$2,057,110	\$2,061,305	\$1,837,430	\$1,639,105	\$2,416,020	\$2,355,438
LIABILITY Securitites										
Lending - Cash Collateral	\$ 147,106	\$ 164,195	\$ 107,127	\$ 108,958	\$ 104,691	\$ 113,171	\$ 108,791	\$ 78,631	\$ 189,426	\$ 211,454
Securities Purchased, Not Paid	2,739	1,671	5,433	3,783	1,455	16,858	5,878	11,640	10,489	76,179
Accrued Expenses and Other Payables	1,306	2,138	1,538	1,329	1,019	1,278	1,080	1,785	1,981	2,250
Securities Lending Interest and Other Payables	17	8		2		12	7		736	962
Total Liabilities	\$ 151,168	\$ 168,012	\$ 114,097	\$ 114,072	\$ 107,165	\$ 131,319	\$ 115,756	\$ 92,056	\$ 202,632	\$ 290,846
Fiduciary Net Position Restricted for Pension Benefits	\$2,413,243	\$2,466,350	\$2,341,513	\$2,160,415	\$1,949,945	\$1,929,986	\$1,721,674	\$ 1,547,049	\$2,213,388	\$2,064,592

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### SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION

FOR THE LAST TEN FISCAL YEARS ENDED DECEMBER 31

				(D)	OLLARS IN	THOUSAN	DS)			
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Contributions	]									
Member	\$ 29,027	\$ 27,368	\$ 22,690	\$ 19,900	\$ 14,041	\$ 13,098	\$ 13,013	\$ 13,051	\$ 12,312	\$ 11,366
Employer										
Retirement Plan	150,372	136,686	119,494	108,063	112,892	104,452	97,806	94,163	85,869	73,612
Post-Employment Health Plan		0	0	0	0	0	4,202	4,083	2,781	650
Investment Income	(47,449)	110,651	198,173	230,954	29,262	217,123	182,006	(666,774)	147,346	237,072
Miscellaneous	109	77	72	62	68	46	12	14	9	26
Transfers Between Plan	379	19,969	204	339	154	166	84	106	124	112
<b>Total Additions</b>	\$132,438	\$294,751	\$340,633	\$359,317	\$156,417	\$334,885	\$297,123	\$(555,357)	\$248,441	\$322,838
		n		1		1				. <u></u>
Benefits	\$179,585	\$164,335	\$154,233	\$143,669	\$131,642	\$121,641	\$112,647	\$104,068	\$ 91,115	\$ 84,863
Post-Employment Health Benefits	0	0	0	0	0	0	3,431	3,679	3,765	3,811
Administrative Expenses	4,076	4,043	4,135	3,869	3,749	3,682	3,527	3,458	3,556	3,066
Refunds	1,884	1,536	1,169	1,309	1,068	1,251	1,038	1,254	1,042	1,036
Miscellaneous	0	0	0	0	0	0	0	0	0	1
Transfers Between Plan	0	0	0	0	0	0	84	106	124	112
<b>Total Deductions</b>	185,545	\$169,914	\$159,537	\$148,848	\$136,459	\$126,573	\$120,727	\$112,565	\$ 99,601	\$ 92,890
Change in Fiduciary Net Position		\$124,837	\$181,097	\$210,469	\$ 19,958	\$208,312	\$176,396	\$(667,922)	\$148,839	\$229,949

			SCHEDULE OF R	EVENUE BY SOUR	CE		
		Employer C	ontributions				
YEAR Ended	MEMBER Contributions	RETIREMENT Plan	POST- Employment Health Plan	INVESTMENT Income	MISC	TRANSFER Between Plans	TOTAL
2004	\$ 11,005,744	\$42,688,367	0	\$186,820,224	\$ 36,052	\$ 172,330	\$240,722,717
2005	10,854,798	62,508,615	0	121,731,640	5,226	102,303	195,202,582
2006	11,365,569	73,611,841	650,000	237,072,471	25,792	112,386	322,838,059
2007	12,312,247	85,868,698	2,780,505	147,346,205	8,596	123,808	248,440,059
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
			SCHEDULE OF E	EXPENSES BY TYP	PE		
		POST- Employment				TRANSFER	
YEAR Ended	BENEFITS	HEALTH BENEFITS	ADMINISTRATIVE EXPENSES	REFUNDS	MISC	BETWEEN Plans	TOTAL
2004	\$ 73,888,771	\$ 3,592,793	\$ 2,371,853	\$ 891,734	\$ 899	\$ 172,330	\$ 80,918,380
2005	81,165,796	3,800,215	2,407,673	1,113,623	0	102,303	88,589,610
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

