

# 2015-16

## Comprehensive Annual Financial Report

Fiscal Year Ended June 30, 2016

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Focused on the Future



California Public Employees' Retirement System  
A Component Unit of the State of California

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COMPREHENSIVE ANNUAL FINANCIAL REPORT

Fiscal Year Ended June 30, 2016

Prepared through the joint efforts of CalPERS' staff.

Available online at [www.calpers.ca.gov](http://www.calpers.ca.gov)



California Public Employees' Retirement System

A Component Unit of the State of California

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# INTRODUCTORY SECTION

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## SECTION HIGHLIGHTS

**\$302 billion** in investments

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**1.8 million** members

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**3,021** contracted public agency employers

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**4th year** of the 2012-2017 Strategic Plan



**\$26.8  
BILLION**

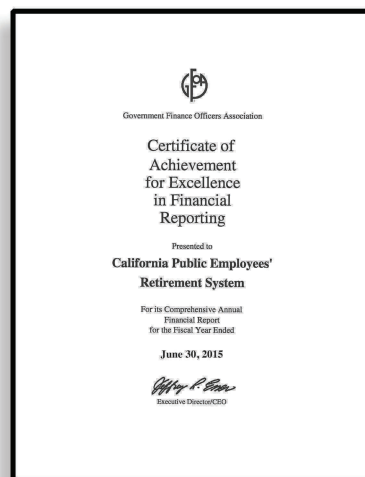
Invested in California based  
companies and projects

# Introductory Section

## PROFESSIONAL AWARDS

### CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING

The Government Finance Officers Association of the United States and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to CalPERS for our Comprehensive Annual Financial Report for the fiscal year ended June 30, 2015. This was the twentieth year that CalPERS has achieved this prestigious award. To be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report that satisfies both generally accepted accounting principles and applicable legal requirements. We believe our current Comprehensive Annual Financial Report continues to meet the Certificate of Achievement Program's requirements.



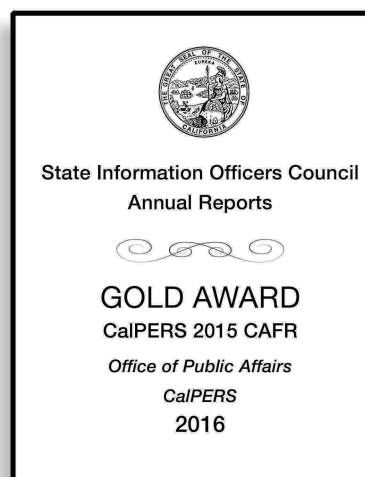
### PUBLIC PENSION STANDARDS AWARD

The Public Pension Coordinating Council awarded a Public Pension Standards Award for Funding and Administration to CalPERS for the fiscal year ended June 30, 2016. This is the fourteenth consecutive year that CalPERS has achieved this prestigious award. In order to be awarded a Public Pension Standards Award, a public pension program must meet professional standards for plan design and administration as set forth in the Public Pension Standards. A Public Pension Standards Award is valid for a period of one year.



### STATE INFORMATION OFFICERS COUNCIL (SIOC) GOLD AWARD

The State Information Officers Council (SIOC) awarded a Gold Award to CalPERS for our Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2015. The awards recognize projects for their excellence in state government communications. SIOC is a nonprofit organization and provides independent judging for the awards by prominent Sacramento-area public relations, media, and design professionals, who are neither members of SIOC, nor associated with the Council.





## INTERIM CHIEF EXECUTIVE OFFICER'S LETTER OF TRANSMITTAL



Doug Hoffner  
*Interim Chief Executive Officer*

November 30, 2016

### **Members of the CalPERS Board of Administration:**

I am pleased to present the CalPERS Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2016.

Over the past fiscal year, CalPERS continued to focus on making positive changes for our members and employers by reducing costs and risk to the System.

While we faced another year of turbulent global markets, CalPERS' plans and policies have been in place for quite some time to best position our System in these challenging economic times.

Despite volatile financial markets during this year, our investments stood at \$302 billion at the end of the Fiscal Year 2015-16 with a 0.6 percent net return on investments in the Public Employees' Retirement Fund (PERF). Our positive net return was driven by positive performance in Fixed Income, which nearly matched its benchmark. Additionally, Private Equity Investments had a return of 1.7 percent for the year, which outperformed its benchmark by 2.5 percentage points.

The international markets reduced our performance in Global Equity, earning a negative 3.4 percent return, however it outperformed its benchmark by 0.6 percentage points. The Real Assets program generated a 6.0 percent return, underperforming its benchmark by 5.1 percentage points. This underperformance was driven by realized losses on legacy assets in the Opportunistic Program.

Overall, while we haven't hit our expected rate of return for the last couple of years, we have exceeded 7.5 percent in 18 of the last 28 years.

As retirement numbers continue to rise, it's even more critical to minimize costs and risks in the portfolio, and pursue strategies that can generate returns to pay member benefits. As of June 30, 2016, CalPERS paid out \$20.3 billion in benefits to nearly 650,000 retirees and beneficiaries—a 6.1 percent increase in the number of retirees and beneficiaries than the previous fiscal year.

To help reduce risk and volatility to the System, the CalPERS Board of Administration (Board) adopted the Funding Risk Mitigation Policy in November 2015. As the System faces a maturing workforce and long life expectancies, it was important to adopt a policy that allows our employers to plan for the future and have more rate predictability. The policy's fundamental purpose is to provide the Board discretion to lower the discount rate following a strong investment return, with periodic reviews that allow for ongoing monitoring. This policy was developed collaboratively by our investment, finance, and actuarial teams and is part of CalPERS' Asset Liability Management (ALM) review cycle that ensures the long-term sustainability of the System.

Our role in finance has also evolved in this new economic environment as we provide more clear and transparent reporting. In the last fiscal year we have improved the Governmental Accounting Standards Board Statement No. 68, *Accounting and Financial Reporting for Pensions*, actuarial valuation process by completing the reports in-house without the use of consultant actuaries. These standards set the pension accounting and financial reporting requirements for state and local government employers.

### INTERIM CHIEF EXECUTIVE OFFICER'S LETTER OF TRANSMITTAL (CONTINUED)

We have also refined some of our actuarial policies by consolidating 16 existing actuarial policies into five. In February 2016, the Board reviewed the actuarial policies framework that will streamline actuarial administration, improve consistency and transparency, and strengthen the CalPERS governance framework.

Our other focus is fueling the California economy with jobs. In Fiscal Year 2014-15, investments in the Golden State rose to \$26.8 billion from the ancillary benefits generated by the System's investments. The *CalPERS for California* report showed that more than 362,000 jobs are supported as a result of CalPERS' private asset class investments in California. Investments in California represent 8.9 percent of the PERF.

Health care premiums increased 4.1 percent for Fiscal Year 2015-16, which was due to an increase in health care rates and the number of subscribers. For Medicare members, we launched the United Healthcare Medicare option during the 2015 Open Enrollment to provide members with better pricing and wider coverage. The new option now provides members with access to any provider who accepts Medicare in all 58 California counties, throughout the United States and its territories. We also improved member access to all Open Enrollment materials that enables members to access their health plan statements through my|CalPERS.

To increase participation in the CalPERS Long-Term Care (LTC) program, eligibility was expanded to all current and former California public employees and their family members. Participation decreased nearly 3 percent due to realized participant attrition and the LTC program sustainability measures.

Additionally, the number of contracted employers who participate in the California Employers' Retiree Benefit Trust Fund continued to grow from 462 to 493—a 6.7 percent increase over the prior fiscal year. This optional program pre-funds retiree health care obligations.

To improve service to our members, we reduced backlog by 96 percent in our member area by improving efficiency and redistributing work. We also received an overall customer service satisfaction rating of 90 percent or higher on our business process surveys and served over 1.1 million customers through phone, online, and in-person channels.

For employers, we closed 576 cases submitted to our Employer Response Team (ERT), with 80 percent of the cases resolved within one to three days. The ERT provides service to employers who need assistance to address time-sensitive, complex, and priority cases.

As we enter the final year of the 2012-17 Strategic Plan, our focus forward will be to continue identifying ways to reduce costs, enhance our customer service, and deliver the pension benefits promised to public servants who work for all of us in California.

#### **Management Responsibility for Financial Reporting**

CalPERS' management prepared the financial statements in this CAFR for Fiscal Year 2015-16. Management is responsible for the integrity and fairness of the information presented, including data that, out of necessity, is based on estimates and judgments. The accounting policies used to prepare these financial statements conform to accounting principles generally accepted in the United States. Financial information presented throughout this annual report is consistent with these accounting principles.

CalPERS maintains a system of internal controls designed to provide reasonable assurance that assets are properly safeguarded, transactions are properly executed, and financial statements are reliable. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. In addition, our internal audit personnel provide a continuing review of the internal controls and operations of CalPERS, and the Chief of the Office of Audit Services regularly reports to the CalPERS Board of Administration's Risk and Audit Committee. The Committee reviews the audit findings and recommendations for improvements in internal control and operational efficiency, and it reviews the actions of management to implement such recommendations.

Our independent external auditors, Macias Gini & O'Connell LLP, have conducted an audit of the basic financial statements in accordance with auditing standards generally accepted in the United States, performing such tests and other procedures as they deem necessary to express opinions on the basic financial statements in their report to the Board. The external auditors also have full and unrestricted access to the Board to discuss their audit and related findings as to the integrity of the financial reporting and the adequacy of internal control systems.

#### **Accounting System and Reports**

Management is responsible for establishing and maintaining an internal control structure designed to ensure that CalPERS assets are protected from loss, theft or misuse, and that income is appropriately distributed. Responsibility for the accuracy, completeness, and fair presentation of the information, and all disclosures, rests with CalPERS. The basic financial statements have been prepared in accordance

### INTERIM CHIEF EXECUTIVE OFFICER'S LETTER OF TRANSMITTAL (CONTINUED)

with accounting principles generally accepted in the United States. The basic financial statements are presented in accordance with the guidelines of the Governmental Accounting Standards Board (GASB), including standards established by GASB Statement No. 67, *Financial Reporting for Defined Benefit Plans, an amendment of GASB Statement No. 25*; GASB Statement No. 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments*; GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*; and other GASB statements as appropriate. GASB Statement No. 34 requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A).

This Letter of Transmittal is designed to complement the MD&A and should be read in conjunction with it. The CalPERS MD&A can be found immediately following the report of the independent auditors.

#### **Funding**

CalPERS' funded status of the PERF is 73.1 percent for Fiscal Year 2014-15 and the estimate for Fiscal Year 2015-16 is approximately 69.0 percent as a result of the investment return. As we remain in a low return environment in these challenging economic times, our top priority is sustainability of the fund and the success of investing over the long-term—not for one year, or ten, but decades.

The PERF is the main trust fund from which nearly all CalPERS retirement benefits are paid. The Actuarial section contains a summary of CalPERS' unfunded actuarial accrued liabilities.

#### **In Closing**

CalPERS' focus is to have a well-balanced approach to address the risks and volatility in the System. The Board has taken many bold steps to sustain the Fund, including the new Funding Risk Mitigation Policy that will put the CalPERS' Fund on more solid ground.

While the future of the financial markets are uncertain over the next few years, our disciplined ALM review cycle assesses the Fund's changing demographics, the state of our economy, and takes a holistic and integrated view of our assets and liabilities. We plan to continue our ALM work into 2017 and review other actions that can reduce risk, complexity, and costs across our entire organization.

We remain committed to serving the nearly 2 million public employees who serve California and ensuring the pension fund continues to pay promised pension benefits for this and future generations.

Douglas Hoffner

*Interim Chief Executive Officer*

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### ABOUT CalPERS

The California Public Employees' Retirement System (CalPERS or the System) is the nation's largest defined benefit public pension fund with total net position in the Public Employees' Retirement Fund (PERF) of \$299 billion as of June 30, 2016.

Headquartered in Sacramento, CalPERS provides retirement benefit services to more than 1.8 million members and health benefit services to 1.4 million covered lives for state, school, and public employers. The System also operates eight Regional Offices located in Fresno, Glendale, Orange, Sacramento, San Diego, San Bernardino, San Jose, and Walnut Creek.

Led by a 13-member Board of Administration consisting of member-elected, appointed, and ex officio members, CalPERS membership consists of 1,212,645 active and inactive members and 650,943 retirees, beneficiaries, and survivors.

Established by legislation in 1931, the System became operational in 1932 to provide a secure retirement to state employees. In 1939, new legislation allowed public agency and classified school employees to join CalPERS for retirement benefits. CalPERS began administering health benefits for state employees in 1962, and five years later, public agencies were able to join the health program on a contract basis.

Today CalPERS offers additional programs, including long-term care coverage and deferred compensation retirement savings plans.

### OUR VISION

A trusted leader respected by our members and stakeholders for our integrity, innovation, and service.

### MISSION

Provide responsible and efficient stewardship of the System to deliver promised retirement and health benefits while promoting wellness and retirement security for members and beneficiaries.

### 2012-17 STRATEGIC PLAN GOALS AND OBJECTIVES

#### Goal A: Improve long-term pension and health benefit sustainability

- Fund the System through an integrated view of pension assets and liabilities.
- Educate employers and other stakeholders to make informed decisions about retirement security and health care.
- Deliver target risk-adjusted investment returns.
- Ensure high-quality, accessible, and affordable health benefits.
- Create a lifestyle of wellness among members and employers.

#### Goal B: Cultivate a high-performing, risk-intelligent, and innovative organization

- Use a focused approach to generate, test, refine, and implement new ideas.
- Deliver superior end-to-end customer service that is adaptive to customer needs.
- Recruit, retain, develop, and empower a broad range of talents against organizational priorities.
- Actively manage business risks with an enterprise-wide view.

#### Goal C: Engage in state and national policy development to enhance the long-term sustainability and effectiveness of our programs

- Clarify and communicate CalPERS' perspective on pension, health, and financial markets.
- Provide education and engagement opportunities to shape policy agenda and expand impact.

### ABOUT CalPERS (CONTINUED)

#### PENSION BELIEFS

In May 2014, the CalPERS Board of Administration adopted a set of 11 Pension Beliefs that articulate the pension fund's views on public pension design, funding, and administration.

##### Pension Belief 1

A retirement system must meet the needs of members and employers to be successful.

##### Pension Belief 2

Plan design should ensure that lifetime retirement benefits reflect each employee's years of service, age, and earnings and are adequate for full-career employees.

##### Pension Belief 3

Inadequate financial preparation for retirement is a growing national concern; therefore, all employees should have effective means to pursue retirement security.

##### Pension Belief 4

A retirement plan should include a defined benefit component, have professionally managed funds with a long-term horizon, and incorporate pooled investments and pooled risks.

##### Pension Belief 5

Funding policies should be applied in a fair, consistent manner, accommodate investment return fluctuations, and support rate stability.

##### Pension Belief 6

Pension benefits are deferred compensation and the responsibility for appropriate funding should be shared between employers and employees.

##### Pension Belief 7

Retirement system decisions must give precedence to the fiduciary duty owed to members but should also consider the interests of other stakeholders.

##### Pension Belief 8

Trustees, administrators and all other fiduciaries are accountable for their actions, and must transparently perform their duties to the highest ethical standards.

##### Pension Belief 9

Sound understanding and deployment of enterprise-wide risk management is essential to the ongoing success of a retirement system.

##### Pension Belief 10

A retirement system should offer innovative and flexible financial education that meets the needs of members and employers.

##### Pension Belief 11

As a leader, CalPERS should advocate for retirement security for America's workers and for the value of defined benefit plans.

### ABOUT CalPERS (CONTINUED)

#### INVESTMENT BELIEFS

In September 2013, the CalPERS Board of Administration adopted a set of 10 Investment Beliefs intended to provide a basis for strategic management of the investment portfolio, and to inform organizational priorities.

##### Investment Belief 1

Liabilities must influence the asset structure.

##### Investment Belief 2

A long time investment horizon is a responsibility and an advantage.

##### Investment Belief 3

CalPERS investment decisions may reflect wider stakeholder views, provided they are consistent with its fiduciary duty to members and beneficiaries.

##### Investment Belief 4

Long-term value creation requires effective management of three forms of capital: financial, physical, and human.

##### Investment Belief 5

CalPERS must articulate its investment goals and performance measures and ensure clear accountability for their execution.

##### Investment Belief 6

Strategic asset allocation is the dominant determinant of portfolio risk and return.

##### Investment Belief 7

CalPERS will take risk only where we have a strong belief we will be rewarded for it.

##### Investment Belief 8

Costs matter and need to be effectively managed.

##### Investment Belief 9

Risk to CalPERS is multi-faceted and not fully captured through measures such as volatility or tracking error.

##### Investment Belief 10

Strong processes and teamwork and deep resources are needed to achieve CalPERS goals and objectives.



## BOARD OF ADMINISTRATION



**Rob Feckner, President**  
School Member Representative  
Glazing Specialist  
Napa Valley Unified School District  
Term Ends: January 15, 2019



**Richard Costigan**  
Ex Officio Member  
State Personnel Board Representative



**Henry Jones, Vice President**  
Retired Member Representative  
Retired, Chief Financial Officer  
Los Angeles Unified School District  
Term Ends: January 15, 2020



**Richard Gillihan**  
Ex Officio Member  
Director  
California Department of Human  
Resources



**Michael Bilbrey**  
All Member Representative  
Bookstore Operations Coordinator  
Citrus Community College  
Term Ends: January 15, 2018



**Dana Hollinger**  
Governor Appointee  
Insurance Industry Representative  
Principal, Dana Hollinger Group  
Term Ends: January 15, 2017



**John Chiang**  
Ex Officio Member  
California State Treasurer



**JJ Jelincic**  
All Member Representative  
Investment Officer III  
CalPERS  
Term Ends: January 15, 2018



BOARD OF ADMINISTRATION (CONTINUED)



**Ron Lind**  
Appointed Jointly by the Senate Rules  
Committee and the Speaker of the  
Assembly  
Public Representative



**Theresa Taylor**  
State Member Representative  
Principal Compliance Representative  
Franchise Tax Board  
Term Ends: January 15, 2019



**Priya Mathur**  
Public Agency Member  
Representative  
Principal Financial Analyst  
Bay Area Rapid Transit  
Term Ends: January 15, 2019



**Betty Yee**  
Ex Officio Member  
California State Controller



**Bill Slaton**  
Governor Appointee  
Local Government Elected Official  
Elected Board Member of  
Sacramento Municipal Utility District  
Term Ends: January 15, 2019

## ORGANIZATIONAL CHART – EXECUTIVE STAFF



**Interim Chief Executive Officer**  
*Douglas Hoffner*



**Financial Office**  
Chief Financial Officer  
*Cheryl Eason*



**Investment Office**  
Chief Investment Officer  
*Ted Eliopoulos*



**General Counsel Office**  
General Counsel  
*Matthew G. Jacobs*



**Actuarial Office**  
Interim Chief Actuary  
*Scott Terando*



**Operations & Technology**  
Deputy Executive Officer  
*Douglas Hoffner*



**Customer Services & Support**  
Deputy Executive Officer  
*Donna Lum*



**Benefit Programs Policy & Planning**  
Deputy Executive Officer  
*Doug P. McKeever*



**Communications & Stakeholder Relations**  
Deputy Executive Officer  
*Brad W. Pacheco*

## CONSULTANT &amp; PROFESSIONAL SERVICES

Individual or Firm <sup>1</sup>	Individual or Firm <sup>1</sup>	Individual or Firm <sup>1</sup>
Aisitech, LLC	Hewitt Associates, LLC	Reed Smith, LLP
Ambire Consulting, Inc.	Host Analytics, Inc.	Regents of the University of CA, Berkeley
Anthem Blue Cross	HP Enterprise Services, LLC	Regents of the University of CA, Davis
ATV Video Center, Inc.	Information Technology Software Professional	Ridgeway Partners, LLC
Avenue Solutions	Innovative Software Technologies, Inc.	Risk 2 Reputation
Base 3 Consulting	J & K Court Reporting, LLC	Riviera Finance Assignee of Sophus
Beacon Consulting Group, Inc.	Jay Gaines & Company, Inc.	Runyon Saltzman & Einhorn, Inc.
Bedrosian & Associates	JLynnConsulting, Inc.	Saba Software, Inc.
Belmonte Enterprises, LLC	K & L Gates, LLP	Sage 2.0
Blue Shield of California	Kath Straub And Associates, LLC	SAS International, Inc.
BluePath Health	KearnFord Application Systems Design	Senn-Delaney Leadership Conslt Group, LLC
Business Advantage Consulting, Inc.	Kenera Consulting, Inc.	Shah & Associates, A Professional Law Company
California Department of Corrections & Rehabilitation	Kiefer Consulting, Inc.	Sharp Health Plan
California Department of Health Care Services	King & Spalding, LLP	Shaw Valenza, LLP
Capio Group	Klausner, Kaufman, Jensen & Levinson	Sign Language Interpreting Service Agency
Carahsoft Technology Corporation	Knowledge Structures, Inc.	Softsol Technologies, Inc.
Celer Systems, Inc.	Kong Consulting, Inc.	SRI Infotech, Inc.
Claims Eval, Inc.	Kronick, Moskovitz, Tiedemann & Girard	Stanfield Systems, Inc.
Continuity Consulting, Inc.	LCS Technologies, Inc.	State Controller's Office
Cornerstone Fitness, Inc.	Leading Resources, Inc. (LRI)	State Treasurer's Office
Cutter Associates, LLC	Logic House, Ltd.	Steptoe & Johnson, LLP
CVS Caremark	Long-Term Care Group, Inc.	T5 Consulting
Daniel J. Edelman, Inc.	Lussier Group	Take 1 Productions
Delegata Corporation	M Corporation	Technology Crest Corporation
Delfino Madden O'Malley Coyle & Koewler, LLP	Macias Gini & O'Connell LLP	Teranomic
Department of General Services/RR Donnelly	Matrix Software Services	TG Page Design Group
Department of Human Resources	Maximus Federal Services, Inc.	The Ballard Group, Inc.
Department of Justice	Mazel Immigration Law, PC	The Taylor Feldman Group, LLC
Dickinson Wright, PLLC	McLagan	Thomson Reuters - West
Domain Experts Corporation	Mellon Bank	Trinity Technology Group, Inc.
Downey Brand, LLP	Mercer Health and Benefits	UBM, LLC
Drinker Biddle & Reath, LLP	Michael Scales Consulting, LLC	United Health Actuarial Services, Inc.
DSS Research	Michael Strategic Analysis	UnitedHealthcare
Eagle Management Group, LLC, dba Matran	Milliman, Inc.	Vantage Consulting Group, Inc.
Eaton Interpreting Services, Inc.	Mindstorm Creative, Inc.	VanWrite Writing Consultants, LLC
Elegant-Enterprise Wide Solutions, Inc.	Modis, Inc.	Vasquez Benisek & Lindgren, LLP
Elynview Corporation	Morgan Lewis & Bockius, LLP	Viaspire
Enclipse Corporation	Nexus IS, Inc.	Visionary Integration Professionals, LLC (VIP)
Enterprise Networking Solutions, Inc.	Nichols Consulting	Voya
Equanim Technologies	Northeast Retirement Services	Worktank
Esoft Infosystems, Inc.	OnCore Consulting, LLC	
Eterasys Consulting, Inc.	Ope Technology, LLC	
Felderstein Fitzgerald Willoughby & Pascuzzi, LLP	Orrick Herrington & Sutcliffe, LLP	
FireEye, Inc., dba Mandiant	Pacific Business Group on Health	
First Data Merchant Services Corporation	Pasanna Consulting Group, LLC	
Gartner, Inc.	Paul Benefits Law Corporation	
Global Blue DVBE, Inc.	Performance Technology Partners, LLC	
Government Operations Agency	Persell Design Group, LLC	
GovernmentJobs.com, Inc., dba NEOGOV	Planet Technologies, Inc.	
Grant Thornton, LLP	Premier Alliance Group, Inc.	
Group One Consultants, Inc.	Princeton Solutions Group, Inc.	
H&B Joint Venture	Pyramid Technical Consultants, Inc.	
Health Net of California	Qualapps, Inc.	
Heidrick & Struggles	Radian Solutions, LLC	

(1) Additional information regarding investment professionals who provide services to the System can be found in the Financial Section: Other Supplementary Information. The Schedule of Commissions & Fees listed by broker can be found in the Investment Section.

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# FINANCIAL SECTION

## Independent Auditor's Report/MD&A

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### SECTION HIGHLIGHTS

Board adopted new **Funding Risk Strategy**

Saved almost **\$122 million** –  
Dependent eligibility verification project

**Implemented** Governmental Accounting  
Standards Board (GASB) Statement No. 72

**Implemented** single, non-Kaiser  
Medicare option



**\$20.3  
BILLION**

Annual Pension  
Benefit Payments (PERF)



Certified  
Public  
Accountants

Century City  
Los Angeles  
Newport Beach  
Oakland  
Sacramento  
San Diego  
San Francisco  
Walnut Creek  
Woodland Hills

## Independent Auditor's Report

To the Board of Administration  
California Public Employees' Retirement System  
Sacramento, California

We have audited the accompanying financial statements of the fiduciary activities and the proprietary activities of the California Public Employees' Retirement System (the System), a component unit of the State of California, as of and for the fiscal year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

### Management's Responsibility for the Financial Statements

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

### Auditor's Responsibility

Our responsibility is to express opinions 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

### Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the fiduciary activities and proprietary activities of the System as of June 30, 2016, and the respective changes in financial position, and, where applicable, cash flows thereof for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

### Emphasis of Matters

As discussed in Note 2 to the basic financial statements, the System implemented the provisions of Governmental Accounting Standards Board Statement (GASBS) No. 72, *Fair Value Measurement and Application*, and GASBS No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, for the fiscal year ended June 30, 2016.

As discussed in Note 8 to the basic financial statements, the total pension liabilities of the Public Employees' Retirement Fund Schools Cost-Sharing Multiple-Employer Defined Benefit Pension Plan and Public Agency Cost-Sharing Multiple-Employer Defined Benefit Pension Plan, based on the most recent actuarial valuations as of June 30, 2015 rolled forward to June 30, 2016, exceeded the plans' fiduciary net position by \$19.8 billion and \$8.7 billion, respectively. The actuarial valuations are very sensitive to the underlying actuarial assumptions, including a discount rate of 7.65 percent, which represents the long-term expected rate of return.

As discussed in Note 1 to the basic financial statements, actual contributions made by the State of California (State) to the closed Judges' Retirement Fund are made pursuant to State statute and were significantly less than the actuarially determined annual required contributions. State contributions were used to fund benefit payments of the current period. As such, the Judges' Retirement Fund does not retain the accumulated contributions of active members. Without the State contributions, the Judges' Retirement Fund will not be able to pay accumulated benefit payments due in fiscal year 2017. Management and legal counsel believe the State is legally required to provide the required contributions to fund the benefits. As discussed in Note 8 to the basic financial statements, the total pension liability of the Judges' Retirement Fund, based on the most recent actuarial valuation as of June 30, 2015 rolled forward to June 30, 2016, exceeded the plan's fiduciary net position by \$3.8 billion.

As discussed in Note 13 to the basic financial statements, the determination of the estimated liability for future policy benefits of the Public Employees' Long-Term Care Fund is very sensitive to the underlying actuarial assumptions, including a discount rate of 5.75 percent, morbidity, lapse rates, voluntary termination, conversion rates to fixed term policies, mortality, plan expenses, and rate increase.

Our opinions are not modified with respect to these matters.

### Other Matters

#### *Prior-Year Comparative Information*

The financial statements include partial prior-year comparative information. Such information does not include all of the information required to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements for the fiscal year ended June 30, 2015, from which such partial information was derived.

We have previously audited the System's 2015 financial statements, and we expressed unmodified audit opinions on the respective financial statements of the fiduciary activities and the proprietary activities in our report dated December 10, 2015. In our opinion, the partial comparative information presented herein as of and for the fiscal year ended June 30, 2015, is consistent, in all material respects, with the audited financial statements from which it has been derived.



### *Required Supplementary Information*

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

### *Other Information*

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

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

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

Sacramento, California  
November 18, 2016



# Management's Discussion & Analysis (Unaudited)

## INTRODUCTION

This section presents Management's Discussion and Analysis of the California Public Employees' Retirement System's (CalPERS or the System) financial performance during the fiscal year ended June 30, 2016. It is a narrative overview and analysis that we present in conjunction with the Interim Chief Executive Officer's Letter of Transmittal included in the Introductory Section of this Comprehensive Annual Financial Report. It should also be read in conjunction with the Basic Financial Statements of CalPERS as presented in this report.

In addition to historical information, the Management's Discussion and Analysis includes certain forward-looking statements, which involve certain risks and uncertainties. CalPERS' actual results, performance, and achievements may differ from the results, performance, and achievements expressed or implied in such forward-looking statements due to a wide range of factors, including changes in interest rates, changes in the securities markets, general economic conditions, legislative changes, and other factors.

CalPERS is primarily responsible for administering retirement and health benefits. CalPERS also administers long-term care benefits, a post-employment benefit fund for retiree health, and supplemental retirement savings plans.

## MANAGEMENT DISCUSSION

### Strategic Planning

CalPERS enters the final year of the 2012-17 Strategic Plan focusing on sustainability of the pension and health programs, enhancing customer service, and strengthening our internal organization. The final year of the 2015-17 Business Plan specifically focuses on the following key areas:

- Enhance business effectiveness, resource allocation, and efficiency of investment programs.
- Build effective risk review and decision processes within and across asset classes.
- Sustain the growth of the California Employers' Retiree Benefit Trust Fund (CERBTF) and improve service to our employers.
- Assess cost effectiveness measures to identify cost savings and performance improvements.
- Implement risk mitigation strategies to enhance management of security events and data loss prevention.

In January 2016, CalPERS initiated a process to develop the 2017-22 Strategic Plan by conducting interviews and gathering feedback from internal and external stakeholders.

### Key Initiatives

CalPERS continues to enhance its operations as follows:

- CalPERS advanced its investment mission to focus on reductions in cost, complexity, risk, and on fewer but more strategic partnerships with investment external managers. The number of strategic managers was reduced from 212 as of June 2015 to 160 as of June 2016. Additionally, CalPERS engaged with various agencies (Securities and Exchange Commission, California State Treasurer's Office, Institutional Limited Partners Association) and key general and limited partners to discuss opportunities for increased collaboration and disclosure to manage investment portfolios in a cost-effective, transparent, and risk-aware manner.
- CalPERS continues its work on asset allocation and risk management through the Asset Liability Management (ALM) process. CalPERS developed a Board-approved Funding Risk Mitigation Policy, which provides for an incremental reduction to the discount rate for the Public Employees' Retirement Fund (PERF) (currently at 7.5 percent) at the discretion of the Board in years when investment performance significantly outperforms the discount rate. The policy was carefully developed over many months of research and consultation with financial experts and stakeholders.
- Over the past two years, CalPERS implemented the Treasury Management Program, which created the Treasury Management and the Reserve Management Policies. In Fiscal Year 2015-16, CalPERS developed a liquidity reporting process to provide the Board assurance that the System can meet its obligations.
- CalPERS is continuing the multi-year project to integrate consideration of environmental, social, and governance (ESG) factors into investment processes to support the goal of achieving long-term, sustainable, risk-adjusted returns consistent with fiduciary duty. Grounded in the three forms of economic capital—financial, human, and physical—that drive long-term value creation, CalPERS has developed strategic themes (Alignment of Interest, Human Capital, and Climate Change) that frame ESG integration work. Specific initiatives in 2015-16 that further this effort are in the areas of proxy access, board diversity, engaging on climate risk, a project to measure carbon emissions across the global equity portfolio, and development of Sustainable Investment Practice Guidelines across all asset classes.

- In May 2016, CalPERS provided its employers with preliminary non-risk-adjusted health plan rates for 2017 to allow them additional time for budgeting purposes.
- CalPERS chose a single, non-Kaiser Medicare option for Health Maintenance Organization (HMO) subscribers. It provides members with more extensive Medicare coverage and reduced costs. This allows members to receive care from any provider who accepts Medicare anywhere in the United States.
- The Dependent Eligibility Verification project concluded as of October 2015, which aided in verifying eligibility for dependents enrolled in a health plan sponsored by CalPERS. Over 18,000 ineligible dependents were removed from CalPERS' health coverage, which has provided overall savings due to a reduction in employer contributions, estimated claims, and federal taxes.
- In conjunction with the United States Department of the Treasury's National Strategy for Financial Literacy, CalPERS continues efforts to improve member financial literacy education and awareness. Financial literacy includes competency in numeracy skills, a general understanding of the economic impact of inflation, and of the benefits of saving early. CalPERS will continue supporting this effort by leveraging all existing communication and social media channels to members to provide information on resources such as basic retirement plan information, defined benefit plans, supplemental savings options, social security, retiree health care, and retirement goal-setting support that is relevant to members at various career stages.
- CalPERS continues to support new sustainable business laws and industry best practices that result in long-term benefits to the environment. Activities in this effort include greenhouse gas emissions reduction, energy conservation initiatives, Leadership in Energy and Environmental Design (LEED®) implementation, water conservation initiatives, electric vehicle charging station support, environmentally preferable purchasing, sustainable building and grounds maintenance and operations, sustainable waste management and organic waste diversion, and industry outreach and sustainability meetings.

## OVERVIEW OF THE FINANCIAL STATEMENTS AND ACCOMPANYING INFORMATION

Management's Discussion and Analysis provides an introduction to and overview of the financial position, which comprises the following components: Basic Financial Statements, Notes to the Basic Financial Statements, Required Supplementary Information, and Other Supplementary Information. Collectively, this information presents the combined net position restricted for pension benefits, other post-employment benefits (OPEB), deferred compensation, and the unrestricted net position of the proprietary funds administered by CalPERS as of June 30, 2016. It also summarizes the combined changes in net position restricted for pension and other post-employment benefits, the changes in unrestricted net position, and the cash flows of the proprietary funds for the year then ended, along with disclosures about the net pension liabilities of the cost-sharing multiple-employer and single-employer defined benefit pension plans.

## FINANCIAL HIGHLIGHTS

Major events and upcoming initiatives impacting the current fiscal year's financial statements include:

- Senate Bill 227 and Assembly Bill 611 were signed by the Governor in October 2013 and September 2014, respectively, and terminated the State Peace Officers' and Firefighters' Defined Contribution Plan, effective June 1, 2014. As of June 30, 2016, all remaining fund balances in the State Peace Officers' and Firefighters' Defined Contribution Fund (SPOFF) were transferred to the Supplemental Contributions Program Fund (SCPF).
- CalPERS implemented the provisions of Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application* (GASB 72), which requires all investments be categorized under a fair value hierarchy. CalPERS determines fair value of its investments based upon both observable and unobservable inputs, which are then placed in the hierarchy. Previously, internal investment pools were reported at Net Asset Value (NAV) in the Basic Financial Statements. In Fiscal Year 2015-16, CalPERS revised its accounting methodology in conjunction with GASB 72 to present investments at the security level and to separately report investment-related transactions such as receivables, payables, and income. Additional discussion of GASB 72 implementation can be found in Note 4 in the Notes to the Basic Financial Statements.

- GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* (GASB 74), is effective for financial statements for fiscal years beginning after June 15, 2016. CalPERS has elected to early implement this standard. As such, actuarial data (including information regarding the net OPEB liability) is not required to be reported in the Notes to the Financial Statements or Required Supplementary Information.
- Overall, the PERF experienced a small but positive investment return in Fiscal Year 2015-16 despite volatile financial markets and challenging global economic conditions. Key to the return was the diversification of the Fund's portfolio, especially CalPERS' fixed income and real assets investments.

### BASIC FINANCIAL STATEMENTS

The June 30, 2016 financial statements separate the funds administered by CalPERS into two categories: fiduciary funds and proprietary funds. While CalPERS' role as a trustee and its monitoring of financial position occur in both categories, a primary focus of fiduciary funds is CalPERS' duty with respect to the payment of benefits, whereas a core concern for proprietary funds is the payment of services.

**Fiduciary Funds** – includes the PERF A, PERF B, PERF C, Legislators' Retirement Fund (LRF), Judges' Retirement Fund (JRF), Judges' Retirement Fund II (JRF II), SPOFF (terminated), Public Employees' Deferred Compensation Fund (DCF), SCPF, California Employees' Retiree Benefit Trust Fund (CERBTF), and Replacement Benefit Fund (RBF). Fiduciary funds are used to account for resources held for the benefit of CalPERS participants.

A Statement of Fiduciary Net Position and a Statement of Changes in Fiduciary Net Position are presented for the fiduciary funds as of and for the fiscal year ended June 30, 2016, along with comparative total information as of and for fiscal year ended June 30, 2015. These financial statements reflect the resources available to pay benefits to retirees and other beneficiaries as of year-end, and the changes in those resources during the year.

**Proprietary Funds** – includes the combined Health Care Fund (HCF) and Contingency Reserve Fund (CRF), and the Public Employees' Long-Term Care Fund (LTCF). A Statement of Net Position, a Statement of Revenues, Expenses, and Changes in Net Position, and a Statement of Cash Flows are presented for the proprietary funds as of and for fiscal year ended June 30, 2016, along with comparative total information as of and for fiscal year ended June 30, 2015. These financial statements reflect the net position, changes in net position,

and cash flows resulting from CalPERS business-type activities.

### NOTES TO THE BASIC FINANCIAL STATEMENTS

The Notes to the Basic Financial Statements provide additional information that is essential to a full understanding of the information provided in the fund financial statements. Information available in the Notes to the Basic Financial Statements is described below:

**Note 1** – provides a general description of CalPERS and a concise description of each of the funds administered by CalPERS. Information about employer and member participation in the pension plans and other post-employment benefit plans administered by CalPERS is also provided.

**Note 2** – provides a summary of significant accounting policies, including the basis of accounting for each of the fund types, target asset allocation, management's use of estimates, and other significant accounting policies.

**Note 3** – provides information on cash and cash equivalents.

**Note 4** – provides detail on the fair value of investments, and information on money-weighted rate of return.

**Note 5** – provides information about investment risk categorizations.

**Note 6** – provides information about securities lending.

**Note 7** – provides information about derivatives.

**Note 8** – provides information about net pension liability and actuarial assumptions for cost-sharing and single-employer plans reported in PERF B and C, LRF, JRF, and JRF II.

**Note 9** – provides information about the CERBTF.

**Note 10** – provides information about CalPERS and State of California OPEB plan.

**Note 11** – provides detailed information about the HCF and the estimated claims liability of the HCF/CRF.

**Note 12** – provides additional information about participating agencies and insurance premiums paid by the CRF.

**Note 13** – provides information about the LTCF actuarial valuation and the estimated liability for future policy benefits.

**Note 14** – provides information about the RBF, as well as applicable internal revenue and government codes.

**Note 15** – provides information on potential contingencies of CalPERS.

**Note 16** – provides information about future accounting pronouncements.

### REQUIRED SUPPLEMENTARY INFORMATION

The Required Supplementary Information schedules include information about the changes in the net pension liability, employer contributions, actuarial assumptions used to calculate the actuarially determined contributions, historical trends, and other required supplementary information related to the System's cost-sharing multiple-employer and single-employer defined benefit pension plans as required by GASB Statement No. 67, *Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25* (GASB 67).

The Money-Weighted Rate of Return (MWRR) expresses investment performance, net of investment expense, and is disclosed per the requirements of GASB 67 and GASB 74.

The Schedule of Claims Development Information for the HCF/CRF provides earned revenues and expenses over the past 10 years.

### OTHER SUPPLEMENTARY INFORMATION

Other schedules include detailed information on administrative expenses incurred by CalPERS-administered funds, investment and other professional services expenses incurred, and changes in assets and liabilities for the agency fund.

## FINANCIAL ANALYSIS

### PUBLIC EMPLOYEES' RETIREMENT FUND (PERF)

The PERF is a trust fund established under section 20170 of the Public Employees' Retirement Law (PERL). The PERF provides retirement benefits to State of California, schools, and other California public agency employees. The PERF benefits are funded by member and employer contributions and by earnings on investments.

For accounting purposes only, the PERF is comprised of and reported as three separate entities. PERF A is comprised of agent multiple-employer plans, which includes the State of California and most public agency rate plans with more than 100 active members. PERF B is a cost-sharing multiple-employer plan of school employers consisting of non-teaching and non-certified employees. PERF C is a cost-sharing multiple-employer plan of public agencies with generally less than 100 active members.

Movements of member account asset balances occur between PERF A, PERF B, and PERF C when employer rate plans have less than 100 members, or when there are other member accounting adjustments. These plan-to-plan movements are reported as a separate line item within the additions and deductions sections, respectively, of each plan's Statement of Changes in Fiduciary Net Position.

The PERF net position decreased by \$4.1 billion or 1.3 percent compared to the prior year due to slow growth

resulting from volatile financial markets. Receivables increased \$15.6 billion due a change in accounting methodology in conjunction with GASB 72 to present investments at the security level as opposed to net asset value (NAV), which created an increase in investment receivable balances. Additionally, securities lending collateral increased \$2.0 billion or 18.2 percent and securities lending obligations increased \$1.9 billion or 17.7 percent as a result of an overall increase in the demand to borrow securities.

Additions to PERF net position include employer and member contributions and investment income. Employer contribution rates increased between 0.5 percent and 3.2 percent for State, 0.1 percent for schools, and between 0.5 percent and 3.8 percent on average for public agency miscellaneous and safety plans, resulting in higher employer contributions of \$0.9 billion or 9.2 percent. Member contributions increased \$0.2 billion or 5.0 percent due to an increase in state employee salary effective July 1, 2015. Additionally, the number of active members who contribute increased from 868,713 at June 30, 2015 to 873,026 at June 30, 2016.

Net investment income is comprised of interest income, dividend income, and net appreciation or depreciation in fair value of investments, and is net of investment expenses.

Net investment income decreased by \$5.2 billion or 78.7 percent to \$1.4 billion in Fiscal Year 2015-16 compared to \$6.6 billion in Fiscal Year 2014-15. Investment returns were higher in Fiscal Year 2014-15 compared to modest gains for Fiscal Year 2015-16 as world markets produced relatively flat returns. Current year returns were helped by strong performance in CalPERS' global debt securities, which was approximately 26.9 percent of the fund's investments as of June 30, 2016. Additionally, the PERF recognized a money-weighted rate of return (MWRR) of 0.5 percent for Fiscal Year 2015-16 compared to 2.2 percent for Fiscal Year 2014-15.

Deductions from the PERF are comprised of benefit payments, refunds of contributions to members and beneficiaries, and costs of administering the PERF. Benefit payments are the primary expense of a retirement system. For Fiscal Year 2015-16, retirement and survivor benefits increased \$1.2 billion or 6.2 percent, primarily due to a rise in number of retirees and beneficiaries from 611,078 as of June 30, 2015, to 648,645 as of June 30, 2016. Administrative expenses decreased primarily due to the reversal of the state OPEB obligation — refer to Note 10 in the Notes to the Basic Financial Statements for additional discussion.



## Management's Discussion & Analysis (Unaudited) (continued)

### Net Position – PERF (Dollars in Thousands)

	PERF A	PERF B	PERF C			
	Agent	Cost-Sharing Schools	Cost-Sharing Public Agencies	2016 PERF Total	2015 PERF Total	Increase/ (Decrease)
<b>ASSETS</b>						
Cash & Cash Equivalents	\$810,557	\$208,039	\$91,896	\$1,110,492	\$873,749	\$236,743
Receivables	13,366,923	3,317,225	1,431,422	18,115,570	2,479,711	15,635,859
Investments	220,395,302	56,563,789	25,022,960	301,982,051	300,962,284	1,019,767
Securities Lending Collateral	9,279,403	2,381,531	1,053,553	12,714,487	10,761,058	1,953,429
Capital Assets, Net & Other Assets	512,207	131,464	58,070	701,741	706,657	(4,916)
<b>Total Assets</b>	<b>\$244,364,392</b>	<b>\$62,602,048</b>	<b>\$27,657,901</b>	<b>\$334,624,341</b>	<b>\$315,783,459</b>	<b>\$18,840,882</b>
<b>LIABILITIES</b>						
Retirement Benefits, Investment Settlement & Other	\$17,035,260	\$4,316,594	\$1,904,387	\$23,256,241	\$2,262,887	\$20,993,354
Securities Lending Obligations	9,243,627	2,372,489	1,047,982	12,664,098	10,756,054	1,908,044
<b>Total Liabilities</b>	<b>\$26,278,887</b>	<b>\$6,689,083</b>	<b>\$2,952,369</b>	<b>\$35,920,339</b>	<b>\$13,018,941</b>	<b>\$22,901,398</b>
<b>TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS</b>	<b>\$218,085,505</b>	<b>\$55,912,965</b>	<b>\$24,705,532</b>	<b>\$298,704,002</b>	<b>\$302,764,518</b>	<b>(\$4,060,516)</b>

### Changes in Net Position – PERF (Dollars in Thousands)

	PERF A	PERF B	PERF C			
	Agent	Cost-Sharing Schools	Cost-Sharing Public Agencies	2016 PERF Total	2015 PERF Total	Increase/ (Decrease)
<b>ADDITIONS</b>						
Member Contributions	\$2,864,486	\$851,133	\$300,135	\$4,015,754	\$3,826,072	\$189,682
Employer Contributions	8,574,866	1,434,632	882,991	10,892,489	9,977,705	914,784
Net Investment Income	1,014,523	269,667	114,758	1,398,948	6,579,019	(5,180,071)
Securities Lending & Other Income	109,362	27,847	12,285	149,494	123,978	25,516
Plan to Plan Resource Movement	13,563	44	36,196	49,803	469,688	(419,885)
<b>Total Additions</b>	<b>\$12,576,800</b>	<b>\$2,583,323</b>	<b>\$1,346,365</b>	<b>\$16,506,488</b>	<b>\$20,976,462</b>	<b>(\$4,469,974)</b>
<b>DEDUCTIONS</b>						
Retirement, Death & Survivor Benefits	\$15,136,240	\$3,457,558	\$1,500,135	\$20,093,933	\$18,922,292	\$1,171,641
Refund of Contributions	130,377	89,278	19,166	238,821	240,623	(1,802)
Plan to Plan Resource Movement	36,194	34	13,575	49,803	469,688	(419,885)
Administrative Expenses	134,630	34,554	15,263	184,447	340,880	(156,433)
<b>Total Deductions</b>	<b>\$15,437,441</b>	<b>\$3,581,424</b>	<b>\$1,548,139</b>	<b>\$20,567,004</b>	<b>\$19,973,483</b>	<b>\$593,521</b>
<b>INCREASE (DECREASE) IN NET POSITION</b>	<b>(\$2,860,641)</b>	<b>(\$998,101)</b>	<b>(\$201,774)</b>	<b>(\$4,060,516)</b>	<b>\$1,002,979</b>	<b>(\$5,063,495)</b>
<b>NET POSITION RESTRICTED FOR PENSION BENEFITS</b>						
Beginning of Year	\$220,946,146	\$56,911,066	\$24,907,306	\$302,764,518	\$301,761,539	\$1,002,979
End of Year	<b>\$218,085,505</b>	<b>\$55,912,965</b>	<b>\$24,705,532</b>	<b>\$298,704,002</b>	<b>\$302,764,518</b>	<b>(\$4,060,516)</b>

## OTHER DEFINED BENEFIT PLANS

### LEGISLATORS' RETIREMENT FUND (LRF)

The LRF provides retirement benefits to California Legislators elected to office before November 7, 1990, and to constitutional, legislative, and statutory officers elected or appointed prior to January 1, 2013. The number of LRF members has been declining as eligible incumbent Legislators leave office and are replaced by those ineligible to participate in the LRF. Actuarially determined contributions will continue to be made by the State of California to supplement the existing assets until all benefit obligations have been fulfilled.

As the LRF is closed to new members and income is primarily limited to investment returns and contributions resulting based on a declining number of active members, CalPERS expects the net position of the fund to steadily decrease over time. Fiscal Year 2015-16 net position of the LRF decreased by \$2.4 million or 2.0 percent compared to the prior year. Receivables increased \$12.7 million due a change in accounting methodology in conjunction with GASB 72 to present investments at the security level as opposed to NAV, which created an increase in investment receivable balances.

Net investment income for the year was \$4.5 million, an increase of \$4.6 million primarily due to the positive performance of fixed income investments. The LRF recognized a MWRR of 3.8 percent for Fiscal Year 2015-16 compared to negative 0.1 percent for Fiscal Year 2014-15. Although there was a slight increase to the employer contribution rate in LRF year over year, the decrease in employer contributions is due to fewer active contributing participants to the fund. This resulted in investment income being the majority of the additions to the fund.

Deductions from the LRF are primarily comprised of benefit payments, refunds, and administrative expenses, which had the most impact to the fund's net position in Fiscal Year 2015-16. Total deductions decreased by \$1.9 million or 19.8 percent due to a decrease of \$1.3 million in both total refunds of contributions and member transfers for Fiscal Year 2015-16. Administrative expenses decreased primarily due to the reversal of the State OPEB obligation — refer to Note 10 in the Notes to the Basic Financial Statements for additional discussion.

### JUDGES' RETIREMENT FUND (JRF)

The JRF provides retirement benefits to California Supreme and Appellate Court Justices and Superior Court Judges appointed or elected before November 9, 1994. The State of California does not pre-fund the benefits for this fund. The benefits are funded on a pay-as-you-go basis.

For Fiscal Year 2015-16, employer, member, and state “balancing contributions” as a whole increased \$11.1 million or 6.0 percent, primarily due to an increase in the State General Fund contributions. The fund held a surplus cash balance in previous fiscal years, which resulted in a reduction to General Fund contributions necessary to pay participant benefits. As the surplus was liquidated in Fiscal Year 2014-15, General Fund contributions increased for Fiscal Year 2015-16 to pay benefits.

Current year benefit payments decreased \$2.5 million or 1.2 percent due to a decrease in the number of benefit recipients for the Extended Service Incentive Program from 29 in Fiscal Year 2014-15 to nine in Fiscal Year 2015-16. Administrative expenses of the fund decreased primarily due to the reversal of the State OPEB obligation — refer to Note 10 in the Notes to the Basic Financial Statements for additional discussion.

### JUDGES' RETIREMENT FUND II (JRF II)

The JRF II provides retirement benefits to California Supreme and Appellate Court Justices and Superior Court Judges first appointed or elected on or after November 9, 1994.

The net position of the JRF II increased by \$88.8 million or 8.2 percent compared to the prior year. Receivables increased \$108.0 million due a change in accounting methodology in conjunction with GASB 72 to present investments at the security level as opposed to NAV, which created an increase in investment receivable balances. Securities lending collateral increased \$8.3 million or 18.3 percent and securities lending obligations increased \$8.2 million or 18.1 percent, as a result of an overall increase in the demand to borrow securities.

Additions to JRF II net position include employer and member contributions and investment income. Member and employer contributions in JRF II were impacted primarily due to an increase in state judges' salaries and an increase in the number of active members from 1,470 as of June 30, 2015 to 1,491 as of June 30, 2016. Member contributions increased \$2.4 million or 10.6 percent, while the increase in employer contributions of \$0.2 million or 0.3 percent was offset due to a lower contribution rate for Fiscal Year 2015-16. The fund had

net investment income of \$20.2 million for the year, which is an increase of \$23.1 million when compared to the investment loss of \$2.9 million for Fiscal Year 2014-15. Similar to other funds, the increase occurred despite volatile economic growth. Additionally, the JRF II recognized a MWRR of 1.9 percent for Fiscal Year 2015-16 compared to negative 0.2 percent for Fiscal Year 2014-15.

Deductions from the JRF II are comprised of benefit payments, refund of contributions to members and beneficiaries, and costs of administering the JRF II. Current year benefit payments increased \$7.5 million or 53.7 percent due to an increase in benefit recipients from 106 in Fiscal Year 2014-15 to 134 in Fiscal Year 2015-16. Additionally, a higher number of participants received monetary credit distributions totaling \$11.5 million in Fiscal Year 2015-16 compared to \$6.4 million in Fiscal Year 2014-15. Administrative expenses decreased primarily due to the reversal of the State OPEB obligation — refer to Note 10 in the Notes to the Basic Financial Statements for additional discussion.

## Management's Discussion & Analysis (Unaudited) (continued)

### Net Position – Other Defined Benefit Plan Funds (Dollars in Thousands)

	LRF			JRF			JRF II		
	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)
<b>ASSETS</b>									
Cash & Cash Equivalents	\$75	\$0	\$75	\$0	\$1	(\$1)	\$1,369	\$1	\$1,368
Receivables	12,838	150	12,688	2,597	2,433	164	115,318	7,320	107,998
Investments	124,962	122,222	2,740	37,864	39,734	(1,870)	1,211,586	1,077,748	133,838
Securities Lending Collateral	3,514	3,497	17	—	—	—	53,795	45,466	8,329
<b>Total Assets</b>	<b>\$141,389</b>	<b>\$125,869</b>	<b>\$15,520</b>	<b>\$40,461</b>	<b>\$42,168</b>	<b>(\$1,707)</b>	<b>\$1,382,068</b>	<b>\$1,130,535</b>	<b>\$251,533</b>
<b>LIABILITIES</b>									
Retirement Benefits, Investment Settlement & Other	\$18,822	\$894	\$17,928	\$667	\$991	(\$324)	\$155,287	\$809	\$154,478
Securities Lending Obligations	3,517	3,506	11	—	—	—	53,828	45,584	8,244
<b>Total Liabilities</b>	<b>\$22,339</b>	<b>\$4,400</b>	<b>\$17,939</b>	<b>\$667</b>	<b>\$991</b>	<b>(\$324)</b>	<b>\$209,115</b>	<b>\$46,393</b>	<b>\$162,722</b>
<b>TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS</b>	<b>\$119,050</b>	<b>\$121,469</b>	<b>(\$2,419)</b>	<b>\$39,794</b>	<b>\$41,177</b>	<b>(\$1,383)</b>	<b>\$1,172,953</b>	<b>\$1,084,142</b>	<b>\$88,811</b>

### Changes in Net Position – Other Defined Benefit Plan Funds (Dollars in Thousands)

	LRF			JRF			JRF II		
	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)
<b>ADDITIONS</b>									
Member Contributions	\$97	\$105	(\$8)	\$3,559	\$3,877	(\$318)	\$24,598	\$22,242	\$2,356
Employer Contributions	549	590	(41)	192,287	180,910	11,377	65,839	65,629	210
Net Investment Income/(Loss)	4,511	(125)	4,636	194	88	106	20,213	(2,863)	23,076
Securities Lending & Other Income	34	31	3	2,568	2,198	370	597	462	135
<b>Total Additions</b>	<b>\$5,191</b>	<b>\$601</b>	<b>\$4,590</b>	<b>\$198,608</b>	<b>\$187,073</b>	<b>\$11,535</b>	<b>\$111,247</b>	<b>\$85,470</b>	<b>\$25,777</b>
<b>DEDUCTIONS</b>									
Retirement, Death & Survivor Benefits	\$7,028	\$7,393	(\$365)	\$199,271	\$201,734	(\$2,463)	\$21,549	\$14,024	\$7,525
Refund of Contributions	379	1,693	(1,314)	78	134	(56)	155	16	139
Administrative Expenses	203	400	(197)	642	1,227	(585)	732	1,127	(395)
<b>Total Deductions</b>	<b>\$7,610</b>	<b>\$9,486</b>	<b>(\$1,876)</b>	<b>\$199,991</b>	<b>\$203,095</b>	<b>(\$3,104)</b>	<b>\$22,436</b>	<b>\$15,167</b>	<b>\$7,269</b>
<b>INCREASE (DECREASE) IN NET POSITION</b>	<b>(\$2,419)</b>	<b>(\$8,885)</b>	<b>\$6,466</b>	<b>(\$1,383)</b>	<b>(\$16,022)</b>	<b>\$14,639</b>	<b>\$88,811</b>	<b>\$70,303</b>	<b>\$18,508</b>
<b>NET POSITION RESTRICTED FOR PENSION BENEFITS</b>									
Beginning of Year	\$121,469	\$130,354	(\$8,885)	\$41,177	\$57,199	(\$16,022)	\$1,084,142	\$1,013,839	\$70,303
End of Year	<b>\$119,050</b>	<b>\$121,469</b>	<b>(\$2,419)</b>	<b>\$39,794</b>	<b>\$41,177</b>	<b>(\$1,383)</b>	<b>\$1,172,953</b>	<b>\$1,084,142</b>	<b>\$88,811</b>



## ASSET LIABILITY MANAGEMENT – DEFINED BENEFIT PLANS

CalPERS continues to assess asset allocation and risk management through the ALM process. CalPERS worked to provide an integrated view of assets and liabilities so that financial risks to the System can be better understood, communicated, and managed.

To establish appropriate levels of risk, ALM is focused on investment and actuarial policies and key decision factors that could drive an optimum asset allocation while stabilizing employer rates and the volatility of those rates year to year. ALM is designed to improve the sustainability and soundness of the PERF, and the goal is to achieve 100 percent funding at an acceptable level of risk. Reducing the risk in the funding of the System will involve tradeoffs between short- and long-term priorities.

In November 2015, the Board adopted the Funding Risk Mitigation Policy, which provides for an incremental reduction in the discount rate for the PERF at the Board's discretion in years when investment performance significantly outperforms the discount rate. The policy aims to:

- Strengthen the long-term sustainability of the fund and secure future benefit payments.
- Protect the fund from volatility of short-term investment returns or changing demographics that could reduce CalPERS' long-term funded status.
- Reduce the level of future risk in the investment portfolio.
- Reduce the volatility in contribution rates for employers.

## FUNDING ANALYSIS – DEFINED BENEFIT PLANS

In February 2014, the CalPERS Board made important decisions regarding the funding of pension benefits at CalPERS. Specifically, the Board elected to hold the PERF's long-term assumed rate of return at 7.5 percent. The Board also adopted significant changes to the actuarial assumptions, most importantly, the inclusion of future mortality improvements in the actuarial assumptions. Finally, the Board approved a financing method that determines when and how quickly these changes would impact employer contributions.

CalPERS completed an experience study, which was adopted by the Board in April 2014, that was based on CalPERS' demographic data from 1997 to 2011. The study focused on recent patterns of termination, death, disability, retirement, and salary increases. For the LRF, JRF, JRF II, and state plans, the new assumptions were implemented in the June 30, 2013, valuation, setting the employer contribution rates for Fiscal Year 2014-15 and beyond. These new assumptions were applied for the schools pool beginning with

the June 30, 2015, valuation, setting the employer contribution rate for Fiscal Year 2016-17. For public agencies, the new assumptions applied to the June 30, 2014, valuations, which set rates for Fiscal Year 2016-17. Note that the net pension liabilities in this report incorporate the impact of the change in actuarial assumptions adopted by the Board.

In April 2013, the CalPERS Board approved new actuarial policies that included a rate-smoothing method with a 30-year fixed amortization period for gains and losses. The amortization has a five-year ramp-up of rates at the start and a five-year ramp-down at the end. Over time, the proposed methods are designed to improve funding levels and help to reduce overall funding level risk. These new policies were applied beginning with the June 30, 2014, valuations for the LRF, JRF II, state plans, and schools pool, which set the employer contribution rates for Fiscal Year 2015-16. For public agencies, the new policies applied in the June 30, 2013, valuations set rates for Fiscal Year 2015-16.

The JRF is funded on a "pay-as-you-go" basis, where short-term investments, contributions received during the year, and a State General Fund augmentation are used to provide funding for benefit payments. This funding method is generally more expensive in the long term, as the plan does not have investment returns generated by a funded plan. Without the State General Fund augmentation, the JRF will not be able to pay the accumulated benefit payments due in Fiscal Year 2016-17.

As of June 30, 2015, the funded status of the PERF was 73.1 percent. The funded status as of June 30, 2016 is estimated to decrease to about 69.0 percent as a result of the investment return in Fiscal Year 2015-16. As of June 30, 2015, the funded status of the JRF II was 100.2 percent. The funded status as of June 30, 2016, is estimated to decrease to about 95.6 percent, mostly as a result of an increase in the amount of projected benefits for eligible participants. As of June 30, 2015, the funded status of the LRF was 114.9 percent. The funded status as of June 30, 2016, is estimated to decrease to about 113.5 percent mostly as a result of investment income in Fiscal Year 2015-16 and a decrease in the amount of projected benefits for eligible participants. All these funded statuses were calculated based on the market value of assets used in actuarial valuations that set funding requirements for employers.

Under GASB 67, there is a difference between the pension costs that must be reported in financial statements and pension contributions established as part of funding valuations. The Actuarial Section included in this report provides actuarial information that was derived for purposes of establishing the funding requirements of employers for which CalPERS administers retirement benefits.

Assets used for GASB 67 financial reporting purposes are slightly greater than assets used for funding requirements as they include amounts for deficiency reserves and fiduciary self-insurance, which creates differences in plan assets reported in the funding actuarial valuation report. CalPERS is required to report Plan Fiduciary Net Position as a percentage of Total Pension Liability for the cost-sharing multiple employer plans (PERF B and PERF C) and for the single-employer pension plans (LRF, JRF, and JRF II). The discount rates used for financial reporting for the PERF, LRF, and JRF II are not adjusted for administrative expenses as compared to the rates used for funding, which are net of administrative expenses. The funding discount rate in JRF differs from the financial reporting discount rate, which uses yields on 20-year tax-exempt General Obligation Municipal Bonds. The following table displays the difference between rates:

Fund	Funding Discount Rate	Financial Reporting Discount Rate
PERF	7.50%	7.65%
JRF	4.25%	2.85%
JRF II	7.00%	7.15%
LRF	5.75%	6.00%

As of June 30, 2016, the Plan Fiduciary Net Position as a Percentage of Total Pension Liability is 73.9 percent for PERF B, 74.1 percent for PERF C, 116.5 percent for LRF, 1.0 percent for JRF, and 97.1 percent for JRF II.

## DEFINED CONTRIBUTION PLANS

### STATE PEACE OFFICERS' & FIREFIGHTERS' DEFINED CONTRIBUTION PLAN FUND (SPOFF)

The SPOFF was terminated effective June 1, 2014 resulting from Senate Bill 227 and Assembly Bill 611, and all remaining balances were transferred to the Supplemental Contributions Program Fund. As of June 30, 2016, the SPOFF carried no balances and was officially closed.

### PUBLIC EMPLOYEES' DEFERRED COMPENSATION FUND (DCF)

The DCF is available to public agencies and school districts within the State of California that have elected to contract for a deferred compensation plan.

The net position of the DCF decreased by \$49.2 million or 3.7 percent primarily due to reduced investment income and increased participant withdrawals. Total additions to the DCF decreased by \$26.2 million or 17.9 percent primarily due to a decrease in net investment income as a result of unfavorable market conditions, while member contributions remained steady.

Total deductions increased by \$75.7 million or 81.2 percent due to an increase in participant withdrawals from the plan. Several large employers terminated their contracts and converted to other plans.

### SUPPLEMENTAL CONTRIBUTIONS PROGRAM FUND (SCPF)

The SCPF was established effective January 1, 2000, to provide supplemental retirement benefits to members of CalPERS and is entirely member funded.

The net position of the SCPF decreased \$9.5 million or 7.1 percent due to the decrease in the number of contributing members to the fund. As a result of the SPOFF closure in Fiscal Year 2014-15, the SCPF was designated as the default rollover plan for the transfer of \$127.5 million in assets that were not withdrawn or transferred at the time of closure. A large number of these members whose assets were transferred from the SPOFF in Fiscal Year 2014-15 are now participating in other programs. Additionally, member contributions decreased by \$127.6 million, from \$127.8 million as of Fiscal Year 2014-15 to \$0.3 million as of Fiscal Year 2015-16 as a result of the SPOFF asset transfers in the prior year.

SCPF deductions reflect withdrawals made by former SPOFF participants subsequent to the termination date. As such, participant withdrawals increased \$0.4 million, from \$15.7 million as of Fiscal Year 2014-15 to \$16.1 million as of Fiscal Year 2015-16.

## Management's Discussion & Analysis (Unaudited) (continued)

### Net Position – Defined Contribution Plan Funds (Dollars in Thousands)

	SPOFF			DCF			SCPF		
	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)
<b>ASSETS</b>									
Cash & Cash Equivalents	\$0	\$1	(\$1)	\$0	\$0	\$0	\$0	\$0	\$0
Receivables	—	1,077	(1,077)	14,586	13,687	899	898	13	885
Investments	—	5,738	(5,738)	1,277,596	1,328,182	(50,586)	124,509	134,125	(9,616)
<b>Total Assets</b>	<b>\$0</b>	<b>\$6,816</b>	<b>(\$6,816)</b>	<b>\$1,292,182</b>	<b>\$1,341,869</b>	<b>(\$49,687)</b>	<b>\$125,407</b>	<b>\$134,138</b>	<b>(\$8,731)</b>
<b>LIABILITIES</b>									
Retirement Benefits, Investment Settlement & Other	\$0	\$1,234	(\$1,234)	\$1,775	\$2,299	(\$524)	\$1,053	\$259	\$794
<b>Total Liabilities</b>	<b>\$0</b>	<b>\$1,234</b>	<b>(\$1,234)</b>	<b>\$1,775</b>	<b>\$2,299</b>	<b>(\$524)</b>	<b>\$1,053</b>	<b>\$259</b>	<b>\$794</b>
<b>TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS</b>	<b>\$0</b>	<b>\$5,582</b>	<b>(\$5,582)</b>	<b>\$1,290,407</b>	<b>\$1,339,570</b>	<b>(\$49,163)</b>	<b>\$124,354</b>	<b>\$133,879</b>	<b>(\$9,525)</b>

### Changes in Net Position – Defined Contribution Plan Funds (Dollars in Thousands)

	SPOFF			DCF			SCPF		
	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)
<b>ADDITIONS</b>									
Member Contributions	\$0	\$81	(\$81)	\$106,072	\$106,272	(\$200)	\$269	\$127,833	(\$127,564)
Employer Contributions	—	802	(802)	909	783	126	—	—	—
Net Investment Income/(Loss)	—	(7,598)	7,598	7,541	32,735	(25,194)	416	1,058	(642)
Securities Lending & Other Income	—	865	(865)	5,354	6,260	(906)	668	305	363
<b>Total Additions</b>	<b>\$0</b>	<b>(\$5,850)</b>	<b>\$5,850</b>	<b>\$119,876</b>	<b>\$146,050</b>	<b>(\$26,174)</b>	<b>\$1,353</b>	<b>\$129,196</b>	<b>(\$127,843)</b>
<b>DEDUCTIONS</b>									
Administrative Expenses	\$0	\$1,601	(\$1,601)	\$4,677	\$4,320	\$357	\$330	\$135	\$195
Participant Withdrawals	—	509,594	(509,594)	164,362	88,973	75,389	16,130	15,751	379
<b>Total Deductions</b>	<b>\$0</b>	<b>\$511,195</b>	<b>(\$511,195)</b>	<b>\$169,039</b>	<b>\$93,293</b>	<b>\$75,746</b>	<b>\$16,460</b>	<b>\$15,886</b>	<b>\$574</b>
Interfund Transfer In/(Out)	(\$5,582)	\$0	(\$5,582)	\$0	\$0	\$0	\$5,582	\$0	\$5,582
<b>INCREASE (DECREASE) IN NET POSITION</b>	<b>(\$5,582)</b>	<b>(\$517,045)</b>	<b>\$511,463</b>	<b>(\$49,163)</b>	<b>\$52,757</b>	<b>(\$101,920)</b>	<b>(\$9,525)</b>	<b>\$113,310</b>	<b>(\$122,835)</b>
<b>NET POSITION RESTRICTED FOR PENSION BENEFITS</b>									
Beginning of Year	\$5,582	\$522,627	(\$517,045)	\$1,339,570	\$1,286,813	\$52,757	\$133,879	\$20,569	\$113,310
End of Year	<b>\$0</b>	<b>\$5,582</b>	<b>(\$5,582)</b>	<b>\$1,290,407</b>	<b>\$1,339,570</b>	<b>(\$49,163)</b>	<b>\$124,354</b>	<b>\$133,879</b>	<b>(\$9,525)</b>

## OTHER POST-EMPLOYMENT BENEFIT TRUST FUND

### CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST FUND (CERBTf)

The CERBTf is a trust for employers to pre-fund health, dental, and other non-pension post-employment benefits. CalPERS early-implemented the financial reporting requirements for the CERBTf under GASB 74 in Fiscal Year 2015-16. As such, actuarial data (including information regarding the net OPEB liability) is not required to be reported in the Notes to the Financial Statements or the Required Supplementary Information. CalPERS is now required to disclose the annual MWRR on OPEB plan investments (net of investment expenses) for the CERBTf.

Net position restricted for OPEB benefits on June 30, 2016, increased \$629.8 million or 14.0 percent primarily due to greater employer contributions from a rising number of participating employers—462 as of June 30, 2015, compared to 493 as of June 30, 2016 (representing 497 OPEB plans). Receivables increased \$338.5 million due to a change in accounting methodology in conjunction with GASB 72 to present investments at the security level as opposed to NAV, which created an increase in investment receivable balances. Securities lending collateral decreased \$1.5 million or 2.9 percent and securities lending obligations decreased \$1.5 million or 3.1 percent. Although overall demand to borrow securities increased, the CERBTf lending decreased due to a smaller number of securities available for loan.

Additions to the CERBTf net position restricted for OPEB benefits are primarily made up of employer contributions and net investment income. Employer contributions increased \$66.2 million or 3.9 percent primarily due to the rise in participating employers. During Fiscal Year 2015-16, the fund experienced net investment income of \$76.6 million, an increase of \$90.6 million from a net investment loss of \$14.0 million in Fiscal Year 2014-15. The increase resulted from positive investment returns on securities in spite of slowed economic growth. Additionally, the CERBTf recognized a MWRR of 1.6 percent in Fiscal Year 2015-16.

Deductions from the CERBTf net position restricted for OPEB benefits increased \$129.7 million or 11.8 percent, due to additional employer participants in the trust requesting reimbursements. The amounts reported for contributions and reimbursements made directly by employers to providers outside the trust amounted to \$1.1 billion for Fiscal Year 2015-16 compared to \$1.0 billion in Fiscal Year 2014-15. Administrative expenses decreased primarily due to the reversal of the State OPEB obligation – refer to Note 10 in the Notes to the Basic Financial Statements for additional discussion.

### Net Position – Other Post-Employment Benefit Trust Fund (Dollars in Thousands)

	CERBTf		
	2016	2015	Increase/ (Decrease)
<b>ASSETS</b>			
Cash & Cash Equivalents	\$66	\$0	\$66
Receivables	393,498	55,039	338,459
Investments	5,353,358	4,473,719	879,639
Securities Lending Collateral	47,810	49,260	(1,450)
<b>Total Assets</b>	<b>\$5,794,732</b>	<b>\$4,578,018</b>	<b>\$1,216,714</b>
<b>LIABILITIES</b>			
Other Post-Employment Benefits, Investment Settlement & Other	\$624,705	\$36,285	\$588,420
Securities Lending Obligations	47,839	49,389	(1,550)
<b>Total Liabilities</b>	<b>\$672,544</b>	<b>\$85,674</b>	<b>\$586,870</b>
<b>TOTAL NET POSITION RESTRICTED FOR OPEB</b>	<b>\$5,122,188</b>	<b>\$4,492,344</b>	<b>\$629,844</b>

### Changes in Net Position – Other Post-Employment Benefit Trust Fund (Dollars in Thousands)

	CERBTf		
	2016	2015	Increase/ (Decrease)
<b>ADDITIONS</b>			
Employer Contributions	\$1,780,240	\$1,714,060	\$66,180
Net Investment Income/(Loss)	76,638	(13,988)	90,626
Securities Lending & Other Income	4,048	4,932	(884)
<b>Total Additions</b>	<b>\$1,860,926</b>	<b>\$1,705,004</b>	<b>\$155,922</b>
<b>DEDUCTIONS</b>			
Administrative Expenses	\$1,559	\$2,044	(\$485)
Reimbursements	1,229,523	1,099,376	130,147
<b>Total Deductions</b>	<b>\$1,231,082</b>	<b>\$1,101,420</b>	<b>\$129,662</b>
<b>INCREASE IN NET POSITION</b>	<b>\$629,844</b>	<b>\$603,584</b>	<b>\$26,260</b>
<b>NET POSITION RESTRICTED FOR OPEB</b>			
Beginning of Year	\$4,492,344	\$3,888,760	\$603,584
End of Year	<b>\$5,122,188</b>	<b>\$4,492,344</b>	<b>\$629,844</b>

## ENTERPRISE FUNDS

### PUBLIC EMPLOYEES' HEALTH CARE FUND (HCF) AND PUBLIC EMPLOYEES' CONTINGENCY RESERVE FUND (CRF)

Health premiums are collected from employers and members for medical and pharmaceutical services. The HCF covers payments related to fee-for-service self-funding. The CRF generally covers costs associated with fully-insured services and expenses incurred by CalPERS to administer its health care programs. In addition, the CRF establishes a contingency reserve for unanticipated health program-related costs. The HCF and CRF statements and schedules are combined to provide a more comprehensive overview of the health programs administered by CalPERS.

In Fiscal Year 2015-16, CalPERS chose the UnitedHealthcare (UHC) Group Medicare Advantage PPO plan as a single, non-Kaiser Medicare option for HMO subscribers to provide members with more extensive Medicare coverage and reduce costs. The new option allows members to receive care from any provider who accepts Medicare, and members can use it in all 58 California counties in addition to anywhere in the United States and its territories.

The net position of the HCF and CRF increased \$44.9 million or 16.1 percent, due to an increase in premium revenues and investment income.

Revenues related to the HCF and CRF include premiums collected from members and employers, federal subsidies, investment income (non-operating revenues), and administrative fees collected to administer the plans. Premiums collected increased \$147.1 million or 4.1 percent primarily due to an increase in health care rates and the number of subscribers. Net investment income increased \$15.9 million or 125.5 percent due to an increased rate of return compared to Fiscal Year 2014-15. Fees collected for administering the fund are determined as a percentage of total active and retired health premiums. These fees increased by \$0.9 million or 3.6 percent due to an increase in total health premiums in Fiscal Year 2015-16.

Expenses are comprised of claims, investment fees, and costs incurred to oversee the plans. The number of medical and drug-related claims increased, but was offset by an increase in pharmacy rebates. Costs incurred to administer the plans decreased by \$34.0 million or 8.5 percent due to a decrease in third-party administrator fees related to the flex funded program and the reversal of the State OPEB obligation — refer to Note 10 in the Notes to the Basic Financial Statements for additional discussion.



### PUBLIC EMPLOYEES' LONG-TERM CARE FUND (LTCF)

The LTCF helps to provide financial protection to participants from the high cost of eligible covered services caused by chronic illness, injury, or old age. Long-term care products reimburse the cost for covered personal care services (activities of daily living) such as bathing, dressing, toileting, transferring, continence, and eating, which are not typically covered by traditional health insurance or Medicare.

Long-term care participation is voluntary, and benefits are funded by member premiums and the LTCF investment income. The LTCF is continuously appropriated under the exclusive control of the Board for the exclusive benefit of participants in the program.

The LTCF continues to improve financially and administratively as the Board expanded eligibility to all classes of persons covered under Title 26 of the Internal Revenue Code (IRC) Section 7702B(f)(2) "Treatment of Qualified Long-Term Care Insurance."

The long-term care program launched an integrated marketing campaign to promote and grow application activity. The Long-Term Care Group (LTCG) Preferred Provider Network continued to gain additional contracted providers, which may provide discounts on services for participants. The Transition Care Pilot, which was rolled out in Fiscal Year 2014-15 and seeks to reduce hospital readmission rates, was expanded from 400 to 1,100 eligible participants.

Participants who elected to accept the 85 percent rate increase related to the three-year Stabilization and Open Application Period Project were subject to a 36 percent rate increase in 2015, and will be subject to an additional increase in 2016. Participants who did not elect to accept the rate increase for 2016 and elected instead to convert their policies received a decrease in premiums.

Unrestricted net position of the LTCF decreased by \$165.7 million or 40.1 percent, primarily due to an increase in the estimated liability for future policy benefits. Receivables increased \$13.8 million due a change in accounting methodology in conjunction with GASB 72 to present investments at the security level as opposed to NAV, which created an increase in investment receivable balances.

The LTCF revenues to administer the plan include premiums collected from participants and investment income. Participation in the plan decreased by 2.9 percent mainly due to participant deaths, coverage cancellations, non-payment of premiums, and exhaustion of benefits. This offset premium revenue, which increased by \$10.1 million or 3.7 percent due to rate increases. Non-operating revenues are comprised of net appreciation or depreciation in fair value of investments and interest income. The investment income for Fiscal Year 2015-16 was \$226.5 million, an increase of \$263.1 million or 719.8 percent from the prior year due to positive returns on investments.

Total expenses are comprised of claims, changes in estimated future claims liabilities, administrative costs to the program, and investment expenses. The overall increase in total expenses is primarily attributable to higher claims expenses and an increase in estimated liabilities for future policy benefits, partially offset by the reversal of the State OPEB obligation — refer to Note 10 in the Notes to the Basic Financial Statements for additional discussion.

## Management's Discussion & Analysis (Unaudited) (continued)

### Net Position – Enterprise Funds (Dollars in Thousands)

	HCF/CRF			LTCF		
	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)
<b>ASSETS</b>						
Cash & Cash Equivalents	\$699,485	\$917,456	(\$217,971)	\$9,686	\$2,444	\$7,242
Receivables	336,966	202,459	134,507	35,295	21,519	13,776
Investments	445,871	420,753	25,118	4,313,329	4,110,434	202,895
Loan Receivable	—	4,500	(4,500)	—	—	—
<b>Total Assets</b>	<b>\$1,482,322</b>	<b>\$1,545,168</b>	<b>(\$62,846)</b>	<b>\$4,358,310</b>	<b>\$4,134,397</b>	<b>\$223,913</b>
<b>LIABILITIES</b>						
Claims Payable, Unearned Premiums, Estimated Insurance Claims Due, & Due to Carriers	\$999,330	\$1,103,782	(\$104,452)	\$341,891	\$301,759	\$40,132
Due to Employers	23,734	28,706	(4,972)	—	—	—
Other Liabilities	134,959	133,236	1,723	37,039	26,090	10,949
Estimated Liability for Future Policy Benefits	—	—	—	3,731,387	3,392,876	338,511
<b>Total Liabilities</b>	<b>\$1,158,023</b>	<b>\$1,265,724</b>	<b>(\$107,701)</b>	<b>\$4,110,317</b>	<b>\$3,720,725</b>	<b>\$389,592</b>
<b>TOTAL UNRESTRICTED NET POSITION</b>	<b>\$324,299</b>	<b>\$279,444</b>	<b>\$44,855</b>	<b>\$247,993</b>	<b>\$413,672</b>	<b>(\$165,679)</b>

### Changes in Net Position – Enterprise Funds (Dollars in Thousands)

	HCF/CRF			LTCF		
	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)
<b>REVENUES</b>						
Premiums	\$3,741,352	\$3,594,279	\$147,073	\$282,426	\$272,362	\$10,064
Federal Government Subsidies	32,539	36,077	(3,538)	—	—	—
Non-Operating Revenues (Loss)	28,538	12,653	15,885	226,526	(36,550)	263,076
Administrative Fees & Other	27,668	26,712	956	—	—	—
<b>Total Revenues</b>	<b>\$3,830,097</b>	<b>\$3,669,721</b>	<b>\$160,376</b>	<b>\$508,952</b>	<b>\$235,812</b>	<b>\$273,140</b>
<b>EXPENSES</b>						
Claims Expense	\$3,404,222	\$3,411,618	(\$7,396)	\$271,742	\$248,785	\$22,957
Increase in Estimated Liabilities	13,258	20,484	(7,226)	376,284	310,565	65,719
Non-Operating Expenses	77	83	(6)	1,606	1,734	(128)
Administrative Expenses	367,685	401,650	(33,965)	24,999	24,304	695
<b>Total Expenses</b>	<b>\$3,785,242</b>	<b>\$3,833,835</b>	<b>(\$48,593)</b>	<b>\$674,631</b>	<b>\$585,388</b>	<b>\$89,243</b>
<b>INCREASE (DECREASE) IN UNRESTRICTED NET POSITION</b>	<b>\$44,855</b>	<b>(\$164,114)</b>	<b>\$208,969</b>	<b>(\$165,679)</b>	<b>(\$349,576)</b>	<b>\$183,897</b>
<b>UNRESTRICTED NET POSITION</b>						
Beginning of Year	\$279,444	\$443,558	(\$164,114)	\$413,672	\$763,248	(\$349,576)
End of Year	\$324,299	\$279,444	\$44,855	\$247,993	\$413,672	(\$165,679)

## REQUESTS FOR INFORMATION

This Financial Report is designed to provide a general overview of CalPERS' finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the CalPERS Financial Office, P.O. Box 942703, Sacramento, CA, 94229-2703, or by calling 888 CalPERS (or 888-225-7377).

Respectfully Submitted,

Cheryl Eason, MBA, CPA (Can), CGA, RPA, DMC  
*Chief Financial Officer*



# FINANCIAL SECTION

## Basic Financial Statements

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# Basic Financial Statements

## STATEMENT OF FIDUCIARY NET POSITION – FIDUCIARY FUNDS

As of June 30, 2016, with Comparative Totals as of June 30, 2015 (Dollars in Thousands)

	Pension Trust Funds					
	PERF A	PERF B	PERF C			
	Agent	Schools Cost-Sharing	Public Agency Cost-Sharing	LRF	JRF	JRF II
<b>ASSETS</b>						
<b>Cash &amp; Cash Equivalents</b>	<b>\$810,557</b>	<b>\$208,039</b>	<b>\$91,896</b>	<b>\$75</b>	<b>\$0</b>	<b>\$1,369</b>
<b>Receivables</b>						
Members	\$647,260	\$104,271	\$55,747	\$69	\$1,201	\$701
Employers	837,523	163,258	28,556	56	1,166	6,234
Investment Sales & Other	10,528,906	2,702,371	1,193,698	12,140	—	103,774
Interest & Dividends	577,833	148,308	65,511	513	38	4,475
Due from Other Funds	5,491	1,410	623	55	141	113
Note Receivable	717,919	184,263	81,393	—	—	—
Other Program	51,991	13,344	5,894	5	51	21
<b>Total Receivables</b>	<b>\$13,366,923</b>	<b>\$3,317,225</b>	<b>\$1,431,422</b>	<b>\$12,838</b>	<b>\$2,597</b>	<b>\$115,318</b>
<b>Investments, at Fair Value</b>						
Short-Term Investments	\$15,821,542	\$4,060,551	\$1,796,326	\$8,495	\$37,864	\$84,136
Global Equity Securities	103,318,270	26,516,322	11,730,418	37,105	—	654,415
Global Debt Securities	59,378,713	15,239,368	6,741,664	79,362	—	473,035
Real Assets	22,789,296	5,848,804	2,587,422	—	—	—
Private Equity	19,087,481	4,898,744	2,167,130	—	—	—
<b>Total Investments</b>	<b>\$220,395,302</b>	<b>\$56,563,789</b>	<b>\$25,022,960</b>	<b>\$124,962</b>	<b>\$37,864</b>	<b>\$1,211,586</b>
Securities Lending Collateral	\$9,279,403	\$2,381,531	\$1,053,553	\$3,514	\$0	\$53,795
Capital Assets, Net & Other Assets	512,207	131,464	58,070	—	—	—
<b>TOTAL ASSETS</b>	<b>\$244,364,392</b>	<b>\$62,602,048</b>	<b>\$27,657,901</b>	<b>\$141,389</b>	<b>\$40,461</b>	<b>\$1,382,068</b>
<b>LIABILITIES</b>						
Retirement & Other Benefits	\$1,266,808	\$290,081	\$125,858	\$589	\$0	\$0
Investment Purchases & Other	15,626,234	4,010,662	1,771,600	18,169	—	155,161
Due to Members & Employers	5,353	—	—	12	52	4
Securities Lending Obligations	9,243,627	2,372,489	1,047,982	3,517	—	53,828
Due to Other Funds	5,795	1,488	657	42	111	121
Management & Third-Party Administrator Fees	—	—	—	—	—	—
Other Program	131,070	14,363	6,272	10	504	1
<b>TOTAL LIABILITIES</b>	<b>\$26,278,887</b>	<b>\$6,689,083</b>	<b>\$2,952,369</b>	<b>\$22,339</b>	<b>\$667</b>	<b>\$209,115</b>
<b>NET POSITION – RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS</b>	<b>\$218,085,505</b>	<b>\$55,912,965</b>	<b>\$24,705,532</b>	<b>\$119,050</b>	<b>\$39,794</b>	<b>\$1,172,953</b>

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

## Basic Financial Statements (continued)

Pension Trust Funds			Other Post-Employment Benefit Trust Fund	Agency Fund	Totals	
SPOFF	DCF	SCPF	CERBTF	RBF	2016	2015
\$0	\$0	\$0	\$66	\$1	\$1,112,003	\$873,752
\$0	\$3,343	\$895	\$0	\$10	\$813,497	\$878,471
—	—	—	—	266	1,037,059	1,068,567
—	—	—	381,835	—	14,922,724	295,177
—	2	3	11,339	17	808,039	227,307
—	—	—	324	—	8,157	8,723
—	—	—	—	—	983,575	—
—	11,241	—	—	—	82,547	81,483
\$0	\$14,586	\$898	\$393,498	\$293	\$18,655,598	\$2,559,728
\$0	\$217,596	\$32,956	\$429,518	\$10,148	\$22,499,132	\$10,012,159
—	761,144	45,435	3,071,011	—	146,134,120	157,628,784
—	298,856	46,118	1,852,829	—	84,109,945	80,519,047
—	—	—	—	—	31,225,522	31,185,446
—	—	—	—	—	26,153,355	28,808,840
\$0	\$1,277,596	\$124,509	\$5,353,358	\$10,148	\$310,122,074	\$308,154,276
\$0	\$0	\$0	\$47,810	\$0	\$12,819,606	\$10,859,281
—	—	—	—	—	701,741	706,657
\$0	\$1,292,182	\$125,407	\$5,794,732	\$10,442	\$343,411,022	\$323,153,694
\$0	\$0	\$0	\$52,351	\$0	\$1,735,687	\$1,639,831
—	—	—	571,852	—	22,153,678	326,303
—	319	929	—	10,307	16,976	17,333
—	—	—	47,839	—	12,769,282	10,854,533
—	459	46	232	1	8,952	8,791
—	993	77	270	—	1,340	1,376
—	4	1	—	134	152,359	322,846
\$0	\$1,775	\$1,053	\$672,544	\$10,442	\$36,838,274	\$13,171,013
\$0	\$1,290,407	\$124,354	\$5,122,188	\$0	\$306,572,748	\$309,982,681

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION – FIDUCIARY FUNDS

For the Fiscal Year Ended June 30, 2016, with Comparative Totals for the Fiscal Year Ended June 30, 2015 (Dollars in Thousands)

	Pension Trust Funds					
	PERF A	PERF B	PERF C			
	Agent	Schools Cost-Sharing	Public Agency Cost-Sharing	LRF	JRF	JRF II
<b>ADDITIONS</b>						
<b>Retirement and OPEB Contributions</b>						
Members	\$2,864,486	\$851,133	\$300,135	\$97	\$3,559	\$24,598
Employers	8,574,866	1,434,632	882,991	549	5,334	65,839
State of California General Fund	—	—	—	—	186,953	—
Employer Contributions Direct – OPEB	—	—	—	—	—	—
Employer Contributions Outside of Trust – OPEB	—	—	—	—	—	—
<b>Total Retirement and OPEB Contribution</b>	<b>\$11,439,352</b>	<b>\$2,285,765</b>	<b>\$1,183,126</b>	<b>\$646</b>	<b>\$195,846</b>	<b>\$90,437</b>
<b>Investment Income</b>						
Net Appreciation in Fair Value of Investments	\$531,235	\$145,626	\$59,966	\$4,562	\$0	\$20,595
Interest & Amortization	119,433	30,654	13,540	1	195	40
Dividends	918,665	235,787	104,152	—	—	—
Other Investment Income	51,344	13,177	5,821	—	—	—
Less Investment Expenses:						
Management & Performance Fees	(453,249)	(116,332)	(51,386)	—	—	—
Other	(152,905)	(39,245)	(17,335)	(52)	(1)	(422)
<b>Net Investment Income</b>	<b>\$1,014,523</b>	<b>\$269,667</b>	<b>\$114,758</b>	<b>\$4,511</b>	<b>\$194</b>	<b>\$20,213</b>
Securities Lending Income	\$134,708	\$34,575	\$15,272	\$45	\$0	\$785
Securities Lending Expense	(35,153)	(9,022)	(3,986)	(11)	—	(190)
<b>Net Securities Lending</b>	<b>\$99,555</b>	<b>\$25,553</b>	<b>\$11,286</b>	<b>\$34</b>	<b>\$0</b>	<b>\$595</b>
Other Income	\$9,807	\$2,294	\$999	\$0	\$2,568	\$2
Plan to Plan Resource Movement	13,563	44	36,196	—	—	—
<b>TOTAL ADDITIONS</b>	<b>\$12,576,800</b>	<b>\$2,583,323</b>	<b>\$1,346,365</b>	<b>\$5,191</b>	<b>\$198,608</b>	<b>\$111,247</b>
<b>DEDUCTIONS</b>						
Retirement, Death, & Survivor Benefits	\$15,136,240	\$3,457,558	\$1,500,135	\$7,028	\$199,271	\$21,549
Refund of Contributions	130,377	89,278	19,166	379	78	155
Plan to Plan Resource Movement	36,194	34	13,575	—	—	—
Administrative Expenses	134,630	34,554	15,263	203	642	732
Participant Withdrawals	—	—	—	—	—	—
OPEB Reimbursements Direct	—	—	—	—	—	—
OPEB Reimbursements – Outside Trust	—	—	—	—	—	—
<b>TOTAL DEDUCTIONS</b>	<b>\$15,437,441</b>	<b>\$3,581,424</b>	<b>\$1,548,139</b>	<b>\$7,610</b>	<b>\$199,991</b>	<b>\$22,436</b>
Interfund Transfer In/(Out)	\$0	\$0	\$0	\$0	\$0	\$0
<b>INCREASE (DECREASE) IN NET POSITION</b>	<b>(\$2,860,641)</b>	<b>(\$998,101)</b>	<b>(\$201,774)</b>	<b>(\$2,419)</b>	<b>(\$1,383)</b>	<b>\$88,811</b>
<b>NET POSITION-RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS</b>						
Beginning of Year	\$220,946,146	\$56,911,066	\$24,907,306	\$121,469	\$41,177	\$1,084,142
End of Year	<b>\$218,085,505</b>	<b>\$55,912,965</b>	<b>\$24,705,532</b>	<b>\$119,050</b>	<b>\$39,794</b>	<b>\$1,172,953</b>

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

## Basic Financial Statements (continued)

Pension Trust Funds			Other Post-Employment Benefit Trust Fund	Totals	
SPOFF	DCF	SCPF	CERBTF	2016	2015
\$0	\$106,072	\$269	\$0	\$4,150,349	\$3,984,720
—	909	—	—	10,965,120	10,152,988
—	—	—	—	186,953	175,193
—	—	—	633,445	633,445	687,461
—	—	—	1,146,795	1,146,795	1,026,599
<b>\$0</b>	<b>\$106,981</b>	<b>\$269</b>	<b>\$1,780,240</b>	<b>\$17,082,662</b>	<b>\$16,026,961</b>
\$0	\$7,165	\$431	\$78,149	\$847,729	\$6,431,399
—	824	25	75	164,787	(91,475)
—	—	—	—	1,258,604	1,175,728
—	14	3	1	70,360	115,361
—	(418)	(39)	(891)	(622,315)	(832,901)
—	(44)	(4)	(696)	(210,704)	(209,786)
<b>\$0</b>	<b>\$7,541</b>	<b>\$416</b>	<b>\$76,638</b>	<b>\$1,508,461</b>	<b>\$6,588,326</b>
\$0	\$0	\$0	\$211	\$185,596	\$145,787
—	—	—	(75)	(48,437)	(33,807)
<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$136</b>	<b>\$137,159</b>	<b>\$111,980</b>
\$0	\$5,354	\$668	\$3,912	\$25,604	\$27,051
—	—	—	—	49,803	469,688
<b>\$0</b>	<b>\$119,876</b>	<b>\$1,353</b>	<b>\$1,860,926</b>	<b>\$18,803,689</b>	<b>\$23,224,006</b>
\$0	\$0	\$0	\$0	\$20,321,781	\$19,145,443
—	—	—	—	239,433	242,466
—	—	—	—	49,803	469,688
—	4,677	330	1,559	192,590	351,734
—	164,362	16,130	—	180,492	614,318
—	—	—	82,728	82,728	72,777
—	—	—	1,146,795	1,146,795	1,026,599
<b>\$0</b>	<b>\$169,039</b>	<b>\$16,460</b>	<b>\$1,231,082</b>	<b>\$22,213,622</b>	<b>\$21,923,025</b>
(\$5,582)	\$0	\$5,582	\$0	\$0	\$0
<b>(\$5,582)</b>	<b>(\$49,163)</b>	<b>(\$9,525)</b>	<b>\$629,844</b>	<b>(\$3,409,933)</b>	<b>\$1,300,981</b>
<b>\$5,582</b>	<b>\$1,339,570</b>	<b>\$133,879</b>	<b>\$4,492,344</b>	<b>\$309,982,681</b>	<b>\$308,681,700</b>
<b>\$0</b>	<b>\$1,290,407</b>	<b>\$124,354</b>	<b>\$5,122,188</b>	<b>\$306,572,748</b>	<b>\$309,982,681</b>

## STATEMENT OF NET POSITION – PROPRIETARY FUNDS

As of June 30, 2016, with Comparative Totals as of June 30, 2015 (Dollars in Thousands)

	Proprietary Funds		Totals	
	HCF/CRF	LTCF	2016	2015
<b>ASSETS</b>				
<b>Current Assets</b>				
Cash & Cash Equivalents	\$36	\$4,670	\$4,706	\$2,443
Short-Term Investments	699,449	5,016	704,465	917,457
<b>Receivables</b>				
Members & Employers	\$20,638	\$376	\$21,014	\$25,745
Health Carriers & Pharmacy Benefit Managers	303,585	—	303,585	161,115
Interest & Dividends	1,038	857	1,895	653
Due from Other Funds	7,192	114	7,306	7,030
Investment Sales and Other	—	33,948	33,948	20,421
Short-Term Loan	4,500	—	4,500	9,000
Other Receivables	13	—	13	14
<b>Total Receivables</b>	<b>\$336,966</b>	<b>\$35,295</b>	<b>\$372,261</b>	<b>\$223,978</b>
<b>Subtotal Current Assets</b>	<b>\$1,036,451</b>	<b>\$44,981</b>	<b>\$1,081,432</b>	<b>\$1,143,878</b>
<b>Noncurrent Assets</b>				
<b>Investments, at Fair Value</b>				
Global Equity Securities	\$0	\$1,363,437	\$1,363,437	\$1,363,603
Global Debt Securities	445,871	2,949,892	3,395,763	3,167,584
<b>Total Investments</b>	<b>\$445,871</b>	<b>\$4,313,329</b>	<b>\$4,759,200</b>	<b>\$4,531,187</b>
Long-Term Loan Receivable	\$0	\$0	\$0	\$4,500
<b>Subtotal Noncurrent Assets</b>	<b>\$445,871</b>	<b>\$4,313,329</b>	<b>\$4,759,200</b>	<b>\$4,535,687</b>
<b>TOTAL ASSETS</b>	<b>\$1,482,322</b>	<b>\$4,358,310</b>	<b>\$5,840,632</b>	<b>\$5,679,565</b>
<b>LIABILITIES</b>				
<b>Current Liabilities</b>				
Claims Payable	\$305,896	\$21,718	\$327,614	\$298,812
Unearned Premiums	95,074	11,650	106,724	99,796
Due to Employers	23,734	—	23,734	28,706
Estimated Insurance Claims Due	423,421	308,523	731,944	680,913
Due to Carriers	174,939	—	174,939	326,020
Due to Other Funds	5,458	1,054	6,512	6,961
Investment Purchases & Other	—	32,434	32,434	20,421
Management & Third-Party Administrator Fees	50,622	366	50,988	49,393
Other	78,879	3,185	82,064	82,551
<b>Total Current Liabilities</b>	<b>\$1,158,023</b>	<b>\$378,930</b>	<b>\$1,536,953</b>	<b>\$1,593,573</b>
<b>Long-Term Liabilities</b>				
Estimated Liability for Future Policy Benefits	\$0	\$3,731,387	\$3,731,387	\$3,392,876
<b>Total Long-Term Liabilities</b>	<b>\$0</b>	<b>\$3,731,387</b>	<b>\$3,731,387</b>	<b>\$3,392,876</b>
<b>TOTAL LIABILITIES</b>	<b>\$1,158,023</b>	<b>\$4,110,317</b>	<b>\$5,268,340</b>	<b>\$4,986,449</b>
<b>TOTAL UNRESTRICTED NET POSITION</b>	<b>\$324,299</b>	<b>\$247,993</b>	<b>\$572,292</b>	<b>\$693,116</b>

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

## STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION – PROPRIETARY FUNDS

For the Fiscal Year Ended June 30, 2016, with Comparative Totals for the Fiscal Year Ended June 30, 2015 (Dollars in Thousands)

	Proprietary Funds		Totals	
	HCF/CRF	LTCF	2016	2015
<b>Operating Revenues</b>				
Premiums	\$3,741,352	\$282,426	\$4,023,778	\$3,866,641
Federal Government Subsidies	32,539	—	32,539	36,077
Administrative Fees Earned	27,598	—	27,598	26,712
Other	70	—	70	—
<b>Total Operating Revenues</b>	<b>\$3,801,559</b>	<b>\$282,426</b>	<b>\$4,083,985</b>	<b>\$3,929,430</b>
<b>Operating Expenses</b>				
Claims Expense	\$3,404,222	\$271,742	\$3,675,964	\$3,660,403
Increase in Estimated Liabilities	13,258	376,284	389,542	331,049
Administrative Expenses	367,685	24,999	392,684	425,954
<b>Total Operating Expenses</b>	<b>\$3,785,165</b>	<b>\$673,025</b>	<b>\$4,458,190</b>	<b>\$4,417,406</b>
<b>OPERATING INCOME (LOSS)</b>	<b>\$16,394</b>	<b>(\$390,599)</b>	<b>(\$374,205)</b>	<b>(\$487,976)</b>
<b>Non-Operating Revenues</b>				
Net Appreciation/(Depreciation) in Fair Value of Investments	\$25,163	\$225,739	\$250,902	(\$33,807)
Interest, Dividends, & Other Investment Income	3,375	787	4,162	9,910
<b>Total Non-Operating Revenues (Loss)</b>	<b>\$28,538</b>	<b>\$226,526</b>	<b>\$255,064</b>	<b>(\$23,897)</b>
<b>Non-Operating Expenses</b>				
Management Fees	\$62	\$1,463	\$1,525	\$1,578
Other Investment Expenses	15	143	158	239
<b>Total Non-Operating Expenses</b>	<b>\$77</b>	<b>\$1,606</b>	<b>\$1,683</b>	<b>\$1,817</b>
<b>NON-OPERATING INCOME (LOSS)</b>	<b>\$28,461</b>	<b>\$224,920</b>	<b>\$253,381</b>	<b>(\$25,714)</b>
<b>CHANGE IN UNRESTRICTED NET POSITION</b>	<b>\$44,855</b>	<b>(\$165,679)</b>	<b>(\$120,824)</b>	<b>(\$513,690)</b>
<b>TOTAL UNRESTRICTED NET POSITION</b>				
<b>Beginning of Year</b>	<b>\$279,444</b>	<b>\$413,672</b>	<b>\$693,116</b>	<b>\$1,206,806</b>
<b>End of Year</b>	<b>\$324,299</b>	<b>\$247,993</b>	<b>\$572,292</b>	<b>\$693,116</b>

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



## STATEMENT OF CASH FLOWS – PROPRIETARY FUNDS

For the Fiscal Year Ended June 30, 2016, with Comparative Totals for the Fiscal Year Ended June 30, 2015 (Dollars in Thousands)

	Proprietary Funds		Totals	
	HCF/CRF	LTCF	2016	2015
<b>Cash Flows From Operating Activities</b>				
Premiums Collected	\$3,610,165	\$282,802	\$3,892,967	\$3,901,965
Federal Government Subsidies	32,539	—	32,539	36,077
Claims Paid	(3,377,365)	(269,797)	(3,647,162)	(3,625,384)
Other (Payments) Receipts, Net	(486,269)	(25,027)	(511,296)	(223,769)
<b>Net Cash Provided by (Used for) Operating Activities</b>	<b>(\$220,930)</b>	<b>(\$12,022)</b>	<b>(\$232,952)</b>	<b>\$88,889</b>
<b>Cash Flows From Investing Activities</b>				
Net Sales (Purchases) of Investments	\$45	\$21,330	\$21,375	(\$6,545)
Net Change in Short-Term Investments	218,006	(5,014)	212,992	(87,849)
Interest, Amortization & Dividends	2,804	(599)	2,205	1,868
Other Investment (Payments) Receipts, Net	110	(1,467)	(1,357)	5,727
<b>Net Cash Provided by (Used for) Investing Activities</b>	<b>\$220,965</b>	<b>\$14,250</b>	<b>\$235,215</b>	<b>(\$86,799)</b>
<b>NET INCREASE IN CASH AND CASH EQUIVALENTS</b>	<b>\$35</b>	<b>\$2,228</b>	<b>\$2,263</b>	<b>\$2,090</b>
<b>Cash &amp; Cash Equivalents, Beginning of Year</b>	<b>\$1</b>	<b>\$2,442</b>	<b>\$2,443</b>	<b>\$353</b>
<b>Cash &amp; Cash Equivalents, End of Year</b>	<b>\$36</b>	<b>\$4,670</b>	<b>\$4,706</b>	<b>\$2,443</b>
<b>Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used for) Operating Activities</b>				
Operating Income (Loss)	\$16,394	(\$390,599)	(\$374,205)	(\$487,976)
Changes in Assets and Liabilities:				
Receivables:				
Members & Employers	4,769	(38)	4,731	22,932
Health Carriers & Pharmacy Benefit Managers	(142,470)	—	(142,470)	(53,549)
Due from Other Funds	(922)	646	(276)	4,651
Loans	4,500	—	4,500	—
Other	4,501	—	4,501	9,001
Claims Payable	26,857	1,945	28,802	35,018
Unearned Premiums	6,514	414	6,928	65,941
Due to Employers	(4,972)	—	(4,972)	(34,793)
Estimated Insurance Claims Due	13,258	37,773	51,031	45,503
Estimated Liability for Future Policy Benefits	—	338,511	338,511	285,547
Due to Carriers	(151,081)	—	(151,081)	143,051
Due to Other Funds	110	(558)	(448)	1,257
Management & Third-Party Administrator Fees Payable	1,983	—	1,983	48,847
Other	(371)	(116)	(487)	3,459
<b>Net Cash Provided by (Used for) Operating Activities</b>	<b>(\$220,930)</b>	<b>(\$12,022)</b>	<b>(\$232,952)</b>	<b>\$88,889</b>
<b>Noncash Investing, Capital &amp; Financing Activities</b>				
Noncash Change in Fair Value of Investments	\$25,157	\$203,667	\$228,824	(\$73,352)

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

# Notes to the Basic Financial Statements

## 1. DESCRIPTION OF CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM ORGANIZATION

The California Public Employees' Retirement System (CalPERS or the System) was established by legislation in 1931 for the purpose of providing a secure retirement to employees of the State of California (State). In 1939, new legislation allowed public agency and classified school employees to join CalPERS for retirement benefits. CalPERS began administering health benefits for state employees in 1962, and five years later, offered health benefits to public agencies on a contract basis.

CalPERS is governed by the Board of Administration (the Board), which consists of 13 members: two elected by CalPERS members, one elected by active state members, one elected by active CalPERS school members, one elected by active CalPERS public agency members, one elected by retired members of CalPERS, two appointed by the Governor, one public representative appointed jointly by the Speaker of the Assembly and Senate Rules Committee, and four ex officio members: State Treasurer, State Controller, Director of California Department of Human Resources, and Designee of the State Personnel Board. The Board is responsible for the management and control of CalPERS, including the exclusive control of the administration and investment of the System.

CalPERS acts as the common investment and administrative agency for the following plans:

Plan Name	Type of Plan
<b>Defined Benefit Pension Plans:</b>	
Public Employees' Retirement Fund A	Agent multiple-employer
Public Employees' Retirement Fund B	Cost-sharing multiple-employer
Public Employees' Retirement Fund C	Cost-sharing multiple-employer
Legislators' Retirement Fund	Single-employer
Judges' Retirement Fund	Single-employer
Judges' Retirement Fund II	Single-employer
<b>Defined Contribution Plans:</b>	
Public Employees' Deferred Compensation Fund	Multiple-employer (457 & 401K plan)
Supplemental Contributions Program Fund	Single-employer
<b>Defined Benefit Other Post-Employment Benefit Plan:</b>	
California Employers' Retiree Benefit Trust Fund	Agent multiple-employer

## DEFINED BENEFIT PENSION PLANS

Below is a summary description of each defined benefit pension plan administered by CalPERS:

*Public Employees' Retirement Fund (PERF)* – The PERF was established in 1932 and provides retirement, death and disability benefits to its member employers, which include the State of California, non-teaching, non-certified employees in schools, and various other public agencies. The benefit provisions for the state and school employees are established by statute. The benefits for the public agencies are established by contract with the System, in accordance with the provisions of the Public Employees' Retirement Law.

For accounting purposes only, the PERF is comprised of and reported as three separate entities. PERF A is comprised of agent multiple-employer plans, which includes the State of California and most public agencies' rate plans with more than 100 active members. PERF B is a cost-sharing multiple-employer plan of school employers consisting of non-teaching and non-certified employees. PERF C is a cost-sharing multiple-employer plan of public agencies with generally less than 100 active members.

As of June 30, 2016, the PERF had the following participating employers:

### Affiliated Employers for PERF

PERF Participants	2016
PERF A	
State	1
Public Agencies <sup>1</sup>	312
<b>Total</b>	<b>313</b>
PERF B	
School Districts and Charter Schools	1,439
PERF C	
Public Agencies <sup>1</sup>	1,312
<b>Total Employers</b>	<b>3,064</b>

<sup>1</sup>) Each public agency employer may be counted in both PERF A and PERF C due to active contracts under both plans.

*Legislators' Retirement Fund (LRF)* – The LRF was established in 1947 and provides retirement, death, and disability benefits to members employed by the State of California. LRF members consist of State Legislators, Constitutional Officers, and Legislative Statutory Officers. The benefits for the LRF are established in accordance with the provisions of the Legislators' Retirement Law. In November 1990, Article IV, section 4.5 was added to the State Constitution, pursuant to the adoption of Proposition 140. This section effectively prohibited future legislators from earning state retirement benefits for service in the Legislature on or after November 7, 1990, though it recognized vested pension benefits that had accrued before that date. Due to the effects

## Notes to the Basic Financial Statements (continued)

of Proposition 140, there is one legislator eligible to participate in the Legislators' Retirement Fund. The only active members in the fund are Constitutional Officers (including the Insurance Commissioner and members of the Board of Equalization) and Legislative Statutory Officers. The Public Employees' Pension Reform Act of 2013 (PEPRA) closed the Legislators' Retirement System to new participants effective January 1, 2013.

*Judges' Retirement Fund (JRF)* – The JRF was established in 1937 and provides retirement, death, and disability benefits to members employed by the State of California. JRF members consist of judges working in the California Supreme Court, the Courts of Appeal, and the Superior Courts who were appointed or elected before November 9, 1994. The benefits for the JRF are established in accordance with the provisions of the Judges' Retirement Law.

The JRF is funded on a "pay-as-you-go" basis, where short-term investments, contributions received during the year, and a State General Fund augmentation are used to provide funding for benefit payments. This funding method is generally more expensive in the long term, as the plan does not have investment returns generated by a funded plan. Without the State General Fund augmentation, the JRF will not be able to pay the accumulated benefit payments due in Fiscal Year 2016-17.

*Judges' Retirement Fund II (JRF II)* – The JRF II was established in 1994 and provides retirement, death, and disability benefits to members employed by the State of California. JRF II's members consist of judges working in the California Supreme Court, the Courts of Appeal, and the Superior Courts who were appointed or elected on or after November 9, 1994. The benefits for the JRF II are established in accordance with the provisions of the Judges' Retirement System II Law.

### Plan Membership

All employees in a covered class of employment who work on a half-time basis or more are eligible to participate in the retirement plans. The underlying data included in the following table reflects current categorizations of members and beneficiaries by rate plan.

As of June 30, 2016, membership in the defined benefit pension plans consisted of the following:

Benefit Recipients and Members in the PERF A, PERF B, PERF C, LRF, JRF, and JRF II

Plan	Retirees	Survivors & Beneficiaries	Members		Total
			Active	Inactive or Deferred	
PERF A Agent	347,112	57,685	469,783	173,280	1,047,860
PERF B Schools Cost-Sharing	178,006	28,558	355,521	143,861	705,946
PERF C Public Agency Cost-Sharing	32,727	4,557	47,722	20,742	105,748
<b>Total PERF</b>	<b>557,845</b>	<b>90,800</b>	<b>873,026</b>	<b>337,883</b>	<b>1,859,554</b>
LRF	132	106	9	11	258
JRF	1,367	559	218	7	2,151
JRF II	113	21	1,491	—	1,625
<b>Total</b>	<b>559,457</b>	<b>91,486</b>	<b>874,744</b>	<b>337,901</b>	<b>1,863,588</b>

### Plan Benefits

The benefits for the defined benefit plans are based on members' years of service, age, final compensation, and benefit formula. Benefits are provided for disability, death, and survivors of eligible members or beneficiaries. Members become fully vested in their retirement benefits earned to date after five years (10 years for state Second Tier members) of credited service. All non-state Second Tier members are eligible to receive cost-of-living (COLA) adjustments up to a maximum of 2 percent compounded annually (up to 5 percent maximum as a contract option for retired members of local agencies). State Second Tier members are eligible for a COLA of 3 percent fixed compounded annually.

## Contributions

The benefits for the defined benefit pension plans are funded by contributions from members and employers, and earnings from investments. Member and employer contributions are a percentage of applicable member compensation. Member contribution rates are defined by law and depend on the respective employer's benefit formulas. In some circumstances, contributions are made by the employer to satisfy member contribution requirements. Employer-paid member contributions are reported as member contributions in the Statement of Changes in Fiduciary Net Position. Employer contribution rates are determined by periodic actuarial valuations or by state statute. Actuarial valuations are based on the benefit formulas and employee groups of each employer. The cost of administering CalPERS is financed through contributions and investment earnings.

The required contribution rates of most active plan members are based on a percentage of salary in excess of a base compensation amount ranging from zero dollars to \$863 monthly.

PEPRA, which took effect in January 2013, changes the way CalPERS retirement and health benefits are applied, and places compensation limits on members with the most impact felt by new CalPERS members. Under PEPRA, new members include:

- (1) Members first joining on or after January 1, 2013 with no prior membership in another California public retirement system.
- (2) Members first joining before January 1, 2013 who are hired by a different CalPERS employer after January 1, 2013 and have a break in service greater than 6 months.
- (3) Members first joining on or after January 1, 2013, who are ineligible for reciprocity with another California public retirement system.

All members that do not fall into the definitions above are considered Classic members and will retain existing benefit levels for future service with the same employer.

Required contribution rates for active plan members and employers as a percentage of payroll for the fiscal year ended June 30, 2016, were as follows:

## Required Contribution Rates

	Employee Contribution Rates		Employer - Required Contribution Rates
	Classic	PEPRA	
<b>PERF A – Agent</b>			
State:			
Miscellaneous – First Tier	5% to 11%	6% to 11%	25.07%
Miscellaneous – Second Tier	3.75%	3.75%	24.39%
Industrial	5% to 11%	6% to 11%	17.78%
Safety	6% to 11%	9% to 11%	18.08%
Peace Officers and Firefighters	8% to 13%	11% to 13%	37.34%
California Highway Patrol	11.50%	11.50%	45.41%
Public Agency:			
Miscellaneous	5% to 8%	5.25% to 8.25%	7.20% to 43.60%
Safety	7% to 9%	8.25% to 13.75%	20.61% to 60.21%
<b>PERF B – Schools Cost-Sharing</b>			
Classified School	7.00%	6.00%	11.85%
<b>PERF C – Public Agency Cost-Sharing</b>			
Public Agency (Pooled):			
Miscellaneous	2% to 8%	4% to 7.25%	3.8% to 88.65%
Safety	7% to 10%	9.5% to 15.25%	9.07% to 415.16%
<b>LRF</b>	4% or 8%	N/A	42.27% <sup>1</sup>
<b>JRF</b>	8.00%	N/A	8.00% <sup>2</sup>
<b>JRF II</b>	8.00%	15.25%	23.37% <sup>1</sup>

(1) This is the minimum PEPRA employer contribution rate, which is the greater of the actuarially determined employer contribution or the employer normal cost.

(2) The employee and employer contribution rates for JRF are set by state statute and are equal to 8% of payroll. JRF is currently funded using a pay-as-you-go approach as contributions made by both the State and members are not adequate to meet current benefit payouts.

**DEFINED CONTRIBUTION PLANS**

CalPERS currently administers a defined contribution plan and a deferred compensation plan to certain members. CalPERS previously administered a second defined contribution plan prior to its official closure in Fiscal Year 2015-16. These funds are further described below:

*State Peace Officers' and Firefighters' Defined Contribution Plan Fund (SPOFF)* – Legislation terminated the State Peace Officers' and Firefighters' Defined Contribution Plan, effective June 1, 2014, upon obtaining the appropriate approvals from the Internal Revenue Service (IRS) in September 2014. The termination required distributions of participant money in the State Peace Officers' and Firefighters' Defined Contribution Plan in accordance with state and federal law, and designated the Supplemental Contributions Program Fund (SCPF) as the default plan for participants who did not make an affirmative election to take a distribution. As of June 30, 2015, some asset balances remained with the SPOFF as reserves held for possible future legacy expenses, excess employer contributions to be discharged, and interest earned. These asset balances were transferred to the SCPF in Fiscal Year 2015-16, and the SPOFF was officially closed.

*Public Employees' Deferred Compensation Fund (DCF)* – The DCF was established in 1990 by Government Code sections 21670 through 21685, granting the maximum tax-preferred retirement saving opportunities under Title 26 of the United States Code. The DCF is available to public agencies and school districts in the State of California on a voluntary basis. Participants may contribute up to the limit established under the Internal Revenue Code (IRC), and may access their funds upon retirement, separation from employment, or other distributable events as allowed under the IRC.

*Supplemental Contributions Program Fund (SCPF)* – The SCPF was established on January 1, 2000, by Chapter 307 of the 1999 Statutes. SCPF is qualified under section 401(a) of Title 26 of the United States Code. The SCPF is currently available to State of California employees who are members of CalPERS, and participation is voluntary. Participant contributions are made on an after-tax basis and are separate from defined benefit contributions. Participants may contribute to a deferred compensation plan in conjunction with SCPF, subject to IRC section 415(c) limits. Distributions are allowed only at retirement or permanent separation from employment.

As of June 30, 2016, membership in the defined contribution plans consisted of the following:

**Members in DCF and SCPF**

Plan	Employers	Members
DCF	758	27,210
SCPF	1	8,147

**OTHER ADMINISTRATIVE ACTIVITIES**

CalPERS administers other activities as follows:

*The California Employers' Retiree Benefit Trust Fund (CERBTF)* – The CERBTF was established by Chapter 331 of the 1988 California Statutes, and employers elect to participate in the CERBTF to save funds to pay future retiree and survivors health care and other post-employment benefits. Currently, the CERBTF has 493 participating employers. The CERBTF is more fully described in Note 9 to the financial statements.

*Old Age & Survivors' Insurance Revolving Fund (OASI)* – The OASI was established to consolidate the collection and payment from California public agencies for employee and employer contributions under the provisions of the Federal Social Security regulations.

Federal legislation was enacted on October 21, 1986, which required direct remittance of Social Security contributions by individual public agencies to the IRS, and eliminated the intermediary collection and remittance of such contributions by individual public agencies to CalPERS. As such, effective January 1, 1987, the OASI stopped receiving contributions from public agencies. Subsequently, CalPERS, the Social Security Administration, and participating local agencies reached agreement on the proper amount of contributions, payments, and refunds. Since then, the OASI fund has been used to reimburse the PERF for OASI contract management and related services, as provided in Government Code section 22601. The residual balances are now being reported in the PERF A for accounting and financial reporting purposes.

*Public Employees' Health Care Fund (HCF)* – The HCF was established under the Public Employees' Medical and Hospital Care Act (PEMHCA) as of July 1, 1988, providing health insurance coverage to CalPERS members through a pooled risk plan. The HCF, which is presented with the Contingency Reserve Fund (CRF) for financial reporting purposes, is more fully described in Note 11 to the financial statements.

*Public Employees' Contingency Reserve Fund (CRF)* – The CRF was established in 1962 with the passage of PEMHCA, and provides a contingency reserve for items such as future rates or future benefits. The CRF, which is presented with the HCF for financial reporting purposes, is more fully described in Note 12 to the financial statements.



**Public Employees' Long-Term Care Fund (LTCF)** – The LTCF was established in 1995 as the Public Employees Long-Term Care Act (Public Employees' Retirement Law, Chapter 15). The LTCF provides self-insured long-term care plans to enrolled participants. The LTCF is described in more depth in Note 13 to the financial statements.

**Replacement Benefit Fund (RBF)** – The RBF was established by Chapter 938 of the 1995 State of California Statutes, providing replacement benefits to members of the defined benefit pension plans. The RBF is more fully described in Note 14 to the financial statements.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### REPORTING ENTITY

The accompanying financial statements include all activities and funds administered by CalPERS. CalPERS is a component unit of the State of California for financial reporting purposes. CalPERS' financial statements are included in fiduciary and proprietary funds in the State of California Comprehensive Annual Financial Report.

### MEASUREMENT FOCUS, BASIS OF ACCOUNTING, & BASIS OF PRESENTATION

The accompanying financial statements were prepared in accordance with U.S. generally accepted accounting principles as applicable to governmental organizations. In doing so, CalPERS adheres to the reporting requirements established by the Governmental Accounting Standards Board (GASB).

The accounts of CalPERS are organized and operated on the basis of funds. The Board has a fiduciary responsibility for the investments within both the fiduciary and proprietary funds. CalPERS has the following fund types as of June 30, 2016:

**Fiduciary Funds** – includes pension trusts (PERF A, PERF B, PERF C, LRF, JRF, JRF II, SPOFF (terminated), DCF, SCPF), an other post-employment trust (CERBTF), and an agency fund (RBF), which account for assets held by the government in a trustee capacity or as an agent on behalf of others. The pension trust funds include defined benefit plans and defined contribution plans, which are accounted for on the flow of economic resources measurement focus and the accrual basis of accounting. Contributions to the defined benefit pension plans are recognized in the period in which the contributions are due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan. Contributions to the defined contribution plans and the other post-employment benefit plan are recognized as received. The RBF is an agency fund and is custodial in nature, and does not measure

the results of operations. Assets and liabilities are recorded using the accrual basis of accounting.

**Proprietary Funds** – includes the combined HCF and CRF and the LTCF. The HCF and CRF statements are combined to give a better overview of the health programs administered by CalPERS. These funds are accounted for on the flow of economic resources measurement focus and use the accrual basis of accounting. Operating revenues and expenses are distinguished from non-operating items and generally result from providing services in connection with ongoing operations. The principal operating revenues of the HCF and CRF are derived from premiums, Federal Employer Group Waiver Plan (EGWP) subsidies, and administrative service fees. The principal operating revenue for the LTCF is premiums. Operating expenses include the cost of claims and related administrative expenses. All revenues and expenses not meeting these definitions are reported as non-operating.

### TARGET ASSET ALLOCATION

State statutes and Board policies allow investments in government, domestic and international debt, domestic and international equities, mutual funds, private equity, real assets, and other investments. In February 2014, the Board approved strategic asset allocation changes effective July 1, 2014.

The following table shows the Board-adopted target asset allocation policy for the defined benefit pension plans, which was still in effect as of June 30, 2016:

Target Asset Allocation

Asset Class	PERF A	PERF B	PERF C	LRF	JRF	JRF II
Global Equity	51%	51%	51%	24%	—%	50%
Private Equity	10%	10%	10%	—%	—%	—%
Global Debt Securities	20%	20%	20%	39%	—%	34%
Real Assets	12%	12%	12%	—%	—%	—%
Liquidity	1%	1%	1%	—%	100%	—%
Inflation	6%	6%	6%	26%	—%	5%
REITs	—%	—%	—%	8%	—%	8%
Commodities	—%	—%	—%	3%	—%	3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## Notes to the Basic Financial Statements (continued)

The CERBTf offers three diversified allocation strategies. By comparison, Strategy 1 has the highest long-term expected rate of return and return volatility, Strategy 2 has a moderate long-term expected rate of return and return volatility, and Strategy 3 has the lowest long-term expected rate of return and return volatility. The following table shows the Board-adopted target asset allocation policy for the three CERBTf strategies:

### CERBTf Target Asset Allocation

Asset Class	CERBTf Strategy 1	CERBTf Strategy 2	CERBTf Strategy 3
Global Equity	57%	40%	24%
Global Debt Securities	27%	39%	39%
Inflation Assets	5%	10%	26%
REITs	8%	8%	8%
Commodities	3%	3%	3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

### CAPITAL ASSETS

Capital assets are defined as assets with an initial individual cost of \$5,000 or more, or \$1 million or more for intangible assets, and an estimated useful life in excess of one year. Capital assets consist of buildings, furniture, equipment, and intangible assets recorded at cost or, if donated, at their estimated fair value at the date of donation. Capital assets are depreciated over their estimated useful lives, ranging from three to five years for furniture and equipment, and 40 years for buildings, and determined on an asset-by-asset basis for intangible assets, using the straight-line method of depreciation.

### LOANS AND NOTES RECEIVABLE

In August 2012, the HCF recognized loan receivables totaling \$36 million; the terms require monthly principal-only payments totaling \$750 thousand beginning January 2013 for 48 months. The loans receivable balance of \$4.5 million is considered short-term at June 30, 2016.

In October 2015, CalPERS sold holdings in privately held real estate investments. Part of the sale included a note receivable, which has a balance of \$983.6 million as of June 30, 2016, reported in the PERF. The terms require quarterly payments from the borrower, with the balance due in two years.

### HCF/CRF OTHER LIABILITIES

The majority of the HCF/CRF Other Liabilities represents the refunded amount from the 2004-2013 Blue Shield contract that was terminated.

### INVESTMENT EXPENSES

Investment expenses presented within the accompanying financial statements consist of management and performance fees and other investment-related fees. Management and performance fees include internal and external management fees, performance fees, and incentive fees. Other investment-related fees include expenses for shared investment-related administration, internal investment staff salaries, dividend tax withholding, certain trading fees, consultants, data analytics, certain other taxes, custody, appraisals, legal services, technology infrastructure, audits, and tax advisory services. These fees are disclosed within the Other Investment Expenses within the Statement of Changes in Fiduciary Net Position and detailed in the Investment Expenses Schedule in the Other Supplementary Information section.

The investment expenses do not include the commissions and fees paid to transact public securities. Partnership management fees for the private equity program are drawn from the committed capital and reported as an increase in the cost basis. These fees and costs are included within the net asset value (NAV) or public securities cost and are also reported in the net appreciation/(depreciation) in fair value of investments line item on the financial statements.

The private equity profit-sharing and management fees are detailed within the unaudited Investment Section under the Schedule of Private Equity Management and Profit Sharing Fees – PERF.

### USE OF ESTIMATES IN THE PREPARATION OF FINANCIAL STATEMENTS

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make significant estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

### RISKS AND UNCERTAINTIES

CalPERS invests in securities that are exposed to a variety of risks, including interest rate, market, credit risk, and foreign currency risk. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the value of investment securities will occur in the near term and such changes could materially affect the amounts reported in the accompanying financial statements.

The total pension liabilities and net pension liabilities disclosed in the Notes to the Financial Statements for the cost-sharing multiple-employer and single-employer defined benefit pension plans are measured based on certain assumptions,



including the long-term rate of return on pension investments, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

### RECLASSIFICATIONS

Certain reclassifications have been made to the comparative totals as of and for the fiscal year ended June 30, 2015, to conform to the presentation as of and for the fiscal year ended June 30, 2016.

### COMPARATIVE TOOLS

The Basic Financial Statements include certain prior year summarized comparative information in total but not at the level of detail required for a presentation in conformity with accounting principles generally accepted in the U.S. Accordingly, such information should be read in conjunction with CalPERS' financial statements for the fiscal year ended June 30, 2015, from which the summarized information was derived.

### TERMINATION OF PENSION PLANS

Public agency participation in the System may be terminated either due to a transfer of a public agency's plan to another qualified system, as permitted by law, a public agency terminating its plan, or an involuntary termination by the Board. In the event that a public agency elects to transfer its plan, the assets of the plan and the related liability for benefits accrued are transferred to the other system. In the event that a public agency elects to terminate its plan or there is an involuntary termination of a plan by the Board, sufficient assets to cover the related liability for benefits accrued are retained by the PERF. Excess assets above those required, if any, are returned to the employer, while the employer is billed for any deficiency in required assets.

### NEW ACCOUNTING PRONOUNCEMENTS

GASB Statement No. 72, *Fair Value Measurement and Application* (GASB 72), was effective in Fiscal Year 2015-16. This statement establishes a hierarchy of inputs to valuation techniques used to measure fair value for financial reporting purposes. Additionally, GASB 72 provides guidance on applying fair value to certain investments and disclosures related to all fair value measurements. Implementation of GASB 72 did not have an impact on the beginning net position of any fund. Refer to Note 4 in the Notes to the Basic Financial Statements for additional disclosure of the requirements of this statement.

CalPERS early-implemented the requirements of GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* (GASB 74), which addresses reporting by Other Postemployment Benefit (OPEB) plans that administer benefits on behalf of governments. This statement modifies note disclosures and Required Supplementary Information related to the measurement of the OPEB liabilities for which assets have been accumulated, and requires disclosure about the annual money-weighted rate of return on plan investments. Refer to Note 9 in the Notes to the Basic Financial Statements for additional discussion of GASB 74.

CalPERS early-implemented the requirements of GASB Statement No. 82, *Pension Issues—an amendment of GASB Statements No. 67, No. 68, and No. 73* (GASB 82), which addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. GASB 82 requires that payments made by an employer on behalf of employees should be classified in a manner consistent with the pension plan terms.

### 3. CASH AND CASH EQUIVALENTS

Cash and cash equivalents of approximately \$1.1 billion at June 30, 2016, represent amounts held in the CalPERS general operating accounts with the State Treasury. The underlying investments at the State Treasurer's Office are not individually identifiable by fund, as CalPERS monies are pooled with the monies of other state agencies and invested.

### 4. INVESTMENTS

#### SHORT-TERM INVESTMENTS

Short-term investments consist of U.S. Treasury and government-sponsored securities, money market funds, commercial paper, certificates of deposit, repurchase agreements, asset-backed securities, notes, and bonds issued by U.S. corporations, and other allowable instruments that meet short-term maturity or average life, diversification, and credit quality restrictions.

#### INVESTMENTS AT FAIR VALUE

GASB 72 requires all investments be categorized under a fair value hierarchy. CalPERS determines fair value of its investments based upon both observable and unobservable inputs. The System categorizes its fair value measurements within the fair value hierarchy established by Generally Accepted Accounting Principles — levels within the hierarchy are as follows:

- Level 1 – quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date.
- Level 2 – inputs (other than quoted prices included within Level 1) that are observable for an asset or liability, either directly or indirectly. These inputs can include quoted prices for similar assets or liabilities in active or inactive markets, or market-corroborated inputs.
- Level 3 – unobservable inputs for an asset or liability, which generally results in a government using the best information available and may include the government's own data.

The remaining investments not categorized under the fair value hierarchy are shown at NAV. These are investments in non-governmental entities for which a readily determinable fair value is not available, such as member units or an ownership interest in partners' capital to which a proportionate share of net assets is attributed. Investments at NAV are commonly calculated by subtracting the fair value of liabilities from the fair value of assets.

## Notes to the Basic Financial Statements (continued)

The following table presents a summary of CalPERS' investments by type as of June 30, 2016, at fair value:

CalPERS – Investments at Fair Value<sup>1</sup> (Dollars in Thousands)

	Fair Value June 30, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>Investments by Fair Value Level</b>				
Global Equity				
Domestic Equity	\$74,246,038	\$74,246,038	\$0	\$0
International Equity	62,421,645	62,421,645	—	—
<b>Total Global Equity</b>	<b>\$136,667,683</b>	<b>\$136,667,683</b>	<b>\$0</b>	<b>\$0</b>
Global Debt				
Asset-Backed	\$15,869,451	\$0	\$14,019,711	\$1,849,740
International Debt Securities	10,412,487	—	10,412,487	—
Bank Loans	510,810	—	510,810	—
U.S. Treasuries	27,249,667	—	27,249,667	—
U.S. Corporate	16,420,484	—	16,420,484	—
<b>Total Global Debt</b>	<b>\$70,462,899</b>	<b>\$0</b>	<b>\$68,613,159</b>	<b>\$1,849,740</b>
Derivatives				
Futures	\$120,750	\$120,750	\$0	\$0
Options	142,990	—	142,990	—
Rights & Warrants	6,042	—	6,042	—
Forward Contract Assets	200,751	—	200,751	—
Forward Contract (Liabilities)	(188,565)	—	(188,565)	—
Swap Assets	63,655	—	63,655	—
Swap (Liabilities)	(40,713)	—	(40,713)	—
<b>Total Derivatives</b>	<b>\$304,910</b>	<b>\$120,750</b>	<b>\$184,160</b>	<b>\$0</b>
Other				
Rule 144(a) Securities	\$13,383,150	\$0	\$0	\$13,383,150
Securitized Assets	1,122,806	—	—	1,122,806
Real Assets <sup>2</sup>	223,530	—	—	223,530
Private Equity	186,472	—	—	186,472
<b>Total Other</b>	<b>\$14,915,958</b>	<b>\$0</b>	<b>\$0</b>	<b>\$14,915,958</b>
<b>Total Investments by Fair Value Level</b>	<b>\$222,351,450</b>	<b>\$136,788,433</b>	<b>\$68,797,319</b>	<b>\$16,765,698</b>
<b>Investments Measured at NAV</b>				
Commingled/Pooled Funds	\$8,899,873	\$0	\$0	\$0
Real Assets <sup>2</sup>	31,001,992	—	—	—
Private Equity	25,966,883	—	—	—
Other Investments	5,085,469	—	—	—
<b>Total Investments Measured at NAV</b>	<b>\$70,954,217</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Investments Measured at Fair Value</b>	<b>\$293,305,667</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

(1) Certain securities and derivatives disclosed in this table are classified as short-term investments, global equity or debt securities, investment sales and other receivables, and investment purchases and other payables on the combined Statement of Fiduciary Net Position – Fiduciary Funds and the Statement of Net Position – Proprietary Funds. Accordingly, the totals presented in this table will not agree to the combined totals presented in those statements.

(2) Real Assets are shown at NAV on the Statement of Fiduciary Net Position – Fiduciary Funds, while the direct holdings at level 3 only include the assets value for each Real Asset investment for GASB 72 purposes. Remaining Real Assets are valued at NAV.

## Notes to the Basic Financial Statements (continued)

Global equity securities include both domestic and international securities, and are classified in Level 1 as fair value is obtained using a quoted price from active markets. The security price is generated by market transactions involving identical or similar assets, which is the market approach to measuring fair value. Inputs are observable in exchange markets, dealer markets, brokered markets, and principal-to-principal markets, for which prices are based on trades of identical securities.

Global debt securities consist primarily of asset-backed securities (securitized offerings backed by residential and commercial mortgages, credit cards, auto and student loans), international debt securities, bank loans, U.S. treasuries, and U.S. corporate securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using matrix pricing. This method uses quoted prices for securities with the same maturities and ratings rather than a fixed price for a designated security. Many debt securities are traded on a dealer market and much less frequently, which is consistent with a Level 2 classification as these investments are valued using observable inputs. Asset-backed securities not classified as Level 2 include collateralized mortgage obligations (CMO), which are mortgage-backed securities that contain a pool of mortgages bundled together and sold as an investment. These are classified in Level 3 of the fair value hierarchy, as assumptions are made by CalPERS to determine prepayment rates, probability of defaults, and loss severity, all of which are unobservable inputs.

Futures are actively traded on major exchanges with quoted prices, and are classified in Level 1 of the fair value hierarchy. Many index, commodity, and fixed income futures are publicly traded on active markets, which is the market approach to valuing securities. Futures trading on active markets are typically priced using the matrix pricing technique which relies on the securities relationship to other benchmark quoted prices. These inputs are observable as they are derived from identical or similar securities which might be exchanged in multiple active markets. All other derivatives are classified in Level 2 of the fair value hierarchy, as these securities are priced using the cost approach on a dealer market traded on lower frequencies. When these securities are valued they may not have similar or observable pricing inputs as securities that are valued using the market approach. Refer to Note 7 in the Notes to the Basic Financial Statements for further detail regarding other derivatives.

Other investments at fair value include securities subject to Rule 144(a) of the Securities and Exchange Commission, which modifies a two-year holding period requirement on privately placed securities to permit qualified institutional buyers to trade these positions among themselves. These securities are typically acquired through unregistered, private

sales or constitute a control stake in an issuing company. Due to the acquisition method and primarily unobservable pricing inputs, these securities are classified as Level 3. Additionally, other investments include securitized investments, which contain pooled debt instruments, limited partnership investments, and various other investment types. Many securitized assets are created by combining similar financial assets into a security, and are marketed to investors as a single investment. Typically, these assumptions are internally generated and cannot be observed in an active market. Due to the fact that these assumptions are unobservable for holdings categorized as other investments, these are also classified as Level 3. Lastly, private equity and real assets direct holdings are investments in which CalPERS owns 100 percent of the assets. Private equity and real estate direct holdings are valued at the income, cost, or market approach depending on the type of holdings. All direct holdings are valued using unobservable inputs and are classified in Level 3 of the fair value hierarchy.

### Investments Measured at NAV (Dollars in Thousands)

Asset Class	Fair Value	Unfunded Commitments
Commingled/Pooled Funds	\$8,899,873	\$0
Real Assets	31,001,992	3,786,044
Private Equities	25,966,883	13,243,512
Other Investments	5,085,469	25,302
<b>Total</b>	<b>\$70,954,217</b>	<b>\$17,054,858</b>

Investments measured at NAV include commingled/pooled funds, private equity holdings, real assets, and other.

Private equity holdings include direct and co-investments with existing CalPERS general partners, direct secondary investments, and fund of funds. By their very nature, these investments are illiquid and typically not resold or redeemed. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over an average of 10 years.

Real asset investments (Real Estate, Infrastructure, and Forestland) are held either in separate accounts, as a limited partner, or in a joint venture or commingled fund. These investments are illiquid and resold at varying rates, with distributions received over the life of the investments. They are typically not redeemed, nor do they have set redemption schedules.

Other investments include funds that hold securities for varying investment strategies which include:

- Emerging Managers Program – investments in newly formed or relatively small investment firms to provide a path of growth and opportunity for managers to eventually build their firms to compete for entry into CalPERS' pool of larger, established managers.
- Absolute Return Strategies – investments that focus on management of total risk, and on generation of returns independent of broad market movements.
- Multi-Asset Class Program – management of portfolios which attempt to outperform the CalPERS assumed rate of return with less risk than the PERF.
- Activist Funds – investments in public companies with the goal of influencing management to increase overall shareholder value.
- Venture Capital Funds – investments made to finance small, early-stage, emerging firms that are believed to have long-term growth potential.

These investments are reported at NAV as they are externally managed fund-structure investments in nongovernmental entities that do not have readily determinable fair values. CalPERS does not look through to capture the value at the individual security level, but reports CalPERS' ownership interest in the investments.

Upon initial investment with a general partner, CalPERS commits to a certain funding level for the duration of the contract. At will, partners may request that CalPERS funds a portion of this amount. Certain unfunded commitments for real assets are subjected to annual approval and are excluded in the unfunded commitment disclosure.

Certain real asset investments are leveraged in that partnerships have been established to purchase properties through a combination of contributions from CalPERS and other investors and through the acquisition of debt. Real asset investments of approximately \$31.0 billion are reported at NAV. Additionally, CalPERS holds recourse debt in a few partnerships totaling \$8.5 million.