### SCHEDULE OF REVENUE BY SOURCE AND EXPENSES BY TYPE

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



### 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
	General	53,749,170	5,700,707	5,763,247	915,087	441,474	66,569,685
	Safety	18,756,413	6,277,380	2,362,634		30,000	27,553,799
2007	Total	\$72,505,583	, ,	, ,	,	,	\$94,123,484
	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
2008	Total	\$79,566,145					\$103,730,828
	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	· · · · ·
2009	Total	\$86,909,064	\$14,024,348	\$10,630,386	\$ 1,037,765	\$ 562,085	\$113,163,648
	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
2010	Total	\$95,959,089	\$14,663,054	\$11,664,255	\$ 1,250,644	\$ 511,293	\$124,048,335
	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
2011	Total	\$103,530,355	\$15,026,505	\$12,512,672	\$ 1,067,734	\$ 572,007	\$132,709,273
	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
2012	Total	\$109,827,312	\$20,005,469	\$13,228,906	\$ 1,308,900	\$ 607,453	\$144,978,040
	General	95,109,549	5,667,332	8,876,109	900,756	572.733	111,126,479
	Safety	31,116,346		3,912,149	1	40,000	
2013	Total	\$126,225,895			,	,	, ,,,,
	General	100,668,155	8,493,931	9,401,576		548,606	
	Safety	31,407,516		4,184,681	107,813	74,951	
2014	Total	\$132,075,671	\$18,049,788	\$13,586,257	\$ 1,535,698	\$ 623,557	\$165,870,971
	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
2015	Total	\$145,790,493	\$18,788,241	\$14,444,431	\$ 1,883,777	\$ 561,971	\$181,468,913

### SCHEDULE OF RETIRED MEMBERS BY TYPE

ACTUARIAL		MEMBERS WITH SERVICE	MEMBERS WITH DISABILITY	SURVIVORS AND	
VALUATION DATE	PLAN TYPE	RETIREMENTS	RETIREMENTS	BENEFICIARIES	TOTAL
	General	2,148	295	413	2,856
	Safety	341	150	86	577
01/01/2005	Total	2,489	445	499	3,433
	General	2,242	311	425	2,978
	Safety	359	158	87	604
01/01/2006	Total	2,601	469	512	3,582
	General	2,323	328	456	3,107
	Safety	365	167	100	632
01/01/2007	Total	2,688	495	556	3,739
	General	2,430	341	467	3,238
	Safety	389	173	106	668
01/01/2008	Total	2,819	514	573	3,906
	General	2,547	355	486	3,388
	Safety	409	183	118	710
01/01/2009	Total	2,956	538	604	4,098
	General	2,654	373	495	3,522
	Safety	420	184	126	730
01/01/2010	Total	3,074	557	621	4,252
	General	2,799	383	515	3,697
	Safety	469	188	135	792
01/01/2011	Total	3,268	571	650	4,489
	General	2,946	381	544	3,871
	Safety	485	190	139	814
01/01/2012	Total	3,431	571	683	4,685
	General	3,113	387	541	4,041
	Safety	514	195	147	856
01/01/2013	Total	3,627	582	688	4,897
	General	3,227	388	557	4,172
	Safety	516	199	154	869
01/01/2014	Total	3,743	587	711	5,041
	General	3,385	393	580	4,358
	Safety	524	205	162	891
01/01/2015	Total	3,909	598	742	5,249

Figures are extracted from actuarial reports which include individuals receiving divorce settlement payments. The most current Actuarial Valuation was conducted as of January 1, 2015 for the period ending December 31, 2014. The information in subsequent years is currently not available.