## RATE OF RETURN

The money-weighted rate of return (MWRR) expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. Following is the annual MWRR, net of investment expense, for the fiscal year ended June 30, 2016:

### Money-Weighted Rate of Return

Plan	Rate of Return (%)
PERF A	
Agent	0.5%
PERF B	
Schools Cost-Sharing	0.5%
PERF C	
Public Agency Cost-Sharing	0.5%
LRF	3.8%
JRF	0.5%
JRF II	1.9%
CERBTf	1.6%

## 5. INVESTMENT RISK DISCLOSURES

### DEPOSIT AND INVESTMENT RISK DISCLOSURES

In accordance with GASB Statement No. 40, *Deposit and Investment Risk Disclosures—an amendment of GASB Statement No. 3* (GASB 40), CalPERS discloses investments of all CalPERS-managed funds that are subject to certain risks: custodial credit risk, concentration of credit risk, interest rate risk, credit risk, and foreign currency risk.

#### Custodial Credit Risk

Custodial credit risk is the risk that, in the event a depository institution or counterparty fails, the System would not be able to recover the value of its deposits, investments, or collateral securities. As of June 30, 2016, a portion of the System's investments, other than posted collateral for Futures and Over-the-Counter instruments, is held in the System's name and is not exposed to custodial credit risk. Where CalPERS trusts invest in commingled funds, the assets within the fund are held in the name of the trustee of the fund and not in CalPERS' name. There are no general policies relating to custodial credit risk.

#### Concentration of Credit Risk

Other than U.S. Government Securities, which are not subjected to the GASB 40 disclosure requirements, CalPERS does not have investments in any single issuer that represent 5 percent or more of fiduciary net position or 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. This risk is managed within the portfolios using the effective duration or



## Notes to the Basic Financial Statements (continued)

option-adjusted methodology. Generally, CalPERS investment policies require the option-adjusted duration of the total fixed income portfolio to stay within 10 percent of the option-adjusted duration of its benchmark with the exception of the Global Fixed Income Program investment policy, which is allowed to stay within negative 50 percent to 10 percent of its benchmark. All individual portfolios are required to maintain a specified level of risk relative to their benchmark.

CalPERS invests in securities with contractual cash flows, such as asset-backed securities, collateralized mortgage obligations, and commercial mortgage-backed securities, including securities backed by residential and commercial mortgage loans. The value, liquidity, and related income of these securities are sensitive to changes in economic conditions, including real estate value, delinquencies or defaults, or both, and may be adversely affected by shifts in the market's perception of the issuers and changes in interest rates.

The following table presents the weighted average effective duration for CalPERS investments subject to interest rate risk as of June 30, 2016:

### CalPERS – Debt Securities Subject to Interest Rate Risk

(Dollars in Thousands)

Debt Security Type	Portfolio Weighted Average Effective Duration	Fair Value June 30, 2016	Percent of Debt Securities
<b>U.S. Treasuries and Agencies:</b>			
U.S. Treasury Notes	5.52	\$14,532,726	16.8%
U.S. Treasury Bonds	16.08	12,662,932	14.6%
U.S. Agencies	10.26	1,379,556	1.6%
U.S. Treasury Strips	11.92	54,009	0.1%
Corporate	10.05	16,262,017	18.8%
Mortgages	2.84	13,875,061	16.0%
Foreign Government	9.98	13,447,755	15.5%
Asset-Backed	0.44	10,367,562	12.0%
Municipals	11.31	10,376	—%
Commingled Fund	1.11	932	—%
<b>No Effective Duration:</b>			
Commercial Paper	N/A	\$2,521,094	2.9%
Commingled Fund	N/A	921,231	1.1%
Asset-Backed	N/A	552,236	0.6%
Swaps	N/A	22,530	—%
Corporate	N/A	5,561	—%
Mortgages	N/A	7,884	—%
<b>Total<sup>(1)</sup></b>		<b>\$86,623,462</b>	<b>100.0%</b>

(1) Certain securities disclosed in this table are classified as short-term investments in the financial statements. As such the total presented in this table will not agree to the total global debt securities on the financial statements.

CalPERS invests in the State Treasury pool and State Street Bank Global Advisors' (SSGA) short-term investment fund (STIF). These investments are included as part of the short-term investments in the financial statements. As of June 30, 2016, the pooled money investment account with the State Treasury totaled approximately \$2.5 billion, and the SSGA STIF totaled approximately \$16.5 billion. This value represents SSGA STIF investments in all portfolios. The short-term securities reported in the Statement of Fiduciary Net Position and the Statement of Proprietary Net Position are reported at fair value. As of June 30, 2016, the weighted average maturity was 167 days for the State Treasury pool and 24 days for the SSGA short-term investment fund. The SSGA short-term investment fund is rated as P1. The State Treasury pool is not rated.

The LTCF, HCF, SCPF, and DCF invest in various SSGA funds, with weighted average maturities and credit ratings as of June 30, 2016:

### CalPERS – SSGA Fund Weighted Average Maturity and Credit Risk (Dollars in Thousands)

SSGA Fund	Fair Value June 30, 2016	Credit Rating <sup>(1)</sup>	Weighted Average Maturity
U.S. Aggregate Bond Index	\$445,871	AA2	7.78
3-10 Year U.S. Agency Index	4,982	AA1	4.88
3-10 Year U.S. Credit Index	211,888	A3	6.26
3-10 Year U.S. Treasury Index	266,182	AAA	5.63
Long U.S. Agency Index	25,745	AA1	18.57
Long U.S. Credit Corporate Index	426,027	A	24.01
Long U.S. Credit Non-Corporate Index	89,523	A2	24.01
Long U.S. Treasury Index	544,233	AAA	25.25
U.S. Asset-Backed/Comm Mort Backed Index	58,988	AA1	5.31
U.S. High Yield Bond Index	99,639	B1	6.68
U.S. Inflation Protected Bond Index	5,501	AAA	8.72
U.S. Mortgage Backed Index	751,388	AAA	4.98
U.S. Short-Term Govt/Credit Bond Index	41,649	AA2	1.96
U.S. Bond Index	303,218	AA2	7.76
U.S. Tips Index	258,721	AAA	8.71
<b>Total</b>	<b>\$3,533,555</b>		

(1) Credit rating reflects market value weight of all the rated securities held by the portfolio (excludes unrated securities) using the middle rating provided by either S&P, Moody's, and Fitch or lower if only two agency ratings are available.

## Notes to the Basic Financial Statements (continued)

The following table presents the weighted average duration for securities lending collateral subject to interest rate risk as of June 30, 2016:

### CalPERS – Securities Lending Collateral Subject to Interest Risk (Dollars in Thousands)

Security Type	Portfolio Weighted Average Effective Duration	Fair Value June 30, 2016	Percent of Securities Lending Collateral
Asset-Backed Securities	0.06	\$787,127	13.4%
Commercial Paper	0.01	\$210,074	3.6%
<b>No Effective Duration:</b>			
Commercial Paper	N/A	\$35,009	0.6%
Money Market Fund <sup>1</sup>	N/A	2,395,497	40.8%
Short-Term Investment Fund <sup>2</sup>	N/A	2,441,899	41.6%
<b>Total<sup>3</sup></b>		<b>\$5,869,606</b>	<b>100.0%</b>

(1) Money Market Fund is invested in U.S. Treasury securities with a weighted average maturity (to final maturity) of less than 1 day (0.40).

(2) Short-Term Investment Fund has a weighted average maturity (to final maturity) of 1 day.

(3) This figure does not include \$6,950,000 in repurchase agreements since it not subject to GASB 40 disclosure. The fair value of the investments in the securities lending collateral portfolio is \$12,819,606 for fiduciary funds.

As of June 30, 2016, CalPERS investments included securities highly sensitive to interest rate fluctuations in that they are subject to early payment in a period of declining interest rates (i.e., collateralized and mortgage pass-through, etc.). The resulting reduction in expected total cash flows affects the fair value of these securities.

For the fiscal year ended June 30, 2016, the collateral invested in CalPERS Internal Securities Lending had an aggregate weighted average maturity (to final maturity) of 306 days and duration of 7.2 days. eSecLending has a weighted average maturity (to final maturity) of 28.8 days.

### Credit Risk

Credit risk is defined as the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The System's investment policies establish both general and specific risk measures for the fixed income portfolio. From the most general perspective, 88 percent of the total fixed income portfolio must be invested in investment-grade securities.

Investment-grade securities have low default probabilities and are rated at a minimum of BBB- by independent agencies (Moody's, Standard & Poor's, or Fitch). Each portfolio is required to maintain a specified risk level.

The following table is a summary of the ratings of CalPERS fixed income securities as of June 30, 2016:

### CalPERS – Debt Security Investments Subject to Credit Risk (Dollars in Thousands)

Moody's Quality Rating	Fair Value June 30, 2016	Fair Value as a Percent of Debt Security Investments
Aaa	\$12,687,126	14.65%
Aa1	2,609,152	3.01%
Aa2	2,172,754	2.51%
Aa3	635,059	0.73%
A1	1,828,485	2.11%
A2	1,207,669	1.39%
A3	3,150,114	3.64%
Baa1	2,639,506	3.05%
Baa2	4,744,232	5.48%
Baa3	2,381,982	2.75%
Ba1	1,575,254	1.82%
Ba2	765,263	0.88%
Ba3	609,086	0.70%
B1	636,687	0.74%
B2	299,813	0.35%
B3	316,787	0.37%
Caa1	332,083	0.38%
Caa3	43,768	0.05%
Caa	148,977	0.17%
Ca	27,515	0.03%
C	4,265	—%
NA <sup>1</sup>	28,261,006	32.63%
NR <sup>2</sup>	19,546,879	22.56%
<b>Total<sup>3</sup></b>	<b>\$86,623,462</b>	<b>100.00%</b>

(1) NA represents U.S. government securities that are not applicable to the GASB 40 disclosure requirements.

(2) NR represents those securities that are not rated.

(3) Certain securities disclosed in this table are classified as short-term investments in the financial statements. As such the total presented in this table will not agree to the total global debt securities on the financial statements.



## Notes to the Basic Financial Statements (continued)

The following table is a summary of the ratings of the securities lending collateral subject to credit risk:

### CalPERS – Securities Lending Collateral Subject to Credit Risk (Dollars in Thousands)

Moody's Quality Rating	Fair Value	Fair Value as a Percent of Securities Lending Collateral
Aaa	\$1,788,813	30.5%
P-1	90,031	1.5%
P-2	155,052	2.7%
NR <sup>1,2</sup>	3,835,710	65.3%
<b>Total<sup>3</sup></b>	<b>\$5,869,606</b>	<b>100.0%</b>

(1) NR represents those securities that are not rated.

(2) This figure includes \$2,395,497 invested in a money market fund and \$1,000,000 invested in short-term investments.

(3) This figure does not include \$6,950,000 in repurchase agreements since they are not subject to GASB 40 disclosure. The fair value of the investments in the securities lending collateral portfolio is \$12,819,606 for fiduciary funds.

### Foreign Currency Risk

Foreign currency risk is defined as any deposits or investments that are denominated in foreign currencies, which bear a potential risk of loss arising from changes in currency exchange rates. The System's asset allocation and investment policies allow for active and passive investments in international securities. The proportion of international stocks within the Global Equity portfolio is, at this time, roughly equal to their market capitalization weight in the Global Equity benchmark. For the global debt securities, 14 percent is targeted for investment in international securities. Real assets and private equity do not have a target allocation for international investments. Refer to the CalPERS International Investment Securities table for foreign currency risk disclosures.

## 6. SECURITIES LENDING

The State Constitution and the Board policies permit CalPERS to enter into securities lending transactions, which are collateralized loans of securities to broker-dealers and other entities with a simultaneous agreement to return collateral for the same securities in the future.

CalPERS has contracted with eSecLending, LLC (eSec) and State Street Bank & Trust (SSB) as third-party securities lending agents to loan domestic and international equity and debt securities. CalPERS receives both cash and noncash (i.e., securities) collateral. Domestic and international securities are collateralized at 102 percent and 105 percent, respectively, of the loaned securities' market value. CalPERS cannot seize the collateral security without borrower default; as such, the collateral security or noncash collateral is not reported in CalPERS' financial statements in accordance with GASB Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions* (GASB 28). Management

believes CalPERS has minimized credit risk exposure to borrowers by requiring the borrower to provide collateralization greater than 100 percent of the market value of the securities loaned. The securities loaned are priced daily by third-party sources, and margins are paid and received daily to maintain over-collateralized levels. Securities on loan can be recalled or returned by CalPERS or the borrower at any time. Since loans are terminable at will, loan durations do not generally match the duration of the investments made with the cash collateral. CalPERS may enter into term loan agreements, which are evaluated on an individual basis. On June 30, 2016, the fair value of the securities on loan was approximately \$18.2 billion. The securities on loan remain on CalPERS' Statement of Fiduciary Net Position in their respective investment categories. At June 30, 2016, cash collateral received totaling \$12.8 billion is reported as securities lending obligation, and the fair value of reinvested cash collateral totaling \$12.8 billion is reported as securities lending collateral on the Statement of Fiduciary Net Position. The changes in fair value of the reinvested cash collateral are reported as net appreciation/depreciation in fair value of investments on the Statement of Changes in Fiduciary Net Position.

Because the domestic and international debt and equity securities in the internally managed investment pools are also used in the securities lending program, in accordance with GASB 28, the securities lending collateral, obligation, and the related income and costs are allocated to the pool owners (respective reporting funds) based on the funds' pro rata share of the pools' investments.

CalPERS' securities lending reinvestment collateral guidelines prescribe that cash collateral received needs to be invested in short-term, high-credit-quality securities. Currently, SSB, eSecLending, and CalPERS manage the collateral.

CalPERS signed an agreement in 2016 with Options Clearing Corporation (OCC) for CalPERS to provide OCC with on-demand liquidity by giving access to a line of credit in a segregated account over a one-year term. This account is controlled by CalPERS and invested in short-term securities when it is not in use. CalPERS will earn commitment fee revenue and short-term interest yield from this agreement. Upon a draw on the line of credit, OCC will provide U.S. Treasury securities as collateral (for a maximum duration of 30 days) that will be bilateral, marked to market daily, and administered by eSecLending. No amounts were drawn nor outstanding at June 30, 2016.

## 7. DERIVATIVES

CalPERS holds investments in swaps, options, futures, rights, and warrants and enters into forward foreign currency exchange contracts. The fair value of futures is determined using the market approach based upon quoted market prices. The fair value of options, rights, warrants, and swaps is determined using the cost approach, as these are traded with lower frequencies. The fair value of derivative investments that are exchange-traded, such as options, rights, and warrants are priced using the exchange they are traded on. Non exchange-traded investments, such as swaps, are determined by an external pricing service using various proprietary methods. The fair value of international currency forwards represents the unrealized gain or loss on the related contracts, which is calculated as the difference between the contract exchange rate and the exchange rate at the end of the reporting period.

Futures contracts are marked to market at the end of each trading day, and the settlement of gains or losses occurs on the following business day through the movement of variation margins. Over-the-counter derivatives, such as swaps, generally reset monthly and the settlement of gains or losses occurs the following business day. Currency forward contracts roll quarterly, updating the contract exchange rate.

With all over-the-counter derivatives, such as swaps and currency forwards, CalPERS is exposed to counterparty risk. CalPERS investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, posting collateral exposure, and monitoring procedures, in addition to adherence to industry standard International Swaps and Derivatives Association and Credit Support Annex agreements with all counterparties.

At June 30, 2016, the aggregate fair value of investment derivatives in an asset position subject to counterparty credit risk was approximately \$343 million. The aggregate amount of cash collateral held by CalPERS on behalf of over-the-counter derivatives was approximately \$59.7 million.

## Notes to the Basic Financial Statements (continued)

### CalPERS – Derivative Instruments Summary<sup>1</sup> (Dollars in Thousands)

Investment	Net Appreciation/ (Depreciation) in Fair Value for the Fiscal Year Ended June 30, 2016	Fair value at June 30, 2016		Notional (Dollars)
		Classification	Amount	
<b>Derivatives (by Type)</b>	<b>Amount</b>			
Commodity Futures Long	(\$995)	Equity Securities	(\$785)	\$25,310
Commodity Futures Short	(3,620)	Equity Securities	769	(24,824)
Credit Default Swaps Bought	230	Debt Securities	(435)	18,232
Credit Default Swaps Written	742	Debt Securities	(293)	43,100
Currency Swaps	(9,225)	Debt Securities	(4,328)	184,285
Equity Options Bought	90,452	Equity Securities	130,111	700,004
Equity Options Written	32,107	Equity Securities	(4,077)	(400,049)
Fixed Income Futures Long	174,940	Equity Securities	(6)	33,771,184
Fixed Income Futures Short	(56,902)	Equity Securities	463	(53,265,057)
Fixed Income Options Bought	(26)	Equity Securities	170	412,827
Fixed Income Options Written	2,040	Equity Securities	(192)	(90,599)
Foreign Currency Futures Long	761	Equity Securities	—	—
Foreign Currency Options Bought	(10,645)	Equity Securities	493	129,467
Foreign Currency Options Written	10,868	Equity Securities	(4,375)	(259,793)
Futures Options Bought	3,946	Equity Securities	29,960	7,000
Futures Options Written	1,495	Equity Securities	(9,100)	(7,000)
FX Forwards	1,104	Investment Sales/Purchases	12,186	9,329,678
Index Futures Long	277,787	Equity Securities	120,309	10,066,035
Index Futures Short	142,681	Equity Securities	—	—
Index Options Bought	(561)	Equity Securities	—	—
Index Options Written	979	Equity Securities	—	—
Pay Fixed Interest Rate Swaps	(15,882)	Debt Securities	(4,437)	237,672
Receive Fixed Interest Rate Swaps	15,592	Debt Securities	11,442	236,296
Rights <sup>2</sup>	(3,003)	Equity Securities	3,156	27,980
Total Return Bond Swaps	(1,150)	Debt Securities	20,581	4,945,155
Total Return Equity Swaps	477	Debt Securities	412	313
Warrants <sup>2</sup>	(9,596)	Equity Securities	2,886	3,264
<b>Total</b>	<b>\$644,596</b>		<b>\$304,910</b>	

(1) The information presented in this table is derived from CalPERS' June 30, 2016, accounting records and in some instances may reflect trades on a one-day lag basis.

(2) The notional amount of rights and warrants are expressed in units rather than dollars.

### CalPERS – Derivative Instruments Subject to Interest Rate Risk (Dollars in Thousands)

Investment Type	Fair Value June 30, 2016	Investment Maturities (in years)			
		Under-1	1-5	6-10	10+
Credit Default Swaps Bought	(\$435)	\$0	(\$470)	\$35	\$0
Credit Default Swaps Written	(293)	—	(293)	—	—
Currency Swaps	(4,328)	—	(5,871)	1,330	213
Fixed Income Options Bought	170	170	—	—	—
Fixed Income Options Written	(192)	(192)	—	—	—
Pay Fixed Interest Rate Swaps	(4,437)	—	(864)	(1,323)	(2,250)
Receive Fixed Interest Rate Swaps	11,442	—	600	4,860	5,982
Total Return Swaps Bond	20,581	20,581	—	—	—
Total Return Swaps Equity	412	412	—	—	—
<b>Total</b>	<b>\$22,920</b>	<b>\$20,971</b>	<b>(\$6,898)</b>	<b>\$4,902</b>	<b>\$3,945</b>

## Notes to the Basic Financial Statements (continued)

### CalPERS – Derivative Instruments Highly Sensitive to Interest Rate Changes (Dollars in Thousands)

Investment type	Reference rate	Fair Value at June 30, 2016	Notional
Interest Rate Swaps	Receive Fixed 0.3%, Pay Variable 6-month LIBOR	\$82	\$2,339
Interest Rate Swaps	Receive Fixed 0.75%, Pay Variable 6-month EURIB	1,858	51,215
Interest Rate Swaps	Receive Fixed 0.78%, Pay Variable 6-month LIBOR	108	22,659
Interest Rate Swaps	Receive Fixed 1.0%, Pay Variable 6-month EURIB	806	12,220
Interest Rate Swaps	Receive Fixed 1.0%, Pay Variable 6-month LIBOR	1,134	11,112
Interest Rate Swaps	Receive Fixed 1.0125%, Pay Variable 3-month STIBO	43	1,145
Interest Rate Swaps	Receive Fixed 1.0225%, Pay Variable 3-month STIBO	36	944
Interest Rate Swaps	Receive Fixed 1.0325%, Pay Variable 3-month STIBO	165	4,225
Interest Rate Swaps	Receive Fixed 1.03625%, Pay Variable 3-month STIBO	44	1,109
Interest Rate Swaps	Receive Fixed 1.08%, Pay Variable 3-month STIBO	77	1,782
Interest Rate Swaps	Receive Fixed 1.085%, Pay Variable 3-month STIBO	21	484
Interest Rate Swaps	Receive Fixed 1.25%, Pay Variable 6-month LIBOR	1,401	46,120
Interest Rate Swaps	Receive Fixed 1.5%, Pay Variable 6-month LIBOR	3,754	9,358
Interest Rate Swaps	Receive Fixed 2.5%, Pay Variable 3-month LIBOR	272	1,800
Interest Rate Swaps	Receive Fixed 3.795%, Pay Variable 3-month BKBM	192	2,279
Interest Rate Swaps	Receive Fixed 6%, Pay Variable 1-month MTIE	728	42,549
Interest Rate Swaps	Receive Fixed 6.24%, Pay Variable 1-month LIBOR	132	8,288
Interest Rate Swaps	Receive Fixed 8.75%, Pay Variable 3-month JIBAR	491	14,339
Interest Rate Swaps	Receive Fixed 9.0%, Pay Variable 3-month JIBAR	98	2,329
Interest Rate Swaps	Receive Variable 3-month CDOR, Pay Fixed 1.0%	(65)	22,715
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.2%	(469)	114,100
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.25%	(135)	13,600
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.694%	(615)	16,940
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.75%	(270)	10,300
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.13150%	(563)	7,880
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.157%	388	5,230
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.25%	(113)	1,400
Interest Rate Swaps	Receive Variable 6-month BBSW, Pay Fixed 3.50%	(420)	3,574
Interest Rate Swaps	Receive Variable 6-month EURIB, Pay Fixed 1.25%	(1,812)	15,664
Interest Rate Swaps	Receive Variable 6-month LIBOR, Pay Fixed .8775%	(196)	22,659
Interest Rate Swaps	Receive Variable 6-month LIBOR, Pay Fixed 1.5%	(167)	3,610
<b>Subtotal – Interest Rate Swaps</b>		<b>\$7,005</b>	<b>\$473,968</b>
Total Return Bond Swaps	Receive Fixed 0%, Pay Fixed 0%	\$48,959	\$38,342
Total Return Bond Swaps	Receive Fixed 0%, Pay Fixed 0.06%	(499)	89,459
Total Return Bond Swaps	Receive Fixed 0%, Pay Fixed 0.07%	(11,892)	2,131,761
Total Return Bond Swaps	Receive Fixed 0%, Pay Fixed 0.08%	(16,174)	2,628,785
Total Return Bond Swaps	Receive Fixed 0.07%, Pay Fixed 0%	(91)	7,000
Total Return Bond Swaps	Receive Fixed 0.08%, Pay Fixed 0%	278	49,808
<b>Subtotal – Total Return Bond Swaps</b>		<b>\$20,581</b>	<b>\$4,945,155</b>
<b>TOTAL</b>		<b>\$27,586</b>	<b>\$5,419,123</b>

## CalPERS – Derivative Instruments Subject to Counterparty Credit Risk

Counterparty	Percentage of Net Exposure	Moody's Ratings
Morgan Stanley Capital Services, Inc.	19.23%	A3
Societe Generale	12.50%	A2
Bank of America, N.A.	10.22%	A1
Goldman Sachs + Co	8.72%	A3
Citibank N.A.	7.87%	A1
Credit Suisse International	7.34%	A2
HSBC Bank USA	6.92%	Aa3
JPMorgan Chase Bank N.A.	6.04%	Aa3
Goldman Sachs International	4.32%	A3
Bnp Paribas, S.A.	4.22%	A1
Deutsche Bank CME	3.15%	Baa2
HSBC Bank Plc	3.03%	A1
Deutsche Bank Securities	2.10%	Baa2
Barclays Bank Plc Wholesale	1.25%	A2
State Street Bank And Trust Company	1.14%	Aa3
Standard Chartered Bank	0.45%	Aa3
Bank of Montreal	0.24%	Aa3
Canadian Imperial Bank of Commerce	0.20%	Aa3
UBS AG	0.18%	A1
Morgan Stanley	0.16%	A3
Commonwealth Bank of Australia Sydney	0.11%	Aa2
Credit Suisse First Boston Intl.	0.11%	A2
Standard Chartered Bank, London	0.09%	Aa3
UBS AG London	0.09%	A1
Deutsche Bank Ag	0.08%	Baa2
Goldman Sachs Intl. London	0.08%	A3
Morgan Stanley Bank, N.A.	0.06%	A1
State Street Bank London	0.04%	A1
Royal Bank of Canada	0.03%	Aa3
Australia And New Zealand Banking Group	0.03%	Aa2
<b>TOTAL</b>	<b>100.00%</b>	

## Notes to the Basic Financial Statements (continued)

### CalPERS – International Investment Securities<sup>1</sup> – Fair Value at June 30, 2016 (U.S. Dollars in Thousands)

Currency	Cash	Equity	Debt Securities	Real Assets	Private Equity	Forward Contracts	Total
Australian Dollar	\$32,400	\$3,193,757	\$512,929	\$161,955	\$0	\$3,129	\$3,904,170
Brazilian Real	4,795	1,060,893	356,351	788,195	—	(37,467)	2,172,767
British Pound	66,707	8,218,504	2,224,855	500,668	—	3,219	11,013,953
Canadian Dollar	4,585	4,460,749	518,234	426,149	153,193	2,644	5,565,554
Chilean Peso	1,030	193,179	123,965	9,851	—	(137)	327,888
Chinese Yuan Renminbi	—	—	—	873,006	—	(387)	872,619
Colombian Peso	591	75,895	12,692	—	—	437	89,615
Czech Koruna	100	46,984	11,977	—	—	(671)	58,390
Danish Krone	881	940,582	91,951	—	—	348	1,033,762
Egyptian Pound	2,924	35,642	—	—	—	—	38,566
Euro Currency	153,987	13,652,435	3,618,595	87,228	2,489,217	(10,721)	19,990,741
Guatemala Quetzal	—	—	—	87,803	—	—	87,803
Hong Kong Dollar	6,167	3,387,205	—	—	—	(14)	3,393,358
Hungarian Forint	1,259	79,870	12,734	—	—	(193)	93,670
Indian Rupee	3,812	1,382,529	—	48,660	—	(105)	1,434,896
Indonesian Rupiah	2,398	353,632	20,623	—	—	3	376,656
Israeli Shekel	515	329,523	537,185	—	—	5,058	872,281
Japanese Yen	54,633	10,928,798	978,641	449	59,526	49,963	12,072,010
Malaysian Ringgit	1,717	411,681	41,725	479	—	554	456,156
Mexican Peso	2,755	624,830	599,641	8,655	—	1,564	1,237,445
Moroccan Dirham	3	3,705	—	—	—	—	3,708
New Taiwan Dollar	2,557	1,705,194	—	—	—	(242)	1,707,509
New Zealand Dollar	1,077	185,241	153,969	—	—	(5,057)	335,230
Norwegian Krone	1,896	512,645	68,009	—	—	(98)	582,452
Pakistan Rupee	535	80,067	—	—	—	—	80,602
Peruvian Noveau Sol	468	—	42,834	—	—	(25)	43,277
Phillipine Peso	115	226,874	—	—	—	(42)	226,947
Polish Zloty	185	187,835	171,818	—	—	3,031	362,869
Romanian Leu	490	—	27,634	—	—	(68)	28,056
Russian Ruble	2,996	—	457,037	358,656	—	694	819,383
Singapore Dollar	1,261	680,291	27,498	—	—	(519)	708,531
South African Rand	4,288	1,101,334	240,495	—	—	(140)	1,345,977
South Korean Won	10,763	2,591,299	—	—	—	(110)	2,601,952
Swedish Krona	1,041	1,448,597	132,236	—	—	(1,307)	1,580,567
Swiss Franc	2,163	3,736,640	77,595	—	—	109	3,816,507
Thailand Baht	3,269	444,586	69,498	—	—	196	517,549
Turkish Lira	3,854	418,414	414,577	—	—	(1,460)	835,385
United Arab Emirates Dirham	376	85,993	—	—	—	—	86,369
<b>Total</b>	<b>\$378,593</b>	<b>\$62,785,403</b>	<b>\$11,545,298</b>	<b>\$3,351,754</b>	<b>\$2,701,936</b>	<b>\$12,186</b>	<b>\$80,775,170</b>

(1) This table presents investment securities of all CalPERS managed funds, including derivative instruments that are subject to foreign currency risk.

## 8. EMPLOYERS' NET PENSION LIABILITY/(ASSET)

The components of the net pension liability of the PERF B, PERF C, LRF, JRF, and JRF II as of June 30, 2016, were as follows:

Net Pension Liability/(Asset) (Dollars in Thousands)

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of Total Pension Liability
<b>PERF B:</b>				
Schools Cost-Sharing Plan	\$75,663,026	\$55,912,965	\$19,750,061	73.9%
<b>PERF C:</b>				
Public Agencies Cost-Sharing Plan	33,358,628	24,705,532	8,653,096	74.1%
<b>LRF:</b>				
State of California	102,220	119,050	(16,830)	116.5%
<b>JRF:</b>				
State of California	3,794,944	39,794	3,755,150	1.0%
<b>JRF II:</b>				
State of California	1,207,550	1,172,953	34,597	97.1%

The total pension liabilities/(assets) were determined by actuarial valuations as of June 30, 2015, by fund, which were rolled forward to June 30, 2016, using the following actuarial assumptions:

## Actuarial Assumptions Used to Measure the Total Pension Liability

	PERF B Schools Cost-Sharing	PERF C Public Agency Cost-Sharing	LRF	JRF	JRF II
Inflation Rate	2.75%	2.75%	2.75%	2.75%	2.75%
Salary Increases	Varies by Entry Age and Service	Varies by Entry Age and Service	3.00%	3.00%	3.00%
Mortality Rate Table <sup>1</sup>	Derived using CalPERS membership data for all funds				
Period Upon Which Actuarial Experience Survey Assumptions Were Based	1997-2011	1997-2011	1997-2011	1997-2011	1997-2011
Post-Retirement Benefit Increase	2.00% until PPPA floor on purchasing power applies, 2.75% thereafter	Contract COLA up to 2.75% until PPPA floor on purchasing power applies, 2.75% thereafter	2.75%	3.00%	2.75%
Discount Rate	7.65%	7.65%	6.00%	2.85%	7.15%

(1) The mortality table used was developed based on CalPERS-specific data. The table includes 20 years of mortality improvements using Society of Actuaries Scale BB. For more details on this table, please refer to the April 2014 experience study report (based on CalPERS demographic data from 1997 to 2011) available online at <https://www.calpers.ca.gov/docs/forms-publications/calpers-experience-study-2014.pdf>.



## Notes to the Basic Financial Statements (continued)

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, staff took into account both short-term and long-term market return expectations as well as the expected pension fund cash flows. Using historical returns of all of the funds' asset classes, expected compound (geometric) returns were calculated over the short term (first 10 years) and the long term (11-60 years) using a building-block approach. Using the expected nominal returns for both short term and long term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and rounded down to the nearest one quarter of one percent.

The tables below reflect long-term expected real rates of return by asset class. The rates of return were calculated using the capital market assumptions applied to determine the discount rate and asset allocation.

### PERF B & PERF C – Long-Term Expected Real Rates of Return by Asset Class

Asset Class	Assumed Asset Allocation	Real Return Years 1 - 10 <sup>1</sup>	Real Return Years 11+ <sup>2</sup>
Global Equity	51.0%	5.25%	5.71%
Global Debt Securities	20.0%	0.99%	2.43%
Inflation Assets	6.0%	0.45%	3.36%
Private Equity	10.0%	6.83%	6.95%
Real Estate	10.0%	4.50%	5.13%
Infrastructure and Forestland	2.0%	4.50%	5.09%
Liquidity	1.0%	(0.55%)	(1.05%)

(1) An expected inflation of 2.50% used for this period.

(2) An expected inflation of 3.00% used for this period.

### LRF – Long-Term Expected Real Rates of Return by Asset Class

Asset Class	Assumed Asset Allocation	Real Return Years 1 - 10 <sup>1</sup>	Real Return Years 11+ <sup>2</sup>
Global Equity	24.0%	5.25%	5.71%
Fixed Income	39.0%	1.79%	2.45%
TIPs	26.0%	1.00%	2.45%
Commodities	3.0%	0.34%	4.32%
REITs	8.0%	3.25%	7.88%

(1) An expected inflation of 2.50% used for this period.

(2) An expected inflation of 3.00% used for this period.

### JRF – Long-Term Expected Real Rates of Return by Asset Class

Asset Class	Assumed Asset Allocation	Real Return Years 1 - 10 <sup>1</sup>	Real Return Years 11+ <sup>2</sup>
Cash	100.0%	(0.55%)	(1.05%)

(1) An expected inflation of 2.50% used for this period.

(2) An expected inflation of 3.00% used for this period.

### JRF II – Long-Term Expected Real Rates of Return by Asset Class

Asset Class	Assumed Asset Allocation	Real Return Years 1 - 10 <sup>1</sup>	Real Return Years 11+ <sup>2</sup>
Global Equity	50.0%	5.25%	5.71%
Fixed Income	34.0%	1.79%	2.45%
TIPs	5.0%	1.00%	2.45%
Commodities	3.0%	0.34%	4.32%
REITs	8.0%	3.25%	7.88%

(1) An expected inflation of 2.50% used for this period.

(2) An expected inflation of 3.00% used for this period.

### DISCOUNT RATE

#### **PERF B, PERF C, LRF, and JRF II**

The discount rates used to measure the total pension liability/ (asset) for the PERF B, PERF C, LRF, and JRF II were 7.65 percent, 7.65 percent, 6.00 percent, and 7.15 percent, respectively. To determine whether the municipal bond rate should be used in the calculation of a discount rate, the amortization and smoothing periods recently adopted by the Board were used. For the PERF B, LRF, and JRF II, projections of expected benefit payments and contributions were performed to determine if the assets would run out. The tests revealed the assets would not run out for PERF B, LRF, and JRF II. Therefore, the long-term expected rates of return on pension plan investments were applied to all periods of projected benefit payments to determine the total pension liability for the PERF B, LRF, and JRF II.

For the PERF C, the crossover test was performed for a miscellaneous agent plan and a safety agent plan selected as being more at risk of failing the crossover test and resulting in a discount rate that would be different from the long-term expected rate of return on pension investments.

Based on the testing of the plans, the tests revealed the assets would not run out. 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 for the PERF C.

#### **JRF**

The discount rate used to measure the total pension liability was 2.85 percent. The State funds the JRF benefit obligations using the pay-as-you-go method. Under the pay-as-you-go method, the pension plan's fiduciary net position was not projected to be sufficient to make projected future benefit payments of current active and inactive employees. Therefore, a discount rate of 2.85 percent, which falls within a reasonable range of yields on 20-year tax-exempt General Obligation Municipal Bonds with an average rating of AA (as measured by the Bond Buyer 20-Bond GO Index) as of June 30, 2016 was applied to all periods of projected benefit payments to measure the total pension liability.

## Notes to the Basic Financial Statements (continued)

### SENSITIVITY OF THE NET PENSION LIABILITY/(ASSET) TO CHANGES IN THE DISCOUNT RATE

The following presents the net pension liability/(asset) of the PERF B, PERF C, LRF, JRF, and JRF II calculated using the current discount rate, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (-100 basis points) or one percentage point higher (+100 basis points) than the current rate:

#### Sensitivity Analysis (Dollars in Thousands)

Discount Rate (assumed)

Plan	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of Total Pension Liability
<b>PERF B</b>				
Schools Cost-Sharing	\$75,663,026	\$55,912,965	\$19,750,061	73.9%
<b>PERF C</b>				
Public Agency Cost-Sharing	33,358,628	24,705,532	8,653,096	74.1%
<b>LRF</b>				
State of California	102,220	119,050	(16,830)	116.5%
<b>JRF</b>				
State of California	3,794,944	39,794	3,755,150	1.0%
<b>JRF II</b>				
State of California	1,207,550	1,172,953	34,597	97.1%

#### Sensitivity Analysis (Dollars in Thousands)

Discount Rate -1%

Plan	Total Pension Liability (-1%)	Plan Fiduciary Net Position	Net Pension Liability/(Asset) (-1%)	Plan Fiduciary Net Position as a Percentage of Total Pension Liability
<b>PERF B</b>				
Schools Cost-Sharing	\$85,380,167	\$55,912,965	\$29,467,202	65.5%
<b>PERF C</b>				
Public Agency Cost-Sharing	37,870,832	24,705,532	13,165,300	65.2%
<b>LRF</b>				
State of California	113,818	119,050	(5,232)	104.6%
<b>JRF</b>				
State of California	4,261,453	39,794	4,221,659	0.9%
<b>JRF II</b>				
State of California	1,356,769	1,172,953	183,816	86.5%

#### Sensitivity Analysis (Dollars in Thousands)

Discount Rate +1%

Plan	Total Pension Liability (+1%)	Plan Fiduciary Net Position	Net Pension Liability/(Asset) (+1%)	Plan Fiduciary Net Position as a Percentage of Total Pension Liability
<b>PERF B</b>				
Schools Cost-Sharing	\$67,571,595	\$55,912,965	\$11,658,630	82.7%
<b>PERF C</b>				
Public Agency Cost-Sharing	29,643,807	24,705,532	4,938,275	83.3%
<b>LRF</b>				
State of California	92,678	119,050	(26,372)	128.5%
<b>JRF</b>				
State of California	3,406,173	39,794	3,366,379	1.2%
<b>JRF II</b>				
State of California	1,095,856	1,172,953	(77,097)	107.0%

## 9. OTHER POST-EMPLOYMENT BENEFIT TRUST FUND

The CERBTf was established by Chapter 331 of the 1988 Statutes and initially funded in 2007. At June 30, 2016, 493 employers had elected to participate in the fund. The purpose of the fund is to receive contributions from participating employers and establish separate employer prefunding accounts to pay for health care or other post-employment benefits in accordance with the terms of the participating employers' plans. Contributions are voluntarily determined by the employer's own funding schedule, and there are no long-term contracts for contributions to the plan. As such, contributions to the CERBTf are elective and not required. The CERBTf is an agent multiple-employer plan as defined in GASB 74, with pooled administrative and investment functions.

Participating employers may receive disbursements from the fund not to exceed the annual premium and other costs of eligible post-employment benefits. If the employer's participation in the fund terminates, all assets in the employer's prefunding account shall remain in the fund except as otherwise provided. Allowable termination disbursements are to a trustee or as a trustee transfer of assets upon satisfactorily demonstrating to the Board one of the following: 1) transfer will satisfy applicable requirements of the Internal Revenue Code and the Board's fiduciary duties, or 2) the employer substantiates to the Board that all of the employer's obligations for the payment of post-employment benefits have been satisfied. From the most recent actuarial valuation reports, there were 256,643 active members, 175 inactive members (all of whom were entitled to but not receiving benefits), and 149,417 retiree plan members.

CalPERS' costs to administer the plan are determined through the Board-approved cost allocation plan, where actual direct and indirect administrative costs are assessed to each fund.

The total Fiscal Year 2015-16 actual OPEB employer contributions from 493 participating employers representing 497 OPEB plans was \$1.8 billion. In compliance with GASB 74, this amount includes the \$633.4 million in contributions made to the CERBTf, plus an additional \$1.2 billion in retiree health care premiums paid by employers directly to providers.

The CERBTf mirrors the investment policies of the System as a whole. These policies are adopted by the CalPERS Investment Committee, which sets forth the System's overarching investment beliefs, purposes, and objectives with respect to all investment programs. Additionally, the CERBTf has separate, Board-approved asset allocation policies in place for the three investment options offered by the fund.

Each strategy seeks to offer employers with investment alternatives dependent upon expected levels of return and volatility. Overall, the CERBTf recognized an annual money-weighted rate of return of 1.6 percent for Fiscal Year 2015-16.

## 10. OTHER POST-EMPLOYMENT BENEFITS (OPEB) OBLIGATION

The State of California as an employer provides retired state employees with certain post-employment benefits, such as health care and dental benefits, under a single-employer defined benefit plan. As a state agency, CalPERS is a component unit of the State, and CalPERS participates in the State's plan as a single-employer plan. The State is legally required to fund the OPEB costs of CalPERS employees. The State does not issue a stand-alone financial report for the OPEB plan. Effective Fiscal Year 2015-16, CalPERS no longer reports the net OPEB obligation related to CalPERS employees, and all existing OPEB liabilities and expenses were reversed. The following table shows the reversal of OPEB liabilities by fund:

Reversal of Net OPEB Obligations (Dollars in Thousands)

Fund	Amount
PERF A – Agent	\$123,196
PERF B – Schools Cost-Sharing	31,619
PERF C – Public Agency Cost-Sharing	13,967
LRF	222
JRF	612
JRF II	406
DCF	199
SCPF	85
CERBTf	685
HCF/CRF	23,903
LTCF	443
<b>Total</b>	<b>\$195,337</b>

## 11. PUBLIC EMPLOYEES' HEALTH CARE FUND (HCF)

The HCF was established under the PEMHCA as of July 1, 1988. Health plan offerings include self-funded plans, PERS Choice, PERSCare, and PERS Select, and effective in 2014, flex-funded plans, Anthem Blue Cross, Blue Shield of California, Health Net, Sharp, and UnitedHealthcare. Health plans are available to entities that contract for health insurance coverage under PEMHCA based on zip codes, as prescribed by state law. Having members in large risk pools spreads the catastrophic claims over a larger base and minimizes administrative expenses. The self-funded plans retain all risk

## Notes to the Basic Financial Statements (continued)

of loss of allowable health claims while the flex-funded plans share a percentage of the risk of loss. Members are not subject to a supplemental assessment in the event of deficiencies. Premium rates are set by the Board based on a trend analysis of the historic cost, utilization, demographics, and administrative expenses of the HCF to provide for the claims incurred and the actuarially determined required level of reserves. The health plans rely on operating cash flows and investment income to fund health benefit payments. During Fiscal Year 2015-16, the Board approved increases in member premiums to mitigate the impact of increasing pharmacy costs and projected medical inpatient and outpatient expenses. Management believes that the current sources of funding will be adequate to provide for benefits of the health plans.

Public agencies participating in the health plans are required to make monthly premium payments based on rates established annually by CalPERS. Employers' shares of premiums are determined by the public agency through benefit negotiations, subject to minimum share of premium levels established through PEMHCA. Public agency employee members pay the difference between the premium rate and the employers' share of premium.

Effective January 1, 2013, CalPERS partnered with its Pharmacy Benefit Manager (PBM) to provide a custom Medicare Part D prescription drug plan, Employer Group Waiver Plan (EGWP), for those members participating in Medicare. Under the EGWP, CalPERS contracts for the prescription drug program through a PBM as the EGWP administrator, and the PBM manages all federal interaction. CalPERS made this change in an effort to provide prescription drug benefits in the most cost-efficient manner for CalPERS members. EGWP subsidies are comprised of direct subsidies, low income cost-sharing subsidies, low income premium subsidies, reinsurance subsidies, and coverage gap discounts. EGWP premium subsidies are reported as federal government subsidies; rebates and coverage gap discounts are reported as an offset to claims expense; and administrative fees are reported as administrative expenses.

The HCF establishes claim liabilities based on estimates of the ultimate costs of claims (including future claim adjustment expenses) that have been reported but not settled, and of claims that have been "Incurred But Not Reported" (IBNR). The estimated claims liability was calculated by health plan partners as of June 30, 2016, using a variety of actuarial and statistical techniques, and adjusted for actual experience to produce current estimates that reflect recent settlements, claim frequency, and other economic and social factors. Adjustments to claims liabilities are charged or credited to expense in the periods in which they are made. The estimated claims liability of \$423.4 million is carried at its face amount, and no interest discount is assumed. The IBNR portion

represents an estimate for claims that have been incurred prior to June 30, 2016, but have not been reported to the HCF. The total estimated claims at the end of the Fiscal Year 2015-16 also includes \$305.9 million, which is reported as claims payable liability in the Statement of Net Position.

### ANTICIPATED INVESTMENT INCOME AND REINSURANCE

Anticipated investment income is included in the annual premium requirement for HCF members. Also, the HCF has not entered into any reinsurance or excess insurance agreements. CalPERS has entered into agreements with flex-funded health plan partners that limit HCF risk to a maximum aggregate monthly cost per member.

The following schedule represents changes in the aggregate estimated claims liabilities of the HCF/CRF for the fiscal years ended June 30, 2016, and June 30, 2015.

#### Changes in the Aggregate Estimate Claims Liabilities of the HCF/CRF (Dollars in Thousands)

Year ended June 30	2016	2015 <sup>(1)</sup>
<b>Total Estimated Claims at Beginning of Fiscal Year</b>	<b>\$689,202</b>	<b>\$635,956</b>
Total Incurred Claims and Claim Adjustment Expenses	3,417,480	3,432,102
Total Payments	(3,377,365)	(3,378,856)
<b>Total Estimated Claims at End of Fiscal Year</b>	<b>\$729,317</b>	<b>\$689,202</b>

(1) Prior year balance has been reclassified to be consistent with the current year presentation.

## 12. PUBLIC EMPLOYEES' CONTINGENCY RESERVE FUND (CRF)

The CRF was established in 1962, with the passage of PEMHCA, to fund administrative costs related to the PEMHCA program, and as a contingency reserve for such items as increases in future rates or in future benefits. PEMHCA was expanded to include local public agency employees on a contract basis in 1967. The CRF is reimbursed by the State and contracting public agencies for costs incurred for administering the program. Activity in the CRF is reported in the HCF/CRF combined financial statement.

PEMHCA establishes eligibility rules for the following:

- Retirees and beneficiaries receiving health care benefits,
- Terminated plan members entitled to but not yet receiving benefits, and
- Active plan members.

The administrative fee is determined as a percentage of insurance premiums paid by the employers. The percentage of the insurance premiums paid for the fiscal year ended June 30, 2016, was 0.32 percent. Administrative rates are reviewed annually and are adjusted, if needed, to cover budgeted administrative costs.



Premiums are placed in the CRF and then, with the exception of premium dollars designated for self-funded services and transferred to the HCF, remitted to the healthcare carriers. As of June 30, 2016, there were 1,169 public agencies and schools participating in health insurance coverage under PEMHCA.

### 13. PUBLIC EMPLOYEES' LONG-TERM CARE FUND (LTCF)

The LTCF began offering self-insured Long-Term Care (LTC) plans in 1995. The LTCF provides LTC coverage to enrolled participants under the Public Employees' Retirement Law (PERL), Chapter 15. The LTC program contracts with a third-party service provider to administer the program. The LTCF is a voluntary member-paid program and is not funded or subsidized by the employers.

There are four LTC policy types:

- LTC 1: policies purchased from the program inception in 1995 through 2002.
- LTC 2: policies purchased from 2003 through 2004.
- LTC 3: policies purchased from 2005 through 2008.
- LTC 4: policies purchased effective December 2013 and forward through open application.

As of June 30, 2016, there are 132,274 active participants in the LTC 1, LTC 2, LTC 3, and LTC 4 policy types, of which 6,549 are receiving benefits.

The LTCF estimate of the funding level, to provide for the payment of future claim benefits, is projected based on actual enrolled participant levels. Participants in the Long-Term Care program with a lifetime benefit period or inflation protection received a 36 percent rate increase in both 2015 and 2016, which totaled an 85 percent overall rate increase. As an alternative to avoid the rate increase, these participants were given the option to convert to another benefit coverage plan in the fall of 2014, spring of 2015, and spring of 2016. The LTCF establishes the liability for future policy benefits based on the present value of future benefits and expenses less the present value of future premiums. The actuarial valuations are very sensitive to the underlying actuarial assumptions, including a discount rate of 5.75 percent, morbidity, lapse rates, voluntary termination, conversion rates to fixed term policies, mortality, plan expenses and rate increase. In Fiscal Year 2015-16, the actual conversion rates were higher than expected. However, actual investment returns were approximately \$8.6 million lower than expected. The mortality and lapse assumptions remained the same as the previous year's assumptions while the morbidity assumptions were slightly higher than the previous year's assumption, thus increasing projected claims.

Total LTCF investments as of June 30, 2016, were approximately \$4.3 billion. The annual premium for Fiscal Year 2015-16 was \$282.4 million, and the total benefits paid out in Fiscal Year 2015-16 were \$271.7 million. Since the program's inception in 1995 through June 30, 2016, the total benefits paid were approximately \$1.9 billion.

### 14. REPLACEMENT BENEFIT FUND (RBF)

The RBF was established as a custodial fund by Chapter 938 of the 1995 Statutes. Initially funded in 1998, it provides benefits to members of the PERF whose retirement allowance, based on the member's choice of retirement option, exceeds the IRC section 415(b) limits. IRC section 415(b) imposes a dollar limit on the annual retirement benefits an individual may receive from a qualified defined benefit pension plan.

The RBF is funded on a "pay-as-you-go" basis. That is, the employer is invoiced for amounts payable to its former employees in the calendar year and upon receipt of payment by the employers, CalPERS remits the replacement benefit to the retirees. Employer contributions must be in amounts equivalent to the benefits not paid from the PERF as a result of the limitations of IRC section 415(b) plus, if applicable, employer Federal Insurance Contributions Act taxes. CalPERS is responsible for calculating the applicable dollar limit under IRC section 415(b) and notifying the employer. At June 30, 2016, there were 802 retirees receiving replacement benefits.

Government Code section 7522.43 provides that a public retirement system may continue to administer a plan of replacement benefits for employees first hired prior to January 1, 2013, only. Section 7522.43 prohibits any employer from offering a plan of replacement benefits for employees hired on or after January 1, 2013.

### 15. CONTINGENCIES

CalPERS has entered into agreements with a number of issuers of nontaxable debt to provide payment of principal and interest in the event of issuer nonpayment. CalPERS is paid an annual fee over the term of the agreement for each transaction. As of June 30, 2016, the credit enhancement program had contingent liabilities of approximately \$427 million and net fee income of approximately \$2 million.

CalPERS is a defendant in litigation involving investments, individual pension, and health benefit payments and participant eligibility issues arising from its normal activities. Generally, in the event of an adverse decision, any payments awarded by the courts would be recovered by CalPERS through prospective adjustments to the employer contribution rate. CalPERS is involved in litigation relating to various

matters. During the fiscal year, specific cases arose that could potentially impact the future financial health of funds administered by CalPERS.

In the case of *Robert M. Mallano, et al. v. John Chiang*, former Controller of the State of California (SCO), the Judges' Retirement System (JRS) and the Judges' Retirement System II (JRS II) were sued as part of a class action by all active and retired jurists (and their beneficiaries) in the State of California. The judges' primary contention is that they were not paid salaries required by applicable statutes over the prior five years, and that JRS and JRS II must independently raise pension benefits to these retirees and beneficiaries based on the statutory salary mandates. JRS and JRS II in turn contend that they do not have statutory authority to increase benefits until the active judges have received an actual pay increase and JRS and JRS II receive a copy of an official Pay Letter from the State of California Department of Human Resources to the SCO authorizing an increase. JRS has been included in this suit because retired JRS judges receive increases to their retirement benefits when active judges receive salary increases. For JRS II, salary increases impact final compensation at retirement.

Trial in this case was originally set for September 30, 2015. However, in August 2015, all parties stipulated to submitting the entire matter to the court on paper, in lieu of live testimony, since the case involved an issue of statutory construction only. All parties filed their respective briefs in mid-September. Oral argument was held on September 30, 2015, and a Statement of Decision was issued on December 16, 2015, entering declaratory judgment in favor of plaintiff class and against JRS, JRS II and the SCO. The court found that, since fiscal year 2008-2009, the SCO, JRS and JRS II had failed to pay constitutionally and statutorily mandated salary increases to active judges, as well as increased benefits to judicial retirees, reflecting the average California state employee salary increases, as required by statute. The judges and their beneficiaries were awarded the unpaid salary increases and benefits payable to judicial retirees and their beneficiaries together with 10 percent per annum interest, owing from the dates on which such sums vested until such increases and benefits are paid. Final Judgment was issued on March 10, 2016.

JRS, JRS II and the SCO filed an appeal on May 5, 2016. Counsel for the judges filed a motion for an award of attorneys' fees in the amount of \$1.2 million. A hearing on the attorneys' fees motion was held on June 1, 2016. Although the court granted the motion, the fee award was reduced to \$659,756, consistent with JRS/JRS II's arguments. Payment of attorneys' fees and costs is stayed during the pendency of the appeal. The Court of Appeal has yet to set a briefing schedule.

*Sanchez, Elma, et al. v. CalPERS* is a class action lawsuit by members of the CalPERS Long-Term Care Plan against CalPERS and eight individual CalPERS Board members. Plaintiffs claim that CalPERS breached its contract with the long-term care purchasers by allegedly promising that long-term care premiums would never increase during the lifetime of the purchaser, but then increasing the premiums, and by failing to continue the Inflation Prevention Benefit without an increase in premiums. Plaintiffs seek to recover all money paid for the long-term care coverage and rescission of the policies sold to the class members, as well as interest and attorneys' fees. CalPERS' demurrer to the complaint was overruled.

The operative complaint alleges a cause of action for breach of fiduciary duty against both CalPERS and the Board Defendants and four causes of action against CalPERS for breach of contract, breach of the implied covenant of good faith and fair dealing, rescission, and declaratory relief. Plaintiffs sought to certify a class consisting of California citizens who purchased LTC 1 and LTC 2 policies issued from 1995- 2004 with lifetime coverage and built-in inflation protection, lifetime policies without inflation protection, as well as three-year and six-year policies with inflation protection from CalPERS.

CalPERS and the Board Defendants deny that the policies were intentionally or negligently underpriced, and assert that the long-term care coverage was a new product with little actuarial data when the program started in 1995, making it difficult to accurately price. Premium increases were imposed across the entire long-term care industry as actuarial and claims data became available. CalPERS asserts that it timely informed policyholders about the need to impose premium increases and has managed the program and the Long-Term Care Trust Fund prudently and properly. CalPERS and the Board Defendants have also asserted a number of substantial legal defenses, including governmental immunity from the tort claims, and that the breach of contract claims are barred by the express language in the Evidence of Coverage and the applicable statute of limitations, among other things.

On January 18, 2016, the court granted Plaintiffs' Motion for Class Certification. Only two claims were certified for class treatment against CalPERS: (1) the breach of contract claim; and (2) Plaintiffs' breach of fiduciary duty claim, on the "duty of care" theory only. None of Plaintiffs' claims against the individual Board members were certified for class treatment.

The parties are engaged in discovery. CalPERS opposed depositions of some current and former Board members by filing a Motion for Protective Order, which was granted without prejudice to Plaintiffs' ability to bring a motion later seeking to depose them, based upon a showing of genuine need. The Class Notice was sent out on or around July 5, 2016. The trial has been set for October 2, 2017. The amount of potential loss



or range of loss on these cases is not estimable at this time due to the many unknowns and complexities of litigation.

### 16. FUTURE ACCOUNTING PRONOUNCEMENTS

Certain requirements of GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68* (GASB 73), are effective for financial statements for fiscal years beginning after June 15, 2016. These address accounting and financial reporting by employers and governmental nonemployer contributing entities for pensions that are not within the scope of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions, an amendment of GASB Statement No. 27* (GASB 68). The following issues are addressed: 1) information required to be presented as notes to 10-year schedules of required supplementary information (RSI) about investment-related factors, 2) accounting and reporting for separately financed specific liabilities of individual employers and non-employer contributing entities, and 3) timing of employer recognition of revenue for the support of non-employer contributing entities not in a special funding situation.

GASB Statement No. 79, *Certain External Investment Pools and Pool Participants* (GASB 79), addresses accounting and financial reporting for certain external investment pools and pool participants. Specifically, it establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes. The requirements of GASB 79 for certain provisions on portfolio quality, custodial credit risk, and shadow pricing are effective for fiscal years beginning after December 15, 2015.

# FINANCIAL SECTION

## Required Supplementary Information

- 72 Schedules of Changes in Net Pension Liability/(Asset) and Related Ratios
- 77 Schedules of Plan Contributions
- 79 Schedule of Investment Returns
- 80 Schedule of Claims Development Information

# Required Supplementary Information

## SCHEDULES OF CHANGES IN NET PENSION LIABILITY/(ASSET) AND RELATED RATIOS

PERF B – Three-Year Review<sup>1</sup> (Dollars in Thousands)

	2016	2015	2014
<b>Total Pension Liability:</b>			
Service Cost	\$1,716,677	\$1,624,993	\$1,576,667
Interest	5,441,918	5,152,519	4,820,116
Changes of Assumptions <sup>2</sup>	—	(1,217,974)	—
Differences Between Expected and Actual Experience	400,103	1,119,011	—
Benefit Payments, Including Refunds of Member Contributions	(3,546,836)	(3,334,081)	(3,139,923)
<b>Net Change in Total Pension Liability</b>	<b>\$4,011,862</b>	<b>\$3,344,468</b>	<b>\$3,256,860</b>
Total Pension Liability – Beginning	71,651,164	68,306,696	65,049,836
<b>Total Pension Liability – Ending (a)</b>	<b>\$75,663,026</b>	<b>\$71,651,164</b>	<b>\$68,306,696</b>
<b>Plan Fiduciary Net Position:</b>			
Contributions – Employer	\$1,434,632	\$1,323,090	\$1,203,071
Contributions – Member	851,133	773,580	744,437
Total Net Investment Income	297,514	1,272,365	8,625,601
Benefit Payments, Including Refunds of Member Contributions	(3,546,836)	(3,334,081)	(3,139,923)
Net Plan to Plan Resource Movement	10	(71,460)	—
Administrative Expenses	(34,554)	(64,124)	(72,167)
<b>Net Change in Plan Fiduciary Net Position</b>	<b>(\$998,101)</b>	<b>(\$100,630)</b>	<b>\$7,361,019</b>
Plan Fiduciary Net Position – Beginning	\$56,911,066	\$57,011,696	\$49,650,677
Plan Fiduciary Net Position – Ending (b)	55,912,965	56,911,066	57,011,696
<b>Net Pension Liability (a) - (b)</b>	<b>\$19,750,061</b>	<b>\$14,740,098</b>	<b>\$11,295,000</b>
<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>	<b>73.9%</b>	<b>79.4%</b>	<b>83.5%</b>
Covered Payroll	\$11,747,602	\$10,964,872	\$10,120,248
<b>Net Pension Liability as a Percentage of Covered Payroll</b>	<b>168.1%</b>	<b>134.4%</b>	<b>111.6%</b>

(1) This is a 10-year schedule. Information in this schedule is not available prior to 2014. Additional years will be added to this schedule in future fiscal years until 10 years of data is presented.

(2) The discount rate increased to 7.65% in Fiscal Year 2014-15 as compared to 7.50% in Fiscal Year 2013-14.

## Required Supplementary Information (continued)

### SCHEDULES OF CHANGES IN NET PENSION LIABILITY/(ASSET) AND RELATED RATIOS (CONTINUED)

PERF C – Three-Year Review<sup>1</sup> (Dollars in Thousands)

	2016	2015	2014
<b>Total Pension Liability:</b>			
Service Cost	\$712,307	\$698,416	\$713,731
Interest	2,399,259	2,285,565	2,169,786
Changes of Benefit Terms	1,478	—	—
Changes of Assumptions <sup>2</sup>	—	(543,686)	—
Differences Between Expected and Actual Experience	(6,333)	(5,678)	—
Benefit Payments, Including Refunds of Member Contributions	(1,519,301)	(1,423,756)	(1,335,871)
<b>Net Change in Total Pension Liability</b>	<b>\$1,587,410</b>	<b>\$1,010,861</b>	<b>\$1,547,646</b>
Total Pension Liability – Beginning	\$31,800,055	\$30,789,194	\$29,241,548
Adjustment to Beginning Amount	(28,837)	—	—
<b>Total Adjusted Pension Liability – Beginning</b>	<b>\$31,771,218</b>	<b>\$30,789,194</b>	<b>\$29,241,548</b>
<b>Total Pension Liability – Ending (a)</b>	<b>\$33,358,628</b>	<b>\$31,800,055</b>	<b>\$30,789,194</b>
<b>Plan Fiduciary Net Position:</b>			
Contributions – Employer	\$882,991	\$859,456	\$747,694
Contributions – Member	300,135	278,529	291,772
Total Net Investment Income	127,043	548,097	3,770,935
Benefit Payments, Including Refunds of Member Contributions	(1,519,301)	(1,423,756)	(1,335,871)
Net Plan to Plan Resource Movement	22,621	(267,581)	—
Administrative Expenses	(15,263)	(27,967)	(31,550)
<b>Net Change in Plan Fiduciary Net Position</b>	<b>(\$201,774)</b>	<b>(\$33,222)</b>	<b>\$3,442,980</b>
Plan Fiduciary Net Position – Beginning	\$24,907,306	\$24,940,528	\$21,497,548
Plan Fiduciary Net Position – Ending (b)	24,705,532	24,907,306	24,940,528
<b>Net Pension Liability (a) - (b)</b>	<b>\$8,653,096</b>	<b>\$6,892,749</b>	<b>\$5,848,666</b>
<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>	<b>74.1%</b>	<b>78.3%</b>	<b>81.0%</b>
Covered Payroll	\$3,472,950	\$3,356,312	\$3,248,018
<b>Net Pension Liability as a Percentage of Covered Payroll</b>	<b>249.2%</b>	<b>205.4%</b>	<b>180.1%</b>

(1) This is a 10-year schedule. Information in this schedule is not available prior to 2014. Additional years will be added to this schedule in future fiscal years until 10 years of data is presented.

(2) The discount rate increased to 7.65% in Fiscal Year 2014-15 as compared to 7.50% in Fiscal Year 2013-14.

## Required Supplementary Information (continued)

### SCHEDULES OF CHANGES IN NET PENSION LIABILITY/(ASSET) AND RELATED RATIOS (CONTINUED)

LRF – Three-Year Review<sup>1</sup> (Dollars in Thousands)

	2016	2015	2014
<b>Total Pension Liability:</b>			
Service Cost	\$608	\$769	\$732
Interest	5,978	6,427	6,465
Changes of Assumptions <sup>2</sup>	—	(2,655)	—
Differences Between Expected and Actual Experience	(3,530)	(4,246)	—
Benefit Payments, Including Refunds of Member Contributions	(7,407)	(9,086)	(7,482)
<b>Net Change in Total Pension Liability</b>	<b>(\$4,351)</b>	<b>(\$8,791)</b>	<b>(\$285)</b>
Total Pension Liability – Beginning	\$106,730	\$115,521	\$115,806
Adjustment to Beginning Amount	(159)	—	—
<b>Total Adjusted Pension Liability – Beginning</b>	<b>\$106,571</b>	<b>\$115,521</b>	<b>\$115,806</b>
<b>Total Pension Liability – Ending (a)</b>	<b>\$102,220</b>	<b>\$106,730</b>	<b>\$115,521</b>
<b>Plan Fiduciary Net Position:</b>			
Contributions – Employer	\$549	\$590	\$565
Contributions – Member	97	105	113
Total Net Investment Income	4,545	(94)	15,372
Benefit Payments, Including Refunds of Member Contributions	(7,407)	(9,086)	(7,482)
Administrative Expenses	(203)	(400)	(362)
<b>Net Change in Plan Fiduciary Net Position</b>	<b>(\$2,419)</b>	<b>(\$8,885)</b>	<b>\$8,206</b>
Plan Fiduciary Net Position – Beginning	\$121,469	\$130,354	\$122,148
Plan Fiduciary Net Position – Ending (b)	119,050	121,469	130,354
<b>Net Pension Asset (a) - (b)</b>	<b>(\$16,830)</b>	<b>(\$14,739)</b>	<b>(\$14,833)</b>
<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>	<b>116.5%</b>	<b>113.8%</b>	<b>112.8%</b>
Covered Payroll	\$1,313	\$1,545	\$1,470
<b>Net Pension Asset as a Percentage of Covered Payroll</b>	<b>(1,281.8%)</b>	<b>(954.0%)</b>	<b>(1,009.0%)</b>

(1) This is a 10-year schedule. Information in this schedule is not available prior to 2014. Additional years will be added to this schedule in future fiscal years until 10 years of data is presented.

(2) The discount rate increased to 6.00% in Fiscal Year 2014-15 as compared to 5.75% in Fiscal Year 2013-14.

## Required Supplementary Information (continued)

### SCHEDULES OF CHANGES IN NET PENSION LIABILITY/(ASSET) AND RELATED RATIOS (CONTINUED)

JRF – Three-Year Review<sup>1</sup> (Dollars in Thousands)

	2016	2015	2014
<b>Total Pension Liability:</b>			
Service Cost	\$29,314	\$25,372	\$27,581
Interest	107,515	127,074	140,256
Changes of Assumptions <sup>2</sup>	384,306	167,036	—
Differences Between Expected and Actual Experience	(59,421)	57,568	—
Benefit Payments, Including Refunds of Member Contributions	(199,349)	(201,868)	(193,935)
<b>Net Change in Total Pension Liability</b>	<b>\$262,365</b>	<b>\$175,182</b>	<b>(\$26,098)</b>
Total Pension Liability – Beginning	\$3,532,394	\$3,357,212	\$3,383,310
Adjustment to Beginning Amount	185	—	—
<b>Total Adjusted Pension Liability – Beginning</b>	<b>\$3,532,579</b>	<b>\$3,357,212</b>	<b>\$3,383,310</b>
<b>Total Pension Liability – Ending (a)</b>	<b>\$3,794,944</b>	<b>\$3,532,394</b>	<b>\$3,357,212</b>
<b>Plan Fiduciary Net Position:</b>			
Contributions – Employer	\$192,287	\$180,910	\$191,148
Contributions – Member	3,559	3,877	4,724
Total Net Investment Income	2,762	2,286	2,583
Benefit Payments, Including Refunds of Member Contributions	(199,349)	(201,868)	(193,935)
Administrative Expenses	(642)	(1,227)	(1,141)
<b>Net Change in Plan Fiduciary Net Position</b>	<b>(\$1,383)</b>	<b>(\$16,022)</b>	<b>\$3,379</b>
Plan Fiduciary Net Position – Beginning	\$41,177	\$57,199	\$53,820
Plan Fiduciary Net Position – Ending (b)	39,794	41,177	57,199
<b>Net Pension Liability (a) - (b)</b>	<b>\$3,755,150</b>	<b>\$3,491,217</b>	<b>\$3,300,013</b>
<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>	<b>1.0%</b>	<b>1.2%</b>	<b>1.7%</b>
Covered Payroll	\$34,301	\$41,378	\$54,649
<b>Net Pension Liability as a Percentage of Covered Payroll</b>	<b>10,947.6%</b>	<b>8,437.4%</b>	<b>6,038.6%</b>

(1) This is a 10-year schedule. Information in this schedule is not available prior to 2014. Additional years will be added to this schedule in future fiscal years until 10 years of data is presented.

(2) The discount rate decreased to 3.82% in Fiscal Year 2014-15 as compared to 4.25% in Fiscal Year 2013-14, and decreased to 2.85% in Fiscal Year 2015-16 as compared to 3.82% in Fiscal Year 2014-15.