### **114** San Joaquin County Employees' Retirement Association

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

		Numbe	er of Years	s of Coun	ty Service	Credit	
RETIREMENT EFFECTIVE DATE	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER
2011							
RETIREES							
General Members							
Average Benefit	\$ 470	¢ 1 205	¢ 1 464	\$ 2,615	\$ 2 202	\$ 2 060	\$ 4 670
Average Final Compensation	\$ 470	\$ 1,205 \$ 5,903	\$ 1,464 \$ 4,928	. ,	\$ 3,302 \$ 6,110		
Count	¢ 5,518	¢ 5,905 26	\$ <del>4</del> ,928	\$ 0,403	\$ 0,110 41	¢ 5,541 16	\$ 5,570
	14	20	)0	4/	11	10	
Safety Members	# 000	# 1 110	# 0 551	# 2 070	# 7 400	# 7 700	#10 506
Average Benefit	<b>\$</b> 922	\$ 1,112	\$ 2,551		\$ 7,499		1
Average Final Compensation	\$ 9,746	\$ 4,483	\$ 5,290	\$ 7,767	\$10,430	İ	
	Z	0	3	3	4	5	3
SURVIVORS/QDROS	7						
General Members							
Average Benefit	\$ 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 Benefit	\$ 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							
	7						
General Members	<b>A 517</b>	# 1 077	# 1 /01	# 0.100	# 0 700	# / 100	# ( 017
Average Benefit	\$ 517	\$ 1,077	\$ 1,481		İ		
Average Final Compensation	\$ 7,532	\$ 5,925	1	1			
Count	19	31	56	36	42	30	44
Safety Members							
Average Benefit	\$ 429			\$ 4,186		1	
Average Final Compensation	\$ 6,793		\$ 6,636	\$ 8,124		\$13,360	\$13,606
Count	4	5	7	3	14	11	5
SURVIVORS/QDROS	_						
General Members							
Average Benefit	\$ 331	\$ 1,189	\$ 1,017	\$ 1,525	\$ 1,274	\$ 3,105	\$ 2,783
Average Final Compensation	\$ 4,482	\$ 3,558	\$ 2,664	\$ 2,604		\$ 4,794	
Count	4	4	8	3	1	2	4
Safety Members							
Average Benefit	\$ 0	\$ 1,039	\$ 2,423	\$ 3,450	\$ 3.573	\$ 3,206	\$ 4,887
Average Final Compensation	\$ 0	\$ 6,972					
Count	0	2	2	2	1	3	

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

				Numbe	er (	of Years	5 O	f Coun	ty	Service	e C	redit		
RETIREMENT EFFECTIVE DATE		0-4		5-9	•	10-14	•	15-19		20-24		25-29	30	& OVER
2013														
RETIREES	_													
General Members														
Average Benefit	\$	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 Benefit	\$	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				9,670
Count		3		2		7		4		1	-	2		2
SURVIVORS/QDROS														
General Members														
Average Benefit	\$	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	\$	
Count		6		9		15		7		5		2		5
Safety Members														
Average Benefit	\$	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 Benefit	\$	461	\$	1,237	\$	1,775	\$	2,567	\$	4,363	\$	4,570	\$	6,392
Average Final Compensation	\$	8,494		,		5,772		6,380		7,652		6,782		7,760
Count	π	13	<u>п</u>	28	π	50	π	46	π	26	π	43	π	39
Safety Members														
Average Benefit	\$	1,715	\$	2,429	\$	3,207	\$	4,546	\$	3,993	\$	7,239	\$	11,302
Average Final Compensation	\$	,		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 Benefit	\$	478	\$	1,016	\$	1,007	\$	935	\$	2,002	\$	1.153	\$	2,941
Average Final Compensation	\$	5,752		4,218				2,835		4,914				,
Count		12		6		13		4		6		1		5
Safety Members														
Average Benefit	\$	2,030	\$	2,464	\$	2,890	\$	3.326	\$	3,002	\$	3.282	\$	0
Average Final Compensation	\$	9,251		8,582	1	5,516	1		1	2,992			1	0
Count	π	2		3	Π	4	Π	1,010		2	π	2	1	0

## Statistical

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

	Number of Years of County Service Credit													
RETIREMENT EFFECTIVE DATE		0-4		5-9		10-14		15-19		20-24		25-29	30	& OVER
2015														
RETIREES														
General Members														
Average Benefit	\$	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 Benefit	\$	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 Benefit	\$	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 Benefit	\$	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

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

		GENER	AL AND SAF	ETY MEMBE	RS										
		Number of Years Since Retirement													
YEAR End		0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER							
	Average Benefit	\$ 2,109	\$ 1,674	\$ 1,591	\$ 1,512	\$ 1,289	\$ 965	\$ 764							
2004	Number of Retirees	1,153	813	578	389	242	178	80							
	Average Benefit	\$ 2,281	\$ 1,759	\$ 1,621	\$ 1,506	\$ 1,424	\$ 985	\$ 807							
2005	Number of Retirees	1,203	876	576	402	254	179	92							
	Average Benefit	\$ 2,256	\$ 1,922	\$ 1,754	\$ 1,564	\$ 1,487	\$ 1,043	\$ 903							
2006	Number of Retirees	1,255	912	593	427	262	185	105							
	Average Benefit	\$ 2,321	\$ 2,168	\$ 1,826	\$ 1,578	\$ 1,639	\$ 1,191	\$ 930							
2007	Number of Retirees	1,253	1,017	626	423	282	181	124							
	Average Benefit	\$ 2,458	\$ 2,294	\$ 1,802	\$ 1,785	\$ 1,653	\$ 1,294	\$ 952							
2008	Number of Retirees	1,285	1,073	659	479	303	168	131							
	Average Benefit	\$ 2,549	\$ 2,408	\$ 1,959	\$ 1,846	\$ 1,723	\$ 1,527	\$ 1,339							
2009	Number of Retirees	1,312	1,083	729	506	307	170	145							
	Average Benefit	\$ 2,569	\$ 2,565	\$ 2,052	\$ 1,972	\$ 1,764	\$ 1,602	\$ 1,329							
2010	Number of Retirees	1,384	1,153	790	502	319	185	156							
	Average Benefit	\$ 2,639	\$ 2,564	\$ 2,199	\$ 2,006	\$ 1,870	\$ 1,743	\$ 1,364							
2011	Number of Retirees	1,430	1,190	838	522	333	196	176							
	Average Benefit	\$ 2,798	\$ 2,591	\$ 2,473	\$ 2,075	\$ 1,839	\$ 1,874	\$ 1,376							
2012	Number of Retirees	1,515	1,185	947	545	334	194	1							
	Average Benefit	\$ 2,840	\$ 2,755	\$ 2,609	\$ 2,049	\$ 2,029	\$ 1,881	\$ 1,348							
2013	Number of Retirees	1,520	1,211	990	577	372	208	1							
	Average Benefit	\$ 2,961	\$ 2,873	\$ 2,706	\$ 2,223	\$ 2,106	\$ 1,899	\$ 1,477							
2014	Number of Retirees	1,609	1,224	987	642	404	209								
	Average Benefit	\$ 3,139	\$ 2,918	\$ 2,921	\$ 2,333	\$ 2,221	\$ 1,995	\$ 1,566							
2015	Number of Retirees	1,587	1,291	1,046	692	412	212	1							