## Required Supplementary Information (continued)

### SCHEDULES OF CHANGES IN NET PENSION LIABILITY/(ASSET) AND RELATED RATIOS (CONTINUED)

JRF II – Three-Year Review<sup>1</sup> (Dollars in Thousands)

	2016	2015	2014
<b>Total Pension Liability:</b>			
Service Cost	\$86,635	\$81,679	\$78,670
Interest	78,412	70,389	61,044
Changes of Assumptions <sup>2</sup>	—	(14,883)	—
Differences Between Expected and Actual Experience	(4,546)	(17,319)	—
Benefit Payments, Including Refunds of Member Contributions	(21,704)	(14,040)	(8,950)
<b>Net Change in Total Pension Liability</b>	<b>\$138,797</b>	<b>\$105,826</b>	<b>\$130,764</b>
Total Pension Liability – Beginning	\$1,073,788	\$967,962	\$837,198
Adjustment to Beginning Amount	(5,035)	—	—
<b>Total Adjusted Pension Liability – Beginning</b>	<b>\$1,068,753</b>	<b>\$967,962</b>	<b>\$837,198</b>
<b>Total Pension Liability – Ending (a)</b>	<b>\$1,207,550</b>	<b>\$1,073,788</b>	<b>\$967,962</b>
<b>Plan Fiduciary Net Position:</b>			
Contributions – Employer	\$65,839	\$65,629	\$57,027
Contributions – Member	24,598	22,242	20,413
Total Net Investment Income	20,810	(2,401)	150,168
Benefit Payments, Including Refunds of Member Contributions	(21,704)	(14,040)	(8,950)
Administrative Expenses	(732)	(1,127)	(785)
<b>Net Change in Plan Fiduciary Net Position</b>	<b>\$88,811</b>	<b>\$70,303</b>	<b>\$217,873</b>
Plan Fiduciary Net Position – Beginning	\$1,084,142	\$1,013,839	\$795,966
Plan Fiduciary Net Position – Ending (b)	1,172,953	1,084,142	1,013,839
<b>Net Pension Liability/(Asset) (a) - (b)</b>	<b>\$34,597</b>	<b>(\$10,354)</b>	<b>(\$45,877)</b>
<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>	<b>97.1%</b>	<b>101.0 %</b>	<b>104.7 %</b>
Covered Payroll	\$280,879	\$259,133	\$249,248
<b>Net Pension Liability/(Asset) as a Percentage of Covered Payroll</b>	<b>12.3%</b>	<b>(4.0%)</b>	<b>(18.4%)</b>

(1) This is a 10-year schedule. Information in this schedule is not available prior to 2014. Additional years will be added to this schedule in future fiscal years until 10 years of data is presented.

(2) The discount rate increased to 7.15% in Fiscal Year 2014-15 as compared to 7.00% in Fiscal Year 2013-14.



## SCHEDULES OF PLAN CONTRIBUTIONS

Three-Year Review<sup>1</sup> (Dollars in Thousands)

	2016	2015	2014
<b>PERF B:</b>			
Actuarially Determined Contribution	\$1,409,752	\$1,303,162	\$1,201,125
Contributions in Relation to the Actuarially Determined Contribution	1,409,752	1,303,162	1,201,125
<b>Contribution Excess</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Covered Payroll	\$11,747,602	\$10,964,872	\$10,120,248
Contributions as a Percentage of Covered Payroll	12.0%	11.9%	11.8%
<b>PERF C:</b>			
Actuarially Determined Contribution	\$788,908	\$691,602	\$732,142
Contributions in Relation to the Actuarially Determined Contribution	788,908	691,602	732,142
<b>Contribution Excess</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Covered Payroll	\$3,472,950	\$3,356,312	\$3,248,018
Contributions as a Percentage of Covered Payroll	22.7%	20.6%	22.5%
<b>LRF:</b>			
Actuarially Determined Contribution	\$141	\$260	\$33
Contributions in Relation to the Actuarially Determined Contribution <sup>2</sup>	549	590	565
<b>Contribution Excess</b>	<b>(\$408)</b>	<b>(\$330)</b>	<b>(\$532)</b>
Covered Payroll	\$1,313	\$1,545	\$1,470
Contributions as a Percentage of Covered Payroll	41.8%	38.2%	38.4%
<b>JRF:</b>			
Actuarially Determined Contribution <sup>3</sup>	\$463,073	\$1,884,555	\$1,569,630
Contributions in Relation to the Actuarially Determined Contribution <sup>4</sup>	192,287	180,910	191,148
<b>Contribution Deficiency</b>	<b>\$270,786</b>	<b>\$1,703,645</b>	<b>\$1,378,482</b>
Covered Payroll	\$34,301	\$41,378	\$54,649
Contributions as a Percentage of Covered Payroll	560.6%	437.2%	349.8%
<b>JRF II:</b>			
Actuarially Determined Contribution	\$65,839	\$63,193	\$55,538
Contributions in Relation to the Actuarially Determined Contribution	65,839	63,193	55,538
<b>Contribution Excess</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Covered Payroll	\$280,879	\$259,133	\$249,248
Contributions as a Percentage of Covered Payroll	23.4%	24.4%	22.3%

(1) This is a 10-year schedule. Information in this schedule is not available prior to 2014. Additional years will be added to this schedule in future fiscal years until 10 years of data is presented.

(2) Because of the provisions of PEPPA, the required employer contribution is the greater of the Actuarially Determined Employer Contribution or the Employer Normal Cost.

(3) The 2016 Actuarially Determined Contribution is based on a 10-year amortization period, while the 2015 and 2014 Actuarially Determined Contributions are based on a 2-year amortization period.

(4) Contributions to the JRF are made based on the pay-as-you-go method.

## Actuarial Assumptions and Methods Used to Set the 2014, 2015, and 2016 Actuarially Determined Contributions

	PERF B	PERF C	LRF	JRF	JRF II
Actuarial Cost Method	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
Amortization Method <sup>1</sup>	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing	Level Dollar	Level Percentage of Payroll and Direct Rate Smoothing
Remaining Amortization Periods <sup>2</sup>					
2016	15-30 years	Differs by employer rate plan but no more than 30 years	29-30 years	10 years	30 years
2015	16-30 years	Differs by employer rate plan but no more than 30 years	30 years	2 years	16-30 years
2014	17-30 years	Differs by employer rate plan but no more than 30 years	30 years	2 years	17-30 years
Asset Valuation Method <sup>3</sup>	Market Value	Market Value	Market Value	Market Value	Market Value
Inflation	2.75%	2.75%	2.75%	2.75%	2.75%
Salary Increases	Varies, Based on Entry Age and Service	Varies, Based on Entry Age and Service	3.00%	3.00%	3.00%
Investment Rate of Return	7.50%	7.50%	5.75%	4.25%	7.00%

(1) Direct Rate Smoothing first applied in 2016 for PERF B and 2015 for PERF C, LRS and JRF II.

(2) Remaining periods vary by portion of unfunded liability balance being amortized.

(3) 2014 and 2015 Actuarially Determined Contributions for PERF B, PERF C, LRF, and JRF II based on smoothing of market value.

## NOTES TO SCHEDULE

## Changes in Benefit Terms

Public agencies can make changes to their plan provisions, and such changes occur on an ongoing basis. A summary of the plan provisions that were used for a specific plan can be found in the plan's annual valuation report.

## Change of Assumptions and Methods

The CalPERS Board adopted new actuarial assumptions in February 2014. The most significant change to the actuarial assumptions that the Board adopted at that time was the inclusion of future mortality improvement. The actuarial assumptions adopted by the Board are designed to ensure greater sustainability and soundness of the defined benefit pension plans, and will be better at predicting future experience resulting in more secure retirement benefits in the decades to come. The current experience study was based on demographic CalPERS data for years 1997 to 2011. The study focused on recent patterns of termination, death, disability, retirement and salary increases. These new assumptions were reflected in the total pension liabilities starting June 30, 2013, and were reflected in Actuarially Determined Contributions starting in 2015 for LRS, JRS and JRS II. The new assumptions will be reflected in the PERF B and PERF C Actuarially Determined Contributions starting in 2017.

On April 17, 2013, the CalPERS Board of Administration approved a change to the CalPERS amortization and smoothing policies for LRF and JRF II. Prior to this change,

CalPERS employed an amortization and smoothing policy, which spread investment returns over a 15-year period while experience gains and losses were amortized over a rolling 30-year period. CalPERS employs an amortization and smoothing policy that spreads rate increases or decreases over a 5-year period, and amortizes all experience gains and losses over a fixed 30-year period.

For JRF, the changes to actuarial methods include an increase in maximum benefit allowable for active members to 75 percent of pay from 65 percent of pay, the benefit payable for a termination changed from being equal to a retirement benefit to one equal to a percent (generally 3.75 percent) times years of service, and the allocated service for the non-member spouse for Qualified Domestic Relations Order changed to full service for the member in order to determine both eligibility and the benefit multiplier.

The JRF is funded on a "pay-as-you-go" basis, where short-term investments, contributions received during the year, and a State General Fund augmentation are used to provide funding for benefit payments. This funding method is generally more expensive in the long term, as the plan does not have investment returns generated by a funded plan. Without the State General Fund augmentation, the JRF will not be able to pay the accumulated benefit payments due in Fiscal Year 2015-16.

## SCHEDULE OF INVESTMENT RETURNS

Annual Money-Weighted Rate of Return, Net of Investment Expense – Three-Year Review <sup>1</sup>

Plan	2016 Rate of Return (%)	2015 Rate of Return (%)	2014 Rate of Return (%)
PERF A			
Agent	0.5%	2.2%	17.7%
PERF B			
Schools Cost-Sharing	0.5%	2.2%	17.7%
PERF C			
Public Agency Cost-Sharing	0.5%	2.2%	17.7%
LRF	3.8%	(0.1)%	12.9%
JRF	0.5%	0.2 %	0.1%
JRF II	1.9%	(0.2)%	18.3%
CERBTf <sup>2</sup>	1.6%	— %	—%

(1) This is a 10-year schedule. Information in this schedule is not available prior to 2014. Additional years will be added to this schedule in future years until 10 years of data is presented.

(2) Early implementation of GASB 74 results in prospective application of calculating the MWRR for the CERBTf. As such, MWRR data prior to 2016 is not available.

# PUBLIC EMPLOYEES' HEALTH CARE FUND/CONTINGENCY RESERVE FUND

## Schedule of Claims Development Information (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
1) Net Earned Required Premium and Investment Revenues	\$3,801,266	\$3,642,206	\$2,808,384	\$1,948,531	\$1,912,355	\$1,775,005	\$1,409,621	\$1,608,738	\$1,543,643	\$1,410,888
2) Unallocated Expenses	\$355,779	\$371,916	\$192,987	\$105,154	\$96,043	\$88,392	\$90,292	\$85,511	\$78,607	\$74,771
3) Estimated Incurred Claims and Expenses, End of Policy Year	\$3,417,480	\$3,432,102	\$2,748,821	\$1,921,957	\$1,816,245	\$1,792,599	\$1,654,214	\$1,530,264	\$1,385,438	\$1,268,239
4) Paid (Cumulative) as of:										
End of Policy Year	\$3,377,365	\$3,378,857	\$2,122,865	\$1,640,709	\$1,635,839	\$1,550,306	\$1,444,509	\$1,313,680	\$1,197,390	\$1,094,818
One Year Later	—	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134	1,316,774	1,197,334
Two Years Later	—	—	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134	1,316,774	1,197,334
Three Years Later	—	—	—	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134	1,316,774	1,197,334
Four Years Later	—	—	—	—	1,788,135	1,698,615	1,589,771	1,448,134	1,316,774	1,197,334
Five Years Later	—	—	—	—	—	1,698,615	1,589,771	1,448,134	1,316,774	1,197,334
Six Years Later	—	—	—	—	—	—	1,589,771	1,448,134	1,316,774	1,197,334
Seven Years Later	—	—	—	—	—	—	—	1,448,134	1,316,774	1,197,334
Eight Years Later	—	—	—	—	—	—	—	—	1,316,774	1,197,334
Nine Years Later	—	—	—	—	—	—	—	—	—	1,197,334
5) Re-Estimated Incurred Claims Expenses:										
End of Policy Year	\$3,417,480	\$3,432,102	\$2,748,821	\$1,921,957	\$1,816,245	\$1,792,599	\$1,654,214	\$1,530,264	\$1,385,438	\$1,268,239
One Year Later	—	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134	1,316,774	1,197,334
Two Years Later	—	—	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134	1,316,774	1,197,334
Three Years Later	—	—	—	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134	1,316,774	1,197,334
Four Years Later	—	—	—	—	1,788,135	1,698,615	1,589,771	1,448,134	1,316,774	1,197,334
Five Years Later	—	—	—	—	—	1,698,615	1,589,771	1,448,134	1,316,774	1,197,334
Six Years Later	—	—	—	—	—	—	1,589,771	1,448,134	1,316,774	1,197,334
Seven Years Later	—	—	—	—	—	—	—	1,448,134	1,316,774	1,197,334
Eight Years Later	—	—	—	—	—	—	—	—	1,316,774	1,197,334
Nine Years Later	—	—	—	—	—	—	—	—	—	1,197,334
6) Decrease in Estimated Incurred Claims and Expenses From End of Policy Year	\$0	\$370,175	(\$69,915)	(\$125,370)	(\$28,110)	(\$93,984)	(\$64,443)	(\$82,130)	(\$68,664)	(\$70,905)

Rows 1 through 6 contain the following information:

- (1) This line shows the total earned premium revenues and investment revenues for each fiscal year.
- (2) This line shows other HCF/CRF operating costs, including overhead and claims expense not allocable to individual claims, for each fiscal year.
- (3) This line shows the HCF/CRF incurred claims and allocated claim adjustment expenses (both paid and accrued) as reported at the end of the policy year. The policy year is the first year in which the triggering event under the contract occurred.
- (4) This section shows the cumulative amounts paid as of the end of each policy year and years succeeding the policy year.
- (5) This section shows re-estimated incurred claims as of the end of each policy year and years succeeding the policy year. Re-estimates are based on new information on new claims not previously reported.
- (6) This line compares the amount of the re-estimated incurred claims to the amount initially established (line 3), and shows whether the re-estimate is greater or less than projected. As data mature for individual policy years, the correlation between initial estimates and re-estimates is used to evaluate the accuracy of incurred claims currently recognized.

# FINANCIAL SECTION

## Other Supplementary Information

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## Other Supplementary Information

### ADMINISTRATIVE EXPENSE – ALL FUNDS (DOLLARS IN THOUSANDS)

	2016
<b>PERSONNEL SERVICES</b>	
Salaries & Wages	\$171,691
Employee Benefits	81,026
<b>Total Personnel Services</b>	<b>\$252,717</b>
<b>CONSULTANT &amp; PROFESSIONAL SERVICES</b>	
State of California Agencies	\$7,415
External Consultants	56,287
Retiree Benefit Trust Management Fees	98
Deferred Compensation Management/Custody Fees	3,683
Health Plan Administrator Fees	253,963
Long-Term Care Administrator Fees	21,654
<b>Total Consultant &amp; Professional Services</b>	<b>\$343,100</b>
<b>OPERATING EXPENSES &amp; EQUIPMENT</b>	
General Expense	\$6,489
Software	1,940
Printing	1,672
Building	26,100
Postage	4,844
Communications	2,071
Data Processing Services	19,827
Travel	1,569
Training	927
Medical Examiners	1,890
Facilities Operation	3,664
Central Administrative Services	25,154
Administrative Hearings	1,216
Consolidated Data Center	65
Equipment	1,942
<b>Total Operating Expenses &amp; Equipment</b>	<b>\$99,370</b>
<b>OTHER EXPENSES &amp; ADJUSTMENTS</b>	
Depreciation Expense	\$18,968
Decrease in Paid Absence Obligation	(2,456)
Reversal of OPEB Obligation	(195,337)
Amortization	2,354
Miscellaneous	66,558
<b>Total Other Expenses &amp; Adjustments</b>	<b>(\$109,913)</b>
<b>TOTAL ADMINISTRATIVE EXPENSES — ALL FUNDS</b>	<b>\$585,274</b>

## INVESTMENT EXPENSE – ALL FUNDS

Investment Management Fees<sup>1,2</sup> (Dollars in Thousands)

	Fees		Fees
<b>Equity Managers</b>		Pacific Investment Management Co.	\$964
Alliance Bernstein, LP	\$61	Rogge Global Partners	48
Allianz Global Investors U.S., LLC	4,133	<b>Total Fixed Income Managers</b>	<b>\$1,586</b>
Arrowstreet Capital, LP	5,778		
Ashmore Equities Investment Management	1,003	<b>Real Asset Managers</b>	
Baillie Gifford Overseas, Ltd.	1,986	301 Capitol Mall, LP	\$127
Blum Strategic Partners IV, LP	125	Aetos Capital Asia TE II, Ltd.	1,069
Cartica Corporate Governance Fund, LP	4,734	AGI Resmark Housing Fund, LLC	894
Dimensional Fund Advisors, LP	152	AGI-TMG Housing Partners I, LLC	(148)
Epoch Investment Partners, Inc.	5,440	Alinda Infrastructure Fund I, LP	1,261
First Quadrant, LP	(961)	Alinda Infrastructure Fund II, LP	2,226
FIS CalBear Fund, LLC	1,262	American Value Partners Fund I, LP	350
FIS Group, Inc.	(42)	Apollo Real Estate Finance Corporation	100
Genesis Asset Managers, LLP	2,227	ARA Asia Dragon Fund	(61)
Grantham, Mayo, Van Otterloo & Co., LLC	(225)	ARA Asia Dragon Fund II	738
Hamilton Lane Advisors, LLC	837	ARA China Long Term Hold	4,378
Hermes Sourcecap Limited	2,442	AREA Real Estate Investment Fund V, LP	235
Huber Capital Management, LLC	3,024	CalEast Canada Limited Partnership	339
J.P. Morgan Investment Management, Inc.	817	CalEast Industrial Investors, LLC	1,893
Lazard Asset Management, LLC	4,299	CalEast Solstice - Base	1,854
Leading Edge Investment Advisors, LLC	(71)	CalEast Solstice - DT Land	501
Legato Capital Management Investments, LLC	4,815	CalEast Solstice - DT Other	396
Legato Capital Management, LLC	3	CalEast Solstice, LLC	12,002
LEIA GEM Investment, LLC	1,842	California Smart Growth Fund IV, LP	293
New Mountain Vantage (California), LP	2,714	CalWest - CalPERS	774
Nomura Asset Mgt. USA, Inc.	40	Canyon Catalyst Fund, LLC	1,355
Progress Investment Management Company	129	Canyon Johnson Urban Fund, III	793
Progress Investments II, LLC	3,840	Carlyle Infrastructure Partners, LP	679
Pyramis Global Advisors Trust Company	2,619	CBRE Strategic Partners Europe Fund III	394
Pzena Investment Management, LLC	1,784	CBRE Strategic Partners UK Fund II	120
Quotient Investors, LLC	695	CBRE Strategic Partners UK Fund III	33
Redwood Investments, LLC	(593)	CIM Fund III, LP	8,705
Relational Mid-Cap	679	CIM Infrastructure Fund, LP	2,026
State Street Global Advisors	2,873	CIM Urban Real Estate Fund, LP	2,759
Strategic Investment Group Investments II, LLC	1,911	CityView LA Urban Fund I, LP	174
Strategic Investment Management, LP	704	CUC III, LLC	390
Strategic Investment Solutions, Inc.	(1)	DB Real Estate Global Opportunities IB, LP	(29)
T. Rowe Price Associates, Inc.	(1,605)	European Property Investors, LP	65
Taiyo Cypress Fund, LP	25	Fillmore East Fund, LP	5
Taiyo Fund, LP	11,526	Fortress Holiday Investment Fund, LP	342
The Boston Company Asset Management, LLC	322	Fortress Investment Fund IV (Fund A), LP	336
The Boston Consulting Group, Inc.	7	FSP - Base	3,973
TOBAM	2,339	FSP - DT 2011	4,912
Wasatch Advisors, Inc.	6,581	FSP - DT 2012 and Beyond	5,197
Wellington Management Company, LLP	4,389	GI Partners Fund II, LP	696
<b>Total Equity Managers</b>	<b>\$84,659</b>	GI Partners Fund III, LP	2,357
		Global Infrastructure Partners II, LP (GIP II)	3,210
<b>Fixed Income Managers</b>		Global Retail Investors, LLC	6,516
Alliance Bernstein, LP	\$333	GRI - Base	2,029
Baring International Investment Limited	369	GRI - DT 2011	463
Columbia Management Investment Advisors	(390)	Guggenheim Structured Real Estate III, LP	7
Investec Asset Management North America	262	Hampshire Partners Fund VI, LP	13



## INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

Investment Management Fees<sup>1,2</sup> (Dollars in Thousands) (continued)

	Fees		Fees
Harbert European Real Estate Fund II, LP	\$107	Stockbridge Real Estate Fund II -B, LP	\$356
Harbert Gulf Pacific Power, LLC (HGPP)	2,677	Strategic Partners Value Enhancement Fund, LP	74
Harbert Power Fund V, LP (HPF V)	424	Sun-Apollo India Real Estate Fund, LLC	159
HC Green Development Fund, LP	442	Sylvanus, LLC	2,289
HC NOP Holdings, LP	118	TechCore, LLC	5,925
HCB Interests II, LP	1,935	TPG Hospitality Investments IV, LLC	766
HCB LTH	7,128	UBS International Infrastructure Fund II (B), LP	585
HCC Interests, LP	259	UBS International Infrastructure Fund II (C), LP	1,244
HCM Holdings II, LP	397	UrbanAmerica, LP II	204
HCR LTH, LLC	4,006	Whitney Ranch Venture, LLC	1,030
Hearthstone Housing Partners II, LLC	1,292	Windsor Realty Fund VII, LP	95
Hearthstone Housing Partners III, LLC	151	Xander Co-Investment	1,131
Hines European Development Fund, LP	66	Xander JV Fund I (India Realty)	301
IHP Investment Fund I, LP	1,157	<b>Total Real Asset Managers</b>	<b>\$178,583</b>
IHP Investment Fund II, LP	992		
IHP Investment Fund III, LP	1,188	<b>Other Investment Management Fees</b>	
IL&FS India Realty Fund II, LLC	943	AQR Capital Management, LLC	\$3,385
IL&FS India Realty Fund, LLC	565	Black River Commodity Multi-Strategy Fund, LLC	(10)
IMI - Base	16,247	Brookside Capital Partners Fund, LP	70
IMI - DT 2011	1,465	Chatham Eureka Fund, LP	2,299
IMP - Base	4,829	Deephaven Market Neutral, LLC	4
IMP - DT 2011	1,772	Double Haven Eureka, LLC	78
IMP - DT 2012 and Beyond	264	Kylin Eureka Fund, LLLP	424
Institutional Core Multifamily Investors	3,050	Lansdowne Eureka Fund, LP	32
Institutional Logistics Partners, LLC	1,745	OZ Domestic Partners II, LP	109
Institutional Multifamily Partners	4,433	OZ Eureka Fund, LP	3,271
JER Europe Fund III, LP	31	Rock Creek 1848 Fund, LP	7
KAREC California Development Program, LLC	(881)	Standard Life Investments Limited	4,730
KC 2011, LLC	2,922	Symphony Eureka Fund, LP	(56)
KSC Affordable Housing Investment Fund, LLC	951	<b>Total Other Investment Management Fees</b>	<b>\$14,343</b>
Land Management Company, LLC	2,025		
LaSalle Asia Opportunity Fund III, LP	463	<b>Total Management Fees</b>	<b>\$279,171</b>
LaSalle French Fund II, LP	23		
LaSalle Japan Logistics Fund II, LP	—		
Lincoln Timber, LP	4,978		
Market Street Capital Partners, LP	387		
Meriwether Farms, LLC	842		
National Office Partners, LLC (CWP)	3,513		
Niam Nordic Investment Fund IV	136		
North Haven Infrastructure Partners II, LP	1,201		
ORA Multifamily Investments I, LLC	4,215		
ORA Residential Investments I, LP	4,861		
Pacific Multifamily Investors, LLC	2,018		
Pacific Vineyard Partners, LLC	458		
PLA Retail Fund I, LP	336		
PRECO Account Partnership III, LP	92		
Rockpoint Real Estate Fund II, LP	42		
Rockpoint Real Estate Fund III, LP	277		
Savanna Real Estate Fund I, LP	91		
Secured Capital Japan Real Estate Partners Asia, LP	324		
Starwood Capital Hospitality Fund II Global, LP	987		
Stockbridge Hollywood Park Co-Investors, LP	(261)		

(1) Expenses and fees less than a thousand dollars are indicated by a dash.  
(2) Negative management fees are due to adjusting entries.

## INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

Performance Fees<sup>1</sup> (Dollars in Thousands)

	Fees		Fees
<b>Absolute Return Strategy Managers</b>		GRI - Base	\$2,994
Brookside Capital Partners Fund, LP	\$352	GRI - DT 2011	2,245
Chatham Eureka Fund, LP	(146)	Harbert Power Fund V, LP (HPF V)	(18)
Kylin Eureka Fund, LLLP	187	HCB Interests II, LP	(5,471)
Lansdowne Eureka Fund, LP	(93)	HCC Interests, LP	(2,559)
OZ Eureka Fund, LP	(1,120)	Hearthstone Housing Partners, LP	(214)
Symphony Eureka Fund, LP	21	Hearthstone Multi-State Residential Value-Added III	(131)
Rock Creek 1848 Fund, LP	18	Hearthstone-MSII Homebuilding Investors, LLC	(23)
<b>Total Absolute Return Strategy Managers</b>	<b>(\$781)</b>	IHP Investment Fund I, LP	61,281
<b>Equity Managers</b>		IMI - Base	19,324
Alliance Bernstein, LP	\$1,264	IMP - Base	(435)
Arrowstreet Capital, LP	18,636	IMP - DT 2011	7,353
Baillie Gifford Overseas, Ltd.	5,620	IMP - DT 2012 and Beyond	8,505
Blum Strategic Partners II	(1)	Institutional Core Multifamily Investors	865
First Quadrant, LP	12,917	Institutional Logistics Partners, LLC	3,208
FIS Group, Inc.	159	Institutional Multifamily Partners	42,646
J.P. Morgan Investment Management, Inc.	208	Ivy Investment Vehicle LDC (SWPM)	24,439
Lazard Asset Management, LLC	(165)	LaSalle Japan Logistics Fund II, LP	2,459
Leading Edge Investment Advisors, LLC	76	National Office Partners, LLC (CWP)	10,313
New Mountain Vantage (California), LP	(93)	ORA Multifamily Investments I, LLC	10,141
Pzena Investment Management, LLC	2,827	ORA Residential Investments I, LP	14,498
Research Affiliates, LLC	3,335	Pacific Multifamily Investors, LLC	1,485
Taiyo Fund, LP	12,545	SDL Hospitality Co-Invest Fund, LP	64
The Boston Company Asset Management, LLC	5,416	Secured Capital Japan Real Estate Partners Asia, LP	(814)
<b>Total Equity Managers</b>	<b>\$62,744</b>	Secured Capital Japan Real Estate Partners II, LP	(1,164)
<b>Fixed Income Managers</b>		Starwood Capital Hospitality Fund II Global, LP	(5,142)
Alliance Bernstein, LP	\$854	TechCore, LLC	9,737
Baring International Investment Limited	226	<b>Total Real Asset Managers</b>	<b>\$279,343</b>
Pacific Investment Management Co.	2,283	<b>Total Performance Fees</b>	<b>\$344,669</b>
<b>Total Fixed Income Managers</b>	<b>\$3,363</b>	<b>Total Management and Performance Fees</b>	<b>\$623,840</b>
<b>Real Asset Managers</b>		(1) Negative performance fees are due to the reversal of accruals caused by the fluctuation in market values.	
AGI Resmark Housing Fund, LLC	\$2,799		
CalEast Canada Limited Partnership	(1,067)		
CalEast Solstice, LLC	(14,063)		
CalSmart, LLC (Canyon)	131		
Canyon Catalyst Fund, LLC	2,350		
Canyon Johnson Urban Fund, III	2,638		
CUC III, LLC	160		
CIM Fund III, LP	(18,997)		
CIM Infrastructure Fund, LP	4,475		
DB Real Estate Global Opportunities IB, LP	(235)		
ERPMI	22		
FSP - Base	10,271		
FSP - DT 2011	11,666		
FSP - DT 2012 and Beyond	12,408		
GI Partners Fund III, LP	(3,034)		
Global Infrastructure Partners II, LP (GIP II)	6,333		
Global Innovation Partners, LLC	111		
Global Retail Investors, LLC	57,789		

## Other Supplementary Information (continued)

### INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

#### Other Investment Expenses<sup>1,2</sup> (Dollars in Thousands)

	Fees		Fees
<b>Advisory Fees</b>		Knowledge Structures, Inc.	\$6
Fan Asset Management, LLC	\$457	KPMG, LLP	40
FIS CalBear Fund, LLC	493	LP Capital Advisors, LLC	99
Goldman Sachs Asset Management	1,304	Meketa Investment Group, Inc.	(12)
Legato Capital Management Investments, LLC	1,320	Mercer Investment Consulting, Inc.	55
LEIA GEM Investment, LLC	750	Mosaic Investment Advisors, Inc.	359
Principal Life Insurance Company	192	Nichols Consulting	(75)
Progress Investments II, LLC	1,250	Pacific Alternative Asset Mgmt Company	175
QS Investors, LLC	446	Pacific Community Ventures, Inc.	374
Research Affiliates, LLC	494	Pension Consulting Alliance, LLC	(6)
Strategic Investment Group Investments II, LLC	498	Persell Design Group, LLC	13
<b>Total Advisory Fees</b>	<b>\$7,204</b>	Planet Technologies, Inc.	81
<b>Auditor Fees</b>		Propoint Technology, Inc.	1,283
Conrad, LLP	\$184	Pyramid Technical Consultants, Inc.	230
Katten Muchin Rosenman, LLP	(26)	RG & Associates	16
KNL Support Services	—	Ryedale, Inc.	597
KPM & Associates, LLP	226	SAS International, Inc.	94
<b>Total Auditor Fees</b>	<b>\$384</b>	SRI Infotech, Inc.	116
<b>Appraisal Fees</b>		Stanfield Systems, Inc.	413
Altus Group U.S. Inc.	\$8,464	StepStone Group, LP	37
<b>Total Appraisal Fees</b>	<b>\$8,464</b>	Technology Crest Corporation	384
<b>Company Expense</b>		The Regents of University of CA	85
Legato Capital Management, LLC	\$235	The Wright Coach	8
LEIA GEM Investment, LLC	67	Trinity Technology Group, Inc.	440
Progress Investments II, LLC	71	UBS Alternative & Quantitative Investment	726
Strategic Investment Management, LP	66	Voyager	1
<b>Total Company Expense</b>	<b>\$439</b>	Wilcox, Miller & Nelson	62
<b>Investment Consultant Fees</b>		<b>Total Investment Consultant Fees</b>	<b>\$8,865</b>
Altius Associates Limited	\$37	<b>Legal Fees</b>	
American Express	22	Berman DeValerio	\$23
APCO Worldwide, Inc.	6	Chapman and Cutler, LLP	(32)
ATV Video Center, Inc.	28	Cox, Castle & Nicholson, LLP	108
Bard Consulting, LLC	812	Downey Brand, LLP	(1)
BDO USA, LLP	6	Foster Pepper, PLLC	151
Beacon Consulting Group, Inc.	(12)	Hogan Lovells, US LLP	374
Callan Associates, Inc.	(42)	Jackson Walker, LLP	61
Cambria Solutions, Inc.	95	K & L Gates, LLP	894
Cambridge Associates, LLC	313	Katten Muchin Rosenman, LLP	27
Courtland Partners, Ltd	248	Keker & Van Nest, LLP	101
Crosswater Realty Advisors, LLC	452	Morgan Lewis & Bockius, LLP	703
Cutter Associates, LLC	100	Nixon Peabody, LLP	20
Dee Hansford Consulting	(12)	Pillsbury Winthrop Shaw Pittman, LLP	2,233
Duff & Phelps, LLC	500	Soltman, Levitt, Flaherty & Wattles, LLP	(29)
Edhec Business School	189	Steptoe & Johnson, LLP	2
FTI Consulting, Inc.	434	<b>Total Legal Fees</b>	<b>\$4,635</b>
Garland Associates, Inc.	104	<b>Master Custodian Fees</b>	
KearnFord Application Systems Design	(16)	State Street Bank And Trust Company	\$4,592
		<b>Total Master Custodian Fees</b>	<b>\$4,592</b>

## Other Supplementary Information (continued)

### INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

#### Other Investment Expenses<sup>1,2</sup> (Dollars in Thousands) (continued)

	Fees		Fees
<b>Fund Administration Fees</b>		eVestment Alliance	\$40
State Street Bank And Trust Company	\$4,005	Factset Research Systems, Inc.	3,274
<b>Total Fund Administration Fees</b>	<b>\$4,005</b>	Firstrain, Inc.	10
		Fitch Ratings, Inc.	267
<b>Tax Advisory Fees</b>		FTSE	710
Ernst & Young, LLP	\$986	FX Alliance, Inc.	33
<b>Total Tax Advisory Fees</b>	<b>\$986</b>	Glass Lewis & Co., LLC	528
		Global Investor Collaboration Svcs., LLC	5
<b>Technology Expenses</b>		GP Analytics	130
13D Research, Inc	\$60	Green Street Advisors	100
Ablegov, Inc.	1	High Frequency Economics, Ltd.	10
Acadiasoft, Inc.	9	IHS Global, Inc.	54
Adobe Government At Carahsoft	—	Institutional Shareholder Services, Inc.	100
Allied Network Solutions, Inc.	5	Intex Solutions, Inc.	251
Altura Capital Group	25	Intralinks, Inc.	3
AT&T Mobility II, LLC	4	Ives Group, Inc.	13
Axioma Inc	436	KPA Advisory Services, Ltd.	6
Barclays Capital	100	Lazard Asset Management, LLC	(20)
Barra	160	London Stock Exchange PLC	138
Barra, Inc.	309	Mcgraw Hill/Standard & Poors	585
Barra, LLC	1,447	Microsoft Services	15
BCA Research	249	Moody's Analytics, Inc.	552
Blackrock Financial Management, Inc.	7,273	Morningstar	21
Bloomberg, LP	2,709	Mountainview Analytics, LLC	10
Bridge Micro	8	MRB Partners, Inc.	100
Business Entity Data B.V.	—	MRI Software, LLC	265
Business Monitor International, Ltd.	40	MSCI INC	410
Cambridge Associates, LLC	175	New York Stock Exchange	6
Candeal, Inc.	11	Northfield Information Services, Inc.	20
Capital Analytics II, LLC	5,308	Nyse Market, Inc.	7
Carahsoft Technology Corp.	122	Omgeo	88
CBRE, Inc.	120	Options Price Reporting Authority	—
Charles River Systems, Inc.	2,091	Preqin Limited	44
Climate Neutral Investment, Ltd.	63	Quantal International, Inc.	45
Cornerstone Macro, LP	95	Radianz Americas, Inc.	182
Cost Effectiveness Measurement, Inc.	70	RBS Smart Productions, Inc.	(20)
Costar Investment Analysis	283	Real Capital Analytics, Inc.	130
Covenant Review, LLC	45	RG & Associates	8
Credit Suisse Customized Fund Investment	(25)	Russell Investment Group	3
Creditsights	100	SNL Financial LC	100
Depository Trust Co.	10	Standard & Poor's Corporation	1,149
Dow Jones & Company	2	Stone & Kanto, LLC	4
Dow Jones & Company, Inc.	3	Strategic Economic Decisions, Inc.	15
eFront Financial Solutions, Inc.	2,468	Summit Financial Printing, LLC	13
Egan-Jones Ratings Co.	6	Sustainalytics U.S. Inc.	60
eMBS INC.	9	The Depository Trust & Clearing Corp.	4
Empirical Research Partners, LLC	400	The Mathworks, Inc.	44
Equilar, Inc.	8	The World Markets Company, PLC	15
Esai Energy, LLC	13	The Statestore, Inc., C/O Wb Fulfillment	43
Etrali North America, LLC	308	Thomson - West	(1)
Eurasia Group	132	Thomson Financial/Nelson	210
Euromoney Trading Limited	8	Thomson Reuters Scientific	188

## INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

Other Investment Expenses<sup>1,2</sup> (Dollars in Thousands) (continued)

	Fees
Toronto Stock Exchange	\$1
Trade Web	102
Trend Macrolytics, LLC	25
Trucost, PLC	75
William O'Neil & Company	30
Yardeni Research, Inc.	19
Yield Book, Inc.	182
Zeno Consulting Group, LLC	49
<b>Total Technology Expenses</b>	<b>\$35,110</b>
<b>Internal Investment Personnel and Administrative</b>	
Internal Investment Personnel and Administrative Expenses	\$69,685
<b>Total Internal Investment Personnel and Administrative</b>	<b>\$69,685</b>
<b>Miscellaneous Investment Expense Fees</b>	
Miscellaneous Investment Expense Fees	\$38
Transaction Fees	66,455
<b>Total Miscellaneous Investment Expense Fees</b>	<b>\$66,493</b>
<b>Total Other Investment Fees and Expenses</b>	<b>\$210,862</b>
<b>Total Investment Expenses - All Funds</b>	<b>\$834,702</b>

(1) Expenses and fees less than a thousand dollars are indicated by a dash.

(2) Negative expenses are due to market fluctuations, adjusting entries, and reimbursements.

**CONSULTANT AND PROFESSIONAL SERVICES EXPENSES – ALL FUNDS (DOLLARS IN THOUSANDS)**

Individual or Firm	Fees	Nature of Services
Aisitech, LLC	\$146	Release Management/Quality Assurance/Configuration Management
Ambire Consulting, Inc.	52	Project Management Services
Anthem Blue Cross	102,727	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention & Disease Management Services
ATV Video Center, Inc.	221	Video and Multimedia Production Services
Avenue Solutions	315	Management Analysis
Base 3 Consulting	421	Application Development, Management Support Services
Beacon Consulting Group, Inc.	201	Investment Business Consulting
Bedrosian & Associates	25	Succession and Workforce Planning
Belmonte Enterprises, LLC	862	Application Development Information Services Project Management Services
Blue Shield of California	116,609	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention & Disease Management Services
BluePath Health	152	Organizational and Leadership Development
Business Advantage Consulting, Inc.	76	Disaster Recovery, Management Support Services
California Department of Corrections & Rehabilitation	111	Management Support Services
California Department of Health Care Services	20	Annual Fee for Long-Term Care Policy & Partnership Services
Capio Group	316	Application Development, Management Support Services
Carahsoft Technology Corporation	531	Innovation and Development
Celer Systems, Inc.	194	Application Development, Information Services formerly Data Services, Management Support Services, Project Management Services
Claims Eval, Inc.	23	Legal Services
Continuity Consulting, Inc.	155	Organizational and Leadership Development
Cornerstone Fitness, Inc.	97	Employee Training and Development
Cutter Associates, LLC	504	Investment Business Consulting
CVS Caremark	5,530	Pharmacy Claims Administration, Account Management, Eligibility, Retail & Other Reporting Services
Daniel J. Edelman, Inc.	(25)	Media Training
Delegata Corporation	2,047	Business Intelligence and Reporting, Business Transformation/Transition, Information Services formerly Data Services, IT Architecture, Project Management Services
Delfino Madden O'Malley Coyle & Koewler, LLP	24	Advice on Labor/Employment Law
Department of General Services/RR Donnelly	379	Open Enrollment Printing, Mail Processing & Postage
Department of Human Resources	252	Election Forms for the Alternate Retirement Program (ARP) Processing Services
Department of Justice	424	Conduct & Provide External Investigative Services
Dickinson Wright, PLLC	44	Legal Services
Domain Experts Corporation	219	Recruiting and Placement
Downey Brand, LLP	34	Legal Services
Drinker Biddle & Reath, LLP	559	Legal Services
DSS Research	139	Medical Consulting Services
Eagle Management Group, LLC, dba Matran	102	Marketing Services
Eaton Interpreting Services, Inc.	112	Interpreting Services
Elegant-Enterprise Wide Solutions, Inc.	53	Application Development, IT Security, Management Support Services, Business Process Reengineering
Elynview Corporation	194	Data Base Administration
Enclipse Corporation	130	IT Architecture, Release Management/Quality Assurance/Configuration Management

## Other Supplementary Information (continued)

### CONSULTANT AND PROFESSIONAL SERVICES EXPENSES – ALL FUNDS (DOLLARS IN THOUSANDS) (CONTINUED)

Individual or Firm	Fees	Nature of Services
Enterprise Networking Solutions, Inc.	\$117	IT Architecture, Systems Analysis, Design, Implementation, Maintenance and Support
Equanim Technologies	484	Management Support Services, Project Management Services
Esoft Infosystems, Inc.	386	Data Base Administration
Eterasys Consulting, Inc.	381	Application Development, Data Base Administration
Felderstein Fitzgerald Willoughby & Pascuzzi LLP	47	Outside Counsel - Bankruptcy
FireEye, Inc., dba Mandiant	116	Management Support Services
First Data Merchant Services Corporation	46	Banking services
Gartner, Inc.	200	Management Support Services
Global Blue DVBE, Inc.	321	IT Asset Management
Government Operations Agency	269	Operations and Strategic Business Planning
GovernmentJobs.com, Inc., dba NEOGOV	21	Recruiting and Placement
Grant Thornton, LLP	291	Operations and Strategic Business Planning, Performance Management and Program Evaluation
Group One Consultants, Inc.	30	Recruiting and Placement
H&B Joint Venture	1,102	Release Management/Quality Assurance/Configuration Management
Health Net of California	5,032	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention & Disease Management Services
Heidrick & Struggles	497	Recruiting and Placement
Hewitt Associates, LLC	417	Actuarial Consulting Services
Host Analytics, Inc.	68	Application Development, Project Management Services
HP Enterprise Services, LLC	196	IT Architecture
Information Technology Software Professional	207	Application Development
Innovative Software Technologies, Inc.	500	Specialized IT Support Services for Actuarial Systems/Business
J & K Court Reporting, LLC	70	Legal Services
Jay Gaines & Company, Inc.	45	Recruiting and Placement
JLynnConsulting, Inc.	688	Application Development, Business Intelligence and Reporting, Information Services formerly Data Services
K & L Gates, LLP	(546)	Legal Services
Kath Straub And Associates, LLC	71	User Experience Design, Strategy and Research
KearnFord Application Systems Design	4,474	Information Services formerly Data Services, Management Support Services, Project Management Services, Release Management/Quality Assurance/Configuration Management
Kenera Consulting, Inc.	149	Project Management Services
Kiefer Consulting, Inc.	114	Application Development, IT Architecture
King & Spalding, LLP	386	Legal Services
Klausner, Kaufman, Jensen & Levinson	95	Outside Fiduciary Counsel
Knowledge Structures, Inc.	87	Employee Training and Development
Kong Consulting, Inc.	572	Systems Analysis, Design, Implementation, Maintenance and Support
Kronick, Moskowitz, Tiedemann & Girard	24	Advice on Labor/Employment Law Issues
LCS Technologies, Inc.	166	Application Development, Data Base Administration
Leading Resources, Inc. (LRI)	34	Employee Training and Development, Organizational Structure and Change Management
Logic House, Ltd.	125	Release Management/Quality Assurance/Configuration Management
Long-Term Care Group, Inc.	21,248	Third-Party Member Record-Keeper, Medical Claims Administration, Eligibility, Retail & Other Reporting Services, IT services
Lussier Group	267	Management Analysis, Legal Services



## Other Supplementary Information (continued)

### CONSULTANT AND PROFESSIONAL SERVICES EXPENSES – ALL FUNDS (DOLLARS IN THOUSANDS) (CONTINUED)

Individual or Firm	Fees	Nature of Services
M Corporation	\$50	Application Development, Business Process Re-engineering, Information Services formerly Data Services, IT Architecture, Management Support Services, Project Management Services
Macias Gini & O'Connell LLP	4,783	Audit Services
Matrix Software Services	204	Data Base Administration
Maximus Federal Services, Inc.	37	Medical Consulting Services
Mazel Immigration Law, PC	28	Legal Services
McLagan	70	Performance Management
Mellon Bank	323	Banking services
Mercer Health and Benefits	738	Actuarial Consulting Services, Medical Consulting Services
Michael Scales Consulting, LLC	216	Application Development
Michael Strategic Analysis	54	Survey and Research Services
Milliman, Inc.	2,652	Actuarial Consulting Services, Project Management Services
Mindstorm Creative, Inc.	56	Video and Multimedia Production Services
Modis, Inc.	140	Architecture, Specialized IT Support Services
Morgan Lewis & Bockius, LLP	(26)	Outside Counsel for Board Investment Program
Nexus IS, Inc.	197	Systems Analysis, Design, Implementation, Maintenance and Support
Nichols Consulting	597	Management Support Services
Northeast Retirement Services	97	Third-Party Member Record-Keeper
OnCore Consulting, LLC	10,907	Application Development, Information Services formerly Data Services, Systems Analysis, Design, Implementation, Maintenance and Support
Ope Technology, LLC	653	Release Management/Quality Assurance/Configuration Management
Orrick Herrington & Sutcliffe, LLP	88	Management Analysis
Pacific Business Group on Health	68	Application Development
Pasanna Consulting Group, LLC	1,016	Application Development, IT Architecture
Paul Benefits Law Corporation	61	Legal Services
Performance Technology Partners, LLC	452	IT Security
Persell Design Group, LLC	66	User Experience Design, Strategy and Research
Planet Technologies, Inc.	269	Systems Analysis, Design, Implementation, Maintenance and Support
Premier Alliance Group, Inc.	91	Project Management Services
Princeton Solutions Group, Inc.	732	Project Management Services, Release Management/Quality Assurance/Configuration Management
Pyramid Technical Consultants, Inc.	101	IT Security
Qualapps, Inc.	446	Application Development, IT Architecture
Radian Solutions, LLC	270	Application Development, Information Services formerly Data Services, Release Management/Quality Assurance/Configuration Management
Reed Smith, LLP	1,023	Legal Services
Regents of the University of CA, Berkeley	110	Management Analysis
Regents of the University of CA, Davis	344	Organizational and Leadership Development, Investment Business Consulting
Ridgeway Partners, LLC	45	Investment Business Consulting
Risk 2 Reputation	150	Management Analysis
Riviera Finance Assignee of Sophus	122	Legal Services
Runyon Saltzman & Einhorn, Inc.	540	Marketing Services
Saba Software, Inc.	102	Employee Training and Development
Sage 2.0	119	Information Services formerly Data Services
SAS International, Inc.	90	Systems Analysis, Design, Implementation, Maintenance and Support
Senn-Delaney Leadership Conslt Group, LLC	125	Organizational and Leadership Development
Shah & Associates, A Professional Law Company	200	Legal Services

## Other Supplementary Information (continued)

### CONSULTANT AND PROFESSIONAL SERVICES EXPENSES – ALL FUNDS (DOLLARS IN THOUSANDS) (CONTINUED)

Individual or Firm	Fees	Nature of Services
Sharp Health Plan	\$4,312	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention & Disease Management Services
Shaw Valenza, LLP	79	Management Analysis
Sign Language Interpreting Service Agency	44	Interpreting Services
Softsol Technologies, Inc.	497	Application Development, Information Services formerly Data Services, Release Management/Quality Assurance/Configuration Management
SRI Infotech, Inc.	99	Application Development
Stanfield Systems, Inc.	37	Project Management Services, Business Process Reengineering
State Controller's Office	9,083	Account Management, Performance Management and Program Evaluation, Information technology, Other Post Employment Benefits and General administrative services
State Treasurer's Office	21	Wiring Services
Steptoe & Johnson, LLP	1,077	Legal Services
T5 Consulting	1,652	Application Development, Business Intelligence and Reporting, Information Services formerly Data Services, IT Architecture
Take 1 Productions	50	Video and Multimedia Production Services
Technology Crest Corporation	373	Application Development, Release Management/Quality Assurance/Configuration Management
Teranomic	100	Project Management Services
TG Page Design Group	135	Video and Multimedia Production Services
The Ballard Group, Inc.	405	Release Management/Quality Assurance/Configuration Management
The Taylor Feldman Group, LLC	89	Management Support Services
Thomson Reuters - West	80	Electronic Legal Library Database
Trinity Technology Group, Inc.	1,758	Application Development, IT Architecture, Specialized IT Support Services for Investment Systems/Business
UBM, LLC	70	Employee Training and Development
United Health Actuarial Services, Inc.	755	Medical Consulting Services
UnitedHealthcare	16,137	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention & Disease Management Services
Vantage Consulting Group, Inc.	475	Application Development, IT Architecture
VanWrite Writing Consultants, LLC	66	Employee Training and Development
Vasquez Benisek & Lindgren, LLP	118	Outside Counsel, Intellectual Property Law
Viaspire	130	Marketing Services, Social Media Services, Writing and Editorial Services
Visionary Integration Professionals, LLC (VIP)	183	Management Support Services, Application Development, Business Process Reengineering
Voya	3,683	Third-Party Member Record-Keeper
Worktank	210	Video and Multimedia Production Services, Web Event Services
Various	204	
<b>Total Consultant and Professional Services Expenses</b>	<b>\$343,100</b>	

Note: Negative Consultant and Professional Expenses are due to adjusting entries.

**STATEMENT OF CHANGES IN ASSETS & LIABILITIES – AGENCY FUND** (DOLLARS IN THOUSANDS)

	RBF		
	Balance June 30, 2015	Additions	Deductions
<b>ASSETS</b>			
Cash & Cash Equivalents	\$0	\$80,547	\$80,546
Employer & Member Receivables	291	39,819	39,834
Interest Receivables	8	40	31
Short-Term Investments	10,524	19,234	19,610
<b>TOTAL ASSETS</b>	<b>\$10,823</b>	<b>\$139,640</b>	<b>\$140,021</b>
<b>LIABILITIES</b>			
Due to Members & Employers	\$10,748	\$74,461	\$74,902
Due to Other Funds	—	8	7
Other Program	75	67	8
<b>TOTAL LIABILITIES</b>	<b>\$10,823</b>	<b>\$74,536</b>	<b>\$74,917</b>

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## INVESTMENT SECTION

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### SECTION HIGHLIGHTS

**0.6 percent** time-weighted rate of return (PERF)

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**6.9 percent** 3-Year return

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**6.8 percent** 5-Year return

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**5.1 percent** 10-Year return

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**Strength** in Fixed Income (9.3 percent return)  
and Real Assets (6.0 percent return)



## Environmental Social Governance

Making progress towards  
sustainable investment  
& operations

## CHIEF INVESTMENT OFFICER'S LETTER

November 30, 2016

On behalf of the CalPERS Investment Office, I am pleased to report on CalPERS' investment performance, operations, and initiatives for the one-year period ending on June 30, 2016. The CalPERS Public Employees' Retirement Fund (PERF) earned a time-weighted rate of return of 0.6 percent this fiscal year, with the ending fair value of investments at \$302 billion.

The diversification of the Fund was essential to achieving the slightly positive returns. Strength in fixed income and infrastructure investments helped to balance the fluctuations in the global equity market. Fixed Income earned a 9.3 percent return, nearly matching its benchmark. The CalPERS Private Equity program earned a return of 1.7 percent for the year, which outperformed its benchmark by 2.5 percentage points.

CalPERS' portfolio achieved the positive net return despite volatile financial markets and challenging global economic conditions. Although the year ended relatively flat, the Fund experienced volatility along the way, as global equity markets saw several drawdowns exceeding negative 10 percent. However, the Global Equity program still managed to outperform its benchmark by 0.6 percentage points, earning negative 3.4 percent. The Real Assets program generated a 6.0 percent return, underperforming its benchmark by 5.1 percentage points. The primary factors of relative underperformance were non-core programs, including realized losses on the final disposition of legacy assets in the Opportunistic Program.

Despite challenging markets, CalPERS continued to achieve significant accomplishments to ensure the long-term sustainability of our investment portfolio. As outlined in our Investment Beliefs, we review the portfolio, along with investment operations, to identify ways to reduce risk, complexity, and costs in the portfolio. Contributors to cost savings during the 2015-16 Fiscal Year included transitioning assets from external managers to internal management when possible, reducing external management fees, and decreasing the number of external consultants and advisors. Cost saving activities in the 2015-16 Fiscal Year resulted in \$67 million in savings. Over the last five Fiscal Years, actual expenses for investment operations have decreased by \$134 million.

CalPERS continues to be a leader in transparency and fee management, as demonstrated by the announcement of the Private Equity Accounting and Reporting Solution (PEARS) System in the 2015-16 Fiscal Year. The system, which was first implemented in early 2015, is a proprietary tool that allows

CalPERS to comprehensively report carried interest and other information from private equity investments. Private equity has the highest net returns in our portfolio and PEARS allows us to more meaningfully examine information received from our external investment partners.

In addition to managing current investments, CalPERS renewed its commitment to emerging and transition managers. We announced the goal to place up to \$11 billion in new commitments with qualified managers by 2020. New commitments to the CalPERS Emerging Manager Program will total up to \$4 billion by the year 2020, while the Transition Manager Program will total up to \$7 billion in commitments during the same period. As part of this effort, CalPERS will hold a global solicitation process for investment proposals from eligible mid-size external investment managers in July 2017.

Notable advancements in environmental, social, and governance issues were made during the year. We made significant progress toward corporate governance reforms in the areas of proxy access, climate risk reporting, and corporate board diversity during the 2016 proxy season. In total, CalPERS co-filed four shareowner proposals, ran 18 proxy solicitation campaigns, and voted on more than 75,300 individual ballot items.

At home, our investments in California totaled \$26.8 billion, an increase of 0.5 percent from the 2014-15 Fiscal Year. These dollars were invested across multiple asset classes, including public equity, fixed income, private equity, real estate, and infrastructure. These commitments support millions of local jobs, contribute to major infrastructure projects, and support business expansion efforts.

CalPERS is committed to the success and sustainability of our system over the long-term and working toward the goals identified in the Investment Office's 2020 Vision strategic plan. Our mission to "manage the CalPERS investment portfolio in a cost-effective, transparent, and risk-aware manner in order to generate returns to pay benefits" is at the forefront of all we do. We will continue to identify ways to reduce the cost, risk, and complexity of the Fund's portfolio and operations, while also maximizing investment returns.

Our Investment Office staff, the Board's pension consultant Wilshire Associates, and State Street Bank & Trust, our master custodian, compiled the investment data presented on the following pages.

Ted Eliopoulos  
*Chief Investment Officer*

## INVESTMENT PERFORMANCE – PUBLIC EMPLOYEES' RETIREMENT FUND (PERF)

Summary of Investments – PERF – As of June 30, 2016 (Dollars in Thousands)

Category	Book Value	Fair Value	% of Investments at Fair Value
Short-Term Investments	\$21,852,174	\$21,678,419	7%
Global Equity Securities	123,175,382	141,565,010	47%
Global Debt Securities	67,530,201	81,359,745	27%
Real Assets	21,671,903	31,225,522	10%
Private Equity	28,007,218	26,153,355	9%
<b>TOTAL INVESTMENT VALUE</b>	<b>\$262,236,878</b>	<b>\$301,982,051</b>	<b>100%</b>

## Portfolio Comparisons – PERF (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return	10-Year Return	Index <sup>7</sup>	1-Year Return	3-Year Return	5-Year Return	10-Year Return
<b>Total Fund</b>	<b>0.6%</b>	<b>6.9%</b>	<b>6.8%</b>	<b>5.1%</b>	Asset Allocation Policy Index <sup>1</sup>	1.0%	6.9%	6.6%	6.2%
					Trust Universe Comparison Service (TUCS)				
					Public Fund Median	0.9%	6.2%	6.3%	5.7%
					Wilshire Large Fund Universe Median	1.3%	7.2%	7.1%	5.9%
Public Equity	(3.4%)	6.8%	6.1%	4.7%	CalPERS FTSE Global All Cap Custom	(4.0%)	6.5%	5.9%	5.0%
Private Equity	1.7%	10.0%	9.7%	10.2%	67% FTSE USTMI+33% FTSEAWEXUS+3%	(0.8%)	10.8%	10.6%	12.7%
<b>Total Growth</b>	<b>(2.6%)</b>	<b>7.3%</b>	<b>6.8%</b>	<b>5.4%</b>	<b>Growth Benchmark<sup>2</sup></b>	<b>(3.1%)</b>	<b>7.4%</b>	<b>7.0%</b>	<b>6.4%</b>
					CalPERS TOT GBL FI INC Policy EX				
Global Fixed Income	9.3%	6.2%	5.9%	7.1%	Tobacco <sup>3</sup>	9.3%	5.5%	5.3%	6.5%
Real Assets	6.0%	10.6%	11.1%	(0.1%)	Real Assets Benchmark <sup>4</sup>	11.1%	11.5%	11.0%	7.8%
Liquidity	0.4%	0.6%	1.1%	1.7%	91-Day Treasury Bill	0.2%	1.1%	1.5%	1.9%
Inflation <sup>6</sup>	(3.6%)	(2.6%)	(1.5%)	—	Inflation Benchmark <sup>5</sup>	(5.0%)	(3.6%)	(2.0%)	—
Absolute Return Strategies	(1.7%)	4.1%	3.4%	3.3%	1 yr Treasury Note + 5%	5.6%	5.4%	5.4%	6.8%

(1) The Asset Allocation Policy Index return equals the return for each asset class benchmark, weighted at the current target asset allocations.

(2) The benchmark is 84% Global Equity Benchmark and 16% Private Equity Benchmark.

(3) The benchmark is 90% Barclays Long Liabilities + 10% Barclays International Fixed Income.

(4) The benchmark is 83% Real Estate Benchmark (NCREIF ODCE (net)), 15% Infrastructure Benchmark (CPI + 4%) and 8.5% Forestland Benchmark (NCREIF Timberland (Gross)).

(5) Inflation Benchmark: 75% ILB Benchmark and 25% Commodities Benchmark.

(6) Inception Date for Inflation Asset Class is 2007.

(7) Index benchmarks are as of June 30, 2016, and are subject to be updated based on changes within the fund portfolios.



## PUBLIC EMPLOYEES' RETIREMENT FUND (CONTINUED)

## Asset Allocations – PERF

Asset Class	Current Allocation	Current Target Allocation <sup>1</sup>
Global Equity	51.9%	51.0%
Private Equity	9.0%	10.0%
Global Fixed Income	20.3%	20.0%
Real Assets	10.8%	12.0%
Liquidity	1.5%	1.0%
Inflation Assets	6.0%	6.0%
Absolute Return Strategies <sup>2</sup>	0.1%	—
Total Plan Level <sup>3</sup>	0.4%	—
<b>TOTAL FUND</b>	<b>100.0%</b>	<b>100.0%</b>

(1) As of June 30, 2016.

(2) These asset classes do not have targets because they are not components of the Total Fund Policy benchmark.

(3) The Total Plan Level includes multi-asset class, transition, and plan level portfolios. These assets do not have targets because they are not components of the Total Fund Policy benchmark.

## Portfolio of California Investments at Fair Value – PERF (Dollars in Millions)

California Investments	Fair Value
Equity	
Domestic Equity	\$12,492
International Equity	897
<b>TOTAL EQUITY</b>	<b>\$13,389</b>
Global Fixed Income	\$3,804
Real Assets <sup>1</sup>	\$7,280
Private Equity <sup>2</sup>	\$2,307
<b>TOTAL CALIFORNIA INVESTMENTS</b>	<b>\$26,780</b>

(1) Real Assets as of April 30, 2016.

(2) Private Equity as of March 31, 2016.

## PUBLIC EMPLOYEES' RETIREMENT FUND (CONTINUED)

## Largest Stock Holdings at Fair Value – PERF (Dollars in Thousands)

Rank	Security Name	Shares	Fair Value
1	Apple	15,792,221	\$1,509,736
2	Exxon Mobil Corporation	13,346,647	1,251,115
3	Microsoft Corporation	22,394,533	1,145,928
4	Johnson & Johnson	8,091,344	981,480
5	AT&T Incorporation	21,121,477	912,659
6	General Electric Company	25,506,038	802,930
7	Nestle SA Reg	10,329,285	796,803
8	Wells Fargo & Company	16,695,613	790,203
9	Amazon.com Incorporation	1,062,061	760,032
10	JP Morgan Chase & Company	12,160,575	755,659

## Largest Bond Holdings at Fair Value – PERF (Dollars in Thousands)

Rank	Bond	Interest Rate	Maturity Date	Par Value	Fair Value
1	United States Treasury	2.875%	5/15/2043	\$3,002,631	\$3,369,493
2	Federal Home Loan Mortgage Corp.	3.500%	9/14/2046	2,658,155	2,793,970
3	United States Treasury	2.125%	5/15/2025	2,518,678	2,659,321
4	United States Treasury	0.625%	1/15/2024	2,108,789	2,209,294
5	Federal Home Loan Mortgage Corp.	3.000%	9/14/2046	1,751,543	1,808,355
6	United States Treasury	0.125%	7/15/2024	1,689,284	1,707,495
7	United States Treasury	1.625%	5/15/2026	1,624,113	1,643,521
8	United States Treasury	2.500%	2/15/2046	897,460	932,901
9	United States Treasury	5.250%	2/15/2029	625,809	884,600
10	United States Treasury	1.125%	1/15/2021	685,675	733,672

A complete list of portfolio holdings is available upon request.