## Glatistical

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

			GEN	IERAL MI	EMI	BERS								
	Number of Years Since Retire													
YEAR End		0-4		5-9		10-14		15-19		20-24		25-29	30	& OVER
	Average Benefit	\$ 1,710	\$	1,375	\$	1,437	\$	1,345	\$	1,074	\$	825	\$	636
2004	Number of Retirees	917		668		497		345		207		160		62
	Average Benefit	\$ 1,885	\$	1,446	\$	1,498	\$	1,342	\$	1,172	\$	826	\$	705
2005	Number of Retirees	962		715		493		361		216		156		75
	Average Benefit	\$ 1,933	\$	1,519	\$	1,560	\$	1,376	\$	1,246	\$	874	\$	755
2006	Number of Retirees	1,036		721		505		375		226		161		83
	Average Benefit	\$ 2,063	\$	1,675	\$	1,615	\$	1,389	\$	1,403	\$	974	\$	803
2007	Number of Retirees	1,055		786		535		365		243		152		102
	Average Benefit	\$ 2,133	\$	1,835	\$	1,557	\$	1,586	\$	1,474	\$	1,004	\$	830
2008	Number of Retirees	1,068		839		555		414		265		135		112
	Average Benefit	\$ 2,278	\$	1,923	\$	1,632	\$	1,683	\$	1,524	\$	1,250	\$	1,073
2009	Number of Retirees	1,108		850		598		433		271		143		119
	Average Benefit	\$ 2,269	\$	2,093	\$	1,696	\$	1,806	\$	1,549	\$	1,379	\$	1,015
2010	Number of Retirees	1,149		912		640		428		285		157		126
	Average Benefit	\$ 2,349	\$	2,168	\$	1,737	\$	1,799	\$	1,649	\$	1,506	\$	1,050
2011	Number of Retirees	1,198		976		654		444		289		169		141
	Average Benefit	\$ 2,456	\$	2,285	\$	1,893	\$	1,868	\$	1,614	\$	1,617	\$	1,108
2012	Number of Retirees	1,267		992		721		467		283		166		145
	Average Benefit	\$ 2,572	\$	2,370	\$	2,062	\$	1,787	\$	1,855	\$	1,623	\$	1,003
2013	Number of Retirees	1,297		1,000		762		485		319		177		132
	Average Benefit	\$ 2,689	\$	2,566	\$	2,133	\$	1,847	\$	1,950	\$	1,628	\$	1,158
2014	Number of Retirees	1,371		1,030		767		524		342		180		144
	Average Benefit	\$ 2,821	\$	2,577	\$	2,359	\$	1,942	\$	2,036	\$	1,763	\$	1,269
2015	Number of Retirees	1,353		1,066		821		560		345		188		160

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

			SAI	FETY ME	MB	ERS									
		Number of Years Since Retirement													
YEAR End		0-4		5-9	10-14			15-19		20-24		25-29		& OVER	
	Average Benefit	\$ 3,864	\$	3,149	\$	2,352	\$	2,953	\$	2,861	\$	2,066	\$	1,259	
2005	Number of Retirees	241		161		83		41		38		23		17	
	Average Benefit	\$ 3,864	\$	3,149	\$	2,352	\$	2,953	\$	2,861	\$	2,066	\$	1,259	
2005	Number of Retirees	241		161		83		41		38		23		17	
	Average Benefit	\$ 3,788	\$	3,443	\$	2,867	\$	2,914	\$	3,000	\$	2,178	\$	1,461	
2006	Number of Retirees	219		191		88		52		36		24		22	
	Average Benefit	\$ 3,698	\$	3,848	\$	3,068	\$	2,766	\$	3,110	\$	2,333	\$	1,522	
2007	Number of Retirees	198		231		91		58		39		29		22	
	Average Benefit	\$ 4,056	\$	3,940	\$	3,109	\$	3,055	\$	2,904	\$	2,481	\$	1,673	
2008	Number of Retirees	217		234		104		65		38		33		19	
	Average Benefit	\$ 4,022	\$	4,178	\$	3,453	\$	2,811	\$	3,220	\$	2,997	\$	2,553	
2009	Number of Retirees	204		233		131		73		36		27		26	
	Average Benefit	\$ 4,033	\$	4,353	\$	3,570	\$	2,931	\$	3,567	\$	2,848	\$	2,646	
2010	Number of Retirees	235		241		150		74		34		28		30	
	Average Benefit	\$ 4,134	\$	4,371	\$	3,841	\$	3,183	\$	3,322	\$	3,223	\$	2,633	
2011	Number of Retirees	232		214		184		78		44		27		35	
	Average Benefit	\$ 4,543	\$	4,164	\$	4,322	\$	3,312	\$	3,086	\$	3,397	\$	2,589	
2012	Number of Retirees	248		193		226		78		51		28		32	
	Average Benefit	\$ 4,398	\$	4,581	\$	4,437	\$	3,431	\$	3,076	\$	3,354	\$	2,813	
2013	Number of Retirees	223		211		228		92		53		31		31	
	Average Benefit	\$ 4,526	\$	4,505	\$	4,705	\$	3,896	\$	2,968	\$	3,582	\$	3,013	
2014	Number of Retirees	238		194		220		118		62		29		30	
	Average Benefit	\$ 4,975	\$	4,531	\$	4,975	\$	3,990	\$	3,171	\$	3,814	\$	2,964	
2015	Number of Retirees	234	1	225		225		132		67		24		34	



### SCHEDULE OF PARTICIPATING EMPLOYERS

FOR THE LAST TEN FISCAL YEARS ENDED DECEMBER 31

	20	15	20	14	20	13	2012	2011	2010	2009	2008	2007	2006	2005
	TIER I	TIER II	TIER I	TIER II	TIER I	TIER II								
COUNTY OF SAN JOAQUI	N													
General Members	4,614	1,416	4,864	918	5,138	507	5,379	5,308	5,476	5,712	5,970	5,964	5,797	5,652
Safety Members	800	85	861	59	881	12	901	920	945	1,026	1,005	960	902	795
Total	5,414	1,501	5,725	977	6,019	519	6,280	6,228	6,421	6,738	6,975	6,924	6,699	6,447
SUPERIOR COURT														
General Members	255	66	263	38	269	20	289	326	357	375	369	334	301	289
Safety Members	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Total	255	66	263	38	269	20	289	326	357	375	369	334	302	289
MANTECA-LATHROP RUR	AL FIRE	PROTECT	ION DIST	RICT										
General Members	1	1	1	1	1	0	1	0	0	1	2	2	1	1
Safety Members	41	8	42	7	43	3	45	39	41	43	44	48	50	41
Total	42	9	43	8	44	3	46	39	41	44	46	50	51	42
WATERLOO-MORADA RUI	RAL FIRE	PROTECT	ION DIST	FRICT										
General Members	0	0	0	0	0	0	0	0	1	1	1	1	1	2
Safety Members	14	7	12	6	13	5	15	15	17	17	17	19	20	32
Total	14	7	12	6	13	5	15	15	18	18	18	20	21	34
OTHER SPECIAL DISTRIC	TS (GENE	ERAL MEN	(IBERS)											
Tracy Public Cemetery District	5	5	5	4	6	3	6	8	7	8	7	6	4	5
SJC Mosquito & Vector Control District	30	8	32	7	38	2	38		37	39	36	36	36	35
SJC Historical Society			52	/					57					
& Museum	2	0	2	0	2	0	2	2	2	2	2	6	6	7
Mountain House Community Services District	10	11	9	9	13	5	16	14	14	16	23	17	14	12
Local Agency Formation Commission	0	0	0	0	1	0	1	1	2	2	3	2	3	4
San Joaquin County Law Library	1	0	1	0	2	0	2	1	1	1	1	1	1	
Total	48	24	49	20	62	10	65	64	63	68	72	68	64	64
Grand Total	5,773	1,607	6,092	1,049	6,407	557	6,695	6,672	6,900	7,243	7,480	7,396	7,137	6,876

Acknowledgments

### COMPILATION, EDITING AND REVIEW Lily Cherng, Felipa Maliwat, and Stephanie Conner

DESIGN AND LAYOUT Design Forge



San Joaquin County Employees' Retirement Association

## Comprehensive Annual Financial Report



For the Year Ended December 31, 2015

### 6 South El Dorado Street

Suite

MPMPMPM

Stockton, CA 95202 (209) 468-2163 Fax (209) 468-0480 www.sjcera.org