## Schedule of Commissions &amp; Fees (Dollars in Thousands)

Broker	Number of Shares Traded	Base Commission & Fees Amount	Broker	Number of Shares Traded	Base Commission & Fees Amount
Agora Corde Titul E Val Mob	5,263,319	\$15	Deutsche Bank AG, London	53,018,453	\$307
Attijariwafa Bank	50,868	8	Deutsche Bank AG	8,331,811	30
Axis Capital, Ltd.	634,857	8	Deutsche Bank Securities, Inc.	670,684,229	628
Banco Itau SA	3,334,300	18	Deutsche Eq In Prvt LIM DB	727,549	19
Banco Pactual SA	6,507,786	24	Deutsche Securities Asia, Ltd.	149,605,079	65
Banco Santander Central Hispano	11,466,091	79	DSP Merrill Lynch, Ltd.	3,645,051	24
Barclays Capital, Inc.	24,213,016	162	Edelweiss Securities Pvt., Ltd.	1,417,700	24
Barclays Capital, Inc./LE	22,262,671	304	Emkay Global Financial Services, Ltd.	707,408	19
Bloomberg Tradebook Europe, Ltd.	8,576,427	12	Enam Securities Pvt., Ltd.	2,577,213	41
Bloomberg Tradebook, LLC	1,042,242	17	Exane Incorporate	286,250	10
BMO Capital Markets Corp.	1,682,204	36	Exane SA	5,078,854	102
BNP Paribas Prime Brokerage, Inc.	4,181,234	11	FBR Capital Markets & Company	1,643,241	45
BNP Paribas Securities (Asia), Ltd.	11,595,900	37	First Union National Bank, Charlotte	529,918	16
BNP Paribas Securities India Private, Ltd.	581,805	19	Goldman Sachs (Asia), LLC	12,758,557	62
BNP Paribas Securities Services	5,703,218	26	Goldman Sachs (India)	329,808	12
BNY Convergenx Execution Solutions, LLC	36,426,398	219	Goldman Sachs and Company	547,646,469	1,384
Broadcort Capital Corp.	546,796	11	Goldman Sachs CME	7,992	16
BTIG, LLC	32,575,423	425	Goldman Sachs Do Brasil Corretora	2,359,700	30
Canaccord Genuity, Inc.	440,455	12	Goldman Sachs International	35,068,213	275
Cantor Fitzgerald & Co.	2,512,243	57	Gordon, Haskett and Company	369,350	13
Celfin Capital SA Corredores De Bolsa	29,438,645	8	Guzman and Company	5,303,469	81
China International Capital Corp.	11,509,600	17	Hanwha Securities Seoul	395,047	15
Cimb Securities USA, Inc.	36,923,300	12	Height Securities, LLC	220,439	8
Citigroup Global Market Korea Secs., Ltd.	1,113,108	43	Hongkong and Shanghai Banking, Corp.	74,470,057	49
Citigroup Global Markets CME	27,454	55	HSBC Bank Brasil SA Banco Multiplo	5,131,365	17
Citigroup Global Markets India	4,243,041	31	HSBC Bank, Plc	40,243,983	251
Citigroup Global Markets Taiwan	35,387,525	41	HSBC Brokerage (USA), Inc.	735,376	23
Citigroup Global Markets, Inc.	405,580,166	3,526	HSBC Securities (USA), Inc.	467,301,777	379
Citigroup Global Markets, Inc. Salomon	217,052	387	Hyundai Securities	918,199	49
Citigroup Global Markets, Ltd.	44,686,211	349	ICICI Brokerage Services, Ltd.	7,518,929	30
CLSA Australia PTY, Ltd.	57,737,255	17	India Infoline, Ltd.	2,711,916	62
CLSA Securities Korea, Ltd.	10,822	12	Instinet	52,757,451	599
CLSA Singapore PTE, Ltd.	658,853,590	355	Instinet Australia Clearing Svc. Pty., Ltd.	37,723,708	103
Commercial International Brokerage, Co.	2,847,199	11	Instinet Pacific, Ltd.	650,104,238	438
Cowen and Company, LLC	1,365,247	42	Instinet Singapore Services PT	23,366,709	14
Credit Lyonnais Securities (Asia)	187,687,002	136	Instinet United Kingdom, Ltd.	313,403,030	1,262
Credit Lyonnais Securities (USA), Inc.	2,087,285	22	Instinet, LLC	120,534,532	1,086
Credit Lyonnais Securities India	6,063,044	14	Investec Henderson Crosthwaite	117,345	9
Credit Research and Trading, LLC	585,543	15	Investment Technology Group, Inc.	29,562,094	173
Credit Suisse First Boston	33,423,393	37	Investment Technology Group, Ltd.	110,713,182	603
Credit Suisse First Boston (Europe)	2,029,622	35	Is Yatirim Menkul Degerler AS	781,410	8
Credit Suisse First Boston SA CTVM	7,446,250	40	ISI Group, Inc.	1,373,439	33
Credit Suisse Secs India Private, Ltd.	7,510,028	23	Itau USA Securities, Inc.	1,204,918	9
Credit Suisse Securities (Europe), Ltd.	184,818,715	443	ITG Australia, Ltd.	10,488,840	66
Credit Suisse Securities (USA), LLC	219,456,782	1,111	ITG Canada	3,505,645	24
CS First Boston (Hong Kong), Ltd.	2,806,020	29	ITG Securities (HK), Ltd.	63,084,904	48
CSFB Australia Equities, Ltd.	1,006,314	10	ITG, Inc.	4,885,724	9
CSI US Institutional Desk	638,123	18	Jefferies and Company, Inc.	14,005,433	149
Daiwa Securities (HK), Ltd.	19,573,599	81	Jefferies International, Ltd.	4,785,922	21
Daiwa Securities America, Inc.	1,148,305	12	JM Financial Institutional Securities PR	1,137,106	17
Danske Bank A.S.	91,829	9	JMP Securities	282,419	10
Davy Stockbrokers	395,071	9	Joh Berenberg Gossler and Company	329,471	14

## Investment Section (continued)

### Schedule of Commissions & Fees (Dollars in Thousands) (continued)

Broker	Number of Shares Traded	Base Commission & Fees Amount	Broker	Number of Shares Traded	Base Commission & Fees Amount
Jones Trading Institutional Services, LLC	28,230,991	\$451	Pershing Securities, Ltd.	706,457	\$10
JP Morgan Chase Bank	379,952	12	Pershing, LLC	6,574,651	116
JP Morgan Chase Bank N.A London	7,800,725	17	Piper Jaffray	429,687	15
JP Morgan Clearing Corp.	52,763,707	297	Raymond James and Associates, Inc.	2,623,152	51
JP Morgan India Private, Ltd.	17,714,253	97	RBC Capital Markets	4,676,710	108
JP Morgan Securities (Asia Pacific), Ltd.	323,453,111	381	RBC Dominion Securities, Inc.	40,914,972	266
JP Morgan Securities (Far East), Ltd.	791,207	32	Redburn Partners LLP	1,263,867	19
JP Morgan Securities (Singapore)	3,467,400	8	Renaissance Capital, Ltd.	357,420	19
JP Morgan Securities Australia, Ltd.	8,026,969	29	Robert W. Baird Company, Inc.	993,930	32
JP Morgan Securities, Inc.	459,425,762	1,527	Rosenblatt Securities, LLC	21,051,138	280
JP Morgan Securities, PLC	164,441,901	565	Royal Bank of Canada Europe, Ltd.	2,219,915	43
Keefe Bruyette and Woods, Inc.	2,679,695	90	Samsung Securities Co., Ltd.	109,817	21
Kepler Equities Paris	614,707	9	Sanford C Bernstein Co., LLC	133,514,636	617
Keybanc Capital Markets, Inc.	684,032	23	Sanford C. Bernstein, Ltd.	51,422,885	266
Kim Eng Securities (Hong Kong), Ltd.	5,089,411	61	Santander Central Hispano Bolsa	439,522	13
Knight Equity Markets, L.P	31,167,895	424	Scotia Capital Markets	882,960	9
Korea Investment and Securities Company, Ltd.	65,877	12	SG Americas Securities, LLC	27,028,405	156
Kotak Securities, Ltd.	8,725,378	85	SG Asia Securities (India) Pvt. Ltd.	3,900,504	16
Leerink Swann and Company	563,841	23	SG Securities Hong Kong	126,204,643	229
Liquidnet Europe, Ltd.	1,367,273	12	Shinhan Investment Corp.	992,868	67
Liquidnet, Inc.	22,796,222	314	Sinopac Securities, Corp.	9,968,834	10
Loop Capital Markets, LLC	8,384,402	67	SJ Levinson and Sons, LLC	2,457,421	38
M. Ramsey King Securities, Inc.	28,301,287	237	SMBC Nikko Securities (Honk Kong), Ltd.	1,914,289	9
Macquarie Bank, Ltd.	88,119,555	338	Societe Generale London Branch	225,934,297	875
Macquarie Securities (India), Inc.	739,359	17	Standard Bank London, Ltd.	2,753,732	38
Macquarie Securities (Singapore), Inc.	868,152	15	State Street Bank and Trust Company	115,190	46
Macquarie Securities (USA), Inc.	362,370	10	Stifel Nicolaus and Co., Inc.	850,938	29
Macquarie Securities, Ltd.	30,625,518	29	Stuart Frankel and Co., Inc.	35,903,679	397
Malayan Banking Berhad	17,705,723	11	Taiwan Depository Clearing Corp.	1,618,000	16
ManFirst Bank DE	105,529	9	Tera Menkul Degerler A.S.	13,275,628	40
Merrill Lynch International	443,641,975	1,148	Topeka Capital Markets, Inc.	7,692,556	91
Merrill Lynch Pierce Fenner and Smith	253,526,903	816	UBS Ag	37,842,102	165
Mischler Financial Group, Inc., Equities	776,281	26	UBS Securities Asia, Ltd.	519,484,410	825
Mizuho Securities Asia, Ltd.	817,414	11	UBS Securities Canada, Inc.	1,315,834	12
Mizuho Securities USA, Inc.	782,835	11	UBS Securities Pte., Ltd.	35,266,407	41
Morgan Stanley and Company Inc.	1,807,890,539	903	UBS Securities, LLC	41,571,332	547
Morgan Stanley and Company	201,608,680	277	UBS Warburg Australia Equities	2,886,540	24
Morgan Stanley and Company International Taipei Metro	230,587,641	41	UBS Warburg, LLC	2,525,614	10
Morgan Stanley Dean Witter, Inc.	31,713,540	333	UBS, Ltd.	109,912,263	576
Morgan Stanley India Company PVT, Ltd.	62,971,496	104	UOB Kay Hian Pte., Ltd.	24,845,332	22
Motilal Oswal Securities, Ltd.	7,392,461	62	Weeden and Company	39,024,873	431
National Financial Services, Corp.	2,142,116	33	Wells Fargo Securities, LLC	2,197,079	52
National Financial Services, LLC	355,922	10	William Blair and Company, LLC	657,590	17
Nesbitt Burns	1,102,358	12	Wood and Company	730,656	27
North South Capital, LLC	10,804,383	165	Woori Investment Securities	999,321	29
Numis Securities, Ltd.	246,176	11	XP Investimentos CCTVM SA	4,383,634	11
Oddo Et Cie	412,495	12	Yamner and Company, Inc.	833,733	8
Parel	16,111,482	37	Yuanta Securities Company, Ltd.	14,700,926	28
Pavilion Global Markets, Ltd.	19,001,873	101	Various	73,593,841	415
Penserra Securities, LLC	57,115,231	583	<b>TOTAL</b>	<b>11,798,223,510</b>	<b>\$34,311</b>

## Private Equity Management Fees &amp; Profit Sharing – PERF

(Dollars in Thousands)

Fund Name	Net Management Fees Paid <sup>1</sup>	Profit Sharing Paid <sup>2</sup>	Fund Name	Net Management Fees Paid <sup>1</sup>	Profit Sharing Paid <sup>2</sup>
57 Stars Global Opportunities Fund 2 (CalPERS), LLC	\$243	\$0	Bridgepoint Europe II 'C', LP	\$0	\$44
57 Stars Global Opportunities Fund, LLC	548	—	Bridgepoint Europe III 'D', LP	229	—
Aberdare Ventures III, LP	36	183	Bridgepoint Europe IV 'B', LP	118	—
Aberdare Ventures IV, LP	584	—	Bridgepoint Europe V	1,347	—
Acon-Bastion Partners II, LP	—	3,099	California Asia Investors, LP	401	—
Advent Global Private Equity IV-A, LP	—	319	California Emerging Ventures II, LLC	200	—
Advent International GPE V-D, LP	236	—	California Emerging Ventures III, LLC	150	—
Advent International GPE VI-A, LP	3,526	35,706	California Emerging Ventures IV, LLC	422	—
Advent International GPE VII-C, LP	6,735	—	CalPERS Clean Energy & Technology Fund, LLC	600	—
Advent Latin America Private Equity Fund IV-D, LP	1,717	—	CalPERS Corporate Partners, LLC	180	1,264
Advent Latin America Private Equity Fund V-H, LP	1,137	—	Capital Link Fund I, LLC	95	—
Advent Latin American Private Equity Fund III-D, LP	261	—	Capital Link Fund II, LLC	190	—
Affinity Asia Pacific Fund III, LP	1,366	7,638	Carlyle Asia Growth Partners III, LP	462	—
Aisling Capital II, LP	529	—	Carlyle Asia Growth Partners IV, LP	1,137	—
Aisling Capital III, LP	751	1,641	Carlyle Asia Partners II, LP	1,162	(4,159)
Apollo Credit Opportunity Fund I, LP	—	429	Carlyle Asia Partners III, LP	1,641	8,238
Apollo European Principal Finance Fund, LP	(30)	3,827	Carlyle Europe Partners III, LP	1,355	12,278
Apollo Investment Fund IV, LP	—	11	Carlyle Europe Real Estate Partners, LP	—	(497)
Apollo Investment Fund VI, LP	—	206	Carlyle Europe Technology Partners II, LP	634	(1,298)
Apollo Investment Fund VII, LP	523	4,747	Carlyle Global Financial Services Partners, LP	1,685	2,453
Apollo Investment Fund VIII, LP	3,636	—	Carlyle Japan Partners II, LP	783	—
Apollo Special Opportunities Managed Account, LP	3,550	—	Carlyle Japan Partners, LP	—	397
ArcLight Energy Partners Fund II, LP	—	470	Carlyle Mexico Partners, LP	70	—
ArcLight Energy Partners Fund III, LP	(60)	24,037	Carlyle Partners IV, LP	207	1,858
ArcLight Energy Partners Fund IV, LP	540	18,966	Carlyle Partners V, LP	1,666	19,468
Ares Corporate Opportunities Fund II, LP	246	69	Carlyle Partners VI, LP	5,188	—
Ares Corporate Opportunities Fund III, LP	1,935	7,761	Carlyle Realty Partners III, LP	—	2,557
Ares Special Situations Fund, LP	—	307	Carlyle Strategic Partners II, LP	172	—
Asia Alternatives Capital Partners II, LP	50	—	Carlyle Strategic Partners, LP	—	(9)
Asia Alternatives Capital Partners, LP	296	—	Carlyle U.S. Equity Opportunities II, LP	1,552	—
Athyrium Opportunities Fund, LP	—	72	Carlyle U.S. Growth Fund III, LP	602	2,845
Avenue Asia Special Situations Fund IV, LP	603	—	Carlyle/Riverstone Global Energy and Power Fund III, LP	1,203	—
Avenue Europe Special Situations Fund, LP	—	592	CDH Fund V, LP	5,305	—
Avenue Special Situations Fund VI (A), LP	425	—	Centerbridge Capital Partners III, LP	1,107	147
Baring Vostok Private Equity Fund IV, LP	1,018	—	Cerberus CP Partners LP	2,308	—
Birch Hill Equity Partners (US) III, LP	233	22,862	Cerberus Institutional Partners V, LP	1,922	—
Birch Hill Equity Partners (US) IV, LP	1,764	—	Clarus Lifesciences I, LP	493	115
Blackstone / GSO Capital Solutions Fund, LP	688	3,073	Clarus Lifesciences II, LP	1,508	—
Blackstone Capital Partners IV, LP	—	959	Clearlake Capital Partners III, LP	480	—
Blackstone Capital Partners V, LP	276	14,877	Clearlake Capital Partners IV, LP	514	—
Blackstone Capital Partners VI, LP	(1,583)	98	Clearlake Opportunities Partners (P), LP	400	—
Blackstone RL Co-Invest, LP	192	—	Clearwater Capital Partners Fund II Holdings, LP	23	—
Blackstone Tactical Opportunities Fund - C, LP	1,511	1,531	Clearwater Capital Partners Fund III, LP	1,082	—
Blackstone Tactical Opportunities Fund (KG Co-Invest), LP	608	—	Clessidra Capital Partners II	—	1,224
Blackstone Tactical Opportunities Fund (T4U Co-Invest), LP	100	—	Collier International Partners IV-D, LP	—	180
Blackstone Tactical Opportunities Fund II - C, LP	366	108	Collier International Partners V-A, LP	2,189	237
Bridgepoint Europe II 'A', LP	5	175	Craton Equity Investors I, LP	278	—
			CVC Capital Partners VI, LP	6,548	—
			CVC Credit Strategic Investment A, LP	1,316	—
			CVC European Equity Partners (D), LP	—	33
			CVC European Equity Partners IV (D), LP	34	1,788

## Investment Section (continued)

### Private Equity Management Fees & Profit Sharing – PERF

(Dollars in Thousands) (continued)

Fund Name	Net Management Fees Paid <sup>1</sup>	Profit Sharing Paid <sup>2</sup>	Fund Name	Net Management Fees Paid <sup>1</sup>	Profit Sharing Paid <sup>2</sup>
CVC European Equity Partners Tandem Fund (B), LP	\$148	\$33,131	Lombard Asia III, LP	\$281	\$144
CVC European Equity Partners V (B), LP	1,080	18,436	Lombard Thailand Partners, LP	—	—
ESP Golden Bear Europe Fund	387	—	Madison Dearborn Capital Partners V, LP	309	—
Essex Woodlands Health Ventures Fund VIII, LP	1,933	—	Magnum Capital, LP	1,201	—
First Reserve Fund X, LP	1	—	MHR Institutional Partners II, LP	—	506
First Reserve Fund XI, LP	2,006	—	MHR Institutional Partners III, LP	1,586	—
First Reserve Fund XII, LP	1,711	—	New Mountain Partners II, LP	—	2,163
First Reserve Fund XIII, LP	5,055	—	New Mountain Partners III, LP	2,071	21,109
Francisco Partners II, LP	673	—	Newbridge Asia III, LP	—	83
Francisco Partners III, LP	779	—	Newbridge Asia IV, LP	(21)	351
GCM Grosvenor DEM II, LP	228	—	Nogales Investors Fund I, LP	—	(235)
Golden State Investment Fund, LLC	149	—	Oak Hill Capital Partners II, LP	70	251
Granite Global Ventures II, LP	67	2,463	Oak Hill Capital Partners III, LP	2,128	8,216
Granite Global Ventures III, LP	514	4,070	Oaktree Opportunities Fund VIIIb, LP	2,590	—
Green Equity Investors IV, LP	72	4,338	Onex Partners IV, LP	4,991	—
Green Equity Investors V, LP	343	3,954	PAG Asia I, LP	1,467	2,675
GSO Capital Opportunities Fund II, LP	1,009	528	Palladium Equity Partners III, LP	239	1,116
GSO Capital Opportunities Fund, LP	135	910	Patria Brazilian Private Equity Fund V, LP	1,532	—
GSO Capital Solutions Fund II, LP	225	—	Permira Europe III	(23)	1,959
GSO Energy Partners-C, LP	648	—	Permira IV, LP	849	482
Hellman & Friedman Capital Partners V, LP	—	143	Permira U.K. Venture IV	—	51
Hellman & Friedman Capital Partners VI	768	15,572	Permira V, LP	3,198	—
Hellman & Friedman Capital Partners VII	4,386	2,353	Perseus-Soros BioPharmaceutical Fund, LP	—	30
ICV Partners II, LP	—	2,648	Polish Enterprise Fund V, LP	85	120
Insight Venture Partners Growth-Buyout Coinvestment Fund (B), LP	2,596	—	Polish Enterprise Fund VI, LP	2,043	—
Insight Venture Partners IX, LP	2,220	—	Providence Equity Partners V	281	—
Insight Venture Partners V Coinvestment Fund, LP	(7)	682	Providence Equity Partners VI, LP	762	—
Insight Venture Partners V, LP	9	1,419	RFG Private Equity Limited Partnership No. 1A, 1B and 1C	70	—
Insight Venture Partners VI, LP	532	2,320	Rhone Partners III, LP	—	363
Khosla Ventures III, LP	2,197	—	Richardson Capital Private Equity Limited Partnership No.2A, 2B and 2C	25	—
Khosla Ventures Seed, LP	1,166	—	Riverstone Global Energy and Power Fund V, LP	2,267	58
KKR 2006 Fund, LP	—	10,317	Riverstone Global Energy and Power Fund VI, LP	8,233	—
KKR Asian Fund II, LP	8,249	—	Riverstone/Carlyle Global Energy and Power Fund IV, LP	1,541	—
KKR Asian Fund, LP	1,072	2,206	Riverstone/Carlyle Renewable & Alternative Energy Fund II, LP	1,419	—
KKR European Fund II, LP	(85)	1,026	Riverwood Capital Partners (Parallel - A), LP	647	10,096
KKR European Fund III, LP	243	2,833	Sacramento Private Equity Partners, LP	500	851
KKR European Fund, LP	(2)	128	SAIF Partners III, LP	655	—
KKR Millennium Fund, LP	1	3,199	SAIF Partners IV, LP	1,117	—
Kline Hawkes Pacific, LP	67	—	Sankaty Managed Account (CalPERS), LP	818	—
KM Corporate Partners Fund II, LP	804	—	Silver Lake Partners II, LP	219	5,176
KPS Special Situations Fund III, LP	421	9,563	Silver Lake Partners III, LP	1,018	19,043
Levine Leichtman Capital Partners Deep Value Fund, LP	86	—	Silver Lake Partners IV, LP	3,909	6,363
Levine Leichtman Capital Partners III, LP	—	564	Silver Lake Tech Assoc III	—	(269)
Levine Leichtman Capital Partners IV, LP	466	1,458	Silver Lake Technology Associates IV	—	(281)
Lexington Capital Partners IV, LP	—	25	Siris Partners III, LP	901	—
Lexington Middle Market Investors, LP	—	192	Tailwind Capital Partners (PP), LP	358	1,696
Lime Rock Partners IV, LP	283	—	Tailwind Capital Partners II, LP	506	—
Lime Rock Partners V, LP	685	—	Technology Partners Fund V, LP	—	(250)
Lion Capital Fund II, LP	496	—	The Central Valley Fund II SBIC, LP	457	—



# Private Equity Management Fees & Profit Sharing – PERF

(Dollars in Thousands) (continued)

Fund Name	Net Management Fees Paid <sup>1</sup>	Profit Sharing Paid <sup>2</sup>
The Central Valley Fund, LP	\$91	\$2,015
The Resolute Fund II, LP	445	3,998
Thomas H. Lee Equity Fund V, LP	—	57
Thomas H. Lee Equity Fund VI, LP	—	13,490
TowerBrook Investors II, LP	1,140	2,176
TowerBrook Investors III, LP	1,517	5,824
TowerBrook Investors IV (Onshore), LP	4,351	1,139
TPG Asia V, LP	1,460	—
TPG Biotechnology Partners II, LP	130	—
TPG Biotechnology Partners III, LP	651	2,156
TPG Partners IV, LP	—	5,466
TPG Partners V, LP	561	—
TPG Partners VI, LP	2,837	32,083
TPG STAR, LP	748	—
Trident VI	3,539	—
VantagePoint CleanTech Partners, LP	(78)	—
Vicente Capital Partners Growth Equity Fund, LP	279	430
W Capital Partners II, LP	498	—
Wellspring Capital Partners V, LP	862	1,508
Welsh, Carson, Anderson & Stowe VI, LP	—	2
Welsh, Carson, Anderson & Stowe X, LP	32	8,890
Welsh, Carson, Anderson & Stowe XI, LP	564	345
Welsh, Carson, Anderson & Stowe XII, LP	6,234	—
WLR Recovery Fund II, LP	—	945
WLR Recovery Fund IV, LP	773	—
Yucaipa American Alliance Fund I, LP	405	—
Yucaipa American Alliance Fund II, LP	1,562	—
Yucaipa Corporate Initiatives Fund II, LP	261	—
<b>TOTAL</b>	<b>\$206,496</b>	<b>\$489,795</b>

(1) CalPERS makes a good faith attempt to account for fees that are not readily separable. These management fees are net of management fee offsets.

(2) Profit sharing represents the amount investment managers realized from the fund during the fiscal year.



## INVESTMENT PERFORMANCE – LEGISLATORS’ RETIREMENT FUND (LRF)

## LRF Portfolio Comparisons (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>	Index	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>
<b>Total Fund</b>	<b>4.0%</b>	<b>5.6%</b>	<b>5.8%</b>	Weighted Policy Benchmark	4.2%	5.3%	5.7%
Global Equity	(3.8%)	6.6%	6.3%	LRS Global Equity Benchmark	(4.0%)	6.5%	6.2%
Global Fixed Income	9.6%	6.9%	6.6%	Barclays Long Liability Index	9.6%	6.2%	6.0%
TIPS	4.3%	2.2%	2.6%	Barclays Long Liability Index TIPS	4.4%	2.3%	2.6%
REITs	12.5%	9.0%	—	CalPERS Custom REIT Index	12.6%	8.9%	—
Commodities	(25.4%)	(20.0%)	—	GSCI Total Return (Daily)	(26.1%)	(19.8%)	—

(1) Due to the inception date, the 5-Year Return is not calculated for REITs and Commodities.

## LRF Asset Allocation

Asset Class	Current Allocation	Current Year Target
Global Equity	23.4%	24.0%
Global Fixed Income	39.8%	39.0%
TIPS	25.8%	26.0%
REITs	8.1%	8.0%
Commodities	2.9%	3.0%
<b>Total Fund</b>	<b>100%</b>	<b>100%</b>

## INVESTMENT PERFORMANCE – JUDGES’ RETIREMENT FUND II (JRF II)

## JRF II Portfolio Comparisons (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>	Index	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>
<b>Total Fund</b>	<b>1.6%</b>	<b>6.4%</b>	<b>6.6%</b>	Weighted Policy Benchmark	1.7%	6.2%	6.6%
Global Equity	(3.8%)	6.6%	6.1%	JRS II Global Equity Benchmark	(4.0%)	6.5%	6.1%
Global Fixed Income	9.7%	6.9%	6.6%	Barclays Long Liability Index	9.6%	6.2%	6.0%
TIPS	4.3%	2.1%	—	Barclays Long Liability TIPS	4.4%	2.3%	—
REITs	12.5%	9.0%	8.6%	CalPERS Custom REIT Index	12.6%	8.9%	8.6%
Commodities	(25.4%)	(20%)	—	GSCI Total Return (Daily)	(26.1%)	(19.8%)	—

(1) Due to the inception date, the 5-Year Return is not calculated for TIPS and Commodities.

## JRF II Asset Allocation

Asset Class	Current Allocation	Current Year Target
Global Equity	49.2%	50.0%
Global Fixed Income	34.8%	34.0%
TIPS	4.9%	5.0%
REITs	8.2%	8.0%
Commodities	2.9%	3.0%
<b>Total Fund</b>	<b>100.0%</b>	<b>100.0%</b>

## INVESTMENT PERFORMANCE – CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST FUND (CERBTf)

### CERBTf Strategy 1 Portfolio Comparisons (Inception date is June 1, 2007) (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>	Index	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>
<b>Total Fund</b>	<b>1.0%</b>	<b>6.1%</b>	<b>6.0%</b>	CERBT Strategy 1 Policy Benchmark	0.7%	5.8%	5.8%
Global Equity	(3.4%)	6.5%	6.3%	MSCI All Country World Index IMI (net)	(3.9%)	6.1%	6.0%
Global Fixed Income	9.6%	6.9%	6.6%	CalPERS Custom Long Liability	9.6%	6.2%	6.0%
TIPS	4.3%	2.2%	—	CalPERS TIPS	4.4%	2.3%	—
REITs	12.1%	8.4%	8.1%	FTSE EPRA/NAREIT Developed Liquid Index (net)	11.1%	7.6%	7.7%
Commodities	(26.5%)	(20.2%)	—	S&P GSCI Total Return Index	(26.1%)	(19.8%)	—

(1) Due to the inception date, the 5-Year Return is not calculated for TIPS and Commodities.

### CERBTf Strategy 2 Portfolio Comparisons (Inception date is October 1, 2011) (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>	Index	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>
<b>Total Fund</b>	<b>2.9%</b>	<b>5.8%</b>	—	CERBT Strategy 2 Policy Benchmark	2.8%	5.5%	—
Global Equity	(3.5%)	6.4%	—	MSCI All Country World Index IMI (net)	(3.9%)	6.1%	—
Global Fixed Income	9.6%	6.9%	—	CalPERS Custom Long Liability	9.6%	6.2%	—
TIPS	4.3%	2.1%	—	CalPERS TIPS	4.4%	2.3%	—
REITs	12.0%	8.3%	—	FTSE EPRA/NAREIT Developed Liquid Index (net)	11.1%	7.6%	—
Commodities	(26.4%)	(20.2%)	—	S&P GSCI Total Return Index	(26.1%)	(19.8%)	—

(1) Due to the inception date, the 5-Year Return is not calculated.

### CERBTf Strategy 3 Portfolio Comparisons (Inception date is January 1, 2012) (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>	Index	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>
<b>Total Fund</b>	<b>4.1%</b>	<b>5.5%</b>	—	CERBT Strategy 3 Policy Benchmark	4.1%	5.1%	—
Global Equity	(3.5%)	6.5%	—	MSCI All Country World Index IMI (net)	(3.9%)	6.1%	—
Global Fixed Income	9.6%	6.9%	—	CalPERS Custom Long Liability	9.6%	6.2%	—
TIPS	4.3%	2.2%	—	CalPERS TIPS	4.4%	2.3%	—
REITs	12.0%	8.4%	—	FTSE EPRA/NAREIT Developed Liquid Index (net)	11.1%	7.6%	—
Commodities	(26.3%)	(20.1%)	—	S&P GSCI Total Return Index	(26.1%)	(19.8%)	—

(1) Due to the inception date, the 5-Year Return is not calculated.

### CERBTf Asset Allocation

Asset Class	Strategy 1		Strategy 2		Strategy 3	
	Current Allocation	Policy Target Allocation	Current Allocation	Policy Target Allocation	Current Allocation	Policy Target Allocation
Global Equity	55.7%	57.0%	39.1%	40.0%	23.1%	24.0%
Global Fixed Income	27.0%	27.0%	39.0%	39.0%	38.4%	39.0%
TIPS	4.8%	5.0%	9.8%	10.0%	24.9%	26.0%
REITs	8.0%	8.0%	8.0%	8.0%	7.9%	8.0%
Commodities	3.1%	3.0%	3.2%	3.0%	3.2%	3.0%
Cash Equivalents	1.4%	—	0.9%	—	2.5%	—
<b>Total Fund</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

## INVESTMENT PERFORMANCE – HEALTH CARE FUND (HCF)

## HCF Portfolio Comparisons (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return	Index	1-Year Return	3-Year Return	5-Year Return
<b>Total Fund</b>	<b>6.0%</b>	<b>4.5%</b>	<b>4.3%</b>	Weighted Policy Benchmark	<b>6.0%</b>	<b>4.1%</b>	<b>3.8%</b>

## HCF Asset Allocation

Asset Class	Current Allocation	Current Year Target
Global Fixed Income	100.0%	100.0%
<b>Total Fund</b>	<b>100.0%</b>	<b>100.0%</b>

## INVESTMENT PERFORMANCE – LONG-TERM CARE FUND (LTCF)

## LTCF Portfolio Comparisons (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>	Index	1-Year Return	3-Year Return	5-Year Return <sup>1</sup>
<b>Total Fund</b>	<b>5.5%</b>	<b>4.9%</b>	<b>4.3%</b>	Weighted Policy Benchmark	<b>5.2%</b>	<b>4.6%</b>	<b>4.2%</b>
Global Equity	(3.5%)	6.4%	6.4%	MSCI All Country World Index (net)	(3.9%)	6.1%	6.2%
Global Fixed Income	9.6%	6.2%	6.0%	Barclays Long Liability Index	9.6%	6.2%	6.0%
TIPS	4.3%	2.3%	2.6%	Barclays Long Liability TIPS	4.4%	2.3%	2.6%
REITs	12.1%	8.3%	8.1%	FTSE EPRA/NAREIT Developed Liquid Index (Net)	11.1%	7.6%	7.7%
Commodities	(25.9%)	(19.7%)	—	GSCI Total Return (Daily)	(26.1%)	(19.8%)	—

(1) Due to the inception date, the 5-Year Return is not calculated for Commodities.

## LTCF Asset Allocation

Asset Class	Current Allocation	Current Year Target
Global Equity	13.8%	15.0%
Global Fixed Income	62.5%	61.0%
TIPS	6.0%	6.0%
REITs	12.5%	12.0%
Commodities	5.2%	6.0%
<b>Total Fund</b>	<b>100.0%</b>	<b>100.0%</b>

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# ACTUARIAL SECTION

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## SECTION HIGHLIGHTS

**73.1 percent funded** (PERF) (2015)

**Implemented** dollar billing for additional flexibility to pay unfunded liabilities (public agency employers)



## A STRONGER FOOTING FOR GENERATIONS

Demographic assumptions  
show public employees  
living longer

## ACTUARIAL CERTIFICATIONS

### CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

July 31, 2016

It is our opinion that the valuations have been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

As authorized, the CalPERS actuarial staff performs annual actuarial valuations of the CalPERS state, schools, and public agency defined benefit pension plans; the latest such valuations are as of June 30, 2015.

The funding objective for each of these plans is to accumulate assets equal to 100 percent of the accrued liability as measured by the Entry Age Normal Cost Method in a manner that keeps contributions approximately level as a percentage of payroll. Unfunded actuarial liabilities or surplus assets (excess assets) are amortized pursuant to Board policy such that unfunded liabilities or surplus assets are amortized over periods not exceeding 30 years.

The valuations are based on the member and financial data as of the valuation date, extracted from the various CalPERS databases. Both the membership and financial data are subject to extensive tests for reasonableness.

Further, we have provided information for the completion of Exhibits A through H in the Actuarial Section of the CAFR.

Scott Terando, ASA, EA, MAAA, FCA, CFA  
*Interim Chief Actuary, CalPERS*

### LEGISLATORS' RETIREMENT SYSTEM

February, 2016

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the actuarial funded condition of the Legislators' Retirement System. This valuation is based on the member and financial data as of June 30, 2015 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. In our opinion, this valuation has been performed in accordance with generally accepted actuarial principles, and in accordance with the standards of practice prescribed by the Actuarial Standards Board. The assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employee's Retirement Law.

The undersigned are actuaries for CalPERS, who are members of the American Academy of Actuaries and the Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

David Clement, ASA, EA, MAAA  
*Senior Pension Actuary, CalPERS*

Scott Terando, ASA, EA, MAAA, FCA, CFA  
*Interim Chief Actuary, CalPERS*

**Note:** Actuarial reports and supporting documents for the state, schools, and local agencies and Legislators' Retirement System can be obtained on the CalPERS website, [www.calpers.ca.gov](http://www.calpers.ca.gov).

## ACTUARIAL CERTIFICATIONS

### JUDGES' RETIREMENT SYSTEM

February, 2016

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the actuarial funded condition of the Judges' Retirement System. This valuation is based on the member and financial data as of June 30, 2015 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

The undersigned are actuaries for CalPERS, who are members of the American Academy of Actuaries and the Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Barbara Ware, FSA, EA, MAAA  
*Senior Pension Actuary, CalPERS*

Scott Terando, ASA, EA, MAAA, FCA, CFA  
*Interim Chief Actuary, CalPERS*

### JUDGES' RETIREMENT SYSTEM II

February, 2016

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the actuarial funded condition of the Judges' Retirement System II. This valuation is based on the member and financial data as of June 30, 2015 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. In our opinion, this valuation has been performed in accordance with generally accepted actuarial principles, and in accordance with the standards of practice prescribed by the Actuarial Standards Board. The assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employee's Retirement Law.

The undersigned are actuaries for CalPERS, who are members of the American Academy of Actuaries and the Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Fritzie Archuleta, ASA, MAAA  
*Senior Pension Actuary, CalPERS*

Scott Terando, ASA, EA, MAAA, FCA, CFA  
*Interim Chief Actuary, CalPERS*

**Note:** The actuarial report and supporting documents for the Judges' Retirement System and Judges' Retirement System II can be obtained on the CalPERS website, [www.calpers.ca.gov](http://www.calpers.ca.gov).



## ACTUARIAL METHODS & ASSUMPTIONS

### ACTUARIAL METHODS

The ultimate cost that a retirement system such as CalPERS incurs is equal to benefits paid plus the expenses resulting from administration and financing. These costs are paid through contributions to the plan and investment earnings on the System's assets.

The actuarial valuations rely upon data extracted from central databases maintained by CalPERS. These databases are created from data supplied by the individual employers. The data was not audited by the actuarial staff, but appears to be reasonable for valuation purposes. Summary information regarding plan membership data for various groups is provided in Exhibits F through H.

Using each plan's schedule of benefits, member data described above, and a set of actuarial assumptions, the plan's actuary estimates the cost of the benefits to be paid. Then, using a particular actuarial funding method, the actuary allocates these costs to the fiscal years within the employee's career.

In the case of the CalPERS plans with pay-related benefits, the financial objective is to fund in a manner which keeps contribution rates approximately as a level percentage of payroll from generation to generation, while accumulating sufficient assets over each member's working career. The primary funding method used to accomplish this objective is the Entry Age Normal Cost Method. This method is used for all defined benefit pay-related plans within CalPERS, for the Legislators' Retirement System (LRS), for the Judges' Retirement System (JRS) and for the Judges' Retirement System II (JRS II). It is also used for the Indexed Level of 1959 Survivor Benefits.

For CalPERS non-pay-related plans, the financial objective is to produce annual costs that coincide with the value of benefits earned for that year. The Term Insurance Cost Method is used for the plans within the 1959 Survivor Program that are not indexed and for the State Group Term Life Insurance Program.

Annual actuarial valuations are performed each June 30, using these methods. This report contains information through the most recent valuation date of June 30, 2015. Progress in financing can be found in the Summary of Funding Progress, Exhibits A and B.

The discount rate of 7.50 percent, net of administrative expenses of 15 basis points, is used in the Public Employees' Retirement Fund (PERF) for funding purposes. The discount rates used for funding purposes in the Legislators' Retirement Fund (LRF) and the Judges' Retirement Fund II (JRF II), also net of administrative expenses, are 5.75 percent and 7.00 percent, respectively. The financial reporting discount

rate differs as it is not reduced for administrative expenses. The Judges' Retirement Fund (JRF) is 4.25 percent for funding reporting purposes.

### Entry Age Normal Cost Method

Under the Entry Age Normal Cost Method, projected benefits are determined for all members. For active members, liabilities are spread in a manner that produces level annual costs as a percent of pay in each year from the age of hire (entry age) to the assumed retirement age. The cost allocated to the current fiscal year is called the normal cost. The actuarial accrued liability for active members is then calculated as the portion of the total cost of the plan allocated to prior years.

The actuarial accrued liability for members currently receiving benefits, for active members beyond the assumed retirement age, and for inactive members entitled to deferred benefits is equal to the present value of the benefits expected to be paid. No normal costs are applicable for these participants. The excess of the total actuarial accrued liability over the value of plan assets is called the unfunded actuarial accrued liability.

The required contribution is then determined by adding the normal cost and an amortization of the unfunded liability as a level percentage of assumed future payroll.

In the CalPERS case, the unfunded liability is broken down into components, or bases, according to their date of origin and the cause that gave rise to that component. A component of the unfunded liability that arose due to a change in plan provisions or in actuarial methods or assumptions is separately tracked and amortized over a declining 20-year period. The amortization methods were adopted by the Board in April 2005.

The actuarial assumptions discussed in this section are used to determine projected benefits. The effect of differences between those assumptions and the actual experience of the plan is calculated each year when the annual actuarial valuation is performed. These differences are experience gains or losses.

In April 2013, the CalPERS Board approved new actuarial policies that are aimed at returning The California Public Employees' Retirement System (the System) to fully funded status within 30 years. The new policies include a rate-smoothing method with a 30-year fixed amortization period for gains and losses. The amortization would have a five-year ramp-up of rates at the start and a five-year ramp-down at the end. These new policies applied beginning with the June 30, 2014 valuation for the state and schools pool, setting employer contribution rates for the Fiscal Year 2015-16. For Public Agencies, the new policies applied in the June 30, 2013 valuations, setting rates for the Fiscal Year 2015-16.

A maximum 30-year amortization payment on the entire unfunded liability is enforced on the amortization methods described above. In addition, for those plans in which the amortization methods described above result in either mathematical inconsistencies or unreasonable actuarial results, all unfunded liability components are combined into a single base and amortized over a period of time, as determined by the CalPERS Chief Actuary. Note that for the purpose of deriving the actuarially determined contribution rate, there is a minimum employer contribution equal to normal cost, less 30-year amortization of surplus (negative unfunded liability), if any. Note that there is a requirement in state statute that employers always contribute an amount never less than normal cost.

### Term Insurance Cost Method

The actuarial funding method for non-indexed levels of the 1959 Survivor Program is a modified Term Insurance Cost Method. Under this method, there is no actuarial accrued liability for active members; all liability is due to current beneficiaries. The normal cost is calculated as the amount needed to provide benefits to survivors of deaths expected in the next one-year period.

The Term Insurance Cost Method is also used for the State Group Term Life Insurance Program. The required contributions are calculated as one and one-half times the expected life insurance payments for the coming year less the current assets available to pay those benefits, but not less than zero. The Term Insurance Cost Method was adopted by the Board in November 1997.

### Asset Valuation Method

As of April 2013, the Board decided to move away from using an actuarial value of assets for setting contribution requirements and use the market value of assets. This change was implemented in the June 30, 2013 actuarial valuations and is reflected in the information provided in this section for the state plans, LRF, JRF and JRF II and local agencies. For the schools pool, the change to using the market value of assets was implemented in the June 30, 2014 actuarial valuation.

## ACTUARIAL ASSUMPTIONS

The actuarial assumptions used in determining actuarial liabilities and required employer contributions include both economic and non-economic assumptions. These assumptions represent the actuary's best estimate of anticipated future experience and are reviewed in depth periodically.

### Economic Assumptions

The economic assumptions include an assumed inflation assumption of 2.75 percent compounded annually. The inflation assumption is a component of assumed investment return, assumed wage growth, and assumed future post-retirement cost-of-living increases.

Based upon the asset allocation of the PERF, the assumed investment return (net of administrative and investment expenses) is 7.5 percent per year, compounded annually. Different asset allocations and lower assumed investment returns apply to LRF, JRF, and JRF II. The economic assumptions adopted by the Board in March 2012 are based on a review by the Actuarial Office and an economic assumptions study performed by an outside actuarial consultant.

The assumed investment returns for these three plans are 5.75 percent, 4.25 percent, and 7.0 percent respectively, net of administrative expenses. For plans within CalPERS, the overall payroll is assumed to increase 3.0 percent annually. This is based upon the 2.75 percent inflation assumption and a 0.25 percent per annum productivity increase assumption. The overall payroll growth assumption is used to project future payroll over which the unfunded liability is amortized.

For plans within CalPERS, the assumed growth in an individual employee's future pay is composed of the 2.75 percent inflation component, an additional 0.25 percent per annum productivity component, and an annual merit increase based on the member's length of service. The service-based merit increase in an individual's salary recognizes that larger salary increases tend to occur earlier in an employee's career. Pay increase assumptions for individual members are shown for sample lengths of service in Exhibit C.

### Non-Economic Assumptions

Non-economic assumptions for plans within the PERF are based upon the most recent CalPERS Experience Study (covering the period June 30, 1997 through June 30, 2011) that was completed and adopted by the Board in April 2014.

Post-retirement mortality tables are based on CalPERS' experience. These tables are used to estimate the value of benefits expected to be paid for service and disability retirements. For disability retirements, impaired longevity is recognized by a separate table. Sample life annuity values based on these tables are shown in Exhibit E.

## CHANGES SINCE PRIOR VALUATION

### Changes in Actuarial Methods

In April 2013, the CalPERS Board approved new actuarial policies that are aimed at returning the System to fully funded status within 30 years. The new policies include a rate-

smoothing method with a 30-year fixed amortization period for gains and losses. The amortization would have a five-year ramp-up of rates at the start and a five-year ramp-down at the end. In addition to closing the funding gap in 30 years, the new method will also help avoid large increases in employer contribution rates in extreme years, while maintaining a reasonable level of change in normal years. Based on investment return simulations performed for the next 30 years, increasing contributions more rapidly in the short-term is expected to result in almost a 25 percent improvement in funded status over a 30-year period. These new policies applied beginning with the June 30, 2014 valuation for the State of California and schools pool, setting employer contribution rates for the Fiscal Year 2015-16. For Public Agencies, the new policies applied in the June 30, 2013 valuations, setting rates for the Fiscal Year 2015-16.

### Changes in Actuarial Assumptions

In February 2014, the CalPERS Board made important decisions regarding the funding of pension benefits at CalPERS. Specifically, the Board adopted relatively modest changes to the current asset allocation that will reduce the expected volatility of investment returns while holding the PERF's long-term assumed rate of return at 7.5 percent. The Board also adopted more significant changes to the actuarial assumptions, most importantly, the inclusion of future mortality improvements in the actuarial assumptions. Finally, the Board approved a financing method which determines when and how quickly these changes will impact employer contributions. The actuarial assumptions adopted by the CalPERS Board of Administration are designed to ensure greater sustainability and soundness of the pension fund, and will be better at predicting future experience, resulting in more secure retirement benefits in the decades to come. The current experience study was based on demographic

CalPERS data for years 1997 to 2011. The study focused on recent patterns of termination, death, disability, retirement, and salary increases. For the state plans, the new assumptions were implemented in the June 30, 2013 valuation, setting the employer contribution rates for Fiscal Year 2014-15. These new assumptions were applied beginning with the June 30, 2015 valuation for the schools pool, setting employer contribution rate for the Fiscal Year 2016-17. For Public Agencies, the new assumptions applied in the June 30, 2014 valuations, setting rates for the Fiscal Year 2016-17. Note that all actuarial information included in this section is based on the new assumptions.

On November 18, 2015, the CalPERS Board of Administration adopted the Funding Risk Mitigation Policy. The Policy seeks to reduce CalPERS funding risk over time. It establishes a mechanism whereby CalPERS investment performance that significantly outperforms the discount rate triggers adjustments to the discount rate, expected investment return, and strategic asset allocation targets. Reducing the volatility of investment returns will increase the long-term sustainability of CalPERS pension benefits for members. Details of the Policy can be found on the CalPERS website.

### Changes in Plan Provisions

There were no changes in the plan provisions for the state plans, schools pool, JRF, JRF II, and LRF. Public agencies can make changes to their plan provisions, and such changes occur on an ongoing basis. A summary of the plan provisions that were used for a specific plan can be found in Appendix B of the plan's annual valuation report.

## SUMMARY OF FUNDING PROGRESS

### UNFUNDED LIABILITY & FUNDED RATIOS

For the plans in CalPERS, unfunded actuarial accrued liabilities are the difference between Entry Age Normal Accrued Liabilities and the assets of the Fund. It is required that these unfunded liabilities be financed systematically over future years.

Because of inflation, comparing the dollar amounts of assets, benefits paid, member salaries, and unfunded actuarial accrued liabilities can be misleading. While no one or two measures can fully describe the financial condition of a plan, the ratio of a pension plan's actuarial value of assets to its liabilities provides a meaningful index. However, a better measure is the funded ratio based on the market value of assets. This is the true measure of a plan's ability to pay benefits. The higher this ratio, the stronger the plan and observation of this ratio over a period of years can give an indication as to the financial strength of the system. Both of these measures are presented in Exhibit A. As stated earlier, beginning with the June 30, 2014 valuations, all plans will use an actuarial value of assets set equal to the market value of assets.

### SOLVENCY TEST

Exhibit B, Funding Progress — Solvency Test, demonstrates System solvency as measured using the System's own assumptions and liability calculation methods.

### INDEPENDENT REVIEW

To ensure the quality of its valuations, CalPERS contracts with independent consulting actuaries to review the valuations on an annual basis with the valuating broken into three groups, so that each group is reviewed on a triennial basis.

**EXHIBIT A: FUNDING PROGRESS – UNFUNDED LIABILITY & FUNDED RATIOS** (DOLLARS IN MILLIONS)

Actuarial Valuation Date	Actuarial Value of Assets (1)	Actuarial Accrued Liability (AAL) (Entry Age) (2)	Unfunded AAL (UAAL)/ Surplus (AVA Basis) (3) = (2) - (1)	Funded Ratio (Actuarial Value of Assets Basis) (4) = (1) / (2)	Annual Covered Payroll (5)	UAAL/ Surplus as a % of Covered Payroll (6) = (3) / (5)	Market Value of Assets (MVA) (7)	Unfunded AAL (UAAL)/ Surplus (MVA Basis) (8) = (2) - (7)	Funded Ratio (Market Value of Assets Basis) (9) = (7) / (2)
<b>PERF</b>									
06/30/15	\$302,418	\$413,700	\$111,282	73.1%	\$47,458	234.5 %	\$302,418	\$111,282	73.1%
06/30/14	301,257	394,726	93,469	76.3%	44,958	207.9 %	301,257	93,469	76.3%
06/30/13	281,928	375,019	93,091	75.2%	42,575	218.7 %	261,622	113,397	69.8%
06/30/12	282,991	340,429	57,438	83.1%	42,599	134.8 %	236,800	103,629	69.6%
06/30/11	271,389	328,567	57,178	82.6%	43,901	130.2 %	241,740	86,827	73.6%
06/30/10	257,070	308,343	51,273	83.4%	44,984	114.0 %	201,632	106,711	65.4%
06/30/09	244,964	294,042	49,078	83.3%	45,100	108.8 %	178,860	115,182	60.8%
06/30/08	233,272	268,324	35,052	86.9%	44,236	79.2 %	238,041	30,283	88.7%
06/30/07	216,484	248,224	31,740	87.2%	40,864	77.7 %	251,162	(2,938)	101.2%
06/30/06	199,033	228,131	29,098	87.2%	38,047	76.5%	211,188	16,943	92.6%
<b>LRF</b>									
06/30/15	\$121	\$106	(\$15)	114.9%	\$1	(1,500.0%)	\$121	(\$15)	114.9%
06/30/14	130	111	(19)	117.1%	2	(950.0%)	130	(19)	117.1%
06/30/13	123	116	(7)	106.0%	1	(700.0%)	122	(6)	105.2%
06/30/12	124	109	(15)	113.8%	2	(750.0%)	123	(14)	112.8%
06/30/11	126	109	(17)	115.6%	2	(850.0%)	124	(15)	113.8%
06/30/10	127	112	(15)	113.4%	2	(750.0%)	114	(2)	101.8%
06/30/09	134	112	(22)	119.6%	2	(1,100.0%)	112	—	100.0%
06/30/08	142	103	(39)	137.9%	2	(1,950.0%)	134	(31)	130.1%
06/30/07	142	102	(40)	139.2%	2	(2,000.0%)	142	(40)	139.2%
<b>JRF</b>									
06/30/15	\$41	\$3,323	\$3,282	1.2%	\$44	7,459.1 %	\$41	\$3,282	1.2%
06/30/14	57	3,415	3,358	1.7%	52	6,457.7%	57	3,358	1.7%
06/30/13	54	3,383	3,329	1.6%	61	5,457.4%	54	3,329	1.6%
06/30/12	73	3,172	3,099	2.3%	69	4,491.3%	73	3,099	2.3%
06/30/11	54	3,297	3,243	1.6%	76	4,267.1%	54	3,243	1.6%
06/30/10	64	3,429	3,365	1.9%	86	3,912.8%	64	3,365	1.9%
06/30/09	41	3,583	3,542	1.1%	97	3,651.5%	41	3,542	1.1%
06/30/08	19	3,607	3,588	0.5%	111	3,232.4%	19	3,588	0.5%
06/30/07	12	2,714	2,702	0.4%	119	2,270.6%	12	2,702	0.4%
<b>JRF II</b>									
06/30/15	\$1,084	\$1,082	(\$2)	100.2%	\$273	(0.7%)	\$1,084	(\$2)	100.2%
06/30/14	1,014	951	(63)	106.6%	252	(25.0%)	1,014	(63)	106.6%
06/30/13	779	837	58	93.1%	242	24.0%	796	41	95.1%
06/30/12	668	703	35	95.0%	231	15.2%	655	48	93.2%
06/30/11	561	610	49	92.0%	230	21.3%	576	34	94.4%
06/30/10	461	521	60	88.5%	213	28.2%	422	99	81.0%
06/30/09	379	451	72	84.0%	199	36.2%	316	135	70.1%
06/30/08	335	367	32	91.3%	175	18.3%	325	42	88.6%
06/30/07	268	295	27	90.8%	156	17.3%	291	4	98.6%
06/30/06	213	220	7	96.8%	125	5.6%	219	1	99.5%

## EXHIBIT B: FUNDING PROGRESS – SOLVENCY TEST

The funding objective for a retirement system is to be able to pay long-term benefit promises through member contributions as a percent of salary that remains approximately level from year to year. In this way, members and employers pay their fair share for retirement services accrued in that year by the retirement system's members.

If a system follows level contribution rate financing principles, it will pay all promised benefits when due—the ultimate test of financial soundness.

A short-term solvency test is one means of checking a system's funding progress. In a short-term solvency test, the plan's present assets (investments and cash) are compared

with 1) member contributions on deposit, 2) the liabilities for future benefits to persons who have retired or terminated, and 3) the liabilities for projected benefits for service already rendered by active members. In a system that employs level contribution rate financing, the liabilities for member contributions on deposit (liability 1) and the liabilities for future benefits to present retirees (liability 2) will be fully covered by present assets, except in rare circumstances.

In addition, the liabilities for service already rendered by members (liability 3) will be partially covered by the remainder of present assets. Generally, if the System has been using level contribution rate financing, the funded portion of liability 3 will increase over time.



## EXHIBIT B: FUNDING PROGRESS - SOLVENCY TEST (CONTINUED)

Valuation Date	Accrued Liability				Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Valuation Assets		
	Member Contributions <sup>†</sup> (1)	Terminated, Retirees & Beneficiaries (2)	Employer-Financed Portion of Active Members (3)	Total Accrued Liability (1) + (2) + (3)		(1)	(2)	(3)
PERF (Dollars in Millions)								
6/30/2015	\$51,600	\$241,900	\$120,200	\$413,700	\$302,400	100.0%	100.0%	7.4%
6/30/2014	49,200	228,300	117,200	394,700	301,257	100.0%	100.0%	20.3%
6/30/2013	46,300	203,700	125,000	375,000	281,900	100.0%	100.0%	25.5%
6/30/2012	43,000	193,000	104,400	340,400	283,000	100.0%	100.0%	45.0%
6/30/2011	42,300	179,100	107,200	328,600	271,400	100.0%	100.0%	46.7%
6/30/2010	40,600	160,200	107,500	308,300	257,100	100.0%	100.0%	52.3%
6/30/2009	39,100	146,800	108,200	294,100	245,000	100.0%	100.0%	54.6%
6/30/2008	36,700	133,800	97,800	268,300	233,300	100.0%	100.0%	64.2%
6/30/2007	34,100	123,000	91,200	248,300	216,500	100.0%	100.0%	65.2%
6/30/2006	31,600	111,400	85,100	228,100	199,000	100.0%	100.0%	65.8%
LRF (Dollars in Thousands)								
6/30/2015	\$556	\$100,658	\$4,532	\$105,746	\$121,469	100.0%	100.0%	446.9%
6/30/2014	508	104,992	5,774	111,274	130,353	100.0%	100.0%	430.4%
6/30/2013	351	110,313	5,142	115,806	123,201	100.0%	100.0%	243.8%
6/30/2012	801	100,337	7,448	108,586	124,212	100.0%	100.0%	309.8%
6/30/2011	1,608	99,305	8,064	108,977	125,646	100.0%	100.0%	306.7%
6/30/2010	1,391	103,673	7,292	112,356	126,642	100.0%	100.0%	295.9%
6/30/2009	1,047	105,002	5,849	111,898	134,195	100.0%	100.0%	481.2%
6/30/2008	1,367	95,765	5,904	103,036	142,351	100.0%	100.0%	765.8%
6/30/2007	1,365	95,661	4,546	101,572	141,603	100.0%	100.0%	980.6%
JRF (Dollars in Thousands)								
6/30/2015	\$66,911	\$2,761,781	\$493,918	\$3,322,610	\$41,178	61.5%	0.0%	0.0%
6/30/2014	76,196	2,734,090	604,494	3,414,780	57,199	75.1%	—	—
6/30/2013	84,692	2,691,326	607,292	3,383,310	53,820	64.0%	—	—
6/30/2012	91,589	2,441,189	639,498	3,172,276	72,693	79.0%	—	—
6/30/2011	94,320	2,494,653	707,565	3,296,538	54,383	58.0%	—	—
6/30/2010	100,426	2,404,920	924,035	3,429,381	63,828	64.0%	—	—
6/30/2009	105,851	1,949,177	1,527,964	3,582,992	41,390	39.0%	—	—
6/30/2008	114,128	1,883,956	1,608,761	3,606,845	19,289	17.0%	—	—
6/30/2007	118,940	1,773,682	821,019	2,713,641	11,672	10.0%	—	—
JRF II (Dollars in Thousands)								
6/30/2015	\$348,475	\$110,644	\$622,705	\$1,081,824	\$1,084,142	100.0%	100.0%	100.4%
6/30/2014	285,683	79,563	585,396	950,642	1,013,840	100.0%	100.0%	110.8%
6/30/2013	243,049	58,393	535,756	837,198	778,980	100.0%	100.0%	89.1%
6/30/2012	223,897	41,142	437,693	702,732	667,557	100.0%	100.0%	92.0%
6/30/2011	172,538	31,596	405,428	609,562	561,476	100.0%	100.0%	88.1%
6/30/2010	136,179	14,430	370,078	520,687	461,071	100.0%	100.0%	83.9%
6/30/2009	121,016	13,191	316,339	450,546	378,692	100.0%	100.0%	77.3%
6/30/2008	107,497	10,610	248,407	366,514	334,903	100.0%	100.0%	87.3%
6/30/2007	81,693	5,340	207,950	294,983	267,604	100.0%	100.0%	86.8%
6/30/2006	65,048	5,710	149,376	220,134	212,904	100.0%	100.0%	95.2%

(1) Includes accrued interest on member contributions.



## EXHIBIT C: SAMPLE PAY INCREASE ASSUMPTIONS FOR INDIVIDUAL MEMBERS

Annual Percentage Increases by Duration of Service<sup>1</sup>

Duration of Service	State Miscellaneous First & Second Tier			State Industrial First & Second Tier			State Safety		
	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40
0	9.50%	8.60%	7.30%	10.00%	10.00%	9.20%	11.20%	10.00%	8.30%
3	7.50%	6.80%	5.60%	7.70%	7.40%	6.60%	6.50%	6.10%	5.60%
5	6.90%	6.20%	5.20%	7.00%	6.60%	5.80%	5.10%	4.90%	4.80%
10	5.20%	4.70%	4.10%	5.90%	5.30%	4.60%	3.60%	3.60%	3.60%
15	4.30%	4.10%	3.70%	5.00%	4.70%	4.30%	3.60%	3.50%	3.40%
20	3.80%	3.70%	3.50%	4.40%	4.30%	4.10%	3.60%	3.50%	3.20%
25	3.50%	3.50%	3.40%	3.90%	3.90%	3.80%	3.60%	3.50%	3.20%
30	3.50%	3.50%	3.40%	3.60%	3.60%	3.60%	3.60%	3.50%	3.20%

Duration of Services	State Peace Officer/Firefighter			California Highway Patrol			School		
	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40
0	17.30%	18.20%	18.60%	8.00%	8.00%	8.00%	9.00%	8.80%	8.20%
3	9.70%	9.70%	9.40%	6.50%	6.50%	6.50%	6.50%	6.30%	5.80%
5	7.50%	7.20%	6.70%	5.40%	5.40%	5.40%	5.80%	5.60%	5.10%
10	4.20%	4.00%	3.70%	3.80%	3.80%	3.80%	4.60%	4.50%	4.10%
15	4.20%	4.00%	3.70%	3.80%	3.80%	3.80%	4.20%	4.10%	3.80%
20	4.20%	4.00%	3.70%	4.50%	4.50%	4.50%	3.90%	3.80%	3.50%
25	4.20%	4.00%	3.70%	4.50%	4.50%	4.50%	3.70%	3.50%	3.30%
30	4.20%	4.00%	3.70%	3.80%	3.80%	3.80%	3.50%	3.30%	3.10%

Duration of Service	Public Agency Miscellaneous			Public Agency Fire			Public Agency Police		
	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40
0	12.20%	11.60%	10.20%	20.00%	19.80%	16.80%	15.00%	14.70%	13.10%
3	7.70%	7.20%	6.30%	9.80%	9.40%	8.10%	8.10%	7.80%	7.00%
5	6.40%	6.00%	5.20%	6.90%	6.40%	5.50%	6.10%	5.80%	5.20%
10	4.60%	4.30%	3.90%	4.70%	4.60%	4.20%	4.50%	4.30%	3.70%
15	4.20%	4.00%	3.60%	4.40%	4.20%	3.90%	4.50%	4.30%	3.70%
20	3.90%	3.80%	3.40%	4.20%	3.90%	3.60%	4.50%	4.30%	3.70%
25	3.70%	3.60%	3.30%	4.00%	3.70%	3.40%	4.50%	4.30%	3.70%
30	3.50%	3.40%	3.20%	3.80%	3.60%	3.40%	4.50%	4.30%	3.70%

Duration of Service	Public Agency County Peace Officer		
	Entry Age 20	Entry Age 30	Entry Age 40
0	17.70%	16.70%	15.00%
3	9.00%	8.60%	7.90%
5	6.50%	6.20%	5.80%
10	4.70%	4.50%	4.10%
15	4.60%	4.50%	3.90%
20	4.60%	4.50%	3.80%
25	4.60%	4.50%	3.80%
30	4.60%	4.40%	3.80%

(1) Increase includes the assumed inflation rate of 2.75 percent per year.

## EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS

State Miscellaneous First and Second Tier – Probability of an active member leaving due to:

Age <sup>1</sup>	Termination with Refund	Termination with Vested Deferred Benefits	Service Retirement <sup>3</sup>		Non-Industrial Death		Non-Industrial Disability		Industrial Death	Industrial Disability
	5 Years <sup>2</sup>	5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male	Female	Male & Female	Male & Female
20	0.01040	0.05560	N/A	N/A	0.00031	0.00020	0.00019	0.00039	N/A	N/A
25	0.00940	0.05040	N/A	N/A	0.00040	0.00023	0.00019	0.00039	N/A	N/A
30	0.00840	0.04520	N/A	N/A	0.00049	0.00025	0.00019	0.00046	N/A	N/A
35	0.00750	0.04000	N/A	N/A	0.00057	0.00035	0.00036	0.00096	N/A	N/A
40	0.00650	0.03490	N/A	N/A	0.00075	0.00050	0.00103	0.00206	N/A	N/A
45	0.00550	0.00000	N/A	N/A	0.00106	0.00071	0.00204	0.00346	N/A	N/A
50	0.00460	0.00000	0.00800	0.02400	0.00155	0.00100	0.00274	0.00415	N/A	N/A
55	0.00360	0.00000	0.04800	0.10800	0.00228	0.00138	0.00238	0.00325	N/A	N/A
56	0.00340	0.00000	0.03900	0.09000	0.00249	0.00148	0.00222	0.00295	N/A	N/A
57	0.00320	0.00000	0.04400	0.10000	0.00265	0.00157	0.00200	0.00277	N/A	N/A
58	0.00300	0.00000	0.04800	0.10800	0.00280	0.00166	0.00200	0.00264	N/A	N/A
59	0.00280	0.00000	0.05900	0.13000	0.00294	0.00174	0.00200	0.00257	N/A	N/A
60	0.00260	0.00000	0.07400	0.16300	0.00308	0.00182	0.00200	0.00256	N/A	N/A
61	0.00240	0.00000	0.08500	0.18600	0.00328	0.00196	0.00200	0.00256	N/A	N/A
62	0.00220	0.00000	0.13600	0.29500	0.00347	0.00208	0.00200	0.00256	N/A	N/A
63	0.00200	0.00000	0.13700	0.29600	0.00366	0.00225	0.00200	0.00256	N/A	N/A
64	0.00190	0.00000	0.11400	0.24600	0.00383	0.00241	0.00200	0.00256	N/A	N/A
65	0.00170	0.00000	0.14600	0.31600	0.00400	0.00257	0.00200	0.00256	N/A	N/A
70	0.00070	0.00000	0.12800	0.27800	0.00524	0.00367	0.00200	0.00256	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

(3) State Miscellaneous Tier 2 members have the right to convert their Tier 2 service to Tier 1 service provided that they make up the shortfall in their accumulated contributions with interest. The assumption is that all Tier 2 members will elect to convert to Tier 1 service.

State Industrial – Probability of an active member leaving due to:

Age <sup>1</sup>	Termination with Refund	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability	Industrial Death	Industrial Disability
	5 Years <sup>2</sup>	5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male & Female	Male & Female	Male & Female
20	0.00950	0.04960	N/A	N/A	0.00031	0.00020	0.00043	0.00003	0.00015
25	0.00860	0.04490	N/A	N/A	0.00040	0.00023	0.00085	0.00007	0.00015
30	0.00770	0.04050	N/A	N/A	0.00049	0.00025	0.00136	0.00010	0.00015
35	0.00680	0.03560	N/A	N/A	0.00057	0.00035	0.00204	0.00012	0.00029
40	0.00590	0.03110	N/A	N/A	0.00075	0.00050	0.00315	0.00013	0.00029
45	0.00500	0.00000	N/A	N/A	0.00106	0.00071	0.00468	0.00014	0.00044
50	0.00420	0.00000	0.01100	0.03100	0.00155	0.00100	0.00621	0.00015	0.00044
55	0.00330	0.00000	0.05200	0.14100	0.00228	0.00138	0.00791	0.00016	0.00058
56	0.00310	0.00000	0.03700	0.10000	0.00249	0.00148	0.00816	0.00016	0.00058
57	0.00290	0.00000	0.03500	0.09400	0.00265	0.00157	0.00850	0.00016	0.00058
58	0.00270	0.00000	0.04600	0.12500	0.00280	0.00166	0.00867	0.00016	0.00058
59	0.00260	0.00000	0.05300	0.14600	0.00294	0.00174	0.00893	0.00017	0.00058
60	0.00240	0.00000	0.07000	0.19100	0.00308	0.00182	0.00918	0.00017	0.00058
61	0.00220	0.00000	0.07100	0.19500	0.00328	0.00196	0.00935	0.00017	0.00058
62	0.00210	0.00000	0.13900	0.37800	0.00347	0.00208	0.00952	0.00017	0.00058
63	0.00180	0.00000	0.11400	0.31200	0.00366	0.00225	0.00969	0.00017	0.00058
64	0.00170	0.00000	0.08700	0.23700	0.00383	0.00241	0.00986	0.00018	0.00058
65	0.00150	0.00000	0.15300	0.41600	0.00400	0.00257	0.01003	0.00018	0.00058
70	0.00060	0.00000	0.16300	0.44400	0.00524	0.00367	0.01003	0.00019	0.00058

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

## EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

California Highway Patrol – Probability of an active member leaving due to:

YRS <sup>2</sup>	Termination with Refund	AGE <sup>1</sup>	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability	Industrial Death	Industrial Disability
	Vary by Service		5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male & Female	Male & Female	Male & Female
0	0.01290	20	0.00930	N/A	N/A	0.00031	0.00020	0.00014	0.00003	0.00026
1	0.01240	25	0.00930	N/A	N/A	0.00040	0.00023	0.00014	0.00007	0.00058
2	0.01210	30	0.00930	N/A	N/A	0.00049	0.00025	0.00014	0.00010	0.00114
3	0.01160	35	0.00930	N/A	N/A	0.00057	0.00035	0.00014	0.00012	0.00204
4	0.01130	40	0.00930	N/A	N/A	0.00075	0.00050	0.00014	0.00013	0.00337
5	0.00400	45	0.00000	N/A	N/A	0.00106	0.00071	0.00028	0.00014	0.00527
6	0.00380	50	0.00000	0.05000	0.14900	0.00155	0.00100	0.00028	0.00015	0.02023
7	0.00360	55	0.00000	0.05000	0.14900	0.00228	0.00138	0.00028	0.00016	0.09011
8	0.00340	56	0.00000	0.05100	0.15200	0.00249	0.00148	0.00028	0.00016	0.11848
9	0.00310	57	0.00000	0.05100	0.15400	0.00265	0.00157	0.00028	0.00016	0.15516
10	0.00290	58	0.00000	0.04900	0.14600	0.00280	0.00166	0.00028	0.00017	0.20240
15	0.00190	59	0.00000	0.08800	0.26300	0.00294	0.00174	0.00028	0.00017	0.26302
20	0.00110	60	0.00000	1.00000	1.00000	0.00308	0.00182	0.00028	0.00017	0.34051
25	0.00060	61	0.00000	1.00000	1.00000	0.00328	0.00196	0.00028	0.00017	0.43917
30	0.00030	62	0.00000	1.00000	1.00000	0.00347	0.00208	0.00028	0.00017	0.45622
35	0.00030	63	0.00000	1.00000	1.00000	0.00366	0.00225	0.00028	0.00018	0.45659
40	0.00030	64	0.00000	1.00000	1.00000	0.00383	0.00241	0.00028	0.00018	0.45696
45	0.00030	65	0.00000	1.00000	1.00000	0.00400	0.00257	0.00028	0.00018	0.45733
50	0.00000	70	0.00000	1.00000	1.00000	0.00524	0.00367	0.00028	0.00019	0.45918

(1) Age for Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

School – Probability of an active member leaving due to:

Age <sup>1</sup>	Termination with Refund	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability		Industrial Death	Industrial Disability
	5 Years <sup>2</sup>	5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male	Female	Male & Female	Male & Female
20	0.02780	0.08160	N/A	N/A	0.00031	0.00020	0.00028	0.00026	N/A	N/A
25	0.02490	0.07330	N/A	N/A	0.00040	0.00023	0.00010	0.00012	N/A	N/A
30	0.02210	0.06490	N/A	N/A	0.00049	0.00025	0.00011	0.00016	N/A	N/A
35	0.01920	0.05660	N/A	N/A	0.00057	0.00035	0.00053	0.00043	N/A	N/A
40	0.01640	0.04820	N/A	N/A	0.00075	0.00050	0.00149	0.00101	N/A	N/A
45	0.01350	0.00000	N/A	N/A	0.00106	0.00071	0.00295	0.00188	N/A	N/A
50	0.01070	0.00000	0.00900	0.01600	0.00155	0.00100	0.00388	0.00244	N/A	N/A
55	0.00780	0.00000	0.04800	0.08800	0.00228	0.00138	0.00358	0.00205	N/A	N/A
56	0.00730	0.00000	0.03900	0.07200	0.00249	0.00148	0.00346	0.00190	N/A	N/A
57	0.00670	0.00000	0.04200	0.07800	0.00265	0.00157	0.00334	0.00176	N/A	N/A
58	0.00620	0.00000	0.05000	0.09200	0.00280	0.00166	0.00323	0.00162	N/A	N/A
59	0.00560	0.00000	0.05700	0.10500	0.00294	0.00174	0.00314	0.00149	N/A	N/A
60	0.00500	0.00000	0.07300	0.13400	0.00308	0.00182	0.00306	0.00139	N/A	N/A
61	0.00450	0.00000	0.09000	0.16600	0.00328	0.00196	0.00299	0.00129	N/A	N/A
62	0.00390	0.00000	0.15100	0.27800	0.00347	0.00208	0.00293	0.00122	N/A	N/A
63	0.00330	0.00000	0.13600	0.25100	0.00366	0.00225	0.00289	0.00115	N/A	N/A
64	0.00270	0.00000	0.13300	0.24400	0.00383	0.00241	0.00285	0.00110	N/A	N/A
65	0.00220	0.00000	0.18000	0.33100	0.00400	0.00257	0.00282	0.00107	N/A	N/A
70	0.00030	0.00000	0.13100	0.24100	0.00524	0.00367	0.00279	0.00105	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

## EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

State Safety – Probability of an active member leaving due to:

YRS <sup>2</sup>	Termination with Refund	AGE <sup>1</sup>	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability	Industrial Death	Industrial Disability
	Vary by Service		5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male & Female	Male & Female	Male & Female
0	0.13130	20	0.03690	N/A	N/A	0.00031	0.00020	0.00036	0.00003	0.00002
1	0.09670	25	0.03690	N/A	N/A	0.00040	0.00023	0.00054	0.00007	0.00076
2	0.06220	30	0.03690	N/A	N/A	0.00049	0.00025	0.00063	0.00010	0.00170
3	0.04610	35	0.03690	N/A	N/A	0.00057	0.00035	0.00072	0.00012	0.00264
4	0.03740	40	0.03690	N/A	N/A	0.00075	0.00050	0.00072	0.00013	0.00360
5	0.00800	45	0.00000	N/A	N/A	0.00106	0.00071	0.00108	0.00014	0.00457
6	0.00750	50	0.00000	0.01200	0.03900	0.00155	0.00100	0.00216	0.00015	0.00557
7	0.00710	55	0.00000	0.06800	0.13900	0.00228	0.00138	0.00306	0.00016	0.00658
8	0.00660	56	0.00000	0.05600	0.11700	0.00249	0.00148	0.00324	0.00016	0.00679
9	0.00620	57	0.00000	0.05400	0.11500	0.00265	0.00157	0.00342	0.00016	0.00700
10	0.00580	58	0.00000	0.06200	0.12800	0.00280	0.00166	0.00351	0.00017	0.00720
15	0.00390	59	0.00000	0.05900	0.12200	0.00294	0.00174	0.00369	0.00017	0.00741
20	0.00250	60	0.00000	0.07300	0.14800	0.00308	0.00182	0.00387	0.00017	0.00762
25	0.00130	61	0.00000	0.09000	0.17800	0.00328	0.00196	0.00396	0.00017	0.00783
30	0.00090	62	0.00000	0.11500	0.22200	0.00347	0.00208	0.00414	0.00017	0.00805
35	0.00090	63	0.00000	0.11700	0.22700	0.00366	0.00225	0.00432	0.00018	0.00826
40	0.00090	64	0.00000	0.11300	0.21900	0.00383	0.00241	0.00441	0.00018	0.00847
45	0.00090	65	0.00000	0.14800	0.28100	0.00400	0.00257	0.00459	0.00018	0.00869
50	0.00000	70	0.00000	0.14300	0.27100	0.00524	0.00367	0.00459	0.00019	0.00978

(1) Age for Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

State Peace Officer/Firefighter – Probability of an active member leaving due to:

YRS <sup>2</sup>	Termination with Refund	AGE <sup>1</sup>	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability	Industrial Death	Industrial Disability
	Vary by Service		5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male & Female	Male & Female	Male & Female
0	0.12170	20	0.01730	N/A	N/A	0.00031	0.00020	0.00010	0.00003	0.00039
1	0.07790	25	0.01730	N/A	N/A	0.00040	0.00023	0.00010	0.00007	0.00087
2	0.04310	30	0.01730	N/A	N/A	0.00049	0.00025	0.00010	0.00010	0.00167
3	0.03530	35	0.01730	N/A	N/A	0.00057	0.00035	0.00020	0.00012	0.00289
4	0.02750	40	0.01730	N/A	N/A	0.00075	0.00050	0.00040	0.00013	0.00464
5	0.00560	45	0.00000	N/A	N/A	0.00106	0.00071	0.00060	0.00014	0.00706
6	0.00520	50	0.00000	0.05200	0.14600	0.00155	0.00100	0.00098	0.00015	0.01027
7	0.00490	55	0.00000	0.07800	0.21300	0.00228	0.00138	0.00143	0.00016	0.01442
8	0.00460	56	0.00000	0.07400	0.20300	0.00249	0.00148	0.00150	0.00016	0.01538
9	0.00420	57	0.00000	0.07100	0.19700	0.00265	0.00157	0.00158	0.00016	0.01638
10	0.00390	58	0.00000	0.08100	0.22000	0.00280	0.00166	0.00165	0.00017	0.01742
15	0.00250	59	0.00000	0.08900	0.23900	0.00294	0.00174	0.00180	0.00017	0.01852
20	0.00150	60	0.00000	0.08800	0.24100	0.00308	0.00182	0.00188	0.00017	0.01966
25	0.00060	61	0.00000	0.09100	0.24800	0.00328	0.00196	0.00195	0.00017	0.02085
30	0.00030	62	0.00000	0.09900	0.26700	0.00347	0.00208	0.00203	0.00017	0.02209
35	0.00030	63	0.00000	0.09100	0.24600	0.00366	0.00225	0.00218	0.00018	0.02339
40	0.00030	64	0.00000	0.10700	0.28800	0.00383	0.00241	0.00225	0.00018	0.02474
45	0.00030	65	0.00000	0.10300	0.27700	0.00400	0.00257	0.00233	0.00018	0.02614
50	0.00000	70	0.00000	1.00000	1.00000	0.00524	0.00367	0.00233	0.00019	0.03403

(1) Age for Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

## EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

Public Agency 2% at 55 Miscellaneous – Probability of an active member leaving due to:

AGE <sup>1</sup>	Termination with Refund	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability		Industrial Death	Industrial Disability
	5 Years <sup>2</sup>	5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male	Female	Male & Female	Male & Female
20	0.02120	0.06560	N/A	N/A	0.00031	0.00020	0.00017	0.00010	N/A	N/A
25	0.01930	0.05970	N/A	N/A	0.00040	0.00023	0.00017	0.00010	N/A	N/A
30	0.01740	0.05370	N/A	N/A	0.00049	0.00025	0.00019	0.00024	N/A	N/A
35	0.01550	0.04770	N/A	N/A	0.00057	0.00035	0.00049	0.00081	N/A	N/A
40	0.01360	0.04180	N/A	N/A	0.00075	0.00050	0.00122	0.00155	N/A	N/A
45	0.01160	0.00000	N/A	N/A	0.00106	0.00071	0.00191	0.00218	N/A	N/A
50	0.00970	0.00000	0.01800	0.02700	0.00155	0.00100	0.00213	0.00229	N/A	N/A
55	0.00780	0.00000	0.06100	0.10000	0.00228	0.00138	0.00221	0.00179	N/A	N/A
56	0.00740	0.00000	0.05300	0.08500	0.00249	0.00148	0.00222	0.00168	N/A	N/A
57	0.00700	0.00000	0.05600	0.09100	0.00265	0.00157	0.00223	0.00158	N/A	N/A
58	0.00660	0.00000	0.06200	0.10000	0.00280	0.00166	0.00223	0.00149	N/A	N/A
59	0.00620	0.00000	0.07200	0.11800	0.00294	0.00174	0.00223	0.00141	N/A	N/A
60	0.00590	0.00000	0.08600	0.13900	0.00308	0.00182	0.00222	0.00135	N/A	N/A
61	0.00550	0.00000	0.10300	0.16800	0.00328	0.00196	0.00221	0.00130	N/A	N/A
62	0.00510	0.00000	0.14700	0.24300	0.00347	0.00208	0.00219	0.00126	N/A	N/A
63	0.00470	0.00000	0.14400	0.23700	0.00366	0.00225	0.00217	0.00123	N/A	N/A
64	0.00440	0.00000	0.13800	0.22700	0.00383	0.00241	0.00214	0.00120	N/A	N/A
65	0.00390	0.00000	0.19700	0.32500	0.00400	0.00257	0.00210	0.00118	N/A	N/A
70	0.00200	0.00000	0.16500	0.27200	0.00524	0.00367	0.00180	0.00114	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

Public Agency 2.5% at 55 Miscellaneous – Probability of an active member leaving due to:

AGE <sup>1</sup>	Termination with Refund	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability		Industrial Death	Industrial Disability
	5 Years <sup>2</sup>	5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male	Female	Male & Female	Male & Female
20	0.02120	0.06560	N/A	N/A	0.00031	0.00020	0.00017	0.00010	N/A	N/A
25	0.01930	0.05970	N/A	N/A	0.00040	0.00023	0.00017	0.00010	N/A	N/A
30	0.01740	0.05370	N/A	N/A	0.00049	0.00025	0.00019	0.00024	N/A	N/A
35	0.01550	0.04770	N/A	N/A	0.00057	0.00035	0.00049	0.00081	N/A	N/A
40	0.01360	0.04180	N/A	N/A	0.00075	0.00050	0.00122	0.00155	N/A	N/A
45	0.01160	0.00000	N/A	N/A	0.00106	0.00071	0.00191	0.00218	N/A	N/A
50	0.00970	0.00000	0.00900	0.04900	0.00155	0.00100	0.00213	0.00229	N/A	N/A
55	0.00780	0.00000	0.08800	0.17900	0.00228	0.00138	0.00221	0.00179	N/A	N/A
56	0.00740	0.00000	0.05700	0.12800	0.00249	0.00148	0.00222	0.00168	N/A	N/A
57	0.00700	0.00000	0.05700	0.12800	0.00265	0.00157	0.00223	0.00158	N/A	N/A
58	0.00660	0.00000	0.06100	0.13600	0.00280	0.00166	0.00223	0.00149	N/A	N/A
59	0.00620	0.00000	0.07400	0.15700	0.00294	0.00174	0.00223	0.00141	N/A	N/A
60	0.00590	0.00000	0.08800	0.17900	0.00308	0.00182	0.00222	0.00135	N/A	N/A
61	0.00550	0.00000	0.09500	0.19100	0.00328	0.00196	0.00221	0.00130	N/A	N/A
62	0.00510	0.00000	0.13000	0.24800	0.00347	0.00208	0.00219	0.00126	N/A	N/A
63	0.00470	0.00000	0.12100	0.23300	0.00366	0.00225	0.00217	0.00123	N/A	N/A
64	0.00440	0.00000	0.11900	0.23100	0.00383	0.00241	0.00214	0.00120	N/A	N/A
65	0.00390	0.00000	0.16000	0.29700	0.00400	0.00257	0.00210	0.00118	N/A	N/A
70	0.00200	0.00000	0.16500	0.30600	0.00524	0.00367	0.00180	0.00114	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

## EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

Public Agency 2.7% at 55 Miscellaneous – Probability of an active member leaving due to:

AGE <sup>1</sup>	Termination with Refund	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability		Industrial Death	Industrial Disability
	5 Years <sup>2</sup>	5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male	Female	Male & Female	Male & Female
20	0.02120	0.06560	N/A	N/A	0.00031	0.00020	0.00017	0.00010	N/A	N/A
25	0.01930	0.05970	N/A	N/A	0.00040	0.00023	0.00017	0.00010	N/A	N/A
30	0.01740	0.05370	N/A	N/A	0.00049	0.00025	0.00019	0.00024	N/A	N/A
35	0.01550	0.04770	N/A	N/A	0.00057	0.00035	0.00049	0.00081	N/A	N/A
40	0.01360	0.04180	N/A	N/A	0.00075	0.00050	0.00122	0.00155	N/A	N/A
45	0.01160	0.00000	N/A	N/A	0.00106	0.00071	0.00191	0.00218	N/A	N/A
50	0.00970	0.00000	0.00900	0.05500	0.00155	0.00100	0.00213	0.00229	N/A	N/A
55	0.00780	0.00000	0.10100	0.20500	0.00228	0.00138	0.00221	0.00179	N/A	N/A
56	0.00740	0.00000	0.07400	0.16000	0.00249	0.00148	0.00222	0.00168	N/A	N/A
57	0.00700	0.00000	0.06800	0.15100	0.00265	0.00157	0.00223	0.00158	N/A	N/A
58	0.00660	0.00000	0.07400	0.16100	0.00280	0.00166	0.00223	0.00149	N/A	N/A
59	0.00620	0.00000	0.08200	0.17400	0.00294	0.00174	0.00223	0.00141	N/A	N/A
60	0.00590	0.00000	0.09300	0.19200	0.00308	0.00182	0.00222	0.00135	N/A	N/A
61	0.00550	0.00000	0.11300	0.22500	0.00328	0.00196	0.00221	0.00130	N/A	N/A
62	0.00510	0.00000	0.13800	0.26600	0.00347	0.00208	0.00219	0.00126	N/A	N/A
63	0.00470	0.00000	0.13500	0.26200	0.00366	0.00225	0.00217	0.00123	N/A	N/A
64	0.00440	0.00000	0.14300	0.27500	0.00383	0.00241	0.00214	0.00120	N/A	N/A
65	0.00390	0.00000	0.17400	0.32600	0.00400	0.00257	0.00210	0.00118	N/A	N/A
70	0.00200	0.00000	0.18300	0.34100	0.00524	0.00367	0.00180	0.00114	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

Public Agency 3% at 60 Miscellaneous – Probability of an active member leaving due to:

AGE <sup>1</sup>	Termination with Refund	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability		Industrial Death	Industrial Disability
	5 Years <sup>2</sup>	5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male	Female	Male & Female	Male & Female
20	0.02120	0.06560	N/A	N/A	0.00031	0.00020	0.00017	0.00010	N/A	N/A
25	0.01930	0.05970	N/A	N/A	0.00040	0.00023	0.00017	0.00010	N/A	N/A
30	0.01740	0.05370	N/A	N/A	0.00049	0.00025	0.00019	0.00024	N/A	N/A
35	0.01550	0.04770	N/A	N/A	0.00057	0.00035	0.00049	0.00081	N/A	N/A
40	0.01360	0.04180	N/A	N/A	0.00075	0.00050	0.00122	0.00155	N/A	N/A
45	0.01160	0.00000	N/A	N/A	0.00106	0.00071	0.00191	0.00218	N/A	N/A
50	0.00970	0.00000	0.01800	0.04000	0.00155	0.00100	0.00213	0.00229	N/A	N/A
55	0.00780	0.00000	0.05700	0.10500	0.00228	0.00138	0.00221	0.00179	N/A	N/A
56	0.00740	0.00000	0.05600	0.10300	0.00249	0.00148	0.00222	0.00168	N/A	N/A
57	0.00700	0.00000	0.06500	0.11900	0.00265	0.00157	0.00223	0.00158	N/A	N/A
58	0.00660	0.00000	0.07600	0.13600	0.00280	0.00166	0.00223	0.00149	N/A	N/A
59	0.00620	0.00000	0.10000	0.17500	0.00294	0.00174	0.00223	0.00141	N/A	N/A
60	0.00590	0.00000	0.14800	0.25500	0.00308	0.00182	0.00222	0.00135	N/A	N/A
61	0.00550	0.00000	0.12300	0.21400	0.00328	0.00196	0.00221	0.00130	N/A	N/A
62	0.00510	0.00000	0.17200	0.29400	0.00347	0.00208	0.00219	0.00126	N/A	N/A
63	0.00470	0.00000	0.16600	0.28500	0.00366	0.00225	0.00217	0.00123	N/A	N/A
64	0.00440	0.00000	0.18500	0.31500	0.00383	0.00241	0.00214	0.00120	N/A	N/A
65	0.00390	0.00000	0.26000	0.43900	0.00400	0.00257	0.00210	0.00118	N/A	N/A
70	0.00200	0.00000	0.18200	0.31000	0.00524	0.00367	0.00180	0.00114	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

## EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

Public Agency 2% at 50 Police – Probability of an active member leaving due to:

YRS <sup>2</sup>	Termination with Refund	AGE <sup>1</sup>	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability	Industrial Death	Industrial Disability
	Vary by Service		5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male & Female	Male & Female	Male & Female
0	0.10130	20	0.01630	N/A	N/A	0.00031	0.00020	0.00010	0.00003	0.00000
1	0.06360	25	0.01630	N/A	N/A	0.00040	0.00023	0.00010	0.00007	0.00165
2	0.02710	30	0.01630	N/A	N/A	0.00049	0.00025	0.00020	0.00010	0.00476
3	0.02580	35	0.01630	N/A	N/A	0.00057	0.00035	0.00030	0.00012	0.00788
4	0.02450	40	0.01630	N/A	N/A	0.00075	0.00050	0.00040	0.00013	0.01100
5	0.00860	45	0.00000	N/A	N/A	0.00106	0.00071	0.00050	0.00014	0.01412
6	0.00790	50	0.00000	0.00500	0.01700	0.00155	0.00100	0.00080	0.00015	0.01846
7	0.00720	55	0.00000	0.08600	0.16600	0.00228	0.00138	0.00130	0.00016	0.04785
8	0.00660	56	0.00000	0.06700	0.13000	0.00249	0.00148	0.00150	0.00016	0.05032
9	0.00590	57	0.00000	0.06600	0.12900	0.00265	0.00157	0.00160	0.00016	0.05279
10	0.00530	58	0.00000	0.06600	0.12900	0.00280	0.00166	0.00180	0.00017	0.05527
15	0.00270	59	0.00000	0.13900	0.17600	0.00294	0.00174	0.00200	0.00017	0.05775
20	0.00170	60	0.00000	0.12300	0.15300	0.00308	0.00182	0.00200	0.00017	0.06024
25	0.00120	61	0.00000	0.11000	0.13800	0.00328	0.00196	0.00200	0.00017	0.06273
30	0.00090	62	0.00000	0.13000	0.16200	0.00347	0.00208	0.00200	0.00017	0.06523
35	0.00090	63	0.00000	0.13000	0.16200	0.00366	0.00225	0.00200	0.00018	0.06774
40	0.00090	64	0.00000	0.13000	0.16200	0.00383	0.00241	0.00200	0.00018	0.07025
45	0.00090	65	0.00000	1.00000	1.00000	0.00400	0.00257	0.00200	0.00018	0.07277
50	0.00000	70	0.00000	1.00000	1.00000	0.00524	0.00367	0.00200	0.00019	0.08549

(1) Age for Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

Public Agency 2% at 50 Fire – Probability of an active member leaving due to:

YRS <sup>2</sup>	Termination with Refund	AGE <sup>1</sup>	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability	Industrial Death	Industrial Disability
	Vary by Service		5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male & Female	Male & Female	Male & Female
0	0.07100	20	0.01620	N/A	N/A	0.00031	0.00020	0.00010	0.00003	0.00007
1	0.05540	25	0.01620	N/A	N/A	0.00040	0.00023	0.00010	0.00007	0.00025
2	0.03980	30	0.01620	N/A	N/A	0.00049	0.00025	0.00010	0.00010	0.00074
3	0.02420	35	0.01620	N/A	N/A	0.00057	0.00035	0.00010	0.00012	0.00158
4	0.02180	40	0.01620	N/A	N/A	0.00075	0.00050	0.00010	0.00013	0.00300
5	0.00290	45	0.00000	N/A	N/A	0.00106	0.00071	0.00020	0.00014	0.00530
6	0.00240	50	0.00000	0.00900	0.01300	0.00155	0.00100	0.00050	0.00015	0.02772
7	0.00200	55	0.00000	0.08900	0.13600	0.00228	0.00138	0.00100	0.00016	0.04088
8	0.00160	56	0.00000	0.08300	0.12700	0.00249	0.00148	0.00110	0.00016	0.04400
9	0.00120	57	0.00000	0.08200	0.12600	0.00265	0.00157	0.00130	0.00016	0.04730
10	0.00090	58	0.00000	0.08800	0.13600	0.00280	0.00166	0.00150	0.00017	0.05078
15	0.00060	59	0.00000	0.07400	0.11300	0.00294	0.00174	0.00150	0.00017	0.05446
20	0.00050	60	0.00000	0.10000	0.15400	0.00308	0.00182	0.00150	0.00017	0.05833
25	0.00030	61	0.00000	0.07200	0.11000	0.00328	0.00196	0.00150	0.00017	0.06241
30	0.00030	62	0.00000	0.09900	0.15200	0.00347	0.00208	0.00150	0.00017	0.06670
35	0.00030	63	0.00000	0.11400	0.17500	0.00366	0.00225	0.00150	0.00018	0.07121
40	0.00030	64	0.00000	0.11400	0.17500	0.00383	0.00241	0.00150	0.00018	0.07595
45	0.00030	65	0.00000	1.00000	1.00000	0.00400	0.00257	0.00150	0.00018	0.08092
50	0.00000	70	0.00000	1.00000	1.00000	0.00524	0.00367	0.00150	0.00019	0.10961

(1) Age for Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.



## EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

Public Agency 3% at 50 Police – Probability of an active member leaving due to:

YRS <sup>2</sup>	Termination with Refund	AGE <sup>1</sup>	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability	Industrial Death	Industrial Disability
	Vary by Service		5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male & Female	Male & Female	Male & Female
0	0.10130	20	0.01630	N/A	N/A	0.00031	0.00020	0.00010	0.00003	0.00000
1	0.06360	25	0.01630	N/A	N/A	0.00040	0.00023	0.00010	0.00007	0.00165
2	0.02710	30	0.01630	N/A	N/A	0.00049	0.00025	0.00020	0.00010	0.00476
3	0.02580	35	0.01630	N/A	N/A	0.00057	0.00035	0.00030	0.00012	0.00788
4	0.02450	40	0.01630	N/A	N/A	0.00075	0.00050	0.00040	0.00013	0.01100
5	0.00860	45	0.00000	N/A	N/A	0.00106	0.00071	0.00050	0.00014	0.01412
6	0.00790	50	0.00000	0.05000	0.24000	0.00155	0.00100	0.00080	0.00015	0.01846
7	0.00720	55	0.00000	0.05200	0.24800	0.00228	0.00138	0.00130	0.00016	0.04785
8	0.00660	56	0.00000	0.04200	0.22100	0.00249	0.00148	0.00150	0.00016	0.05032
9	0.00590	57	0.00000	0.04300	0.22300	0.00265	0.00157	0.00160	0.00016	0.05279
10	0.00530	58	0.00000	0.05400	0.25500	0.00280	0.00166	0.00180	0.00017	0.05527
15	0.00270	59	0.00000	0.05400	0.25300	0.00294	0.00174	0.00200	0.00017	0.05775
20	0.00170	60	0.00000	0.06000	0.27200	0.00308	0.00182	0.00200	0.00017	0.06024
25	0.00120	61	0.00000	0.04800	0.23800	0.00328	0.00196	0.00200	0.00017	0.06273
30	0.00090	62	0.00000	0.06100	0.27400	0.00347	0.00208	0.00200	0.00017	0.06523
35	0.00090	63	0.00000	0.05700	0.26300	0.00366	0.00225	0.00200	0.00018	0.06774
40	0.00090	64	0.00000	0.06900	0.29600	0.00383	0.00241	0.00200	0.00018	0.07025
45	0.00090	65	0.00000	1.00000	1.00000	0.00400	0.00257	0.00200	0.00018	0.07277
50	0.00000	70	0.00000	1.00000	1.00000	0.00524	0.00367	0.00200	0.00019	0.08549

(1) Age for Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

Public Agency 3% at 50 Fire – Probability of an active member leaving due to:

YRS <sup>2</sup>	Termination with Refund	AGE <sup>1</sup>	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability	Industrial Death	Industrial Disability
	Vary by Service		5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male & Female	Male & Female	Male & Female
0	0.07100	20	0.01620	N/A	N/A	0.00031	0.00020	0.00010	0.00003	0.00007
1	0.05540	25	0.01620	N/A	N/A	0.00040	0.00023	0.00010	0.00007	0.00025
2	0.03980	30	0.01620	N/A	N/A	0.00049	0.00025	0.00010	0.00010	0.00074
3	0.02420	35	0.01620	N/A	N/A	0.00057	0.00035	0.00010	0.00012	0.00158
4	0.02180	40	0.01620	N/A	N/A	0.00075	0.00050	0.00010	0.00013	0.00300
5	0.00290	45	0.00000	N/A	N/A	0.00106	0.00071	0.00020	0.00014	0.00530
6	0.00240	50	0.00000	0.02000	0.13000	0.00155	0.00100	0.00050	0.00015	0.02772
7	0.00200	55	0.00000	0.04300	0.17400	0.00228	0.00138	0.00100	0.00016	0.04088
8	0.00160	56	0.00000	0.05300	0.19600	0.00249	0.00148	0.00110	0.00016	0.04400
9	0.00120	57	0.00000	0.05400	0.19700	0.00265	0.00157	0.00130	0.00016	0.04730
10	0.00090	58	0.00000	0.05200	0.19300	0.00280	0.00166	0.00150	0.00017	0.05078
15	0.00060	59	0.00000	0.07500	0.23900	0.00294	0.00174	0.00150	0.00017	0.05446
20	0.00050	60	0.00000	0.06500	0.21900	0.00308	0.00182	0.00150	0.00017	0.05833
25	0.00030	61	0.00000	0.07600	0.24100	0.00328	0.00196	0.00150	0.00017	0.06241
30	0.00030	62	0.00000	0.06800	0.22400	0.00347	0.00208	0.00150	0.00017	0.06670
35	0.00030	63	0.00000	0.02700	0.14300	0.00366	0.00225	0.00150	0.00018	0.07121
40	0.00030	64	0.00000	0.09400	0.27700	0.00383	0.00241	0.00150	0.00018	0.07595
45	0.00030	65	0.00000	1.00000	1.00000	0.00400	0.00257	0.00150	0.00018	0.08092
50	0.00000	70	0.00000	1.00000	1.00000	0.00524	0.00367	0.00150	0.00019	0.10961

(1) Age for Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

## EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

Public Agency 3% at 55 Police – Probability of an active member leaving due to:

YRS <sup>2</sup>	Termination with Refund	AGE <sup>1</sup>	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability	Industrial Death	Industrial Disability
	Vary by Service		5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male & Female	Male & Female	Male & Female
0	0.10130	20	0.01630	N/A	N/A	0.00031	0.00020	0.00010	0.00003	0.00000
1	0.06360	25	0.01630	N/A	N/A	0.00040	0.00023	0.00010	0.00007	0.00165
2	0.02710	30	0.01630	N/A	N/A	0.00049	0.00025	0.00020	0.00010	0.00476
3	0.02580	35	0.01630	N/A	N/A	0.00057	0.00035	0.00030	0.00012	0.00788
4	0.02450	40	0.01630	N/A	N/A	0.00075	0.00050	0.00040	0.00013	0.01100
5	0.00860	45	0.00000	N/A	N/A	0.00106	0.00071	0.00050	0.00014	0.01412
6	0.00790	50	0.00000	0.00400	0.01500	0.00155	0.00100	0.00080	0.00015	0.01846
7	0.00720	55	0.00000	0.06100	0.13100	0.00228	0.00138	0.00130	0.00016	0.04785
8	0.00660	56	0.00000	0.07200	0.15300	0.00249	0.00148	0.00150	0.00016	0.05032
9	0.00590	57	0.00000	0.06500	0.14000	0.00265	0.00157	0.00160	0.00016	0.05279
10	0.00530	58	0.00000	0.06600	0.14200	0.00280	0.00166	0.00180	0.00017	0.05527
15	0.00270	59	0.00000	0.11800	0.24700	0.00294	0.00174	0.00200	0.00017	0.05775
20	0.00170	60	0.00000	0.06500	0.13800	0.00308	0.00182	0.00200	0.00017	0.06024
25	0.00120	61	0.00000	0.08400	0.17800	0.00328	0.00196	0.00200	0.00017	0.06273
30	0.00090	62	0.00000	0.10800	0.22600	0.00347	0.00208	0.00200	0.00017	0.06523
35	0.00090	63	0.00000	0.08400	0.17800	0.00366	0.00225	0.00200	0.00018	0.06774
40	0.00090	64	0.00000	0.08400	0.17800	0.00383	0.00241	0.00200	0.00018	0.07025
45	0.00090	65	0.00000	1.00000	1.00000	0.00400	0.00257	0.00200	0.00018	0.07277
50	0.00000	70	0.00000	1.00000	1.00000	0.00524	0.00367	0.00200	0.00019	0.08549

(1) Age for Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

Public Agency 3% at 55 Fire – Probability of an active member leaving due to:

YRS <sup>2</sup>	Termination with Refund	AGE <sup>1</sup>	Termination with Vested Deferred Benefits	Service Retirement		Non-Industrial Death		Non-Industrial Disability	Industrial Death	Industrial Disability
	Vary by Service		5 Years <sup>2</sup>	10 Years <sup>2</sup>	25 Years <sup>2</sup>	Male	Female	Male & Female	Male & Female	Male & Female
0	0.07100	20	0.01620	N/A	N/A	0.00031	0.00020	0.00010	0.00003	0.00007
1	0.05540	25	0.01620	N/A	N/A	0.00040	0.00023	0.00010	0.00007	0.00025
2	0.03980	30	0.01620	N/A	N/A	0.00049	0.00025	0.00010	0.00010	0.00074
3	0.02420	35	0.01620	N/A	N/A	0.00057	0.00035	0.00010	0.00012	0.00158
4	0.02180	40	0.01620	N/A	N/A	0.00075	0.00050	0.00010	0.00013	0.00300
5	0.00290	45	0.00000	N/A	N/A	0.00106	0.00071	0.00020	0.00014	0.00530
6	0.00240	50	0.00000	0.00100	0.01600	0.00155	0.00100	0.00050	0.00015	0.02772
7	0.00200	55	0.00000	0.07300	0.17900	0.00228	0.00138	0.00100	0.00016	0.04088
8	0.00160	56	0.00000	0.06400	0.16100	0.00249	0.00148	0.00110	0.00016	0.04400
9	0.00120	57	0.00000	0.06300	0.15700	0.00265	0.00157	0.00130	0.00016	0.04730
10	0.00090	58	0.00000	0.06500	0.16300	0.00280	0.00166	0.00150	0.00017	0.05078
15	0.00060	59	0.00000	0.08800	0.21300	0.00294	0.00174	0.00150	0.00017	0.05446
20	0.00050	60	0.00000	0.10500	0.25100	0.00308	0.00182	0.00150	0.00017	0.05833
25	0.00030	61	0.00000	0.11800	0.28200	0.00328	0.00196	0.00150	0.00017	0.06241
30	0.00030	62	0.00000	0.08700	0.21000	0.00347	0.00208	0.00150	0.00017	0.06670
35	0.00030	63	0.00000	0.06700	0.16500	0.00366	0.00225	0.00150	0.00018	0.07121
40	0.00030	64	0.00000	0.06700	0.16500	0.00383	0.00241	0.00150	0.00018	0.07595
45	0.00030	65	0.00000	1.00000	1.00000	0.00400	0.00257	0.00150	0.00018	0.08092
50	0.00000	70	0.00000	1.00000	1.00000	0.00524	0.00367	0.00150	0.00019	0.10961

(1) Age for Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.

(2) Years of service.

## EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

Post-Retirement Mortality – Rates vary by age and gender. These rates are used for all plans.

AGE	Healthy Recipients		Non-Industrially Disabled (Not Job Related)		Industrially Disabled (Job Related)	
	Male	Female	Male	Female	Male	Female
50	0.00501	0.00466	0.01680	0.01158	0.00501	0.00466
55	0.00599	0.00416	0.01973	0.01149	0.00599	0.00416
60	0.00710	0.00436	0.02289	0.01235	0.00754	0.00518
65	0.00829	0.00588	0.02451	0.01607	0.01122	0.00838
70	0.01305	0.00993	0.02875	0.02211	0.01635	0.01395
75	0.02205	0.01722	0.03990	0.03037	0.02834	0.02319
80	0.03899	0.02902	0.06083	0.04725	0.04899	0.03910
85	0.06969	0.05243	0.09731	0.07762	0.07679	0.06251
90	0.12974	0.09887	0.14804	0.12890	0.12974	0.09887
95	0.22444	0.18489	0.22444	0.21746	0.22444	0.18489
100	0.32536	0.30017	0.32536	0.30017	0.32536	0.30017

## EXHIBIT E: SINGLE LIFE RETIREMENT VALUES

Present value of \$1 monthly increase 2 percent annually after two-year waiting period. Discount rate of 7.50 percent.

Age	Public Agencies and Schools						Age	State					
	Service Retirement		Non-Industrial Disability Retirement		Industrial Disability Retirement			Service Retirement		Non-Industrial Disability Retirement		Industrial Disability Retirement	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
50	174.201	180.132	146.566	161.023	171.308	176.597	50	174.201	180.132	146.566	161.023	171.308	176.597
51	172.546	178.765	145.064	159.681	169.482	175.022	51	172.546	178.765	145.064	159.681	169.482	175.022
52	170.822	177.335	143.528	158.267	167.575	173.371	52	170.822	177.335	143.528	158.267	167.575	173.371
53	169.025	175.819	141.958	156.776	165.585	171.622	53	169.025	175.819	141.958	156.776	165.585	171.622
54	167.155	174.197	140.356	155.200	163.509	169.752	54	167.155	174.197	140.356	155.200	163.509	169.752
55	165.216	172.433	138.729	153.491	161.351	167.729	55	165.216	172.433	138.729	153.491	161.351	167.729
56	163.195	170.523	137.091	151.636	159.098	165.544	56	163.195	170.523	137.091	151.636	159.098	165.544
57	161.080	168.475	135.456	149.637	156.735	163.206	57	161.080	168.475	135.456	149.637	156.735	163.206
58	158.853	166.304	133.781	147.502	154.245	160.728	58	158.853	166.304	133.781	147.502	154.245	160.728
59	156.529	164.021	132.064	145.255	151.648	158.156	59	156.529	164.021	132.064	145.255	151.648	158.156
60	154.108	161.628	130.294	142.913	148.969	155.504	60	154.108	161.628	130.294	142.913	148.969	155.504
61	151.594	159.121	128.455	140.485	146.206	152.769	61	151.594	159.121	128.455	140.485	146.206	152.769
62	148.959	156.492	126.530	137.967	143.367	149.943	62	148.959	156.492	126.530	137.967	143.367	149.943
63	146.195	153.733	124.502	135.345	140.462	147.022	63	146.195	153.733	124.502	135.345	140.462	147.022
64	143.287	150.858	122.347	132.655	137.490	144.025	64	143.287	150.858	122.347	132.655	137.490	144.025
65	140.230	147.876	120.051	129.907	134.438	140.956	65	140.230	147.876	120.051	129.907	134.438	140.956
70	123.167	131.573	106.473	115.386	117.503	124.624	70	123.167	131.573	106.473	115.386	117.503	124.624
75	104.262	113.259	90.538	98.992	98.938	106.897	75	104.262	113.259	90.538	98.992	98.938	106.897
80	83.998	93.429	73.663	80.985	80.609	88.688	80	83.998	93.429	73.663	80.985	80.609	88.688
85	64.107	72.594	57.941	63.116	63.244	70.925	85	64.107	72.594	57.941	63.116	63.244	70.925
90	45.736	52.607	44.449	46.502	45.736	52.607	90	45.736	52.607	44.449	46.502	45.736	52.607
95	32.030	36.161	32.030	32.986	32.030	36.161	95	32.030	36.161	32.030	32.986	32.030	36.161
100	22.430	23.866	22.430	23.866	22.430	23.866	100	22.430	23.866	22.430	23.866	22.430	23.866

## EXHIBIT F: HISTORY OF MEMBER SALARY DATA

Valuation Date	Number of Active Members	Annual Covered Payroll (in Millions)	Average Annual Salary	% Increase in Average Pay
6/30/2015	800,198	\$47,418	\$59,258	1.9 %
6/30/2014	772,817	44,958	58,174	2.8 %
6/30/2013	752,681	42,575	56,564	1.2 %
6/30/2012	762,459	42,599	55,871	(0.8%)
6/30/2011	779,481	43,901	56,321	(0.6%)
6/30/2010	794,138	44,984	56,645	2.2 %
6/30/2009	812,864	45,053	55,425	1.9 %
6/30/2008	813,474	44,236	54,379	5.5 %
6/30/2007	793,164	40,864	51,521	3.9 %
6/30/2006	767,127	38,047	49,597	4.0 %

## EXHIBIT G: MEMBERS IN VALUATION

### State Miscellaneous First Tier – By Attained Age & Years of Service – June 30, 2015

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date <sup>1</sup>						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	2,601	8	—	—	—	—	2,609	\$88,256,301
25-29	9,677	1,244	20	—	—	—	10,941	476,352,746
30-34	9,790	5,032	962	75	—	—	15,859	849,497,151
35-39	7,283	5,475	3,465	1,065	77	—	17,365	1,053,542,653
40-44	5,685	5,062	4,497	3,141	796	74	19,255	1,267,598,524
45-49	5,042	4,547	4,862	4,010	2,640	1,406	22,507	1,541,800,081
50-54	4,683	4,302	4,593	4,344	3,327	5,599	26,848	1,887,093,728
55-59	3,769	3,609	4,007	3,808	2,793	7,047	25,033	1,765,326,645
60-64	2,255	2,523	2,762	2,444	1,774	4,102	15,860	1,135,401,847
65 & up	1,106	1,372	1,306	1,181	749	1,618	7,332	530,897,080
<b>Total</b>	<b>51,891</b>	<b>33,174</b>	<b>26,474</b>	<b>20,068</b>	<b>12,156</b>	<b>19,846</b>	<b>163,609</b>	<b>\$10,595,766,756</b>

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.

### State Miscellaneous Second Tier – By Attained Age & Years of Service – June 30, 2015

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date <sup>1</sup>						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	5	—	—	—	—	—	5	\$205,648
25-29	21	1	—	—	—	—	22	958,732
30-34	27	7	3	2	—	—	39	2,194,530
35-39	29	21	30	129	1	—	210	12,275,796
40-44	33	33	65	370	115	4	620	37,245,140
45-49	33	33	76	445	347	85	1,019	61,494,210
50-54	18	26	53	424	342	279	1,142	69,566,793
55-59	23	23	39	338	280	291	994	58,434,969
60-64	10	18	38	222	153	209	650	39,420,528
65 & up	12	11	15	97	62	79	276	16,821,528
<b>Total</b>	<b>211</b>	<b>173</b>	<b>319</b>	<b>2,027</b>	<b>1,300</b>	<b>947</b>	<b>4,977</b>	<b>\$298,617,874</b>

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.

### State Industrial First & Second Tier – By Attained Age & Year of Service – June 30, 2015

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date <sup>1</sup>						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	233	—	—	—	—	—	233	\$7,556,125
25-29	695	188	2	—	—	—	885	36,579,825
30-34	709	525	60	—	—	—	1,294	60,675,531
35-39	527	496	182	58	2	—	1,265	65,677,536
40-44	507	481	258	158	35	5	1,444	80,404,176
45-49	495	515	297	226	114	42	1,689	95,565,270
50-54	464	518	284	264	167	142	1,839	107,352,430
55-59	274	394	233	237	134	116	1,388	80,759,734
60-64	158	230	140	114	46	49	737	43,845,871
65 & up	56	110	61	65	25	13	330	21,492,010
<b>Total</b>	<b>4,118</b>	<b>3,457</b>	<b>1,517</b>	<b>1,122</b>	<b>523</b>	<b>367</b>	<b>11,104</b>	<b>\$599,908,508</b>

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.

## EXHIBIT G: MEMBERS IN VALUATION (CONTINUED)

## State Safety – By Attained Age &amp; Years of Service – June 30, 2015

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date <sup>1</sup>						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	311	—	—	—	—	—	311	\$13,733,490
25-29	1,432	227	3	—	—	—	1,662	93,739,148
30-34	1,725	797	116	2	—	—	2,640	167,689,502
35-39	1,437	1,170	343	41	—	—	2,991	214,672,707
40-44	1,366	1,307	596	181	14	1	3,465	275,502,490
45-49	1,236	1,255	728	360	97	15	3,691	289,271,773
50-54	1,101	1,233	894	491	219	119	4,057	318,870,846
55-59	879	1,133	835	490	229	105	3,671	300,277,371
60-64	431	797	549	437	149	74	2,437	217,879,212
65 & up	156	390	297	195	89	44	1,171	120,764,617
<b>Total</b>	<b>10,074</b>	<b>8,309</b>	<b>4,361</b>	<b>2,197</b>	<b>797</b>	<b>358</b>	<b>26,096</b>	<b>\$2,012,401,156</b>

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.

## California Highway Patrol – By Attained Age &amp; Years of Service – June 30, 2015

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date <sup>1</sup>						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	74	—	—	—	—	—	74	\$5,371,204
25-29	345	223	—	—	—	—	568	52,858,147
30-34	311	738	116	—	—	—	1,165	119,813,006
35-39	149	560	573	196	1	—	1,479	159,097,555
40-44	49	268	541	662	239	—	1,759	197,741,971
45-49	—	12	202	429	401	325	1,369	163,954,449
50-54	1	—	4	105	171	389	670	85,529,718
55-59	—	—	1	9	21	108	139	18,510,725
60-64	—	—	—	—	—	—	—	—
65 & up	—	—	—	—	—	—	—	—
<b>Total</b>	<b>929</b>	<b>1,801</b>	<b>1,437</b>	<b>1,401</b>	<b>833</b>	<b>822</b>	<b>7,223</b>	<b>\$802,876,775</b>

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.

## State Peace Officer/Firefighter – By Attained Age &amp; Years of Service – June 30, 2015

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date <sup>1</sup>						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	1,410	—	—	—	—	—	1,410	\$58,660,308
25-29	2,765	475	—	—	—	—	3,240	165,424,189
30-34	1,914	3,193	559	3	—	—	5,669	389,729,909
35-39	958	2,500	2,381	690	6	—	6,535	504,614,968
40-44	618	1,735	2,018	2,400	596	8	7,375	607,422,484
45-49	356	1,173	1,429	2,155	1,831	672	7,616	661,386,437
50-54	228	780	873	1,228	1,053	947	5,109	448,279,970
55-59	121	336	427	631	516	407	2,438	210,906,634
60-64	44	134	169	252	162	135	896	76,365,239
65 & up	11	26	60	63	32	45	237	20,740,391
<b>Total</b>	<b>8,425</b>	<b>10,352</b>	<b>7,916</b>	<b>7,422</b>	<b>4,196</b>	<b>2,214</b>	<b>40,525</b>	<b>\$3,143,530,529</b>

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.

## EXHIBIT G: MEMBERS IN VALUATION (CONTINUED)

## School – By Attained Age &amp; Years of Service – June 30, 2015

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date <sup>1</sup>						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	9,718	28	—	—	—	—	9,746	\$252,727,637
25-29	18,887	2,790	54	—	—	—	21,731	637,669,572
30-34	15,449	8,104	2,195	87	—	—	25,835	907,288,818
35-39	12,949	8,455	5,664	1,800	40	—	28,908	1,105,872,237
40-44	12,956	8,404	6,531	4,020	880	53	32,844	1,277,657,794
45-49	13,482	10,142	7,609	5,146	2,311	1,125	39,815	1,565,074,656
50-54	12,241	11,774	10,083	7,065	3,439	4,030	48,632	1,973,154,099
55-59	8,656	10,197	10,080	8,043	4,214	5,528	46,718	1,938,211,178
60-64	4,570	6,245	6,747	5,805	3,312	3,926	30,605	1,258,385,279
65 & up	2,353	2,859	2,820	2,201	1,340	1,544	13,117	487,536,424
<b>Total</b>	<b>111,261</b>	<b>68,998</b>	<b>51,783</b>	<b>34,167</b>	<b>15,536</b>	<b>16,206</b>	<b>297,951</b>	<b>\$11,403,577,694</b>

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.

## Public Agency Miscellaneous – By Attained Age &amp; Years of Service – June 30, 2015

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date <sup>1</sup>						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	4,498	24	—	—	—	—	4,522	\$156,900,531
25-29	12,331	2,081	83	—	—	—	14,495	661,341,162
30-34	12,619	7,257	2,080	112	—	—	22,068	1,260,207,937
35-39	9,545	7,604	5,327	1,617	101	—	24,194	1,586,883,320
40-44	7,424	6,749	6,023	3,841	1,012	108	25,157	1,788,820,499
45-49	6,635	6,071	6,031	4,754	2,666	1,616	27,773	2,076,283,567
50-54	5,884	6,000	6,123	5,023	3,589	5,215	31,834	2,456,580,041
55-59	4,206	4,692	5,182	4,400	2,965	5,329	26,774	2,058,201,003
60-64	2,190	2,990	3,302	2,797	1,785	2,897	15,961	1,198,336,160
65 & up	938	1,331	1,495	1,210	707	1,105	6,786	483,470,114
<b>Total</b>	<b>66,270</b>	<b>44,799</b>	<b>35,646</b>	<b>23,754</b>	<b>12,825</b>	<b>16,270</b>	<b>199,564</b>	<b>\$13,727,024,334</b>

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.

## Public Agency Safety – By Attained Age &amp; Years of Service – June 30, 2015

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date <sup>1</sup>						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	1,297	3	—	—	—	—	1,300	\$75,229,109
25-29	4,310	904	2	—	—	—	5,216	377,186,372
30-34	3,391	4,046	952	5	—	—	8,394	729,970,361
35-39	1,530	3,178	3,498	667	4	—	8,877	860,330,438
40-44	738	1,844	3,034	2,732	626	10	8,984	946,245,872
45-49	439	986	1,753	2,259	2,168	1,058	8,663	988,437,312
50-54	268	396	656	925	1,154	1,757	5,156	609,017,168
55-59	124	177	228	307	338	695	1,869	214,078,432
60-64	46	58	73	81	108	200	566	60,781,418
65 & up	17	14	11	18	28	43	131	13,078,823
<b>Total</b>	<b>12,160</b>	<b>11,606</b>	<b>10,207</b>	<b>6,994</b>	<b>4,426</b>	<b>3,763</b>	<b>49,156</b>	<b>\$4,874,355,305</b>

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.



# EXHIBIT H: SCHEDULE OF RETIREES & BENEFICIARIES ADDED TO/AND REMOVED FROM ROLLS

Year Ended	Added to Rolls		Removed from Rolls		Rolls – End of Year		% Increase/ Decrease in Annual Allowances	Average Annual Allowance
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
PERF								
6/30/16 <sup>1</sup>	43,132	\$1,379,126,240	20,399	\$475,981,343	643,433	\$20,260,202,675	4.7%	\$31,488
6/30/15 <sup>1</sup>	43,501	1,333,700,350	18,731	399,466,572	620,700	19,357,057,778	5.1%	31,186
6/30/14 <sup>2</sup>	36,000	1,229,596,000	17,358	393,057,000	595,930	18,422,824,000	6.8%	30,914
6/30/13 <sup>2</sup>	39,121	1,434,115,000	17,310	379,821,000	577,288	17,242,387,000	6.9%	29,868
6/30/12 <sup>2</sup>	39,729	1,286,891,000	19,412	381,443,000	555,477	16,126,912,000	7.3%	29,033
6/30/11 <sup>2</sup>	40,596	1,318,290,000	17,298	319,210,000	535,160	15,032,305,000	9.3%	28,089
JRF								
6/30/16 <sup>1</sup>	68	\$4,719,741	80	\$8,389,989	1,860	\$184,288,038	(2.0%)	\$99,080
6/30/15 <sup>1</sup>	102	9,011,281	84	7,820,995	1,872	187,958,286	0.6%	100,405
6/30/14 <sup>2</sup>	55	6,608,000	68	6,696,000	1,854	186,768,000	2.4%	100,738
6/30/13 <sup>2</sup>	49	6,082,000	74	7,383,000	1,867	182,464,000	(1.3%)	97,731
6/30/12 <sup>2</sup>	75	7,365,000	67	5,804,000	1,892	184,952,000	1.7%	97,755
6/30/11 <sup>2</sup>	104	9,536,000	69	6,037,000	1,884	181,834,000	2.4%	96,515
JRF II								
6/30/16 <sup>1</sup>	30	\$2,479,659	3	\$260,218	117	\$9,385,451	31.0%	\$80,218
6/30/15 <sup>1</sup>	27	2,551,990	2	164,980	90	7,166,010	49.9%	79,622
6/30/14 <sup>2</sup>	20	1,648,000	3	378,000	65	4,779,000	35.7%	73,523
6/30/13 <sup>2</sup>	13	1,172,000	2	232,000	48	3,522,700	13.9%	73,390
6/30/12 <sup>2</sup>	9	744,000	2	195,000	37	3,093,000	43.9%	83,595
6/30/11 <sup>2</sup>	11	1,224,000	—	—	30	2,149,000	53.8%	71,633
LRF								
6/30/16 <sup>1</sup>	3	\$86,709	8	\$250,007	216	\$6,839,588	(2.3%)	\$31,665
6/30/15 <sup>1</sup>	6	233,438	9	592,552	221	7,002,886	(4.9%)	31,687
6/30/14 <sup>2</sup>	1	13,000	10	434,000	224	7,362,000	0.9%	32,866
6/30/13 <sup>2</sup>	2	133,000	14	587,000	233	7,297,000	(5.0%)	31,318
6/30/12 <sup>2</sup>	3	102,000	12	461,000	245	7,680,000	(2.4%)	31,347
6/30/11 <sup>2</sup>	15	460,000	16	399,000	254	7,871,000	1.2%	30,988

(1) These total counts and allowances account for all payments types with the exception of one-time lump-sum payments.

(2) These total counts and allowances are for service, disability, and industrial retirement, special death, 1957 Survivor, Pre-Retirement Option 2, and 1959 Survivor beneficiaries and non-members.

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## STATISTICAL SECTION

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### SECTION HIGHLIGHTS

**6.1 percent increase** of retirees and beneficiaries from the previous fiscal year

**6.7 percent increase** (prefunded retiree health care) of employers from the previous fiscal year (CERBT)

**Expanded long-term care** coverage to include current and former public employees and relatives



**1.4  
MILLION**

**Covered lives**  
state, school, and  
public employers

## Statistical Section

### INTRODUCTION

The Statistical section provides additional historical information to understand the economic condition of the California Public Employees' Retirement System.

The schedules presented contain information on financial trends, analysis, and additional analytical information on

employees' membership data, retirement benefits, health benefits, supplemental income, long-term care and public agency employers.

The information in this section is obtained from comprehensive annual financial reports for relevant years and other internal sources.

### CHANGES IN FIDUCIARY NET POSITION – RETIREMENT PROGRAMS

PERF Changes in Fiduciary Net Position, as of June 30, 2016 – 10-Year Review (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ADDITIONS</b>										
Member	\$4,015,754	\$3,826,072	\$3,775,038	\$3,896,078	\$3,598,437	\$3,600,089	\$3,378,867	\$3,882,355	\$3,512,075	\$3,262,699
Employer	10,892,489	9,977,705	8,777,602	8,123,833	7,772,913	7,465,397	6,955,049	6,912,376	7,242,802	6,442,384
Investment Income/(Loss)	1,398,948	6,579,019	45,471,821	30,284,807	(203,084)	43,904,425	25,567,295	(57,367,054)	(12,499,110)	40,748,261
Plan to Plan Resource Movement	49,803	469,688	—	—	—	—	—	—	—	—
Miscellaneous Income	149,494	123,978	126,223	7,176	7,070	3,011	10,234	3,155	6,202	9,119
<b>TOTAL ADDITIONS</b>	<b>\$16,506,488</b>	<b>\$20,976,462</b>	<b>\$58,150,684</b>	<b>\$42,311,894</b>	<b>\$11,175,336</b>	<b>\$54,972,922</b>	<b>\$35,911,445</b>	<b>(\$46,569,168)</b>	<b>(\$1,738,031)</b>	<b>\$50,462,463</b>
<b>DEDUCTIONS</b>										
Benefit Payments	\$20,093,933	\$18,922,292	\$17,760,584	\$16,635,263	\$15,356,696	\$14,242,258	\$12,972,457	\$11,831,836	\$10,884,417	\$10,070,555
Refund of Contributions	238,821	240,623	236,968	242,595	218,082	227,168	182,387	186,783	182,415	181,574
Administrative Expenses	184,447	340,880	381,497	426,077	380,404	357,779	278,036	427,809	402,340	278,453
Plan to Plan Resource Movement	49,803	469,688	—	—	—	—	—	—	—	—
<b>TOTAL DEDUCTIONS</b>	<b>\$20,567,004</b>	<b>\$19,973,483</b>	<b>\$18,379,049</b>	<b>\$17,303,935</b>	<b>\$15,955,182</b>	<b>\$14,827,205</b>	<b>\$13,432,880</b>	<b>\$12,446,428</b>	<b>\$11,469,172</b>	<b>\$10,530,582</b>
<b>CHANGE IN NET POSITION</b>	<b>(\$4,060,516)</b>	<b>\$1,002,979</b>	<b>\$39,771,635</b>	<b>\$25,007,959</b>	<b>(\$4,779,846)</b>	<b>\$40,145,717</b>	<b>\$22,478,565</b>	<b>(\$59,015,596)</b>	<b>(\$13,207,203)</b>	<b>\$39,931,881</b>
<b>NET POSITION— RESTRICTED FOR PENSION BENEFITS</b>										
<b>Beginning of Year</b>	<b>\$302,764,518</b>	<b>\$301,761,539</b>	<b>\$261,989,904</b>	<b>\$236,981,945</b>	<b>\$241,761,791</b>	<b>\$201,616,074</b>	<b>\$179,137,509<sup>1</sup></b>	<b>\$237,915,479</b>	<b>\$251,122,682</b>	<b>\$211,190,801</b>
<b>End of Year</b>	<b>\$298,704,002</b>	<b>\$302,764,518</b>	<b>\$301,761,539</b>	<b>\$261,989,904</b>	<b>\$236,981,945</b>	<b>\$241,761,791</b>	<b>\$201,616,074</b>	<b>\$178,899,883</b>	<b>\$237,915,479</b>	<b>\$251,122,682</b>

(1) Due to the implementation of GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets*, beginning balance was restated.

## CHANGES IN FIDUCIARY NET POSITION – RETIREMENT PROGRAMS (CONTINUED)

LRF Changes in Fiduciary Net Position, as of June 30, 2016 – 10-Year Review (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ADDITIONS</b>										
Member	\$97	\$105	\$113	\$31	\$0	\$3	\$17	\$69	\$14	\$129
Employer	549	590	565	80	—	—	—	—	—	—
Investment Income/(Loss)	4,511	(125)	15,332	6,974	7,761	17,667	17,793	(14,041)	223	16,530
Miscellaneous Income	34	31	40	—	—	—	—	—	—	—
<b>TOTAL ADDITIONS</b>	<b>\$5,191</b>	<b>\$601</b>	<b>\$16,050</b>	<b>\$7,085</b>	<b>\$7,761</b>	<b>\$17,670</b>	<b>\$17,810</b>	<b>(\$13,972)</b>	<b>\$237</b>	<b>\$16,659</b>
<b>DEDUCTIONS</b>										
Benefit Payments	\$7,028	\$7,393	\$7,482	\$7,548	\$7,659	\$7,382	\$11,082	\$7,706	\$7,621	\$7,666
Refund of Contributions	379	1,693	—	—	202	440	35	296	309	92
Administrative Expenses	203	400	362	418	347	408	4,444	358	397	323
<b>TOTAL DEDUCTIONS</b>	<b>\$7,610</b>	<b>\$9,486</b>	<b>\$7,844</b>	<b>\$7,966</b>	<b>\$8,208</b>	<b>\$8,230</b>	<b>\$15,561</b>	<b>\$8,360</b>	<b>\$8,327</b>	<b>\$8,081</b>
<b>CHANGE IN NET POSITION</b>	<b>(\$2,419)</b>	<b>(\$8,885)</b>	<b>\$8,206</b>	<b>(\$881)</b>	<b>(\$447)</b>	<b>\$9,440</b>	<b>\$2,249</b>	<b>(\$22,332)</b>	<b>(\$8,090)</b>	<b>\$8,578</b>
<b>NET POSITION—RESTRICTED FOR PENSION BENEFITS</b>										
Beginning of Year	\$121,469	\$130,354	\$122,148	\$123,029	\$123,476	\$114,036	\$111,787	\$134,119	\$142,209	\$133,631
End of Year	\$119,050	\$121,469	\$130,354	\$122,148	\$123,029	\$123,476	\$114,036	\$111,787	\$134,119	\$142,209

JRF Changes in Fiduciary Net Position, as of June 30, 2016 – 10-Year Review (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ADDITIONS</b>										
Member	\$3,559	\$3,877	\$4,724	\$4,909	\$5,796	\$6,658	\$7,361	\$8,597	\$9,569	\$10,398
Employer	192,287	180,910	191,148	161,945	196,402	167,302	185,389	190,510	163,206	131,372
Investment Income	194	88	54	76	80	184	332	410	384	1,186
Miscellaneous Income	2,568	2,198	2,529	2,694	2,877	3,216	3,486	3,574	3,827	2,591
<b>TOTAL ADDITIONS</b>	<b>\$198,608</b>	<b>\$187,073</b>	<b>\$198,455</b>	<b>\$169,624</b>	<b>\$205,155</b>	<b>\$177,360</b>	<b>\$196,568</b>	<b>\$203,091</b>	<b>\$176,986</b>	<b>\$145,547</b>
<b>DEDUCTIONS</b>										
Benefit Payments	\$199,271	\$201,734	\$193,925	\$187,084	\$185,428	\$185,119	\$178,861	\$174,902	\$168,304	\$151,059
Refund of Contributions	78	134	10	—	17	—	32	—	136	—
Administrative Expenses	642	1,227	1,141	1,413	1,163	1,188	968	1,049	973	701
<b>TOTAL DEDUCTIONS</b>	<b>\$199,991</b>	<b>\$203,095</b>	<b>\$195,076</b>	<b>\$188,497</b>	<b>\$186,608</b>	<b>\$186,307</b>	<b>\$179,861</b>	<b>\$175,951</b>	<b>\$169,413</b>	<b>\$151,760</b>
<b>CHANGE IN NET POSITION</b>	<b>(\$1,383)</b>	<b>(\$16,022)</b>	<b>\$3,379</b>	<b>(\$18,873)</b>	<b>\$18,547</b>	<b>(\$8,947)</b>	<b>\$16,707</b>	<b>\$27,140</b>	<b>\$7,573</b>	<b>(\$6,213)</b>
<b>NET POSITION—RESTRICTED FOR PENSION BENEFITS</b>										
Beginning of Year	\$41,177	\$57,199	\$53,820	\$72,693	\$54,146	\$63,093	\$46,386	\$19,246	\$11,673	\$17,886
End of Year	\$39,794	\$41,177	\$57,199	\$53,820	\$72,693	\$54,146	\$63,093	\$46,386	\$19,246	\$11,673

## CHANGES IN FIDUCIARY NET POSITION – RETIREMENT PROGRAMS (CONTINUED)

JRF II Changes in Fiduciary Net Position, as of June 30, 2016 – 10-Year Review (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ADDITIONS</b>										
Member	\$24,598	\$22,242	\$20,413	\$18,819	\$18,757	\$18,589	\$16,178	\$15,400	\$13,808	\$11,694
Employer	65,839	65,629	57,027	54,025	53,711	53,863	42,589	39,514	36,761	27,062
Investment Income/(Loss)	20,213	(2,863)	149,679	79,214	13,947	91,596	50,801	(59,927)	(12,184)	35,427
Miscellaneous Income	597	462	489	—	—	—	—	—	—	—
<b>TOTAL ADDITIONS</b>	<b>\$111,247</b>	<b>\$85,470</b>	<b>\$227,608</b>	<b>\$152,058</b>	<b>\$86,415</b>	<b>\$164,048</b>	<b>\$109,568</b>	<b>(\$5,013)</b>	<b>\$38,385</b>	<b>\$74,183</b>
<b>DEDUCTIONS</b>										
Benefit Payments	\$21,549	\$14,024	\$8,865	\$10,518	\$3,536	\$2,236	\$1,392	\$1,252	\$964	\$1,005
Refund of Contributions	155	16	85	58	2,604	5,870	2,592	3,062	2,134	981
Administrative Expenses	732	1,127	785	899	725	716	494	578	597	451
<b>TOTAL DEDUCTIONS</b>	<b>\$22,436</b>	<b>\$15,167</b>	<b>\$9,735</b>	<b>\$11,475</b>	<b>\$6,865</b>	<b>\$8,822</b>	<b>\$4,478</b>	<b>\$4,892</b>	<b>\$3,695</b>	<b>\$2,437</b>
<b>CHANGE IN NET POSITION</b>	<b>\$88,811</b>	<b>\$70,303</b>	<b>\$217,873</b>	<b>\$140,583</b>	<b>\$79,550</b>	<b>\$155,226</b>	<b>\$105,090</b>	<b>(\$9,905)</b>	<b>\$34,690</b>	<b>\$71,746</b>
<b>NET POSITION—RESTRICTED FOR PENSION BENEFITS</b>										
Beginning of Year	\$1,084,142	\$1,013,839	\$795,966	\$655,383	\$575,833	\$420,607	\$315,517	\$325,422	\$290,732	\$218,986
End of Year	<u>\$1,172,953</u>	<u>\$1,084,142</u>	<u>\$1,013,839</u>	<u>\$795,966</u>	<u>\$655,383</u>	<u>\$575,833</u>	<u>\$420,607</u>	<u>\$315,517</u>	<u>\$325,422</u>	<u>\$290,732</u>

SPOFF Changes in Fiduciary Net Position, as of June 30, 2016 – 10-Year Review (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ADDITIONS</b>										
Member	\$0	\$81	\$103	\$169	\$69	\$0	\$0	\$0	\$0	\$0
Employer	—	802	43	105	92	39,066	52,219	53,114	51,475	48,948
Investment Income/(Loss)	—	(7,598)	68,597	53,165	(25)	88,035	37,643	(55,423)	(18,363)	37,813
Miscellaneous Income	—	865	1,683	—	—	7	3,431	—	—	—
<b>TOTAL ADDITIONS</b>	<b>\$0</b>	<b>(\$5,850)</b>	<b>\$70,426</b>	<b>\$53,439</b>	<b>\$136</b>	<b>\$127,108</b>	<b>\$93,293</b>	<b>(\$2,309)</b>	<b>\$33,112</b>	<b>\$86,761</b>
<b>DEDUCTIONS</b>										
Administrative Expenses	\$0	\$1,601	\$1,556	\$1,460	\$1,589	\$1,839	\$1,758	\$2,715	\$2,157	\$0
Participant Withdrawals	—	509,594	37,585	34,417	24,640	30,949	22,743	12,922	11,626	10,828
<b>TOTAL DEDUCTIONS</b>	<b>\$0</b>	<b>\$511,195</b>	<b>\$39,141</b>	<b>\$35,877</b>	<b>\$26,229</b>	<b>\$32,788</b>	<b>\$24,501</b>	<b>\$15,637</b>	<b>\$13,783</b>	<b>\$10,828</b>
Interfund Transfer In/(Out)	(\$5,582)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>CHANGE IN NET POSITION</b>	<b>(\$5,582)</b>	<b>(\$517,045)</b>	<b>\$31,285</b>	<b>\$17,562</b>	<b>(\$26,093)</b>	<b>\$94,320</b>	<b>\$68,792</b>	<b>(\$17,946)</b>	<b>\$19,329</b>	<b>\$75,933</b>
<b>NET POSITION—RESTRICTED FOR PENSION BENEFITS</b>										
Beginning of Year	\$5,582	\$522,627	\$491,342	\$473,780	\$499,873	\$405,553	\$336,761	\$354,707	\$335,378	\$259,445
End of Year	<u>\$0</u>	<u>\$5,582</u>	<u>\$522,627</u>	<u>\$491,342</u>	<u>\$473,780</u>	<u>\$499,873</u>	<u>\$405,553</u>	<u>\$336,761</u>	<u>\$354,707</u>	<u>\$335,378</u>

## CHANGES IN FIDUCIARY NET POSITION – RETIREMENT PROGRAMS (CONTINUED)

DCF Changes in Fiduciary Net Position, as of June 30, 2016 – 10-Year Review (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ADDITIONS</b>										
Member	\$106,072	\$106,272	\$131,900	\$99,977	\$104,333	\$89,531	\$108,436	\$247,484	\$125,952	\$104,956
Employer	909	783	698	455	80	84	84	87	53	—
Investment Income/(Loss)	7,541	32,735	164,384	114,471	4,872	151,932	72,951	(251,890)	(47,015)	80,167
Miscellaneous Income	5,354	6,260	5,258	—	225	214	858	113	39	14
<b>TOTAL ADDITIONS</b>	<b>\$119,876</b>	<b>\$146,050</b>	<b>\$302,240</b>	<b>\$214,903</b>	<b>\$109,510</b>	<b>\$241,761</b>	<b>\$182,329</b>	<b>(\$4,206)</b>	<b>\$79,029</b>	<b>\$185,137</b>
<b>DEDUCTIONS</b>										
Administrative Expenses	\$4,677	\$4,320	\$4,101	\$3,467	\$3,131	\$3,874	\$3,491	\$2,393	\$1,759	\$0
Participant Withdrawals	164,362	88,973	97,388	82,587	73,025	93,844	46,418	34,753	47,942	42,647
<b>TOTAL DEDUCTIONS</b>	<b>\$169,039</b>	<b>\$93,293</b>	<b>\$101,489</b>	<b>\$86,054</b>	<b>\$76,156</b>	<b>\$97,718</b>	<b>\$49,909</b>	<b>\$37,146</b>	<b>\$49,701</b>	<b>\$42,647</b>
<b>CHANGE IN NET POSITION</b>	<b>(\$49,163)</b>	<b>\$52,757</b>	<b>\$200,751</b>	<b>\$128,849</b>	<b>\$33,354</b>	<b>\$144,043</b>	<b>\$132,420</b>	<b>(\$41,352)</b>	<b>\$29,328</b>	<b>\$142,490</b>
<b>NET POSITION—RESTRICTED FOR PENSION BENEFITS</b>										
Beginning of Year	\$1,339,570	\$1,286,813	\$1,086,062	\$957,213 <sup>1</sup>	\$947,062	\$803,019	\$670,599	\$711,951	\$682,623	\$540,133
End of Year	<u>\$1,290,407</u>	<u>\$1,339,570</u>	<u>\$1,286,813</u>	<u>\$1,086,062</u>	<u>\$980,416</u>	<u>\$947,062</u>	<u>\$803,019</u>	<u>\$670,599</u>	<u>\$711,951</u>	<u>\$682,623</u>

(1) Due to prior period adjustment, beginning balance was restarted.

SCPF Changes in Fiduciary Net Position, as of June 30, 2016 – 10-Year Review (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ADDITIONS</b>										
Member	\$269	\$127,833	\$160	\$164	\$208	\$285	\$536	\$483	\$713	\$457
Employer	—	—	—	—	—	—	—	—	—	—
Investment Income/(Loss)	416	1,058	2,077	2,051	3	3,610	1,884	(4,054)	(1,517)	3,619
Miscellaneous Income	668	305	111	—	—	—	33	—	—	389
<b>TOTAL ADDITIONS</b>	<b>\$1,353</b>	<b>\$129,196</b>	<b>\$2,348</b>	<b>\$2,215</b>	<b>\$211</b>	<b>\$3,895</b>	<b>\$2,453</b>	<b>(\$3,571)</b>	<b>(\$804)</b>	<b>\$4,465</b>
<b>DEDUCTIONS</b>										
Administrative Expenses	\$330	\$135	\$62	\$58	\$63	\$84	\$117	\$61	\$113	\$0
Participant Withdrawals	16,130	15,751	1,013	1,448	1,219	2,113	1,624	671	870	1,918
<b>TOTAL DEDUCTIONS</b>	<b>\$16,460</b>	<b>\$15,886</b>	<b>\$1,075</b>	<b>\$1,506</b>	<b>\$1,282</b>	<b>\$2,197</b>	<b>\$1,741</b>	<b>\$732</b>	<b>\$983</b>	<b>\$1,918</b>
Interfund Transfer In/(Out)	\$5,582	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>CHANGE IN NET POSITION</b>	<b>(\$9,525)</b>	<b>\$113,310</b>	<b>\$1,273</b>	<b>\$709</b>	<b>(\$1,071)</b>	<b>\$1,698</b>	<b>\$712</b>	<b>(\$4,303)</b>	<b>(\$1,787)</b>	<b>\$2,547</b>
<b>NET POSITION—RESTRICTED FOR PENSION BENEFITS</b>										
Beginning of Year	\$133,879	\$20,569	\$19,296	\$18,587	\$19,658	\$17,960	\$17,248	\$21,551	\$23,338	\$20,791
End of Year	<u>\$124,354</u>	<u>\$133,879</u>	<u>\$20,569</u>	<u>\$19,296</u>	<u>\$18,587</u>	<u>\$19,658</u>	<u>\$17,960</u>	<u>\$17,248</u>	<u>\$21,551</u>	<u>\$23,338</u>



## CHANGES IN FIDUCIARY NET POSITION – OPEB PLANS

CERBTf Changes in Fiduciary Net Position, as of June 30, 2016 – 10-Year Review (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ADDITIONS</b>										
Member	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Employer	1,780,240	1,714,060	1,681,053	1,031,619	771,750	758,251	674,406	595,632	655,030	11,469
Investment Income/(Loss)	76,638	(13,988)	515,507	237,710	8,066	331,492	128,918	(143,800)	(20,998)	(29)
Miscellaneous Income	4,048	4,932	4,483	—	—	—	—	—	—	—
<b>TOTAL ADDITIONS</b>	<b>\$1,860,926</b>	<b>\$1,705,004</b>	<b>\$2,201,043</b>	<b>\$1,269,329</b>	<b>\$779,816</b>	<b>\$1,089,743</b>	<b>\$803,324</b>	<b>\$451,832</b>	<b>\$634,032</b>	<b>\$11,440</b>
<b>DEDUCTIONS</b>										
Participant Withdrawals	\$1,229,523	\$1,099,376	\$1,020,924	\$635,074	\$566,360	\$507,951	\$364,182	\$246,047	\$1,702	\$0
Administrative Expenses	1,559	2,044	1,786	2,062	1,910	2,305	822	543	131	—
<b>TOTAL DEDUCTIONS</b>	<b>\$1,231,082</b>	<b>\$1,101,420</b>	<b>\$1,022,710</b>	<b>\$637,136</b>	<b>\$568,270</b>	<b>\$510,256</b>	<b>\$365,004</b>	<b>\$246,590</b>	<b>\$1,833</b>	<b>\$0</b>
<b>CHANGE IN NET POSITION</b>	<b>\$629,844</b>	<b>\$603,584</b>	<b>\$1,178,333</b>	<b>\$632,193</b>	<b>\$211,546</b>	<b>\$579,487</b>	<b>\$438,320</b>	<b>\$205,242</b>	<b>\$632,199</b>	<b>\$11,440</b>
<b>NET POSITION—RESTRICTED FOR PENSION BENEFITS</b>										
Beginning of Year	\$4,492,344	\$3,888,760	\$2,710,427	\$2,078,234	\$1,866,688	\$1,287,201	\$848,881	\$643,639	\$11,440	\$0
End of Year	<u>\$5,122,188</u>	<u>\$4,492,344</u>	<u>\$3,888,760</u>	<u>\$2,710,427</u>	<u>\$2,078,234</u>	<u>\$1,866,688</u>	<u>\$1,287,201</u>	<u>\$848,881</u>	<u>\$643,639</u>	<u>\$11,440</u>

## PUBLIC EMPLOYEES' RETIREMENT SYSTEM MEMBERSHIP &amp; RETIREMENT DATA

The presentation of the following table has been modified to better align statistical data with current categorizations of members and beneficiaries by rate plan and current pension reform changes. This table will continue populating each subsequent year until 10 years of data is available.

## Public Employees' Retirement System – Two-Year Review

	2016	2015
<b>ACTIVE &amp; INACTIVE MEMBERS</b>		
<b>STATE MEMBERS</b>		
State Miscellaneous – Classic	216,647	233,574
State Miscellaneous – PEPRA	44,057	29,009
State Safety – Classic	68,020	64,167
State Safety – PEPRA	16,991	11,054
<b>Total State Members</b>	<b>345,715</b>	<b>337,804</b>
<b>PUBLIC AGENCY MEMBERS</b>		
School – Miscellaneous – Classic	396,832	422,114
School – Miscellaneous – PEPRA	102,550	67,363
Public Agency – Miscellaneous – Classic	241,605	269,528
Public Agency – Miscellaneous – PEPRA	64,234	46,091
Public Agency – Safety – Classic	50,372	54,825
Public Agency – Safety – PEPRA	9,601	6,896
<b>Total Public Agency Members</b>	<b>865,194</b>	<b>866,817</b>
<b>TOTAL ACTIVE &amp; INACTIVE MEMBERS</b>	<b>1,210,909</b>	<b>1,204,621</b>
<b>BENEFIT RECIPIENTS</b>		
Retired		
Classic	557,679	530,725
PEPRA	166	90
Survivors and Beneficiaries		
Classic	90,774	80,250
PEPRA	26	13
<b>TOTAL BENEFIT RECIPIENTS<sup>1</sup></b>	<b>648,645</b>	<b>611,078</b>
<b>TOTAL MEMBERS AND BENEFIT RECIPIENTS</b>	<b>1,859,554</b>	<b>1,815,699</b>

(1) This total includes payments to individual retirees, survivors, and beneficiaries who have received any monthly and/or lump-sum payments.

## Public Employees' Retirement System Membership &amp; Retirement Data (CONTINUED)

Public Employees' Retirement System – Eight-Year Review<sup>1</sup>

	2014	2013	2012	2011	2010	2009	2008	2007
<b>ACTIVE &amp; INACTIVE MEMBERS</b>								
<b>STATE MEMBERS</b>								
Miscellaneous	236,552	227,291	228,667	223,251	224,084	224,966	222,806	219,101
University of California	44	44	45	49	56	81	93	103
Industrial	13,669	13,038	13,734	13,732	13,624	12,822	11,862	10,815
Alternative Retirement Plan	7,407	12,160	9,491	13,972	16,477	19,422	19,086	16,608
Highway Patrol	7,479	7,556	7,565	7,573	7,589	7,471	7,133	6,987
Safety	31,150	28,878	28,935	29,402	29,305	29,911	28,763	26,099
Peace Officer/Firefighter	45,346	45,116	47,162	48,243	49,437	51,260	51,371	48,722
<b>Total State Members</b>	<b>341,647</b>	<b>334,083</b>	<b>335,599</b>	<b>336,222</b>	<b>340,572</b>	<b>345,933</b>	<b>341,114</b>	<b>328,435</b>
<b>PUBLIC AGENCY MEMBERS</b>								
Schools	442,088	430,865	428,117	425,186	427,211	432,383	426,686	409,675
Cities	160,127	158,649	160,253	163,430	167,994	173,315	175,240	171,546
Counties	97,780	94,980	93,468	93,651	95,122	97,188	98,395	95,177
Districts & Other Public Agencies	87,372	85,660	85,003	84,937	85,145	85,578	84,698	82,067
<b>Total Public Agency Members</b>	<b>787,367</b>	<b>770,154</b>	<b>766,841</b>	<b>767,204</b>	<b>775,472</b>	<b>788,464</b>	<b>785,019</b>	<b>758,465</b>
<b>TOTAL ACTIVE &amp; INACTIVE</b>	<b>1,129,014</b>	<b>1,104,237</b>	<b>1,102,440</b>	<b>1,103,426</b>	<b>1,116,044</b>	<b>1,134,397</b>	<b>1,126,133</b>	<b>1,086,900</b>
<b>BENEFIT RECIPIENTS</b>								
Service Retirement	505,031	486,625	464,601	450,263	428,821	408,428	393,328	380,162
Disability Retirement	44,242	43,857	43,626	43,347	43,090	43,074	42,813	42,965
Industrial Disability Retirement	37,686	36,493	35,495	34,733	33,951	33,453	32,757	32,081
Industrial Death	891	894	903	1,070	1,056	1,045	1,039	1,013
1957 Survivor Benefit	3,775	3,698	3,831	3,626	3,535	3,398	3,246	3,164
1959 Survivor Benefit	3,217	3,192	3,171	3,195	3,170	3,115	3,069	2,985
<b>TOTAL BENEFIT RECIPIENTS<sup>1</sup></b>	<b>594,842</b>	<b>574,759</b>	<b>551,627</b>	<b>536,234</b>	<b>513,623</b>	<b>492,513</b>	<b>476,252</b>	<b>462,370</b>
<b>TOTAL MEMBERS</b>	<b>1,723,856</b>	<b>1,678,996</b>	<b>1,654,067</b>	<b>1,639,660</b>	<b>1,629,667</b>	<b>1,626,910</b>	<b>1,602,385</b>	<b>1,549,270</b>

(1) Information presented using different categorization of members and beneficiaries.

## PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA

## PRIMARY BENEFITS

CalPERS' benefit categories are established in the Public Employees' Retirement Law (PERL) and the Public Employees' Pension Reform Act of 2013 (PEPRA). The PERL and PEPRA categorize members under two distinct levels of membership, which are:

- **Public Employees' Pension Reform Act (PEPRA)**

**Members** – New members who first became members of the CalPERS System on or after January 1, 2013, or were hired on or after January 1, 2013, by a new employer after a break in service longer than six months from previous eligible employment.

- **Classic Members** – All members that do not fit within the definition of a new member as defined by PEPRA. These existing CalPERS members as of December 31, 2012, will retain the existing benefit levels for future service with the same employer. Because the new member determination is made on an appointment-by-appointment basis, classic members will be tested against the "new member" definition upon each new appointment.

Benefits are paid according to the category of employment and the type of benefit coverage provided by an employer. A local agency's benefits may vary based upon statutory elections made by the employer.

The four categories of membership are:

- **Miscellaneous Members** – Staff, operational, supervisory, and all other eligible employees who are not in special membership categories.
- **Safety Members** – California Highway Patrol officers, police officers, firefighters, and other employees whose principal duties are in active law enforcement or fire prevention and suppression work, or who occupy positions designated by law as safety member positions.
- **State Industrial Members** – Employees of the California Department of Corrections and Rehabilitation who have the same service retirement and other benefits as miscellaneous members, but who also have industrial death and disability benefits under certain limited circumstances.
- **State Peace Officer/Firefighter Members** – State employees who are involved in law enforcement, firefighting and fire suppression, public safety, protective services, or the management and supervision thereof, whose positions are defined as state peace officer/firefighter members in the Government Code or by the Department of Human Resources.

## SERVICE RETIREMENT

**State Miscellaneous & State Industrial Members – Classic**

- 2 percent at 55 – A guarantee of 2 percent of final compensation at age 55 for each year of service credit.
- 2 percent at 60 – A guarantee of 2 percent of final compensation at age 60 for each year of service credit.

Retirement may begin at age 50 with a reduced benefit rate, or at age 55 or 60 with an increased benefit rate to age 63.

- 1.25 percent at 65 – A guarantee of 1.25 percent of final compensation at age 65 for each year of service credit. Retirement may begin at age 55 with a reduced benefit rate.

**State Miscellaneous & State Industrial Members – PEPRA**

- 2 percent at 62 – A guarantee of 2 percent of final compensation at age 62 for each year of service credit. Retirement may begin at age 52 with a reduced benefit rate, or after age 62 with an increased benefit rate to age 67.
- 1.25 percent at 67 – A guarantee of 1.25 percent of final compensation at age 67 for each year of service credit. Retirement may begin at age 55 with a reduced benefit rate.

**State Safety Members – Classic**

- 2 percent at 55 – It provides 2 percent of final compensation for each year of service for retirement at age 55.
- 2.5 percent at 55 – It provides 2.5 percent of final compensation for each year of service for retirement at age 55.

The maximum allowance payable is 80 percent of final compensation. Retirement may begin at age 50 with a reduced benefit rate.

- 3 percent at 50 – It provides 3 percent of final compensation for each year of service for retirement at age 50.
- 3 percent at 55 – It provides 3 percent of final compensation for each year of service for retirement at age 55. Retirement may begin at age 50 with a reduced benefit rate.

The maximum allowance payable is 90 percent.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

**State Safety Members – PEPRA**

- 2 percent at 57 – It provides 2 percent of final compensation for each year of service for retirement at age 57.
- 2.5 percent at 57 – It provides 2.5 percent of final compensation for each year of service for retirement at age 57.
- 2.7 percent at 57 – It provides 2.7 percent of final compensation for each year of service for retirement at age 57.

Retirement may begin at age 50 with a reduced benefit rate.

**School Members 2 Percent at 55 – Classic**

A guarantee of 2 percent of final compensation at age 55 for each year of service credit. Retirement may begin at age 50 with a reduced benefit rate, or after age 55 with an increased benefit rate to age 63.

**School Members 2 Percent at 62 – PEPRA**

A guarantee of 2 percent of final compensation at age 62 for each year of service credit. Retirement may begin at age 52 with a reduced benefit rate, or after age 62 with an increased benefit rate to age 67.

**Local Miscellaneous Members – Classic**

- 2 percent at 55 – A guarantee of 2 percent of final compensation at age 55 for each year of service credit.
- 2 percent at 60 – A guarantee of 2 percent of final compensation at age 60 for each year of service.

Retirement may begin at age 50 with a reduced benefit rate, or after age 55 or 60 with an increased benefit rate to age 63.

- 2.5 percent at 55 – A guarantee of 2.5 percent of final compensation at age 55 for each year of service credit.
- 2.7 percent at 55 – A guarantee of 2.7 percent of final compensation at age 55 for each year of service credit.
- 3 percent at 60 – A guarantee of 3 percent of final compensation at age 60 for each year or service credit.

Retirement may begin at age 50 with a reduced benefit rate.

- 1.5 percent at 65 – A guarantee of 1.5 percent of final compensation at age 65 for each year of service credit. Retirement may begin at age 55 with a reduced benefit rate.

**Local Miscellaneous Members 2 Percent at 62 – PEPRA**

A guarantee of 2 percent of final compensation at age 62 for each year of service credit. Retirement may begin at age 52 with a reduced benefit rate, or after age 62 with an increased benefit rate to age 67.

**Local Safety Members 2 Percent at 50 Formula**

2 percent of final compensation for each year of service for retirement at age 50, with an increased benefit rate to age 55. The maximum allowance payable is 90 percent of final compensation.

**Local Safety Members – Classic**

- 2 percent at 50 – It provides 2 percent of final compensation for each year of service for retirement at age 50, with an increased benefit rate to age 55.
- 3 percent at 50 – It provides 3 percent of final compensation for each year of service for retirement at age 50.

The maximum allowance payable is 90 percent of final compensation.

- 2 percent at 55 – It provides 2 percent of final compensation for each year of service for retirement at age 55.
- 2.5 percent at 55 – It provides 2.5 percent of final compensation for each year of service retirement at age 55.
- 3 percent at 55 – It provides 3 percent of final compensation for each year of service for retirement at age 55.

Retirement may begin at age 50 with a reduced benefit rate.

The maximum allowance payable is 90 percent of final compensation.

**Local Safety Members – PEPRA**

- 2 percent at 57 – It provides 2 percent of final compensation for each year of service for retirement at age 57.
- 2.5 percent at 57 – It provides 2.5 percent of final compensation for each year of service for retirement at age 57.
- 2.7 percent at 57 – It provides 2.7 percent of final compensation for each year of service for retirement at age 57.

Retirement may begin at age 50 with a reduced benefit rate.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

DISABILITY RETIREMENT

**For Most Members**

A monthly allowance of 1.8 percent of final compensation for each year of service, improved under certain conditions to 33.33 percent of final compensation, applicable to members with at least five years of service credit.

**By Contract Amendment Only for Local Agencies**

A monthly allowance of 30 percent of final compensation, plus an additional 1 percent for each year of service over five years to a maximum of 50 percent.

**For State Second Tier Members**

A monthly allowance of 1.125 percent of final compensation for each year of service, improved under certain conditions to 33.33 percent of final compensation, applicable to members with at least 10 years of service credit or five years if credited as of January 1, 1985.

**For Certain Local Miscellaneous Second Tier Members**

A monthly allowance of 1.35 percent of final compensation for each year of service, improved under certain conditions to 33.33 percent of final compensation, applicable to members with at least five years of service credit.

INDUSTRIAL DISABILITY RETIREMENT

**For Most Members**

A monthly allowance of 50 percent of final compensation, applicable to California Highway Patrol (CHP) members, state and local safety members, state peace officer/firefighter members, state industrial members, local miscellaneous members (by contract amendment only), and certain state miscellaneous members defined by law. The injury or illness must be job related and the member must be serving in one of these categories at the time the industrial disability occurs. CHP members may be entitled to an enhanced benefit if specific qualifying factors are met.

**By Contract Amendment Only for Local Agencies**

A monthly allowance of 75 percent of final compensation, if found totally disabled.

**By Contract Amendment Only for Local Agencies**

A monthly allowance of 50 percent to 90 percent of final compensation, depending on the disability rating by the Workers' Compensation Appeals Board.

DEATH BENEFITS (BEFORE RETIREMENT)

STATE MEMBERS: LUMP SUM

**Basic Death Benefit – State Members Only**

**Eligible to retire or not eligible to retire with 20 years or more of state service credit** – A return of member contributions plus interest (compounded annually) and a state-paid portion equal to six months' pay (50 percent of the member's earnable pay for the 12 months prior to the member's death).

**Not eligible to retire with less than 20 years of state service credit** – A return of only the member contributions plus interest (compounded annually).

**Insurance Benefit – State Members Only**

**Eligible to retire or not eligible to retire with 20 years or more of state service credit** – \$5,000 in a lump sum.

Not eligible to retire with less than 20 years of state service credit — \$5,000 in a lump sum plus six months' pay (50 percent of annual compensation).

STATE MEMBERS – MONTHLY

**Alternate Death Benefit<sup>1</sup> – For State Members in Bargaining Units Contracting for this Benefit, Who are Not Eligible to Retire, With 20 Years or More of State Service Credit**

A monthly allowance payable to a surviving spouse or registered domestic partner until death, then to children under age 18. It is calculated similarly to pre-retirement Option 2W (if the beneficiary is a spouse or registered domestic partner), or like a 1957 Survivor Benefit (if the beneficiary is a minor child), as though the member had been old enough to retire. A spouse or registered domestic partner or minor child may receive continued health and dental insurance with the Alternate Death Benefit.

(1) The surviving spouse or registered domestic partner of other than a state member, or a guardian of a minor child, may elect the Basic Death Benefit or the 1957 Survivor Benefit. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the Pre-Retirement Option 2W Death Benefit.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

**Pre-Retirement Option 2W Benefit<sup>1</sup> – For All State**

**Members, Married, or Registered Domestic Partnership**

A monthly allowance payable to the surviving spouse or registered domestic partner until death, then to children under age 18, equal to what the deceased member would have received had they retired on the date of their death and elected Option 2W.

**1957 Survivor Benefit<sup>1</sup> – For All State Members, Not**

**Married, or No Registered Domestic Partnership**

For members eligible to retire who are not married or in a registered domestic partnership, a monthly allowance payable to the unmarried surviving minor children until age 18, equal to one-half of the highest allowance (unmodified) the member would have received had they retired on the date of death. Once allowance stops, the total allowance paid is compared to the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

**1959 Survivor Benefit – State Members**

A monthly benefit paid to survivors of deceased members who died prior to retirement. This benefit is similar to the Social Security Survivor Benefit and is paid in addition to any other applicable pre-retirement death benefit, except the Special Death Benefit.

**Special Death Benefit<sup>1</sup> – Survivors of State, State Industrial, State Peace Officer/Firefighter Members, State Miscellaneous<sup>3</sup>**

A monthly allowance equal to 50 percent of final compensation payable to the surviving spouse or registered domestic partner until death, or if no spouse, to natural or adopted unmarried children up to age 22. The monthly allowance is recalculated annually on October 1 based on the salary rates for employees who work in the position the member held at the time of death until such time as the member would have attained age 50.

**Special Death Benefit<sup>2</sup> – Violent Death**

Provides increased benefits (up to 75 percent of final compensation) based upon the number of surviving children, if the member's death is the result of external violence or physical force.

**SCHOOL MEMBERS – LUMP SUM**

**Basic Death Benefit – School Members**

Eligible to retire or not—A return of member contributions plus interest (compounded annually) and an employer-paid portion equal to one month's compensation earnable for each year of current service to a maximum of six months.

**SCHOOL MEMBERS – MONTHLY**

**1957 Survivor Benefit<sup>1</sup> – School Members, Married, or Registered Domestic Partnership**

For all members eligible to retire who are married or in a registered domestic partnership, a monthly allowance payable to the surviving spouse or registered domestic partner until death, then to children under age 18, equal to one-half of the highest allowance (unmodified) the member would have received had they retired on the date of death.

**1957 Survivor Benefit – For All School Members, Not Married, or No Registered Domestic Partnership**

For members eligible to retire who are not married or in a registered domestic partnership, a monthly allowance payable to the unmarried surviving minor children until age 18, equal to one-half of the highest allowance (unmodified) the member would have received had they retired on the date of death. Once allowance stops, the total allowance paid is compared to the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

(1) The surviving spouse or registered domestic partner of other than a state member, or a guardian of a minor child, may elect the Basic Death Benefit or the 1957 Survivor Benefit. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the Pre-Retirement Option 2W Death Benefit.

(2) The Special Death Benefit is payable if the member's death is job related.

(3) The survivor of a state or local miscellaneous member qualifies for the Special Death Benefit if the member was killed or fatally injured while performing their official duties.



PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

**1959 Survivor Benefit – School Members**

A monthly benefit paid to survivors of deceased members who died prior to retirement. This benefit is similar to the Social Security Survivor Benefit and is paid in addition to any other applicable pre-retirement death benefit, except the Special Death Benefit.

**LOCAL AGENCY MEMBERS – LUMP SUM**

**Basic Death Benefit – Local Agency Members**

**Eligible to retire or not** – A return of member contributions plus interest (compounded annually) and an employer-paid portion equal to one month's compensation earnable for each year of current service to a maximum of six months.

**LOCAL AGENCY MEMBERS – MONTHLY**

**1957 Survivor Benefit<sup>(1)</sup> – Local Agency Members, Married, or Registered Domestic Partnership**

For all members eligible to retire who are married or in a registered domestic partnership, a monthly allowance payable to the surviving spouse or registered domestic partner until death, then to children under age 18, equal to one-half of the highest allowance (unmodified) the member would have received had they retired on the date of death.

**1957 Survivor Benefit – For All Local Agency Members, Not Married, or No Registered Domestic Partnership**

For members eligible to retire who are not married or in a registered domestic partnership, a monthly allowance payable to the unmarried surviving minor children until age 18, equal to one-half of the highest allowance (unmodified) the member would have received had they retired on the date of death. Once allowance stops, the total allowance paid is compared to the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

**1959 Survivor Benefit – Local Agency Members Not Coordinated With Social Security by Contract Option Amendment**

A monthly benefit paid to survivors of deceased members who died prior to retirement. This benefit is similar to the Social Security Survivor Benefit and is paid in addition to any other applicable pre-retirement death benefit, except the Special Death Benefit.

**Alternate Death Benefit for Firefighters – Local Agencies by Contract With 20 Years or More of Total Service Credit**

A monthly non-job-related allowance payable to a surviving spouse or registered domestic partner until death, then to children under age 18. It is calculated similarly to Pre-Retirement Option 2W (if the beneficiary is a spouse or registered domestic partner, even if the agency does not contract separately for the Pre-Retirement Option 2W benefit), or like a 1957 Survivor Benefit (if the beneficiary is a minor child), as though the member had either been old enough to retire (if the member died before reaching retirement age), or based on the member's actual age if the member was eligible to retire at the time of death. This benefit applies to all service credit earned by the member, including service that may have been earned with a local agency that does not contract for the Alternate Death Benefit, as long as the member was employed at the time of death by a local agency that provides this benefit in their contract.

**Pre-Retirement Option 2W Benefit – Local Agencies by Contract, Married, or Registered Domestic Partnership**

A monthly allowance payable to the surviving spouse or registered domestic partner until death, then to children under age 18, equal to what the deceased member would have received had they retired on the date of their death and elected Option 2W.

(1) The surviving spouse or registered domestic partner of other than a state member, or a guardian of a minor child, may elect the Basic Death Benefit or the 1957 Survivor Benefit. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the Pre-Retirement Option 2W Death Benefit.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

**Special Death Benefit<sup>1</sup> – Survivors of Patrol, Local Safety & Local Miscellaneous by Contract Amendment<sup>3</sup>**

A monthly allowance equal to 50 percent of final compensation payable to the surviving spouse or registered domestic partner until death, or if no spouse, to natural or adopted unmarried children up to age 22. The monthly allowance is recalculated annually on October 1 based on the salary rates for employees who work in the position the member held at the time of death until such time as the member would have attained age 50.

**Special Death Benefit<sup>2</sup> – Violent Death**

Provides increased benefits (up to 75 percent of final compensation) based upon the number of surviving children, if the member's death is the result of external violence or physical force.

**COST-OF-LIVING ADJUSTMENTS**

**For All Members – Except State Second Tier**

A maximum of 2 percent compounded annually (up to 5 percent maximum as a contract option for retired members of local agencies). Note: Does not apply to the Pre-Retirement 1959 Survivor Death Benefit.

**For State Second Tier Members Only**

A fixed 3 percent compounded annually.

**SEPARATION FROM EMPLOYMENT/REFUNDS**

At permanent separation from employment, members may either leave their contributions on deposit and defer retirement<sup>4</sup> or terminate membership by electing to take a refund of member contributions plus interest (compounded annually). With a refund election, CalPERS is required to deduct federal withholding of 20 percent from the untaxed portion of the refund, unless the taxable portion is directly rolled over to a qualified plan or IRA.

(1) The surviving spouse or registered domestic partner of other than a state member, or a guardian of a minor child, may elect the Basic Death Benefit or the 1957 Survivor Benefit. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the Pre-Retirement Option 2W Death Benefit.

(2) The Special Death Benefit is payable if the member's death is job related.

(3) The survivor of a state or local miscellaneous member qualifies for the Special Death Benefit if the member was killed or fatally injured while performing their official duties.

(4) A member who has less than the required amount of service credit may return to CalPERS-covered employment to obtain the minimum service credit required to be eligible for retirement.

## PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

The presentation of the following table has been modified to better align statistical data with current categorizations of members and beneficiaries by rate plan and current pension reform changes. For accounting purposes only, the Public Employees' Retirement Fund (PERF) is comprised of and reported as three separate entities. PERF A is comprised of agent multiple-employer plans, which includes State of California and most public agencies' rate plans with more than 100 active members. PERF B is a cost-sharing multiple-employer plan of school employers consisting of non-teaching and non-certified employees. PERF C is a cost-sharing multiple-employer plan of public agencies' plans with generally less than 100 active members.

## Retirement Benefit Recipients and Members by Employer Category – PERF

Employer/Category	Plan Type	Active	Inactive	Retired <sup>1</sup>	Survivors & Beneficiaries <sup>2</sup>	Total
<b>STATE</b>						
Miscellaneous – Classic <sup>3</sup>	PERF A	145,722	70,925	141,522	26,414	384,583
Miscellaneous – PEPRA <sup>3</sup>	PERF A	38,913	5,144	23	1	44,081
Safety – Classic <sup>4</sup>	PERF A	57,856	10,164	55,236	6,501	129,757
Safety – PEPRA <sup>4</sup>	PERF A	15,469	1,522	8	2	17,001
Pre-Retirement Death – Classic	PERF A	—	—	—	3,044	3,044
Pre-Retirement Death – PEPRA	PERF A	—	—	—	4	4
<b>TOTAL STATE</b>		<b>257,960</b>	<b>87,755</b>	<b>196,789</b>	<b>35,966</b>	<b>578,470</b>
<b>SCHOOL</b>						
Miscellaneous – Classic	PERF B	262,562	134,270	177,976	27,429	602,237
Miscellaneous – PEPRA	PERF B	92,959	9,591	30	—	102,580
Pre-Retirement Death – Classic	PERF B	—	—	—	1,116	1,116
Pre-Retirement Death – PEPRA	PERF B	—	—	—	13	13
<b>TOTAL SCHOOL</b>		<b>355,521</b>	<b>143,861</b>	<b>178,006</b>	<b>28,558</b>	<b>705,946</b>
<b>PUBLIC AGENCY</b>						
Miscellaneous – Classic	PERF A	131,605	71,109	116,660	15,983	335,357
Miscellaneous – PEPRA	PERF A	44,944	8,682	68	—	53,694
Safety – Classic	PERF A	29,677	5,064	33,593	4,338	72,672
Safety – PEPRA	PERF A	5,597	670	2	—	6,269
Pre-Retirement Death – Classic	PERF A	—	—	—	1,392	1,392
Pre-Retirement Death – PEPRA	PERF A	—	—	—	6	6
Miscellaneous – Classic	PERF C	23,701	15,190	18,496	2,316	59,703
Miscellaneous – PEPRA	PERF C	9,026	1,582	32	—	10,640
Safety – Classic	PERF C	12,069	3,562	14,196	1,866	31,693
Safety – PEPRA	PERF C	2,926	408	3	—	3,337
Pre-Retirement Death – Classic	PERF C	—	—	—	375	375
<b>TOTAL PUBLIC AGENCY</b>		<b>259,545</b>	<b>106,267</b>	<b>183,050</b>	<b>26,276</b>	<b>575,138</b>
<b>TOTAL BENEFIT RECIPIENTS AND MEMBERS</b>		<b>873,026</b>	<b>337,883</b>	<b>557,845</b>	<b>90,800</b>	<b>1,859,554</b>

(1) The actual number of retirees is by the employer category from which they retired, regardless of whether they had service in other employer categories.

(2) The total includes those unique recipients receiving either a lump-sum, one-time only payment, and/or continuous payments.

(3) State Miscellaneous includes State Industrial.

(4) State Safety includes Highway Patrol and Peace Officer/Firefighter.

## PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

## Benefit and Refund Deductions from Fiduciary Net Position – Six-Year Review – PERF

Category	2016	2015	2014	2013	2012	2011
Service Retirement	\$17,482,814,843	\$16,399,932,312	\$15,318,518,965	\$14,304,469,220	\$13,100,533,228	\$12,078,836,537
Disability Retirement	614,204,683	599,845,301	575,825,287	560,645,818	566,771,017	557,833,490
Industrial Disability Retirement	1,784,205,878	1,695,674,147	1,583,017,137	1,494,486,150	1,425,569,675	1,349,369,869
PPPA Payments <sup>1</sup>	21,742,842	25,792,689	33,299,953	37,957,813	38,927,217	42,656,666
<b>Total</b>	<b>\$19,902,968,246</b>	<b>\$18,721,244,449</b>	<b>\$17,510,661,342</b>	<b>\$16,397,559,001</b>	<b>\$15,131,801,137</b>	<b>\$14,028,696,562</b>
Basic Death Benefit/Group Term Life Insurance	\$37,528,299	\$25,652,204	\$26,528,315	\$45,181,888	\$43,730,806	\$41,224,228
1957 Survivor Benefit	95,869,358	92,157,432	87,564,961	83,210,337	77,780,450	74,103,991
1959 Survivor Benefit	33,770,778	33,886,098	33,699,064	34,606,918	32,855,386	33,355,374
Industrial Death Allowance	47,735,846	45,653,060	43,918,078	42,555,263	42,035,922	38,985,369
Option 1, Temporary Annuity, Other Lump Sum-Death Benefits & Other Prior Year Adjustments	36,775,082	55,058,746	57,285,779	32,149,825	28,492,596	25,893,151
Adjustments <sup>2</sup>	(60,714,425)	(51,360,036)	—	—	—	—
<b>Total</b>	<b>\$190,964,938</b>	<b>\$201,047,504</b>	<b>\$248,996,197</b>	<b>\$237,704,231</b>	<b>\$224,895,160</b>	<b>\$213,562,113</b>
<b>Total Retirement and Death Payments</b>	<b>\$20,093,933,184</b>	<b>\$18,922,291,953</b>	<b>\$17,759,657,539</b>	<b>\$16,635,263,232</b>	<b>\$15,356,696,297</b>	<b>\$14,242,258,675</b>
Refunds	238,821,624	240,623,206	237,893,870	242,595,215	218,082,685	227,167,877
<b>Grand Total</b>	<b>\$20,332,754,808</b>	<b>\$19,162,915,159</b>	<b>\$17,997,551,409</b>	<b>\$16,877,858,447</b>	<b>\$15,574,778,982</b>	<b>\$14,469,426,552</b>

(1) These payments were made from the Purchasing Power Protection Account, which is structured to maintain current benefit levels and to restore CalPERS allowances to 75% of their original purchasing power (80 percent for public agencies).

(2) Adjustment category added in FY 2015 to accommodate manual claims and overpayment recoveries.

## PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

Program data – PERF – Average Benefit Payments – As of June 30, 2016 – 10-Year Review

Retirement Effective Dates	Years of Service Credit						
	0-5	6-10	11-15	16-20	21-25	26-30	31+
<b>2015-16</b>							
Average Monthly Allowance <sup>1</sup>	\$541	\$1,053	\$1,641	\$2,392	\$3,443	\$5,223	\$5,744
Average Final Compensation	\$5,942	\$5,130	\$5,282	\$5,728	\$6,361	\$7,565	\$7,307
Number of Recipients <sup>1</sup>	1,383	4,840	5,571	5,140	4,741	5,599	5,057
<b>2014-15</b>							
Average Monthly Allowance <sup>2</sup>	\$634	\$1,034	\$1,591	\$2,313	\$3,264	\$5,026	\$5,370
Average Final Compensation	\$6,024	\$5,028	\$5,131	\$5,625	\$6,227	\$7,503	\$7,081
Number of Recipients <sup>2</sup>	1,510	5,240	5,908	5,277	5,020	5,534	5,168
<b>2013-14</b>							
Average Monthly Allowance <sup>3</sup>	\$530	\$837	\$1,340	\$1,890	\$2,791	\$4,295	\$4,975
Average Final Compensation	\$5,923	\$4,680	\$4,782	\$5,041	\$5,643	\$6,680	\$6,720
Number of Recipients <sup>3</sup>	880	5,029	5,707	4,890	5,013	5,085	5,808
<b>2012-13</b>							
Average Monthly Allowance <sup>3</sup>	\$540	\$774	\$1,304	\$1,911	\$2,806	\$4,337	\$4,954
Average Final Compensation	\$6,098	\$4,537	\$4,758	\$5,127	\$5,651	\$6,692	\$6,686
Number of Recipients <sup>3</sup>	774	5,053	5,864	4,958	5,664	5,557	6,861
<b>2011-12</b>							
Average Monthly Allowance <sup>3</sup>	\$541	\$747	\$1,267	\$1,860	\$2,733	\$4,228	\$5,026
Average Final Compensation	\$6,104	\$4,442	\$4,679	\$5,037	\$5,722	\$6,587	\$6,700
Number of Recipients <sup>3</sup>	763	4,688	5,628	4,735	5,746	5,163	6,726
<b>2010-11</b>							
Average Monthly Allowance <sup>3</sup>	\$517	\$782	\$1,291	\$1,856	\$2,815	\$4,146	\$5,130
Average Final Compensation	\$6,442	\$4,508	\$4,739	\$4,927	\$5,606	\$6,500	\$6,741
Number of Recipients <sup>3</sup>	713	4,322	5,128	4,607	5,993	5,243	7,572
<b>2009-10</b>							
Average Monthly Allowance <sup>3</sup>	\$586	\$829	\$1,377	\$2,059	\$3,043	\$4,577	\$5,572
Average Final Compensation	\$6,806	\$4,460	\$4,760	\$5,153	\$5,819	\$6,738	\$7,076
Number of Recipients <sup>3</sup>	878	4,172	4,322	4,208	5,596	5,322	7,092
<b>2008-09</b>							
Average Monthly Allowance <sup>3</sup>	\$606	\$830	\$1,360	\$1,988	\$2,906	\$4,432	\$5,569
Average Final Compensation	\$6,519	\$4,378	\$4,680	\$4,982	\$5,641	\$6,574	\$7,013
Number of Recipients <sup>3</sup>	680	3,796	3,598	3,681	4,157	3,977	5,801
<b>2007-08</b>							
Average Monthly Allowance <sup>3</sup>	\$506	\$777	\$1,306	\$1,966	\$2,882	\$4,364	\$5,433
Average Final Compensation	\$6,138	\$4,358	\$4,518	\$4,970	\$5,587	\$6,472	\$6,864
Number of Recipients <sup>3</sup>	727	3,620	3,371	3,652	3,765	3,458	4,883
<b>2006-07</b>							
Average Monthly Allowance <sup>3</sup>	\$601	\$753	\$1,222	\$1,801	\$2,624	\$3,917	\$5,115
Average Final Compensation	\$6,125	\$4,294	\$4,356	\$4,632	\$5,182	\$5,925	\$6,539
Number of Recipients <sup>3</sup>	648	3,943	3,536	4,059	3,738	3,606	4,467

(1) These averages and totals are for retired members only.

(2) These averages and totals are for retired members and community property only.

(3) These averages and totals are for retired members, survivors, beneficiaries, and community property recipients.

## PUBLIC AGENCY EMPLOYERS

### CONTRACTS SUMMARY

On June 30, 2016, 1,582 public agency contracts provided retirement, death, and survivor benefits for participants of 57 county offices of education; 4 school district offices; 450 cities and towns; 37 counties; the State of California; and 1,033 districts and other public agencies. The 57 county offices of education contracts provide benefits for 1,439 school districts and charter schools, bringing the total number of public agency employers to 3,021.

During Fiscal Year 2015-16, two additional agencies contracted with CalPERS for retirement, death, and survivor benefits. The new contracting agencies are:

#### New Contracts

Effective Date	Public Agency	Misc. Member Formula	Safety Member Formula
10/1/2015	Hesperia Unified School District		2.7% @ 57
1/9/2016	Butte County Fair Association	2% @ 62	

#### Amendments

Public agency contracts vary depending upon the member categories covered, the formula the agency elects to provide, and the optional benefit provisions selected from the group of 41 benefits. These optional benefits may be provided at the time the original contract is established or they may be added later through the contract amendment process.

During Fiscal Year 2015-16, 53 contract amendments were completed.

### Two Years of Additional Service Credit – "Golden Handshake"

Contracting agencies may amend their contracts to provide additional service credit if there are impending mandatory transfers, layoffs, or demotions. Eligible employees who retire within a 90- to 180-day window period established by the employer receive two years additional service credit. The county offices of education may also contract for this benefit when there is an impending curtailment of, or change, in the manner of performing services, and their best interest would be served by granting the additional service credit. Once the contract is amended, the employer may establish additional window periods.

In Fiscal Year 2015-16, one public agency amended its contract to provide the two years of additional service credit.

#### Popular Benefit Amendments

Benefit	Number of Amendments
Cost-Sharing	43
Pre-Retirement Option 2W Death Benefit	1
Two-Year Additional Service Credit	1

#### Mergers

- San Bernardino Economic Development Agency merged into the Successor Agency to the Redevelopment Agency of the City of San Bernardino effective March 26, 2016.

#### Terminations

- Citrus Pest Control District No. 2 of Riverside County, effective November 1, 2015.
- Metro Gold Line Foothill Extension Construction Authority, effective December 31, 2015.
- Newport Beach City of Employees Federal Credit Union, effective April 21, 2016.

# PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Reciprocal Systems

Reciprocity is a valuable addition to the CalPERS benefit package. Its purpose is to encourage career public service, by allowing members to move between employers under different public retirement systems without losing their retirement and related benefits. The following retirement systems have reciprocity with CalPERS:

## Counties Under the County Employees' Retirement Law of 1937

- Alameda
- Contra Costa
- Fresno
- Imperial
- Kern
- Los Angeles
- Marin
- Mendocino
- Merced
- Orange
- Sacramento
- San Bernardino
- San Diego
- San Joaquin
- San Mateo
- Santa Barbara
- Sonoma
- Stanislaus
- Tulare
- Ventura

## The University of California Retirement Plan (UCRP)

## Reciprocal Public Retirement Systems

- Concord, City of
- Contra Costa Water District
- Costa Mesa, City of (safety only)
- East Bay Municipal Utility District
- East Bay Regional Park District (safety only)
- Fresno, City of
- Los Angeles City Employees' Retirement Plan
- Los Angeles County Metropolitan Transportation Authority (Non-Contract Employees' Retirement Income Plan)
- Oakland, City of (non-safety only)
- Pasadena, City of (fire and police only)
- Sacramento, City of
- San Clemente, City of (non-safety only)
- San Diego, City of
- San Francisco, City and County of
- San Jose, City of
- San Luis Obispo, County of

## Systems with Limited Reciprocity

- Judges' Retirement System
- Judges' Retirement System II
- Legislators' Retirement System
- California State Teachers' Retirement System

## PARTICIPATING PUBLIC AGENCIES BY TYPE

The following tables are counts of active participants, excluding retirees, sorted by public agency. In most cases, a participant is only counted once. A participant could be counted more than once if he/she were actively employed by more than one employer on the report effective date. An active member is currently employed by the State of California, a CalPERS contracting public agency, or a school district. Agencies that contract with CalPERS for retirement benefits and have zero participants were included.

For accounting purposes only, the PERF is comprised of and reported as three separate entities. PERF A is comprised of agent multiple-employer plans, which includes State of California and most public agency rate plans with more than 100 active members. PERF B is a cost-sharing multiple-employer plan of school employers consisting of non-teaching and non-certified employees. PERF C is a cost-sharing multiple-employer plan of public agency plans with generally fewer than 100 active members.

## Largest Participating Employers – Current Year

	2016
Employer	Number of Employees
State of California	257,960
Los Angeles County Office of Education	50,400
Los Angeles Unified School District	29,067
San Diego County Office of Education	28,475
Orange County Office of Education	25,311
San Bernardino County Office of Education	21,857
County of Riverside	21,323
Riverside County Office of Education	21,178
All Other	417,455
<b>Total Covered Employees</b>	<b>873,026</b>

## Largest Participating Employers – Nine-Years Prior

	2007
Employer	Number of Employees <sup>1</sup>
State of California	328,435
Los Angeles County Office of Education	78,227
Los Angeles Unified School District	42,295
San Diego County Office of Education	26,923
County of Riverside	22,830
Orange County Office of Education	22,506
County of Santa Clara	20,750
All Other	517,145
<b>Total Covered Employees</b>	<b>1,059,111</b>

(1) Number of Employees includes active and inactive members.



PUBLIC AGENCY EMPLOYERS (CONTINUED)

County Offices of Education (57)

	PERF B Active		PERF B Active
Alameda	12,459	Nevada	849
Alpine	33	Orange	25,311
Amador	361	Placer	3,567
Butte	3,096	Plumas	431
Calaveras	453	Riverside	21,323
Colusa	459	Sacramento	14,235
Contra Costa	8,356	San Benito	691
Del Norte	301	San Bernardino	21,857
El Dorado	2,059	San Diego	29,067
Fresno	11,529	San Joaquin	7,733
Glenn	531	San Luis Obispo	2,927
Humboldt	2,565	San Mateo	6,263
Imperial	2,610	Santa Barbara	4,318
Inyo	297	Santa Clara	14,347
Kern	12,843	Santa Cruz	2,944
Kings	1,712	Shasta	2,917
Lake	751	Sierra	51
Lassen	476	Siskiyou	879
Los Angeles	50,400	Solano	3,577
Madera	1,666	Sonoma	4,932
Marin	1,977	Stanislaus	7,228
Mariposa	175	Sutter	1,159
Mendocino	1,658	Tehama	1,165
Merced	3,738	Trinity	304
Modoc	244	Tulare	7,165
Mono	204	Tuolumne	508
Monterey	5,215	Ventura	8,150
Napa	1,664	Yolo	1,970
		Yuba	1,230
<b>Total</b>			<b>324,930</b>

School District Offices<sup>1</sup> (4)

	Active			Total
	PERF A	PERF B	PERF C	
Los Angeles Unified School District	395	28,080	—	28,475
Los Angeles Community College District	—	2,511	—	2,511
Los Angeles County Office of Education	1,734	—	—	1,734
San Diego County Office of Education	873	—	—	873
<b>Total</b>	<b>3,002</b>	<b>30,591</b>	<b>0</b>	<b>33,593</b>

(1) Agencies that contract with CalPERS as public agencies and are not reflected elsewhere in this report.

Counties (37 total)

	Active		Total
	PERF A	PERF C	
Alpine	—	94	94
Amador	281	92	373
Butte	2,277	—	2,277
Calaveras	414	82	496
Colusa	301	58	359
Del Norte	439	39	478
El Dorado	1,827	—	1,827
Glenn	417	23	440
Humboldt	1,965	—	1,965
Inyo	335	38	373
Kings	1,478	—	1,478
Lake	925	—	925
Lassen	373	59	432
Madera	1,326	—	1,326
Mariposa	309	69	378
Modoc	219	21	240
Mono	190	72	262
Monterey	5,076	—	5,076
Napa	1,328	108	1,436
Nevada	728	65	793
Placer	2,555	—	2,555
Plumas	366	34	400
Riverside	21,178	—	21,178
San Benito	384	79	463
San Joaquin	—	—	—
Santa Clara	16,956	—	16,956
Santa Cruz	2,226	—	2,226
Shasta	1,923	—	1,923
Sierra	—	113	113
Siskiyou	635	—	635
Solano	3,019	—	3,019
Sutter	982	—	982
Tehama	805	—	805
Trinity	258	57	315
Tuolumne	547	121	668
Yolo	1,557	—	1,557
Yuba	856	—	856
<b>Total</b>	<b>74,455</b>	<b>1,224</b>	<b>75,679</b>

## Statistical Section (continued)

### PUBLIC AGENCY EMPLOYERS (CONTINUED)

#### Cities & Towns (450)

City /Town	Active		Total	City /Town	Active		Total	City /Town	Active		Total
	PERF A	PERF C			PERF A	PERF C			PERF A	PERF C	
Adelanto	—	38	38	Calabasas	—	94	94	Del Mar	—	58	58
Agoura Hills	—	32	32	Calexico	—	150	150	Del Rey Oaks	—	11	11
Alameda	474	—	474	California City	—	111	111	Delano	—	56	56
Albany	—	77	77	Calimesa	—	10	10	Desert Hot Springs	—	54	54
Alhambra	416	—	416	Calipatria	—	11	11	Diamond Bar	—	54	54
Aliso Viejo	—	20	20	Calistoga	—	54	54	Dinuba	—	171	171
Alturas	—	23	23	Camarillo	135	—	135	Dixon	—	100	100
American Canyon	—	78	78	Campbell	144	39	183	Dos Palos	—	30	30
Anaheim	2,296	—	2,296	Canyon Lake	—	5	5	Downey	400	—	400
Anderson	—	58	58	Capitola	—	76	76	Duarte	—	47	47
Angels	—	53	53	Carlsbad	683	—	683	Dublin	—	90	90
Antioch	189	91	280	Carmel-By-The-Sea	—	78	78	Dunsmuir	—	11	11
Apple Valley	—	121	121	Carpinteria	—	31	31	East Palo Alto	—	105	105
Arcadia	311	—	311	Carson	416	—	416	Eastvale	—	18	18
Arcata	—	115	115	Cathedral City	—	168	168	El Cajon	409	—	409
Arroyo Grande	—	86	86	Cerritos	273	—	273	El Centro	199	90	289
Artesia	—	32	32	Chico	367	—	367	El Cerrito	—	179	179
Arvin	—	60	60	Chino	330	107	437	El Monte	275	—	275
Atascadero	—	136	136	Chowchilla	—	58	58	El Segundo	276	—	276
Atherton	—	46	46	Chula Vista	958	—	958	Elk Grove	—	310	310
Atwater	—	92	92	Citrus Heights	—	208	208	Emeryville	—	40	40
Auburn	—	68	68	Claremont	144	38	182	Encinitas	161	62	223
Avalon	—	67	67	Clayton	—	28	28	Escalon	—	29	29
Avenal	—	46	46	Clearlake	—	51	51	Escondido	837	—	837
Azusa	239	64	303	Cloverdale	—	47	47	Etna	—	18	18
Bakersfield	1,477	—	1,477	Clovis	593	—	593	Eureka	162	54	216
Baldwin Park	166	69	235	Coachella City	—	73	73	Exeter	—	46	46
Banning	131	27	158	Coalinga	—	126	126	Fairfax	—	35	35
Barstow	—	145	145	Colfax	—	8	8	Fairfield	564	—	564
Beaumont	—	118	118	Colma	—	46	46	Farmersville	—	34	34
Bell	—	105	105	Colton	220	80	300	Fillmore	—	36	36
Bell Gardens	—	183	183	Colusa	—	38	38	Firebaugh	—	36	36
Bellflower	—	91	91	Commerce	157	—	157	Folsom	421	—	421
Belmont	—	133	133	Compton	294	67	361	Fontana	741	—	741
Belvedere	—	19	19	Concord	408	—	408	Fort Bragg	—	56	56
Benicia	173	60	233	Corcoran	—	64	64	Fortuna	—	71	71
Berkeley	1,317	—	1,317	Corning	—	45	45	Fountain Valley	—	217	217
Beverly Hills	870	—	870	Corona	530	101	631	Fowler	—	30	30
Biggs	—	9	9	Coronado	206	70	276	Fremont	892	—	892
Bishop	—	37	37	Corte Madera	—	51	51	Fullerton	630	—	630
Blue Lake	—	11	11	Costa Mesa	443	70	513	Galt	122	35	157
Blythe	—	59	59	Cotati	—	39	39	Garden Grove	664	—	664
Bradbury	—	3	3	Covina	116	60	176	Gardena	351	95	446
Brawley	—	134	134	Crescent City	—	57	57	Gilroy	246	—	246
Brea	299	—	299	Cudahy	—	19	19	Glendale	1,731	—	1,731
Brentwood	206	65	271	Culver City	666	—	666	Glendora	153	53	206
Brisbane	—	97	97	Cupertino	185	—	185	Goleta	—	51	51
Buellton	—	24	24	Cypress	100	51	151	Gonzales	—	38	38
Buena Park	183	81	264	Daly City	486	—	486	Grand Terrace	—	41	41
Burbank	1,310	—	1,310	Dana Point	—	64	64	Grass Valley	—	79	79
Burlingame	185	38	223	Davis	258	99	357	Greenfield	—	56	56

## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Cities &amp; Towns (continued)

City /Town	Active		Total	City /Town	Active		Total	City /Town	Active		Total
	PERF A	PERF C			PERF A	PERF C			PERF A	PERF C	
Gridley	—	54	54	Lakewood	307	—	307	Moreno Valley	304	—	304
Grover Beach	—	59	59	Lancaster	329	—	329	Morgan Hill	178	40	218
Guadalupe	—	31	31	Larkspur	—	61	61	Morro Bay	—	87	87
Gustine	—	24	24	Lathrop	—	70	70	Mountain View	594	—	594
Half Moon Bay	—	21	21	Lawndale	—	66	66	Mt. Shasta	—	35	35
Hanford	204	90	294	Lemon Grove	—	69	69	Murrieta	—	248	248
Hawaiian Gardens	—	67	67	Lemoore	—	115	115	Napa	504	—	504
Hawthorne	192	86	278	Lincoln	—	147	147	National City	317	—	317
Hayward	814	—	814	Lindsay	—	82	82	Needles	—	50	50
Healdsburg	—	125	125	Live Oak	—	22	22	Nevada City	—	38	38
Hemet	273	—	273	Livermore	313	89	402	Newark	122	53	175
Hercules	—	73	73	Livingston	—	59	59	Newman	—	43	43
Hermosa Beach	—	174	174	Lodi	380	—	380	Newport Beach	784	—	784
Hesperia	—	110	110	Loma Linda	—	77	77	Norco	—	55	55
Hidden Hills	—	3	3	Lomita	—	42	42	Norwalk	236	—	236
Highland	—	37	37	Lompoc	303	74	377	Novato	155	60	215
Hillsborough	—	81	81	Long Beach	4,513	—	4,513	Oakdale	—	100	100
Hollister	—	164	164	Loomis	—	8	8	Oakland	3,864	—	3,864
Hughson	—	26	26	Los Alamitos	—	50	50	Oakley	—	71	71
Huntington Beach	979	—	979	Los Altos	—	125	125	Oceanside	866	—	866
Huntington Park	—	156	156	Los Altos Hills	—	18	18	Ojai	—	38	38
Imperial	—	68	68	Los Banos	—	151	151	Ontario	1,050	—	1,050
Imperial Beach	—	78	78	Los Gatos	116	39	155	Orange	613	—	613
Indian Wells	—	29	29	Lynwood	138	—	138	Orange Cove	—	48	48
Indio	177	64	241	Madera	202	57	259	Orland	—	37	37
Industry	—	22	22	Malibu	—	66	66	Oroville	—	112	112
Inglewood	631	—	631	Mammoth Lakes	—	66	66	Oxnard	1,216	103	1,319
Ione	—	18	18	Manhattan Beach	256	98	354	Pacific Grove	—	82	82
Irvine	908	—	908	Manteca	257	110	367	Pacifica	124	57	181
Irwindale	—	87	87	Marina	—	82	82	Palm Desert	113	—	113
Jackson	—	32	32	Martinez	—	51	51	Palm Springs	422	—	422
Kerman	—	68	68	Marysville	—	72	72	Palmdale	182	—	182
King City	—	31	31	Maywood	—	20	20	Palo Alto	1,011	—	1,011
Kingsburg	—	55	55	Menifee	—	71	71	Palos Verdes	—	65	65
La Canada Flintridge	—	37	37	Menlo Park	206	44	250	Paradise	—	64	64
La Habra	281	69	350	Merced	437	—	437	Paramount	—	97	97
La Habra Heights	—	15	15	Mill Valley	—	185	185	Parlier	—	34	34
La Mesa	250	—	250	Millbrae	—	92	92	Pasadena	1,774	—	1,774
La Mirada	—	74	74	Milpitas	331	—	331	Paso Robles	118	57	175
La Palma	—	56	56	Mission Viejo	149	—	149	Patterson	—	116	116
La Puente	—	28	28	Modesto	1,139	—	1,139	Perris	—	79	79
La Quinta	—	80	80	Monrovia	151	82	233	Petaluma	304	—	304
La Verne	—	163	163	Montague	—	6	6	Pico Rivera	141	—	141
Laguna Beach	163	93	256	Montclair	102	66	168	Piedmont	—	94	94
Laguna Hills	—	50	50	Monte Sereno	—	7	7	Pinole	—	85	85
Laguna Niguel	—	96	96	Montebello	458	—	458	Pismo Beach	—	120	120
Laguna Woods	—	7	7	Monterey	328	121	449	Pittsburg	179	82	261
Lake Elsinore	—	76	76	Monterey Park	320	—	320	Placentia	—	132	132
Lake Forest	—	71	71	Moorpark	—	60	60	Placerville	—	87	87
Lakeport	—	48	48	Moraga	—	35	35	Pleasant Hill	—	122	122

## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Cities &amp; Towns (continued)

City /Town	Active		Total	City /Town	Active		Total	City /Town	Active		Total
	PERF A	PERF C			PERF A	PERF C			PERF A	PERF C	
Pleasanton	449	79	528	San Mateo	525	—	525	Torrance	1,367	—	1,367
Pomona	519	—	519	San Pablo	—	134	134	Tracy	448	—	448
Port Hueneme	—	113	113	San Ramon	219	62	281	Truckee	—	104	104
Porterville	209	99	308	Sand City	—	22	22	Tulare	238	108	346
Portola	—	17	17	Sanger	—	99	99	Tulelake	—	10	10
Portola Valley	—	12	12	Santa Ana	1,020	—	1,020	Turlock	249	125	374
Poway	177	49	226	Santa Barbara	919	100	1,019	Tustin	196	89	285
Rancho Cordova	—	78	78	Santa Clara	931	—	931	Twentynine Palms	—	35	35
Rancho	539	—	539	Santa Clarita	400	—	400	Ukiah	149	45	194
Rancho Mirage	—	84	84	Santa Cruz	702	154	856	Union City	221	76	297
Rancho Palos	—	90	90	Santa Fe Springs	116	53	169	Upland	265	—	265
Rancho Santa	—	29	29	Santa Maria	388	164	552	Vacaville	484	—	484
Red Bluff	—	94	94	Santa Monica	2,252	—	2,252	Vallejo	486	—	486
Redding	775	—	775	Santa Paula	—	133	133	Vernon	264	—	264
Redlands	318	135	453	Santa Rosa	1,206	—	1,206	Victorville	371	1	372
Redondo Beach	467	—	467	Santee	—	123	123	Villa Park	—	7	7
Redwood City	618	—	618	Saratoga	—	57	57	Visalia	575	—	575
Reedley	—	108	108	Sausalito	—	64	64	Vista	226	72	298
Rialto	323	—	323	Scotts Valley	—	54	54	Walnut	—	48	48
Richmond	749	—	749	Seal Beach	—	89	89	Walnut Creek	346	81	427
Ridgecrest	—	107	107	Seaside	—	164	164	Wasco	—	62	62
Rio Vista	—	48	48	Sebastopol	—	48	48	Waterford	—	16	16
Ripon	—	23	23	Selma	—	92	92	Watsonville	287	105	392
Riverbank	—	60	60	Shafter	—	184	184	Weed	—	27	27
Riverside	2,138	—	2,138	Shasta Lake	—	43	43	West Covina	328	—	328
Rocklin	139	89	228	Sierra Madre	—	89	89	West Hollywood	213	—	213
Rohnert Park	151	67	218	Signal Hill	—	123	123	West Sacramento	273	126	399
Rolling Hills	—	5	5	Simi Valley	509	—	509	Westlake Village	—	15	15
Rolling Hills	—	20	20	Solana Beach	—	70	70	Westminster	134	84	218
Rosemead	—	64	64	Soledad	—	55	55	Whittier	376	—	376
Roseville	1,247	—	1,247	Solvang	—	34	34	Wildomar	—	16	16
Ross	—	19	19	Sonoma	—	47	47	Williams	—	29	29
Sacramento	4,159	—	4,159	Sonora	—	42	42	Willits	—	41	41
Salinas	432	91	523	South El Monte	—	51	51	Willows	—	28	28
San Anselmo	—	31	31	South Gate	248	80	328	Windsor	—	96	96
San Bernardino	920	—	920	South Lake Tahoe	149	68	217	Winters	—	48	48
San Bruno	167	78	245	South Pasadena	—	157	157	Woodlake	—	37	37
San Buenaventura	608	—	608	South San	435	—	435	Woodland	288	—	288
San Carlos	—	84	84	St. Helena	—	82	82	Woodside	—	17	17
San Clemente	169	6	175	Stanton	—	29	29	Yorba Linda	111	—	111
San Dimas	—	83	83	Stockton	1,495	—	1,495	Yountville	—	28	28
San Fernando	—	118	118	Suisun City	—	98	98	Yreka	—	54	54
San Francisco <sup>1</sup>	970	3	973	Sunnyvale	869	—	869	Yuba City	177	108	285
San Gabriel	—	170	170	Susanville	—	79	79	Yucaipa	—	45	45
San Jacinto	—	42	42	Sutter Creek	—	14	14	Yucca Valley	—	40	40
San Joaquin	—	14	14	Taft	—	153	153	<b>Total</b>	<b>96,391</b>	<b>24,008</b>	<b>120,399</b>
San Jose	—	10	10	Tehachapi	—	61	61	(1) San Francisco has both City and County employees; however it is listed only in the "total" count of the Cities & Towns category.			
San Leandro	277	90	367	Temecula	191	—	191				
San Luis Obispo	315	98	413	Temple City	—	47	47				
San Marcos	199	64	263	Thousand Oaks	345	—	345				
San Marino	—	119	119	Tiburon	—	36	36				

## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (1,033)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
Academic Senate for California Community Colleges	—	17	17	Associated Students of California State University, Chico	—	95	95
Access Services Incorporated	—	83	83	Association of Bay Area Governments	—	59	59
Agoura Hills and Calabasas Community Center	—	9	9	Association of California Water Agencies	—	38	38
Alameda Alliance for Health	250	—	250	Association of California Water Agencies - Joint Powers Insurance Authority	—	51	51
Alameda Corridor Transportation Authority	—	10	10	Association of Monterey Bay Area Governments	—	17	17
Alameda County Fire Department	341	69	410	Atascadero Cemetery District	—	3	3
Alameda County Law Library	—	10	10	Auburn Area Recreation and Park District	—	47	47
Alameda County Mosquito Abatement District	—	17	17	Auburn Public Cemetery District	—	5	5
Alameda County Schools Insurance Group	—	3	3	Avila Beach Community Services District	—	1	1
Alameda County Transportation Commission	—	27	27	Aztec Shops, Ltd.	—	45	45
Alameda County Waste Management Authority	—	37	37	Baldwin Park Unified School District	—	10	10
Alameda County Water District	216	—	216	Bard Water District	—	17	17
Albany Municipal Services Joint Powers	—	22	22	Bardsdale Cemetery District	—	4	4
Alhambra Redevelopment Agency	—	—	—	Barstow Cemetery District	—	3	3
Alliance of Schools for Cooperative Insurance Programs	—	32	32	Bay Area Air Quality Management District	330	—	330
Alpine Fire Protection District	—	17	17	Bay Area Water Supply and Conservation Agency	—	8	8
Alpine Springs County Water District	—	3	3	Beach Cities Health District	—	66	66
Alta California Regional Center, Inc.	398	—	398	Bear Mountain Recreation and Park District	—	6	6
Alta Irrigation District	—	25	25	Bear Valley Community Services District	—	43	43
Altadena Library District	—	22	22	Beaumont District Library	—	11	11
Amador County Transportation Commission	—	5	5	Beaumont-Cherry Valley Recreation and Park District	—	18	18
Amador Transit	—	24	24	Beaumont-Cherry Valley Water District	—	30	30
Amador Water Agency	—	44	44	Bella Vista Water District	—	26	26
American Canyon Fire Protection District	—	18	18	Belmont Fire Protection District	—	23	23
American River Flood Control District	—	7	7	Belmont-San Carlos Fire Department	—	1	1
Anderson Cemetery District	—	1	1	Belvedere-Tiburon Library Agency	—	21	21
Anderson Fire Protection District	—	15	15	Benicia City Housing Authority	—	8	8
Angiola Water District	—	8	8	Bennett Valley Fire Protection District	—	13	13
Antelope Valley Mosquito and Vector Control District	—	6	6	Berkeley Housing Authority	—	14	14
Antelope Valley Schools Transportation Agency	224	—	224	BETA Healthcare Group Risk Management Authority	—	56	56
Antelope Valley Transit Authority	—	41	41	Big Bear Area Regional Wastewater Agency	—	15	15
Apple Valley Fire Protection District	—	48	48	Big Bear City Airport District	—	5	5
Aptos/La Selva Fire Protection Agency	—	37	37	Big Bear City Community Services District	—	54	54
Arbuckle-College City Fire Protection District	—	3	3	Big Bear Municipal Water District	—	10	10
Arcade Creek Recreation and Park District	—	5	5	Bighorn-Desert View Water Agency	—	8	8
Arcata Fire Protection District	—	24	24	Black Gold Cooperative Library System	—	6	6
Area 12 Agency on Aging	—	15	15	Blanchard/Santa Paula Public Library District	—	7	7
Armona Community Services District	—	—	—	Blue Lake Fire Protection District	—	1	1
Aromas Water District	—	5	5	Bodega Bay Fire Protection District	—	14	14
Arrowbear Park County Water District	—	5	5	Bolinas Community Public Utility District	—	6	6
Arroyo Grande District Cemetery	—	3	3	Bolinas Fire Protection District	—	2	2
Associated Students California State University San Bernardino	—	2	2	Bonita-Sunnyside Fire Protection District	—	13	13
Associated Students Incorporated of California State University East Bay	—	6	6	Boron Community Services District	—	5	5
Associated Students Incorporated of California State University Stanislaus	—	6	6	Borrego Springs Fire Protection District	—	21	21
				Borrego Water District	—	10	10

## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
Boulder Creek Fire Protection District	—	1	1	California Interscholastic Federation, Southern Section	—	17	17
Branciforte Fire Protection District	—	4	4	California Interscholastic Federation, State Office	—	10	10
Brannan-Andrus Levee Maintenance District	—	2	2	California Joint Powers Insurance Authority	—	26	26
Broadmoor Police Protection District	—	8	8	California Joint Powers Risk Management Authority	—	5	5
Brooktrails Township Community Services District	—	13	13	California Maritime Academy Foundation, Inc.	—	—	—
Browns Valley Irrigation District	—	13	13	California Municipal Utilities Association	—	6	6
Buena Park Library District	—	19	19	California Pines Community Services District	—	16	16
Burney Basin Mosquito Abatement District	—	1	1	California Redevelopment Association Foundation	—	4	4
Burney Fire District	—	8	8	California School Boards Association	—	85	85
Burney Water District	—	7	7	California Special Districts Association	—	24	24
Butte County Air Quality Management District	—	11	11	California State and Federal Employees No. 20 Credit Union	—	6	6
Butte County Association of Governments	—	11	11	California State University, Bakersfield Foundation	—	11	11
Butte County Fair Association	—	3	3	California State University, East Bay Foundation Inc.	—	3	3
Butte County In-Home Supportive Services Public Authority	—	3	3	California State University, Fresno Athletic Corporation	—	50	50
Butte County Mosquito and Vector Control District	—	19	19	California State University, Stanislaus Auxiliary and Business Services	—	—	—
Butte Local Agency Formation Commission	—	4	4	California State University-Fresno Association, Inc.	—	84	84
Butte Schools Self-Funded Programs	—	2	2	Callayomi County Water District	—	5	5
Butte-Glenn Community College District	—	4	4	Calleguas Municipal Water District	—	65	65
Byron-Bethany Irrigation District	—	8	8	Camarillo Health Care District	—	21	21
Cabrillo College Foundation	—	9	9	Cambria Cemetery District	—	1	1
Cachuma Operation and Maintenance Board	—	12	12	Cambria Community Healthcare District	—	32	32
Cal Poly Corporation	316	—	316	Cambria Community Services District	—	38	38
Cal Poly Pomona Foundation, Inc.	—	225	225	Cameron Park Community Services District	—	8	8
Calaveras Council of Governments	—	6	6	Camrosa Water District	—	23	23
Calaveras County Water District	—	65	65	Capitol Area Development Authority	—	38	38
Calaveras Public Utility District	—	8	8	Carmel Area Wastewater District	—	23	23
California Association for Park and Recreation Indemnity	—	5	5	Carmel Highlands Fire Protection District of Monterey County	—	—	—
California Authority of Racing Fairs	—	6	6	Carmel Regional Fire Ambulance Authority	—	1	1
California Bear Credit Union	—	22	22	Carmichael Water District	—	25	25
California Central Valley Flood Control Association	—	2	2	Carpinteria Sanitary District	—	17	17
California Fair Services Authority	—	29	29	Carpinteria Valley Water District	—	26	26
California Fairs Financing Authority	—	—	—	Casitas Municipal Water District	—	53	53
California Firefighter's Joint Apprenticeship Committee	—	26	26	Castaic Lake Water Agency	—	121	121
California Interscholastic Federation, Central Coast Section	—	5	5	Castro Valley Sanitary District	—	20	20
California Interscholastic Federation, Central Section	—	3	3	Castroville Community Services District	—	5	5
California Interscholastic Federation, North Coast Section	—	6	6	Cawelo Water District	—	17	17
California Interscholastic Federation, Northern Section	—	1	1	Cayucos Sanitary District	—	7	7
California Interscholastic Federation, Sac-Joaquin Section	—	6	6	Cayucos-Morro Bay Cemetery District	—	3	3
California Interscholastic Federation, San Diego Section	—	5	5	Centerville Community Services District	—	7	7
				Central Basin Municipal Water District	—	25	25



## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
Central Calaveras Fire and Rescue Protection District	—	5	5	Community Development Commission of Mendocino County	—	22	22
Central Coast Computing Authority	—	—	—	Community Development Commission of the County of Los Angeles	548	—	548
Central Coast Water Authority	—	29	29	Compton Creek Mosquito Abatement District	—	1	1
Central Contra Costa Solid Waste Authority	—	6	6	Compton Unified School District	—	21	21
Central Contra Costa Transit Authority	266	—	266	Conejo Recreation and Park District	155	—	155
Central County Fire Department	—	85	85	Consolidated Mosquito Abatement District	—	24	24
Central Fire Protection District of Santa Cruz County	—	56	56	Contra Costa Community College District	—	22	22
Central Marin Police Authority	—	49	49	Contra Costa County Law Library	—	3	3
Central Marin Sanitation Agency	—	44	44	Contra Costa County Schools Insurance Group	—	31	31
Central Sierra Child Support Agency	—	43	43	Contra Costa Transportation Authority	—	20	20
Central Sierra Planning Council	—	—	—	Cooperative Organization for the Development of Employee Selection Procedures	—	7	7
Central Valley Regional Center, Inc.	397	—	397	Cooperative Personnel Services	223	—	223
Central Water District	—	3	3	Copperopolis Fire Protection District	—	14	14
Chester Public Utility District	—	14	14	Cordelia Fire Protection District of Solano County	—	4	4
Chico Area Recreation and Park District	—	75	75	Cordova Recreation and Park District	—	51	51
Children and Families Commission of San Luis Obispo County	—	3	3	Corning Water District	—	3	3
Chino Basin Water Conservation District	—	15	15	Costa Mesa Sanitary District	—	18	18
Chino Basin Watermaster	—	8	8	Cosumnes Community Services District	363	—	363
Chino Valley Independent Fire District	—	134	134	Cottonwood Fire Protection District	—	2	2
Citrus Heights Water District	—	30	30	Cottonwood Water District	—	3	3
City/County Association of Governments of San Mateo County	—	2	2	CRA/LA, a Designated Local Authority	—	18	18
Clear Creek Community Services District	—	13	13	Crescent City Harbor District	—	8	8
Clearlake Oaks County Water District	—	16	16	Crescenta Valley Water District	—	35	35
Cloverdale Citrus Fair	—	3	3	Crestline Lake Arrowhead Water Agency	—	11	11
Cloverdale Fire Protection District	—	5	5	Crestline Village Water District	—	14	14
Clovis Cemetery District	—	11	11	Crockett Community Services District	—	4	4
Coachella Valley Association of Governments	—	17	17	CSAC Excess Insurance Authority	—	62	62
Coachella Valley Mosquito and Vector Control District	—	55	55	Cucamonga Valley Water District	126	—	126
Coachella Valley Public Cemetery District	—	8	8	Cutler Public Utility District	—	5	5
Coachella Valley Water District	536	—	536	Cutler-Orosi Joint Powers Wastewater Authority	—	4	4
Coalinga/Huron Unified School District Library District	—	12	12	Cuyama Valley Recreation District	—	2	2
Coalinga-Huron Cemetery District	—	6	6	Dairy Council of California	—	39	39
Coalinga-Huron Recreation and Park District	—	14	14	Davis Cemetery District	—	4	4
Coast Life Support District	—	13	13	De Luz Community Services District	—	6	6
Coastal Developmental Services Fdn DBA Westside Regional Center	215	—	215	Del Norte County Library District	—	4	4
Coastside County Water District	—	19	19	Del Paso Manor Water District	—	4	4
Coastside Fire Protection District	—	—	—	Del Puerto Water District	—	5	5
Colfax Cemetery District	—	2	2	Del Rey Community Services District	—	6	6
College of the Canyons Foundation	—	1	1	Delano Mosquito Abatement District	—	7	7
College Town	—	—	—	Delta Diablo	—	74	74
Colusa County One-Stop Partnership	—	13	13	Delta Vector Control District	—	15	15
Colusa Mosquito Abatement District	—	2	2	Denair Community Services District	—	7	7
Community College League of California	—	18	18	Desert Water Agency	—	75	75
				Diablo Water District	—	13	13
				Diamond Springs/El Dorado Fire Protection District	—	26	26
				Dixon Public Library District	—	16	16



## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
Donald P. And Katherine B. Loker University Student Union, Inc.	—	14	14	Foothill Municipal Water District	—	10	10
Dougherty Regional Fire Authority	—	—	—	Foresthill Public Utility District	—	10	10
Downey Cemetery District	—	—	—	Forestville Fire Protection District	—	12	12
Dublin San Ramon Services District	—	111	111	Forestville Water District	—	4	4
Durham Mosquito Abatement District	—	1	1	Fort Bragg Fire Protection Authority	—	4	4
East Bay Dischargers Authority	—	3	3	Fort Ord Reuse Authority	—	14	14
East Bay Regional Park District	584	74	658	Foundation for California Community Colleges	—	129	129
East Contra Costa Irrigation District	—	18	18	Fresno City Housing Authority	113	—	113
East County Schools Federal Credit Union	—	16	16	Fresno County Housing Authority	111	—	111
East Orange County Water District	—	6	6	Fresno County Law Library	—	3	3
East Palo Alto Sanitary District	—	8	8	Fresno Westside Mosquito Abatement District	—	9	9
East Quincy Services District	—	5	5	Fruitridge Fire Protection District	—	—	—
East San Gabriel Valley Human Services Consortium	—	6	6	Fullerton California State University Associated Students	—	60	60
East Valley Water District	—	68	68	Fulton-El Camino Recreation and Park District	—	10	10
Eastern Municipal Water District	611	—	611	Garden Valley Fire Protection District	—	20	20
Eastern Sierra Transit Authority	—	49	49	Georgetown Divide Public Utility District	—	22	22
Ebbetts Pass Fire Protection District	—	25	25	Georgetown Divide Resource Conservation District	—	2	2
El Dorado County Fire Protection District	—	68	68	Georgetown Fire Protection District	—	14	14
El Dorado County Resource Conservation District	—	2	2	Gilsizer County Drainage District	—	3	3
El Dorado County Transit Authority	—	68	68	Glen Ellen Fire Protection District	—	14	14
El Dorado County Transportation Commission	—	6	6	Glendale College, Associated Students of	—	1	1
El Dorado Hills Community Services District	—	37	37	Glendale Community College District	—	6	6
El Dorado Hills County Water District	—	67	67	Glenn County Mosquito and Vector Control District	—	2	2
El Dorado Irrigation District	209	—	209	Gold Coast Transit	203	—	203
El Dorado Local Agency Formation Commission	—	3	3	Gold Ridge Fire Protection District	—	27	27
Encina Wastewater Authority	—	66	66	Gold Ridge Resource Conservation District	—	7	7
Esparto Community Services District	—	4	4	Golden Gate Bridge Highway and Transportation District	454	—	454
Esparto Fire Protection District	—	2	2	Golden Hills Community Services District	—	13	13
Estero Municipal Improvement District	133	64	197	Golden Sierra Job Training Agency	—	15	15
Exeter District Ambulance	—	32	32	Goleta Sanitary District	—	33	33
Exposition Metro Line Construction Authority	—	10	10	Goleta Water District	—	70	70
Fair Oaks Recreation & Park District	—	16	16	Goleta West Sanitary District	—	7	7
Fair Oaks Water District	—	27	27	Granada Sanitary District	—	2	2
Fairfield-Suisun Sewer District	—	57	57	Great Basin Unified Air Pollution Control District	—	23	23
Fall River Valley Community Services District	—	6	6	Greater Anaheim Special Education Local Plan Area	—	81	81
Fallbrook Public Utility District	—	70	70	Greater Los Angeles County Vector Control District	—	72	72
Far Northern Coordinating Council on Developmental Disabilities	179	—	179	Greater Vallejo Recreation District	—	86	86
Feather River Air Quality Management District	—	9	9	Green Valley County Water District	—	3	3
Feather River Recreation and Park District	—	16	16	Greenfield Fire Protection District	—	7	7
Feather Water District	—	3	3	Gridley Biggs Cemetery District	—	3	3
Felton Fire Protection District	—	2	2	Grossmont Healthcare District	—	6	6
Fern Valley Water District	—	4	4	Grossmont-Cuyamaca Community College District Auxiliary Organization	—	61	61
Florin County Water District	—	13	13	Groveland Community Services District	—	16	16
Florin Resource Conservation District Elk Grove Water District	—	38	38	Gualala Community Services District	—	4	4
Fontana Unified School District	—	18	18				

## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
Hacienda La Puente Unified School District	—	6	6	Humboldt Transit Authority	—	51	51
Hamilton Branch Fire Protection District	—	—	—	Humboldt Waste Management Authority	—	45	45
Happy Camp Sanitary District	—	—	—	Idyllwild Fire Protection District	—	9	9
Happy Homestead Cemetery District	—	3	3	Independent Cities Association, Inc.	—	—	—
Happy Valley Fire District	—	3	3	Indian Wells Valley Water District	—	29	29
Hayward Area Recreation and Park District	131	—	131	Inland Counties Regional Center, Inc.	628	—	628
Health Plan of San Joaquin	—	284	284	Inland Empire Health Plan	1,611	—	1,611
Heartland Communications Facility Authority	—	17	17	Inland Empire Resource Conservation District	—	7	7
Heber Public Utility District	—	15	15	Inland Empire Utilities Agency	283	—	283
Helendale Community Services District	—	18	18	Intelecom Intelligent Telecommunications	—	10	10
Helix Water District	142	—	142	Intergovernmental Training and Development Center	—	7	7
Henry Miller Reclamation District No. 2131	—	28	28	Inverness Public Utility District	—	5	5
Herald Fire Protection District	—	2	2	Ironhouse Sanitary District	—	27	27
Heritage Ranch Community Services District	—	8	8	Irvine Child Care Project	—	—	—
Herlong Public Utility District	—	5	5	Irvine Ranch Water District	361	—	361
Hesperia Fire Protection District	—	—	—	Isla Vista Recreation and Park District	—	11	11
Hesperia Unified School District	—	6	6	Jackson Valley Irrigation District	—	3	3
Hesperia Water District	—	58	58	Jamestown Sanitary District	—	3	3
Hidden Valley Lake Community Services District	—	11	11	Janesville Fire Protection District	—	—	—
Hi-Desert Water District	—	41	41	Joshua Basin Water District	—	22	22
Higgins Area Fire Protection District	—	27	27	June Lake Public Utility District	—	6	6
Hilton Creek Community Services District	—	2	2	Jurupa Area Recreation and Park District	—	19	19
Hopland Public Utility District	—	—	—	Jurupa Community Services District	—	175	175
Housing Authority of the City of Alameda	—	52	52	Kaweah Delta Water Conservation District	—	21	21
Housing Authority of the City of Calexico	—	16	16	Kelseyville Fire Protection District	—	35	35
Housing Authority of the City of Eureka	—	25	25	Kensington Community Services District	—	10	10
Housing Authority of the City of Livermore	—	14	14	Kentfield Fire Protection District	—	19	19
Housing Authority of the City of Los Angeles	757	—	757	Kenwood Fire Protection District	—	8	8
Housing Authority of the City of Madera	—	29	29	Kern County Council of Governments	—	21	21
Housing Authority of the City of San Buenaventura	—	58	58	Kern County Law Library	—	4	4
Housing Authority of the City of San Luis Obispo	—	45	45	Kern County Local Agency Formation	—	2	2
Housing Authority of the City of South San Francisco	—	4	4	Kern Health Systems	—	340	340
Housing Authority of the County of Butte	—	32	32	Kern River Valley Cemetery District	—	2	2
Housing Authority of the County of Kern	141	—	141	Kern-Tulare Water District	—	7	7
Housing Authority of the County of Santa Clara	129	—	129	Kettleman City Community Services District	—	4	4
Housing Authority of the County of Santa Cruz	—	54	54	Kings County Area Public Transit Agency	—	9	9
Hub Cities Consortium	—	28	28	Kings County Association of Governments	—	7	7
Human Rights/Fair Housing Commission of the City and County of Sacramento	—	19	19	Kings County In-Home Supportive Services Public Authority	—	5	5
Humboldt Bay Fire Joint Powers Authority	—	58	58	Kings Mosquito Abatement District	—	16	16
Humboldt Bay Harbor Recreation and Conservation District	—	15	15	Kings Waste and Recycling Authority	—	40	40
Humboldt Bay Municipal Water District	—	31	31	Kinneloa Irrigation District	—	4	4
Humboldt Community Services District	—	21	21	Kirkwood Meadows Public Utility District	—	21	21
Humboldt County Association of Governments	—	5	5	Konocti County Water District	—	11	11
Humboldt State University Center Board of Directors	—	49	49	La Branza Water District	—	—	—
				La Habra Heights County Water District	—	10	10
				La Puente Valley County Water District	—	15	15
				Laguna Beach County Water District	—	41	41
				Lake Arrowhead Community Services District	—	54	54

## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
Lake County Fire Protection District	—	38	38	Los Gatos-Saratoga Department of Community Education and Recreation	—	46	46
Lake County Vector Control District	—	10	10	Los Osos Community Services District	—	18	18
Lake Don Pedro Community Services District	—	6	6	Lower Lake Cemetery District	—	2	2
Lake Hemet Municipal Water District	—	53	53	Lower Lake County Waterworks District No. 1	—	5	5
Lake Oroville Area Public Utility District	—	9	9	Lower Tule River Irrigation District	—	25	25
Lake Shastina Community Services District	—	9	9	Madera Cemetery District	—	19	19
Lake Valley Fire Protection District	—	62	62	Madera County Mosquito and Vector Control District	—	10	10
Lakeport County Fire Protection District	—	23	23	Main San Gabriel Basin Watermaster	—	8	8
Lakeside Fire Protection District	—	51	51	Majestic Pines Community Services District	—	3	3
Lakeside Water District	—	12	12	Mammoth Lakes Fire District	—	18	18
Lamont Public Utility District	—	8	8	Mammoth Lakes Mosquito Abatement District	—	—	—
Las Gallinas Valley Sanitary District of Marin County	—	20	20	Management of Emeryville Services Authority	—	111	111
Las Virgenes Municipal Water District	114	—	114	March Joint Powers Authority	—	18	18
Lassen County Waterworks District No. 1	—	1	1	Marin Children and Families Commission	—	2	2
League of California Cities	—	75	75	Marin Community College District	—	5	5
Leucadia Wastewater District	—	20	20	Marin County Housing Authority	—	37	37
Levee District No. 1 of Sutter County	—	3	3	Marin County In-Home Supportive Services Public Authority	—	3	3
Linda County Water District	—	12	12	Marin Healthcare District	—	—	—
Linda Fire Protection District	—	17	17	Marin Municipal Water District	230	—	230
Linden-Peters Rural County Fire Protection District	—	14	14	Marina Coast Water District	—	38	38
Lindsay Strathmore Public Cemetery District	—	6	6	Marinwood Community Services District	—	20	20
Little Lake Fire Protection District	—	4	4	Mariposa Public Utility District	—	6	6
Littlerock Creek Irrigation District	—	6	6	Maxwell Public Utility District	—	3	3
Live Oak Cemetery District	—	3	3	McCloud Community Services District	—	7	7
Livermore/Amador Valley Transit Authority	—	15	15	McFarland Recreation and Park District	—	12	12
Local Agency Formation Commission of Monterey County	—	3	3	McKinleyville Community Services District	—	26	26
Local Agency Formation Commission of Solano County	—	1	1	Meeks Bay Fire Protection District	—	6	6
Local Government Services Authority, a Joint Powers Authority	—	18	18	Meiners Oaks County Water District	—	5	5
Lompico County Water District	—	5	5	Mendocino City Community Services District	—	4	4
Long Beach City College Associated Student Body Enterprises	—	1	1	Mendocino County Russian River Flood Control & Water Conservation Improvement Dt	—	1	1
Long Beach State University, Associated Students	—	71	71	Mendocino Transit Authority	—	58	58
Long Beach State University, Forty-Niner Shops, Inc.	—	57	57	Menlo Park Fire Protection District	—	115	115
Loomis Fire Protection District	—	15	15	Merced County Housing Authority	—	35	35
Los Alamos Community Services District	—	5	5	Merced County Mosquito Abatement District	—	14	14
Los Angeles County Area 'E' Civil Defense and Disaster Board	—	2	2	Merced Irrigation District	158	—	158
Los Angeles County Law Library	—	37	37	Mesa Water District	—	49	49
Los Angeles County Sanitation District No. 2	1,644	—	1,644	Metropolitan Transportation Commission	218	—	218
Los Angeles County West Vector Control District	—	32	32	Metropolitan Water District of Southern California	1,780	—	1,780
Los Angeles Memorial Coliseum Commission	—	1	1	Midpeninsula Regional Open Space District	—	137	137
Los Angeles Regionalized Insurance Services Authority	—	—	—	Mid-Peninsula Water District	—	18	18
				Mid-Placer Public Schools Transportation Agency	—	33	33
				Midway City Sanitary District	—	26	26
				Midway Heights County Water District	—	4	4
				Millview County Water District	—	—	—
				Minter Field Airport District	—	12	12

## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
Mission Springs Water District	—	36	36	Newcastle, Rocklin, Gold Hill Cemetery District	—	7	7
Mojave Air and Space Port	—	19	19	Newhall County Water District	—	30	30
Mojave Water Agency	—	38	38	Niland Sanitary District	—	2	2
Mokelumne Rural Fire District	—	10	10	Nipomo Community Services District	—	17	17
Monte Vista County Water District	—	32	32	North Bay Cooperative Library System	—	3	3
Montecito Fire Protection District	—	48	48	North Bay Regional Center	196	—	196
Montecito Sanitary District of Santa Barbara County	—	15	15	North Bay Schools Insurance Authority	—	27	27
Montecito Water District	—	23	23	North Central Counties Consortium	—	5	5
Monterey Bay Unified Air Pollution Control District	—	31	31	North Coast County Water District	—	20	20
Monterey County Regional Fire Protection District	—	60	60	North Coast Railroad Authority	—	2	2
Monterey County Water Resources Agency	—	37	37	North Coast Unified Air Quality Management	—	14	14
Monterey Peninsula Airport District	—	33	33	North County Dispatch Joint Powers Authority	—	28	28
Monterey Peninsula Regional Park District	—	14	14	North County Fire Protection District of Monterey County	—	42	42
Monterey Peninsula Water Management District	—	25	25	North County Fire Protection District of San Diego County	—	79	79
Monterey Regional Waste Management District	107	—	107	North County Transit District	152	—	152
Monterey Regional Water Pollution Control Agency	—	79	79	North Delta Water Agency	—	2	2
Monterey-Salinas Transit District	245	—	245	North Kern Cemetery District	—	7	7
Montezuma Fire Protection District	—	15	15	North Kern Water Storage District	—	36	36
Morongo Basin Transit Authority	—	42	42	North Kern-South Tulare Hospital District	185	—	185
Mother Lode Job Training Agency	—	17	17	North Los Angeles County Regional Center, Inc.	412	—	412
Moulton-Niguel Water District	—	123	123	North Marin Water District	—	51	51
Mountains Recreation and Conservation Authority	—	136	136	North of the River Municipal Water District	—	—	—
Mountain-Valley Library System	—	—	—	North of the River Recreation and Park District	139	—	139
Mt. San Antonio College Auxiliary Services	—	9	9	North State Cooperative Library System	—	—	—
Mt. View Sanitary District of Contra Costa County	—	14	14	North Tahoe Fire Protection District	—	65	65
Municipal Pooling Authority	—	13	13	North Tahoe Public Utility District	—	52	52
Municipal Water District of Orange County	—	30	30	Northern California Power Agency	151	—	151
Murphys Sanitary District	—	4	4	Northern California Special Districts Insurance Authority	—	1	1
Murrieta Fire Protection District	—	50	50	Northern Salinas Valley Mosquito Abatement District	—	8	8
Murrieta Valley Cemetery District	—	6	6	Northern Sierra Air Quality Management District	—	6	6
Napa County Mosquito Abatement District	—	8	8	Northshore Fire Protection District	—	44	44
Napa County Resource Conservation District	—	10	10	Northstar Community Services District	—	38	38
Napa County Transportation and Planning Agency	—	12	12	Northwest Mosquito and Vector Control District	—	20	20
Napa Sanitation District	—	47	47	Novato Sanitary District	—	18	18
National Orange Show	—	54	54	Oakdale Irrigation District	—	68	68
Natomas Fire Protection District	—	—	—	Oakdale Rural Fire Protection District	—	—	—
Nevada Cemetery District	—	4	4	Oakland City Housing Authority	290	30	320
Nevada County Consolidated Fire District	—	43	43	Oakland Unified School District	—	23	23
Nevada County Local Agency Formation Commission	—	3	3	Oceano Community Services District	—	10	10
Nevada County Resource Conservation District	—	3	3	Ojai Valley Sanitary District	—	20	20
Nevada Irrigation District	190	—	190	Olcese Water District	—	—	—
Nevada-Sierra Regional IHSS Public Authority	—	19	19	Olivenhain Municipal Water District	—	81	81
				Omnitrans	669	—	669
				Ophir Hill Fire Protection District	—	14	14
				Orange County Health Authority	1,112	—	1,112
				Orange County Transportation Authority	—	2	2

## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
Orange County Vector Control District	—	68	68	Plumas Local Agency Formation Commission	—	—	—
Orchard Dale Water District	—	9	9	Pomerado Cemetery District	—	5	5
Orland Cemetery District	—	3	3	Pomona Valley Transportation Authority	—	3	3
Oro Loma Sanitary District	—	41	41	Pomona, Calif State Polytechnic University, Associated Students, Inc.	—	60	60
Orosi Public Utility District	—	4	4	Port of Oakland	—	—	—
Oroville Cemetery District	—	7	7	Port San Luis Harbor District	—	28	28
Oroville Mosquito Abatement District	—	1	1	Porter Vista Public Utility District	—	1	1
Otay Water District	132	—	132	Porterville Irrigation District	—	1	1
Oxnard Harbor District	—	29	29	Porterville Public Cemetery District	—	10	10
Pacific Fire Protection District	—	—	—	Public Agency Risk Sharing Authority of California	—	5	5
Padre Dam Municipal Water District	129	—	129	Public Cemetery District No. 1 of Kern County	—	7	7
Pajaro Valley Fire Protection Agency	—	—	—	Public Entity Risk Management Authority	—	5	5
Pajaro Valley Public Cemetery District	—	7	7	Public Transportation Services Corporation	2,122	—	2,122
Pajaro Valley Water Management Agency	—	14	14	Pupil Transportation Cooperative	131	—	131
Palm Ranch Irrigation District	—	4	4	Purissima Hills Water District	—	8	8
Palmdale Water District	—	84	84	Quartz Hill Water District	—	12	12
Palo Verde Valley District Library	—	5	5	Quincy Community Services District	—	8	8
Palos Verdes Library District	—	51	51	Rainbow Municipal Water District	—	54	54
Paradise Recreation and Park District	—	25	25	Ramona Municipal Water District	—	45	45
Pasadena City College Bookstore	—	9	9	Rancho Adobe Fire Protection District	—	33	33
Paso Robles City Housing Authority	—	14	14	Rancho California Water District	136	—	136
Patterson Irrigation District	—	13	13	Rancho Cucamonga Fire Protection District	—	116	116
Pauma Valley Community Services District	—	18	18	Rancho Murieta Community Services District	—	38	38
Peardale Chicago Park Fire Protection District	—	3	3	Rancho Santa Fe Fire Protection District	—	75	75
Pebble Beach Community Services District	—	11	11	Rancho Santiago Community College Associated Students	—	—	—
Peninsula Fire Protection District	—	13	13	Rancho Simi Recreation & Park District	254	—	254
Peninsula Health Care District	—	3	3	Reclamation District No. 1000	—	11	11
Peninsula Traffic Congestion Relief Alliance	—	9	9	Reclamation District No. 1001	—	10	10
Penn Valley Fire Protection District	—	19	19	Reclamation District No. 1660	—	—	—
Personal Assistance Services Council	—	27	27	Reclamation District No. 3	—	2	2
Phelan Pinon Hills Community Services District	—	28	28	Reclamation District No. 833	—	2	2
Pico Water District	—	11	11	Reclamation District No. 999	—	4	4
Pine Cove Water District	—	4	4	Red Bluff Cemetery District	—	3	3
Pine Grove Mosquito Abatement District	—	1	1	Redwood Coast Regional Center	—	105	105
Pinedale County Water District	—	7	7	Redwood Empire Municipal Insurance Fund	—	11	11
Pioneer Cemetery District	—	3	3	Redwood Empire School Insurance Group	—	26	26
Pixley Irrigation District	—	4	4	Reedley Cemetery District	—	6	6
Placer County Cemetery District No. 1	—	6	6	Regional Center of Orange County	457	—	457
Placer County Resource Conservation District	—	3	3	Regional Center of the East Bay	366	—	366
Placer County Transportation Planning Agency	—	7	7	Regional Housing Authority of Sutter and Nevada Counties	—	36	36
Placer County Water Agency	205	—	205	Regional Water Authority	—	6	6
Placer Hills Fire Protection District	—	37	37	Rescue Fire Protection District	—	12	12
Placer Mosquito and Vector Control District	—	19	19	Resort Improvement District No. 1	—	13	13
Planning and Service Area II Area Agency on Aging	—	11	11	Resource Conservation District of the Santa Monica Mountains	—	17	17
Pleasant Hill - Martinez Joint Facilities Agency	—	82	82	Richardson Bay Sanitary District	—	4	4
Pleasant Hill Recreation and Park District	—	52	52	Rincon Del Diablo Municipal Water District	—	18	18
Pleasant Valley County Water District	—	4	4				
Pleasant Valley Recreation and Park District	—	47	47				
Plumas Eureka Community Services District	—	4	4				



## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
Rincon Valley Fire Protection District	—	22	22	San Bernardino County Transportation Authority	—	—	—
Rio Alto Water District	—	7	7	San Bernardino Valley Municipal Water District	—	21	21
Rio Linda Elverta Community Water District	—	11	11	San Bernardino Valley Water Conservation District	—	6	6
Rio Vista-Montezuma Cemetery District	—	4	4	San Diego Association of Governments	348	—	348
Riverbank City Housing Authority	—	1	1	San Diego County Law Library	—	16	16
Riverside County Air Pollution Control District	—	—	—	San Diego County Water Authority	239	—	239
Riverside County Flood Control and Water Conservation District	230	—	230	San Diego Metropolitan Transit System	—	157	157
Riverside County Law Library	—	12	12	San Diego Pooled Insurance Program Authority	—	—	—
Riverside County Regional Park and Open Space District	—	180	180	San Diego State University Associated Students	—	35	35
Riverside County Transportation Commission	—	43	43	San Diego Trolley, Inc.	524	—	524
Riverside County Waste Resources Management District	—	21	21	San Diego Unified School District	—	41	41
Riverside Transit Agency	425	—	425	San Dieguito Water District	—	23	23
Rosamond Community Services District	—	24	24	San Elijo Joint Powers Authority	—	19	19
Rose Bowl Operating Company	—	32	32	San Francisco Bay Area Rapid Transit District	3,553	—	3,553
Rosedale-Rio Bravo Water Storage District	—	7	7	San Francisco Bay Area Water Emergency Transportation Authority	—	12	12
Roseville Public Cemetery District	—	8	8	San Francisco City and County Housing Authority	148	—	148
Ross Valley Fire Department	—	33	33	San Francisco City and County Redevelopment Agency	—	39	39
Rowland Water District	—	25	25	San Francisco Community College District Bookstore Auxiliary	—	—	—
Rubidoux Community Services District	—	23	23	San Francisco County Transportation Authority	—	35	35
Running Springs Water District	—	39	39	San Francisco Health Authority	—	304	304
Rural County Representatives of California	—	27	27	San Francisco Law Library	—	7	7
Russian River Fire Protection District	—	17	17	San Francisquito Creek Joint Powers Authority	—	4	4
Sacramento Area Council of Governments	—	60	60	San Gabriel County Water District	—	15	15
Sacramento Area Flood Control Agency	—	12	12	San Gabriel Valley Council of Governments	—	29	29
Sacramento City Housing Authority	194	—	194	San Gabriel Valley Mosquito and Vector Control District	—	29	29
Sacramento County Public Law Library	—	19	19	San Gabriel Valley Municipal Water District	—	8	8
Sacramento Metropolitan Air Quality Management District	—	90	90	San Geronio Pass Water Agency	—	4	4
Sacramento Metropolitan Cable Television Commission	—	7	7	San Jacinto Valley Cemetery District	—	8	8
Sacramento Metropolitan Fire District	600	81	681	San Joaquin County Housing Authority	—	86	86
Sacramento Municipal Utility District	2,127	—	2,127	San Joaquin County IHSS Public Authority	—	9	9
Sacramento Public Library Authority	310	—	310	San Joaquin Delta Community College District	—	10	10
Sacramento Regional Fire/EMS Communications Center	—	53	53	San Juan Water District	—	47	47
Sacramento Suburban Water District	—	62	62	San Lorenzo Valley Water District	—	29	29
Sacramento Transportation Authority	—	4	4	San Luis Obispo Cal Poly Associated Students, Inc.	—	77	77
Sacramento-Yolo Mosquito and Vector Control District	—	67	67	San Luis Obispo Council of Governments	—	20	20
Salida Fire Protection District	—	8	8	San Luis Obispo Regional Transit Authority	—	11	11
Salinas Valley Solid Waste Authority	—	47	47	San Luis Water District	—	12	12
Salton Community Services District	—	21	21	San Mateo County Harbor District	—	26	26
Samoa Peninsula Fire Protection District	—	—	—	San Mateo County In-Home Supportive Services Public Authority	—	10	10
San Andreas Regional Center, Inc.	281	—	281	San Mateo County Law Library	—	3	3
San Andreas Sanitary District	—	7	7	San Mateo County Schools Insurance Group	—	5	5
San Benito County Water District	—	19	19				
San Bernardino City Unified School District	—	27	27				
San Bernardino County Housing Authority	116	—	116				

## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
San Mateo County Transit District	686	—	686	Sewer Authority Mid-Coastside	—	14	14
San Miguel Community Services District	—	4	4	Sewerage Commission-Oroville Region	—	9	9
San Miguel Consolidated Fire Protection District	—	7	7	Shafter Wasco Irrigation District	—	9	9
San Simeon Community Services District	—	—	—	Shasta Area Safety Communications Agency	—	40	40
Sanger Cemetery District	—	7	7	Shasta Community Services District	—	6	6
Sanitary District No. 1 of Marin County	—	32	32	Shasta Lake Fire Protection District	—	6	6
Sanitary District No. 5 of Marin County	—	8	8	Shasta Local Agency Formation Commission	—	—	—
Santa Ana River Flood Protection Agency	—	—	—	Shasta Mosquito and Vector Control District	—	16	16
Santa Ana Unified School District	—	29	29	Shasta Regional Transportation Agency	—	8	8
Santa Ana Watershed Project Authority	—	25	25	Shasta Valley Cemetery District	—	2	2
Santa Barbara County Law Library	—	2	2	Shiloh Public Cemetery District	—	3	3
Santa Barbara County Special Education Local Plan Area	—	11	11	Sierra Lakes County Water District	—	3	3
Santa Barbara Regional Health Authority	—	179	179	Sierra-Sacramento Valley Emergency Medical Services Agency	—	9	9
Santa Clara County Central Fire Protection District	228	67	295	Silicon Valley Animal Control Authority	—	16	16
Santa Clara County Health Authority	—	163	163	Silicon Valley Clean Water	—	83	83
Santa Clara County Law Library	—	3	3	Silveyville Cemetery District	—	5	5
Santa Clara County Open Space Authority	—	30	30	Solano County Mosquito Abatement District	—	9	9
Santa Clara County Schools Insurance Group	—	5	5	Solano County Water Agency	—	15	15
Santa Clara Valley Transportation Authority	680	—	680	Solano Irrigation District	—	81	81
Santa Clara Valley Water District	714	—	714	Solano Transportation Authority	—	20	20
Santa Clarita Valley School Food Services Agency	—	92	92	Soledad Community Health Care District	—	—	—
Santa Cruz County Law Library	—	—	—	Sonoma County Library	157	—	157
Santa Cruz County Regional Transportation Commission	—	18	18	Sonoma Marin Area Rail Transit District	—	101	101
Santa Cruz Local Agency Formation Commission	—	2	2	Sonoma State Enterprises, Inc.	—	—	—
Santa Cruz Metropolitan Transit District	307	—	307	Sonoma Student Union Corporation	—	—	—
Santa Cruz Port District	—	38	38	Soquel Creek Water District	—	42	42
Santa Cruz Regional 9-1-1	—	54	54	South Bay Regional Public Communications Authority	—	57	57
Santa Fe Irrigation District	—	46	46	South Central Los Angeles Regional Center for Developmentally Disabled Persons	266	—	266
Santa Margarita Water District	148	—	148	South Coast Water District	—	83	83
Santa Maria Public Airport District	—	13	13	South County Support Services Agency	—	39	39
Santa Monica Community College District	—	14	14	South Feather Water and Power Agency	—	60	60
Santa Nella County Water District	—	6	6	South Kern Cemetery District	—	4	4
Santa Paula City Housing Authority	—	6	6	South Orange County Wastewater Authority	—	60	60
Santa Ynez River Water Conservation District, Improvement District No. 1	—	17	17	South Placer Fire District	—	46	46
Sausalito-Marín City Sanitary District	—	14	14	South Placer Municipal Utility District	—	24	24
School Risk And Insurance Management Group	—	7	7	South San Joaquin Irrigation District	—	85	85
Schools Excess Liability Fund	—	8	8	South San Luis Obispo County Sanitation District	—	9	9
Schools Insurance Authority	—	70	70	South Tahoe Public Utility District	—	111	111
Scotts Valley Fire Protection District	—	28	28	Southeast Area Social Services Funding Authority	—	46	46
Scotts Valley Water District	—	16	16	Southern California Association of Governments	134	—	134
Selma Cemetery District	—	6	6	Southern California Library Cooperative	—	3	3
Selma-Kingsburg-Fowler County Sanitation District	—	31	31	Southern California Public Power Authority	—	17	17
Serrano Water District	—	10	10	Southern California Regional Rail Authority	230	—	230
				Southern San Joaquin Municipal Utility District	—	11	11



## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total	Other Public Agency	Active		Total
	PERF A	PERF C			PERF A	PERF C	
Southern Sonoma County Resource Conservation District	—	—	—	Transportation Agency for Monterey County	—	13	13
Southwest Transportation Agency	—	48	48	Treasure Island Development Authority	—	—	—
Special District Risk Management Authority	—	14	14	Tri-City Mental Health Center	—	161	161
Squaw Valley Public Service District	—	29	29	Tri-Counties Association for the Developmentally Disabled	307	—	307
Stallion Springs Community Services District	—	12	12	Tri-County Schools Insurance Group	—	4	4
Stanislaus Consolidated Fire Protection District	—	80	80	Tri-Dam Project	—	24	24
Stanislaus County Housing Authority	—	81	81	Trindel Insurance Fund	—	15	15
State and Federal Contractors Water Agency	—	5	5	Trinity County Waterworks District #1	—	2	2
State Bar of California	538	—	538	Trinity Public Utilities District	—	22	22
State Water Contractors	—	9	9	Truckee Donner Public Utility District	—	67	67
Stege Sanitary District	—	11	11	Truckee Fire Protection District	—	52	52
Stinson Beach County Water District	—	8	8	Truckee Sanitary District	—	34	34
Stockton East Water District	—	37	37	Truckee Tahoe Airport District	—	23	23
Stockton Unified School District	—	34	34	Tulare Mosquito Abatement District	—	6	6
Strawberry Recreation District	—	6	6	Tulare Public Cemetery District	—	8	8
Student Union, San Bernardino, California State University	—	18	18	Tuolumne Fire District	—	3	3
Successor Agency to the Redevelopment Agency of the City of Fresno	—	3	3	Tuolumne Utilities District	—	72	72
Successor Agency to the Redevelopment Agency of the City of San Bernardino	—	1	1	Turlock Mosquito Abatement District	—	14	14
Suisun Fairfield Rockville Cemetery District	—	13	13	Twain Harte Community Services District	—	13	13
Suisun Fire Protection District	—	1	1	Twentynine Palms Water District	—	19	19
Suisun Resource Conservation District	—	7	7	Twin Rivers Unified School District	—	26	26
Summit Cemetery District	—	10	10	Ukiah Valley Fire District	—	7	7
Sunnyslope County Water District	—	19	19	Union Public Utility District	—	6	6
Susanville Sanitary District	—	9	9	Union Sanitary District	137	—	137
Sutter Cemetery District	—	13	13	United Water Conservation District	—	57	57
Sweetwater Authority	126	—	126	University Enterprises Corporation at CSUSB	—	124	124
Sweetwater Springs Water District	—	10	10	University Enterprises, Inc.	160	—	160
Sylvan Cemetery District	—	5	5	University Student Union California State University Stanislaus	—	4	4
Tahoe City Public Utility District	—	50	50	Upland City Housing Authority	—	8	8
Tahoe Resource Conservation District	—	26	26	Upper San Gabriel Valley Municipal Water District	—	10	10
Tahoe Transportation District	—	—	—	Vacaville Fire Protection District	—	5	5
Tahoe-Truckee Sanitation Agency	—	47	47	Vacaville-Elmira Cemetery District	—	6	6
Tehachapi Valley Recreation and Park District	—	10	10	Vallecitos Water District	—	113	113
Tehachapi-Cummings County Water District	—	20	20	Vallejo Sanitation and Flood Control District	—	81	81
Tehama County Mosquito Abatement District	—	6	6	Valley Center Municipal Water District	—	62	62
Temescal Valley Water District	—	9	9	Valley County Water District	—	25	25
Templeton Community Services District	—	26	26	Valley Mountain Regional Center, Inc.	288	—	288
Thermalito Water and Sewer District	—	11	11	Valley of the Moon Water District	—	11	11
Three Arch Bay Community Services District	—	—	—	Valley Sanitary District	—	26	26
Three Rivers Community Services District	—	1	1	Valley Springs Public Utility District	—	3	3
Three Valleys Municipal Water District	—	25	25	Valley-Wide Recreation and Park District	—	115	115
Tiburon Fire Protection District	—	31	31	Vandenberg Village Community Services District	—	9	9
Torrance City Redevelopment Agency	—	—	—	Ventura College Foundation	—	7	7
Trabuco Canyon Water District	—	19	19	Ventura County Law Library	—	4	4
Tracy Rural County Fire Protection District	—	—	—	Ventura County Schools Business Services Authority	—	13	13
Transbay Joint Powers Authority	—	13	13	Ventura County Schools Self-Funding Authority	—	10	10

## PUBLIC AGENCY EMPLOYERS (CONTINUED)

## Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active		Total
	PERF A	PERF C	
Ventura County Transportation Commission	—	20	20
Ventura Port District	—	40	40
Ventura River County Water District	—	6	6
Victor Valley Transit Authority	—	18	18
Victor Valley Wastewater Reclamation Authority	—	48	48
Visalia Public Cemetery District	—	4	4
Vista Irrigation District	—	90	90
Walnut Valley Water District	—	53	53
Wasco Recreation and Park District	—	5	5
Washington Colony Cemetery District	—	3	3
Water Employee Services Authority	166	—	166
Water Facilities Authority	—	8	8
Water Replenishment District of Southern California	—	32	32
Weaverville Community Services District	—	4	4
Weaverville Sanitary District	—	3	3
West Almanor Community Services District	—	1	1
West Basin Municipal Water District	—	43	43
West Bay Sanitary District	—	27	27
West Cities Communication Center	—	23	23
West Contra Costa Integrated Waste Management Authority	—	3	3
West Contra Costa Transportation Advisory Committee	—	5	5
West County Transportation Agency	—	120	120
West County Wastewater District	—	55	55
West End Communications Authority	—	—	—
West Kern Water District	—	42	42
West Stanislaus Irrigation District	—	15	15
West Valley Mosquito and Vector Control District	—	16	16
West Valley Sanitation District of Santa Clara County	—	30	30
West Valley Water District	—	68	68
West Valley-Mission Community College District	—	9	9
Westborough Water District	—	5	5
Western Contra Costa Transit Authority	—	8	8
Western Municipal Water District	—	147	147
Western Riverside Council of Governments	—	25	25
Westlands Water District	—	109	109
Westwood Community Services District	—	5	5
Wheeler Ridge-Maricopa Water Storage District	—	46	46
Wildomar Cemetery District	—	—	—
Willow County Water District	—	11	11
Willow Creek Community Services District	—	5	5
Willows Cemetery District	—	2	2
Wilton Fire Protection District	—	1	1
Windsor Fire Protection District	—	25	25
Winterhaven Water District	—	2	2
Winters Cemetery District	—	2	2

Other Public Agency	Active		Total
	PERF A	PERF C	
Winters Fire Protection District	—	—	—
Winton Water and Sanitary District	—	9	9
Woodbridge Rural County Fire Protection District	—	35	35
Woodlake Fire District	—	7	7
Woodside Fire Protection District	—	51	51
Yolo County Federal Credit Union	—	48	48
Yolo County Housing Authority	—	41	41
Yolo County In-Home Supportive Services Public Authority	—	5	5
Yolo County Public Agency Risk Management Insurance Authority	—	7	7
Yolo County Transportation District	—	11	11
Yolo Emergency Communications Agency	—	42	42
Yolo-Solano Air Quality Management District	—	20	20
Yorba Linda Water District	—	77	77
Yuba Community College District	—	4	4
Yuba County Water Agency	—	58	58
Yuba Sutter Transit Authority	—	5	5
Yucaipa Valley Water District	—	63	63
Yuima Municipal Water District	—	9	9
<b>Total</b>	<b>37,975</b>	<b>22,490</b>	<b>60,465</b>

## LEGISLATORS' RETIREMENT SYSTEM MEMBERSHIP &amp; RETIREMENT DATA

## Legislators' Retirement System – 10-Year Review

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ACTIVE &amp; INACTIVE MEMBERS</b>										
Members of the Legislature	6	6	6	7	8	8	15	17	18	23
Constitutional Officers	13	14	17	17	19	20	17	18	18	19
Legislative Statutory Officers	1	2	4	4	4	4	4	4	4	4
<b>TOTAL ACTIVE &amp; INACTIVE MEMBERS</b>	<b>20</b>	<b>22</b>	<b>27</b>	<b>28</b>	<b>31</b>	<b>32</b>	<b>36</b>	<b>39</b>	<b>40</b>	<b>46</b>
<b>BENEFIT RECIPIENTS</b>										
<b>Members of the Legislature</b>										
Service Retirement	215	221	225	226	200	210	214	221	222	228
Disability Retirement	7	8	7	7	9	9	9	9	11	11
Pre-Retirement Option 2	1	1	2	2	—	—	—	—	—	—
<b>Total Members of the Legislature</b>	<b>223</b>	<b>230</b>	<b>234</b>	<b>235</b>	<b>209</b>	<b>219</b>	<b>223</b>	<b>230</b>	<b>233</b>	<b>239</b>
<b>Constitutional Officers</b>										
Service Retirement	12	12	11	10	26	26	25	21	21	22
Disability Retirement	1	1	1	1	1	1	1	1	1	1
Pre-Retirement Option 2	1	1	—	1	2	2	2	2	2	2
<b>Total Constitutional Officers</b>	<b>14</b>	<b>14</b>	<b>12</b>	<b>12</b>	<b>29</b>	<b>29</b>	<b>28</b>	<b>24</b>	<b>24</b>	<b>25</b>
<b>Legislative Statutory Officers</b>										
Service Retirement	1	1	1	1	5	5	5	5	5	5
<b>Total Legislative Statutory Officers</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
<b>TOTAL BENEFIT RECIPIENTS</b>	<b>238</b>	<b>245</b>	<b>247</b>	<b>248</b>	<b>243</b>	<b>253</b>	<b>256</b>	<b>259</b>	<b>262</b>	<b>269</b>
<b>TOTAL MEMBERS</b>	<b>258</b>	<b>267</b>	<b>274</b>	<b>276</b>	<b>274</b>	<b>285</b>	<b>292</b>	<b>298</b>	<b>302</b>	<b>315</b>

## LEGISLATORS' RETIREMENT SYSTEM PROGRAM DATA

### PRIMARY BENEFITS

CalPERS has administered the Legislators' Retirement System (LRS) since its inception in 1947. The duties of the Board with respect to administering LRS are the same as CalPERS on such items as determining membership and benefit rights, making investments, crediting interest, and obtaining information necessary for administration. Benefits payable from LRS are financed through the State's contribution as an employer, member contributions, and interest earned on investments.

The CalPERS Board is authorized to establish actuarially determined rates. For Fiscal Year 2015-16, the Board approved an employer contribution rate of 42.27 percent. Effective January 1, 2013, Assembly Bill 340 added Government Code section 7522.52. Section 7522.52 requires that a public employer's contribution to a defined benefit plan, in combination with employee contributions to that defined benefit plan, shall not be less than the normal cost.

Member contributions to LRS are made by active members based on position and membership date. Active Legislative Members and Constitutional Officers contribute 4 percent of compensation if first elected before March 4, 1972, or 8 percent of compensation if first elected after March 4, 1972. The interest credited to member accounts is the net earnings rate of investments.

### ASSEMBLY BILL 340 – PUBLIC EMPLOYEES' PENSION REFORM ACT (PEPRA)

The California Legislature passed and the Governor signed the Public Employees' Pension Reform Act of 2013 (PEPRA) on September 12, 2012. PEPRA contained a number of provisions intended to reduce future pension obligations. PEPRA primarily affects new pension plan members who are enrolled for the first time after December 31, 2012. The financial impact will be gradually realized as total pension costs and the employer share of those costs decrease.

PEPRA amended the Legislators' Retirement Law, and permanently closed LRS to all Constitutional and Legislative Statutory Officers who take office on or after January 1, 2013.

### PROPOSITION 140

Proposition 140, the Political Reform Act of 1990, requires that Legislators (Senators and Members of the Assembly) first elected after November 7, 1990 participate in the federal Social Security program and in no other retirement system.

### MEMBERSHIP

Members of the Legislature serving prior to November 7, 1990, elected Constitutional Officers, and Legislative Statutory Officers serving prior to January 1, 2013, were eligible for membership.

### SERVICE RETIREMENT

#### Retirement Age

The retirement age is 60, with four or more years of service credit, or any age with 20 or more years. The retirement age for Legislative Statutory Officers is 55, or any age with 20 years or more of service credit.

#### Members of the Legislature Benefit Formula

The retirement formula consists of three separate formulas that are totaled together to provide the members with their allowance. The first part of the formula consists of 5 percent of the first \$500 of salary up to 15 years of service. The second part is 3 percent per year of the same \$500 of salary for years in excess of 15 years. And finally, total years of service is multiplied by 3 percent per year of their salary above \$500. In no case may members receive more than two-thirds of their salary.

#### Constitutional Officers' Benefit Formula

Five percent per year of service up to eight years (40 percent) of their highest salary. If the member has 24 or more years of service, the retirement allowance is 60 percent of their final salary.

#### Statutory Officers' Benefit Formula

Statutory Officers receive 3 percent per year of service, not to exceed 66 percent of final monthly compensation.

#### Early Retirement Options for Members of the Legislature & Constitutional Officers

Legislators and Constitutional Officers may retire before age 60 with 15 years of service. However, their retirement allowance is reduced by 2 percent for each year they retire before age 60.

### DISABILITY RETIREMENT

Disability retirement uses the same formula as service retirement. There is no reduction if retirement is before age 60 for members of the Legislature.

**LEGISLATORS' RETIREMENT SYSTEM PROGRAM DATA (CONTINUED)**
**DEATH BENEFITS (BEFORE RETIREMENT)**
**Not Eligible to Retire**

One month's salary for each year of service, plus the return of the member's contributions with interest payable to a survivor.

**Eligible to Retire**

If the member has elected one of the optional settlements, the beneficiary will receive the benefit provided by the option selected, calculated as if the date of death had been the date of retirement. In lieu of this benefit, the beneficiary may elect an allowance of one-half the unmodified retirement allowance, payable until death or remarriage.

**DEATH BENEFITS WHILE IN OFFICE**

Beneficiaries receive a lump-sum benefit in an amount equal to the annual compensation of an LRS member during the 12 months preceding the member's death, regardless of whether the member was eligible to retire.

**LRS Active & Inactive Members**

Category	Active	Inactive	Total
Members of the Legislature	1	5	6
Constitutional Officers	8	5	13
Legislative Statutory Officers	—	1	1
<b>Total</b>	<b>9</b>	<b>11</b>	<b>20</b>

**LRS Benefit Payments by Type**

Category	Amount Paid
Service Retirement	\$6,885,855
Disability Retirement	104,559
Beneficiary Death Benefits	1,849
Beneficiary Death Benefits/Allowance	75,230
Adjustments <sup>1</sup>	339,847
<b>Total</b>	<b>\$7,407,340</b>

(1) Adjustments contain manual claims and overpayment recoveries.

**DEATH BENEFITS (AFTER RETIREMENT)**

Members choose between one of four options. The level of survivor benefit is based on the option chosen, without a reduction in allowance for members of the Legislature. Constitutional Officers and Statutory Officers receive a reduced allowance based on their age at time of retirement and the option they choose. Beneficiaries also receive a \$600 lump sum payment.

**COST-OF-LIVING ADJUSTMENTS (COLA)**

The annual COLA is determined by the Consumer Price Index.

**LRS Benefit Recipients by Retirement Type**

Category	Retired <sup>1</sup>	Survivors & Beneficiaries <sup>1</sup>	Total
<b>Members of Legislature</b>			
Service Retirement	121	94	215
Disability Retirement	—	7	7
Pre-Retirement Option 2	—	1	1
<b>TOTAL MEMBERS OF LEGISLATURE</b>	<b>121</b>	<b>102</b>	<b>223</b>
<b>Constitutional Officers</b>			
Service Retirement	11	1	12
Disability Retirement	—	1	1
Pre-Retirement Option 2	—	1	1
<b>TOTAL CONSTITUTIONAL OFFICERS</b>	<b>11</b>	<b>3</b>	<b>14</b>
<b>Legislative Statutory Officers</b>			
Service Retirement	—	1	1
<b>TOTAL LEGISLATIVE STATUTORY OFFICERS</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>TOTAL</b>	<b>132</b>	<b>106</b>	<b>238</b>

(1) The actual number of benefit recipients is by the employer category from which they retired, regardless of whether they had service in other employer categories.

## LEGISLATORS' RETIREMENT SYSTEM PROGRAM DATA (CONTINUED)

## LRS Average Benefit Payments – As of June 30, 2016 – 10-Year Review

Retirement Effective Dates	Years of Service Credit						
	0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31+
<b>2015-16</b>							
Average Monthly Allowance <sup>1</sup>	\$1,921	\$5,305	\$0	\$0	\$0	\$0	\$0
Average Final Compensation	\$3,542	\$13,261	—	—	—	—	—
Number of Recipients <sup>1</sup>	1	1	—	—	—	—	—
<b>2014-15</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$2,458	\$0	\$0	\$0	\$0	\$0
Average Final Compensation	\$0	\$7,921	\$0	\$0	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	1	—	—	—	—	—
<b>2013-14</b>							
Average Monthly Allowance <sup>2</sup>	\$1,074	\$552	\$0	\$0	\$0	\$0	\$0
Average Final Compensation	\$2,342	\$780	\$0	\$0	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	1	3	—	—	—	—	—
<b>2012-13</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$4,479	\$2,103	\$6,699	\$0	\$0	\$0
Average Final Compensation	\$0	\$13,008	\$4,375	\$8,812	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	2	1	2	—	—	—
<b>2011-12 <sup>3</sup></b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Average Final Compensation	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	—	—	—	—	—	—
<b>2010-11</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$4,258	\$2,103	\$0	\$8,206	\$0	\$0
Average Final Compensation	\$0	\$6,481	\$4,375	\$0	\$9,215	\$0	\$0
Number of Recipients <sup>2</sup>	—	3	1	—	1	—	—
<b>2009-10</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$435	\$1,759	\$6,604	\$4,965	\$3,842	\$4,452
Average Final Compensation	\$0	\$1,600	\$0	\$13,767	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	4	1	1	1	1	1
<b>2008-09</b>							
Average Monthly Allowance <sup>2</sup>	\$0	N/A	\$1,250	\$2,957	\$6,456	\$0	\$0
Average Final Compensation	\$0	\$0	\$0	\$0	\$9,684	\$0	\$0
Number of Recipients <sup>2</sup>	—	—	2	1	2	—	—
<b>2007-08</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$2,212	\$1,250	\$0	\$1,710	\$0	\$0
Average Final Compensation	\$0	\$7,858	\$0	\$0	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	2	3	—	2	—	—
<b>2006-07</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$2,134	\$310	\$5,717	\$4,921	\$0	\$0
Average Final Compensation	\$0	\$8,434	\$0	\$8,250	\$9,240	\$0	\$0
Number of Recipients <sup>2</sup>	—	6	9	1	2	—	—

(1) These averages and totals are for retired members only.

(2) These averages and totals are for retired members and community property only.

(3) There were no retirements in FY 2011-12, thus no benefit amounts to report.

## JUDGES' RETIREMENT SYSTEM MEMBERSHIP &amp; RETIREMENT DATA

## Judges' Retirement System – 10-Year Review

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ACTIVE &amp; DEFERRED MEMBERS</b>										
Judges	225	241	285	325	431	466	528	620	682	756
<b>TOTAL ACTIVE &amp; DEFERRED MEMBERS</b>	<b>225</b>	<b>241</b>	<b>285</b>	<b>325</b>	<b>431</b>	<b>466</b>	<b>528</b>	<b>620</b>	<b>682</b>	<b>756</b>
<b>BENEFIT RECIPIENTS</b>										
Service Retirement	1,182	1,193	1,157	1,151	654	655	648	641	619	610
Disability Retirement	89	100	100	50	46	46	46	48	47	52
Deferred Retirement	584	594	598	632	582	590	595	595	604	611
Optional Settlement Benefit	—	—	—	—	527	510	478	433	390	352
Industrial Disability Retired	1	1	1	—	—	—	—	—	—	—
Pre-Retirement Survivor	—	—	—	63	75	73	76	72	75	77
Pre-Retirement Death	61	60	66	—	—	—	—	—	—	—
Extended Service Incentive Program	9	29	—	—	—	—	—	—	—	—
<b>TOTAL BENEFIT RECIPIENTS</b>	<b>1,926</b>	<b>1,977</b>	<b>1,922</b>	<b>1,896</b>	<b>1,884</b>	<b>1,874</b>	<b>1,843</b>	<b>1,789</b>	<b>1,735</b>	<b>1,702</b>
<b>TOTAL MEMBERS</b>	<b>2,151</b>	<b>2,218</b>	<b>2,207</b>	<b>2,221</b>	<b>2,315</b>	<b>2,340</b>	<b>2,371</b>	<b>2,409</b>	<b>2,417</b>	<b>2,458</b>



## JUDGES' RETIREMENT SYSTEM PROGRAM DATA

### PRIMARY BENEFITS

The Judges' Retirement System (JRS) was established in 1937. The operational activities of the JRS were transferred from the State Controller's Office to CalPERS in 1979.

Benefits payable through the JRS are financed by the General Fund, the payroll contributions of members, and the State's contribution as an employer. Both employer and members contribute at the rate of 8 percent of compensation.

### MEMBERSHIP

The Judges' Retirement System provides retirement, disability, death, and survivor benefits for Supreme and Appellate Court Justices, Superior Court Judges, and beneficiaries. Health and dental benefits are provided to eligible retirees and beneficiaries of JRS under the Public Employees' Medical and Hospital Care Act (PEMHCA).

### SERVICE RETIREMENT

#### Retirement Age

Members must be at least age 60 with 20 years of service, or age 70 with at least 10 years of service.

#### Retirement Benefit Formula

The retirement allowance is a percentage of the current salary of the last judicial office held and is increased proportionally with active judicial salaries. The allowance is based on a member's age and years of service as follows:

Age	Years of Service	Retirement Allowance
60-70	20	75%
66	18	65%
67	16	65%
68	14	65%
69	12	65%
70	10	65%

Judges can work as long as they want and receive their full pension of either 65 percent or 75 percent (depending on credited service).

#### Deferred Retirement

Judges are eligible for deferred retirement at any age if they have at least five years of service. However, judges are not paid the allowance until they reach the age they would be eligible for normal retirement if they had remained in office. A judge must be at least age 63, or age 60 with 20 years of service, to receive a retirement allowance. The allowance is based on years of service multiplied by a percentage of the judge's final salary—varying from 2 percent for five years to 3.75 percent for 12 or more years of service. The maximum benefit they can receive is 75 percent of salary.

### DISABILITY RETIREMENT (NON-WORK RELATED)

Judges must apply to the Commission on Judicial Performance to receive a disability retirement. There is no age requirement.

The service requirement is four years. The retirement allowance is 65 percent of the judge's final salary, or 75 percent of their final salary if the judge has 20 or more years of service.

### DISABILITY RETIREMENT (WORK RELATED)

Judges receive the same amount for work-related disability retirement as non-work related disability retirement. Any person becoming a judge between January 1, 1980 and December 31, 1988, must have at least two years of judicial service; or after January 1, 1989, must have four years of judicial service, unless the disability is a result of injury or disease arising out of and in the course of judicial service.

### DEATH BENEFITS (BEFORE RETIREMENT)

#### Not Eligible to Retire

Spouses or registered domestic partners can receive 25 percent of a current active judge's salary for life or return of contributions plus one month's salary, for each year of service not to exceed six months; or the surviving spouse or registered domestic partner can elect a monthly allowance for life, if the judge had paid an extra \$2 per month and had 10 to 20 years of service. This allowance would be equal to 1.625 percent of the salary multiplied by the number of years of service.

#### Eligible to Retire

Spouses or registered domestic partners receive one-half of what the retirement allowance would have been if the judge had retired on date of death. At any time while in office, a judge may make an irrevocable election for their eligible surviving spouse or registered domestic partner to receive the maximum survivor benefit (Option 2) in the event of the judge's pre-retirement death. This benefit is only payable if a judge dies after 20 or more years of service.

## JUDGES' RETIREMENT SYSTEM PROGRAM DATA (CONTINUED)

### DEATH BENEFITS (AFTER RETIREMENT)

Spouses or registered domestic partners receive one-half of the retirement pension for life, if the member retired with the standard retirement benefit formula, or on disability.

Judges may elect to take a reduced retirement allowance in order to enhance the survivor benefits to their spouse, registered domestic partner, or a designated beneficiary.

### COST-OF-LIVING ADJUSTMENTS

The allowance increases are based on the current salary of an active judge. Retirees receive the same increase as active judges.

#### JRS Active and Deferred Members

Category	Active	Deferred	Total
Judges	218	7	225
<b>TOTAL</b>	<b>218</b>	<b>7</b>	<b>225</b>

#### JRS Benefit Payments by Type

Category	Amount Paid
Service Retirement	\$164,500,110
Disability Retirement	4,924,844
Beneficiary Death Benefits/Life Allowance	29,281,661
Extended Service Incentive Program	1,737,873
Adjustments <sup>1</sup>	(1,095,332)
<b>TOTAL</b>	<b>\$199,349,156</b>

(1) Adjustments contain manual claims and overpayment recoveries.

#### JRS Benefit Recipients by Retirement Type

Category	Retired <sup>1</sup>	Survivors & Beneficiaries <sup>1</sup>	Total
Service Retirement	902	280	1,182
Disability Retirement	36	53	89
Deferred Retirement	420	164	584
Industrial Disability Retirement	1	—	1
Pre-Retirement Death	—	61	61
Extended Service Incentive Program	8	1	9
<b>TOTAL</b>	<b>1,367</b>	<b>559</b>	<b>1,926</b>

(1) The actual number of benefit recipients is by the employer category from which they retired, regardless of whether they had service in other employer categories.

## JUDGES' RETIREMENT SYSTEM PROGRAM DATA (CONTINUED)

## JRS Average Benefit Payments – As of June 30, 2016 – 10-Year Review

Retirement Effective Dates	Years of Service Credit						
	0-5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31+
<b>2015-16</b>							
Average Monthly Allowance <sup>1</sup>	\$2,725	\$2,365	\$6,962	\$0	\$10,842	\$11,792	\$5,284
Average Final Compensation	\$15,753	\$15,753	\$7,877	\$0	\$11,027	\$16,890	\$0
Number of Recipients <sup>1</sup>	2	1	2	—	10	2	1
<b>2014-15</b>							
Average Monthly Allowance <sup>2</sup>	\$2,165	\$2,554	\$7,224	\$9,556	\$10,612	\$9,184	\$11,749
Average Final Compensation	\$15,292	\$15,292	\$16,516	\$15,469	\$15,341	\$15,746	\$16,217
Number of Recipients <sup>2</sup>	3	4	3	16	19	14	5
<b>2013-14</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$3,723	\$5,343	\$7,529	\$8,959	\$10,439	\$9,800
Average Final Compensation	\$0	\$2	\$9,432	\$10,218	\$7,426	\$10,581	\$3,776
Number of Recipients <sup>2</sup>	—	9	13	12	35	16	4
<b>2012-13</b>							
Average Monthly Allowance <sup>2</sup>	\$2,233	\$3,325	\$4,546	\$9,156	\$8,434	\$8,549	\$11,147
Average Final Compensation	\$14,899	\$7,049	\$3,044	\$1,752	\$974	\$1,655	\$0
Number of Recipients <sup>2</sup>	2	6	9	17	33	9	4
<b>2011-12</b>							
Average Monthly Allowance <sup>2</sup>	\$1,316	\$3,160	\$7,580	\$8,055	\$9,795	\$10,090	\$0
Average Final Compensation	\$14,899	\$15,473	\$17,879	\$15,114	\$15,042	\$15,168	\$0
Number of Recipients <sup>2</sup>	2	4	5	20	30	9	—
<b>2010-11</b>							
Average Monthly Allowance <sup>2</sup>	\$1,447	\$4,186	\$5,586	\$8,680	\$8,645	\$7,809	\$9,245
Average Final Compensation	\$14,899	\$14,899	\$14,899	\$14,899	\$14,382	\$17,299	\$17,018
Number of Recipients <sup>2</sup>	3	8	10	22	41	16	4
<b>2009-10</b>							
Average Monthly Allowance <sup>2</sup>	\$2,352	\$3,914	\$7,133	\$8,742	\$8,730	\$8,892	\$7,771
Average Final Compensation	\$15,974	\$15,290	\$15,042	\$14,947	\$15,042	\$15,437	\$14,899
Number of Recipients <sup>2</sup>	2	11	15	45	45	8	3
<b>2008-09</b>							
Average Monthly Allowance <sup>2</sup>	\$1,385	\$3,388	\$6,231	\$9,236	\$9,313	\$10,636	\$10,189
Average Final Compensation	\$14,899	\$15,114	\$15,095	\$15,071	\$15,412	\$14,193	\$14,899
Number of Recipients <sup>2</sup>	1	10	11	25	50	15	4
<b>2007-08</b>							
Average Monthly Allowance <sup>2</sup>	\$3,410	\$5,643	\$6,108	\$8,432	\$8,297	\$9,838	\$12,787
Average Final Compensation	\$14,899	\$14,899	\$15,186	\$14,899	\$15,069	\$14,899	\$17,050
Number of Recipients <sup>2</sup>	3	6	15	38	47	15	1
<b>2006-07</b>							
Average Monthly Allowance <sup>2</sup>	\$1,555	\$4,411	\$5,800	\$7,855	\$8,512	\$9,348	\$10,661
Average Final Compensation	\$14,304	\$13,984	\$13,884	\$13,854	\$14,134	\$13,824	\$14,304
Number of Recipients <sup>2</sup>	2	7	16	31	33	7	2

(1) These averages and totals are for retired members only.

(2) These averages and totals are for retired members and community property only.

## JUDGES' RETIREMENT SYSTEM II MEMBERSHIP &amp; RETIREMENT DATA

## Judges' Retirement System II – 10-Year Review

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>ACTIVE MEMBERS</b>										
Judges II – Classic	1,367	1,385	1,396	1,352	1,272	1,290	1,197	1,119	979	915
Judges II – PEPRA <sup>1</sup>	124	85	—	—	—	—	—	—	—	—
<b>TOTAL ACTIVE MEMBERS</b>	<b>1,491</b>	<b>1,470</b>	<b>1,396</b>	<b>1,352</b>	<b>1,272</b>	<b>1,290</b>	<b>1,197</b>	<b>1,119</b>	<b>979</b>	<b>915</b>
<b>BENEFIT RECIPIENTS</b>										
Service Retirement	86	68	47	30	14	7	6	4	3	4
Disability Retirement	13	10	11	18	9	13	7	6	5	3
Optional Settlement Benefit	—	—	—	—	—	6	4	4	4	—
Pre-Retirement Survivor	—	—	—	2	13	2	2	1	2	2
Industrial Disability Retirement	4	4	3	—	—	—	—	—	—	—
Surviving Spouse 50% Allowance	6	6	6	—	—	—	—	—	—	—
Survivor Continuance	8	5	4	—	—	—	—	—	—	—
36-month Judge's Salary	2	2	2	2	1	2	—	—	—	—
Monetary Credit	15	11	—	—	—	—	—	—	—	—
<b>TOTAL BENEFIT RECIPIENTS</b>	<b>134</b>	<b>106</b>	<b>73</b>	<b>52</b>	<b>37</b>	<b>30</b>	<b>19</b>	<b>15</b>	<b>14</b>	<b>9</b>
<b>TOTAL MEMBERS</b>	<b>1,625</b>	<b>1,576</b>	<b>1,469</b>	<b>1,404</b>	<b>1,309</b>	<b>1,320</b>	<b>1,216</b>	<b>1,134</b>	<b>993</b>	<b>924</b>

(1) Reporting for PEPRA active members began with the 2014-15 CAFR.

## JUDGES' RETIREMENT SYSTEM II PROGRAM DATA

### PRIMARY BENEFITS

The Judges' Retirement System II (JRS II) was established in 1994 to create a fully funded, actuarially sound retirement system for judges appointed or elected on or after November 9, 1994. This system provides two different types of retirement benefits: a traditional defined benefit plan or a cash balance (Monetary Credits) plan. The defined benefit plan provides a lifetime monthly retirement allowance of up to 75 percent of final compensation.

Alternatively, a judge may elect to receive the amount of his or her monetary credits in either a lump sum or an annuity of actuarially equivalent value.

### ASSEMBLY BILL 340 – PUBLIC EMPLOYEES' PENSION REFORM ACT (PEPRA)

The California Legislature passed and the Governor signed the Public Employees' Pension Reform Act of 2013 (PEPRA) on September 12, 2012. PEPRA contained a number of provisions intended to reduce future pension obligations. PEPRA primarily affects new pension plan members who are enrolled for the first time after December 31, 2012. The financial impact will be gradually realized as total pension costs and the employer share of those costs decrease.

The new law implemented new member contribution requirements for judges who meet the definition of a new member under PEPRA, effective January 1, 2013. The new requirements provide that all new PEPRA members must contribute to JRS II an amount equal to half of the normal cost.

### MEMBERSHIP

The JRS II provides retirement, disability, death, and survivor benefits for Supreme and Appellate Court Justices, and Superior Court Judges, first appointed or elected after November 9, 1994, and their beneficiaries. Health and dental benefits are provided to eligible retirees and beneficiaries of JRS II under PEMHCA.

### SERVICE RETIREMENT

#### Retirement Age

Judges must be at least age 65 with 20 years of service or age 70 with a minimum of five years of service to receive the defined benefit plan. Judges who leave office with five or more years of service but who do not meet the above criteria receive the amount of their monetary credits.

### RETIREMENT FORMULA

#### Defined Benefit Plan

This option provides a defined benefit of 3.75 percent of the judge's final compensation per year of service, up to 75 percent of the judge's final compensation. Optional settlements are available which reduce a judge's retirement allowance to provide a lifetime benefit for a surviving spouse upon death of the judge.

The Public Employees' Pension Reform Act of 2013 (Chapter 296, Stats. 2012) (PEPRA) also added Government Code section 7522.32, which for the purpose of determining the retirement benefits to be paid to a new member of a public retirement system, defines final compensation as the highest average annual pensionable compensation earned by the member during a period of at least 36 consecutive months.

#### Monetary Credit Plan

The judge may elect to have his or her monetary credits paid in a single lump sum, as an annuity for his or her lifetime, or pursuant to one of the available optional settlements.

### DISABILITY RETIREMENT (NON WORK-RELATED)

Judges who have five years of service and become permanently disabled because of a mental or physical disability may apply to the Commission on Judicial Performance for disability retirement.

A judge who retires for non work-related disability will receive an allowance in an amount equal to the lower of the following:

- 3.75 percent of the judge's final compensation on the effective date of the disability retirement multiplied by the number of years of service the judge would have been credited had the judge continued to work until the age the judge would have first been eligible for service retirement, or
- 65 percent of the judge's final compensation on the effective date of the disability retirement.

### DISABILITY RETIREMENT (WORK RELATED)

Judges receive 65 percent of their final compensation on the effective date of the disability retirement, regardless of age or length of service, if the disability is predominantly a result of injury arising out of and in the course of judicial service.

## JUDGES' RETIREMENT SYSTEM II PROGRAM DATA (CONTINUED)

## DEATH BENEFITS (BEFORE RETIREMENT)

**Not Eligible to Retire**

Spouses or registered domestic partners receive the judge's monetary credits or three times the judge's annual salary at the time of death, whichever is greater.

**Eligible for the Defined Benefit Plan**

Spouses or registered domestic partners receive either a monthly retirement allowance equal to one-half of the judge's defined benefit plan allowance or the judge's monetary credits. Or if elected by the judge, the surviving spouse or registered domestic partner of an eligible judge who dies after 20 or more years of service, will receive the maximum survivor benefit (Option 2).

## JRS II Active Judges

	Active
Judges II – Classic	1,367
Judges II – PEPRA	124
<b>TOTAL</b>	<b>1,491</b>

## JRS II Benefit Payments by Type

Category	Amount Paid
Service Retirement	\$7,967,133
Disability Retirement	1,826,300
Beneficiary Death Benefits	—
Beneficiary Death Benefits/Life Allowance	309,615
Monetary Credit	11,482,350
Adjustments <sup>1</sup>	118,592
<b>TOTAL</b>	<b>\$21,703,990</b>

(1) Adjustments contain manual claims and overpayment recoveries.

## JRS II Benefit Recipients by Retirement Type

Category	Retired <sup>1</sup>	Survivors & Beneficiaries <sup>1</sup>	Total
Service Retirement	83	3	86
Disability Retirement	13	—	13
Industrial Disability Retirement	4	—	4
Surviving Spouse 50% Allowance	—	6	6
Survivor Continuance	—	8	8
36-month Judge's Salary	—	2	2
Monetary Credit	13	2	15
<b>TOTAL</b>	<b>113</b>	<b>21</b>	<b>134</b>

(1) The actual number of benefit recipients is by the employer category from which they retired, regardless of whether they had service in other employer categories.

## DEATH BENEFITS (AFTER RETIREMENT)

**Defined Benefit Plan**

Spouses or registered domestic partners receive one-half of the judge's monthly allowance for life. Judges who retired under a service retirement may also elect an optional settlement to increase the monthly benefits to their eligible surviving spouse or registered domestic partner.

**Monetary Credit Plan**

If the judge elected to receive his or her monetary credits in a lump sum or as a lifetime annuity for his or her life alone, there are no other benefits payable. If the judge elected one of the available optional settlements, his or her surviving spouse or registered domestic partner will receive benefits based on the optional settlement elected.

## COST-OF-LIVING ADJUSTMENTS

The retirement allowance of retired judges who have elected the defined benefit plan will be adjusted every January after the judge has been retired six months. The adjustment is based on the United States city average of the Consumer Price Index for All Urban Consumers, as published by the United States Bureau of Statistics. No adjustment will be made unless the cost-of-living increase equals or exceeds 1 percent, and the allowance cannot be increased more than 3 percent in a single year.

## JUDGES' RETIREMENT SYSTEM II PROGRAM DATA (CONTINUED)

## JRS II Average Benefit Payments – As of June 30, 2016 – 10-Year Review

Retirement Effective Dates	Years of Credited Service						
	0-5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31+
<b>2015-16</b>							
Average Monthly Allowance <sup>1</sup>	\$3,047	\$4,774	\$7,918	\$10,667	\$0	\$0	\$0
Average Final Compensation	\$15,638	\$15,521	\$15,683	\$15,710	\$0	\$0	\$0
Number of Recipients <sup>1</sup>	1	3	5	11	—	—	—
<b>2014-15</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$5,198	\$6,740	\$9,637	\$0	\$0	\$0
Average Final Compensation	\$0	\$15,149	\$15,225	\$15,253	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	1	8	13	—	—	—
<b>2013-14</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$4,175	\$6,457	\$8,991	\$11,274	\$0	\$0
Average Final Compensation	\$0	\$11,205	\$14,949	\$14,942	\$15,032	\$0	\$0
Number of Recipients <sup>2</sup>	—	4	12	4	1	—	—
<b>2012-13</b>							
Average Monthly Allowance <sup>2</sup>	\$2,024	\$7,337	\$6,449	\$8,691	\$10,168	\$0	\$0
Average Final Compensation	\$14,899	\$14,899	\$14,899	\$14,899	\$14,899	\$0	\$0
Number of Recipients <sup>2</sup>	3	5	3	6	1	—	—
<b>2011-12</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$3,812	\$8,824	\$8,192	\$0	\$0	\$0
Average Final Compensation	\$0	\$14,899	\$15,975	\$14,899	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	3	2	4	—	—	—
<b>2010-11</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$11,423	\$8,150	\$0	\$0	\$0	\$0
Average Final Compensation	\$0	\$14,899	\$14,899	\$0	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	3	6	1	1	—	—
<b>2009-10</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$9,684	\$6,025	\$0	\$0	\$0	\$0
Average Final Compensation	\$0	\$14,899	\$15,437	\$0	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	1	4	—	—	—	—
<b>2008-09</b>							
Average Monthly Allowance <sup>2</sup>	\$14,899	\$4,476	\$0	\$0	\$0	\$0	\$0
Average Final Compensation	\$14,899	\$15,975	\$0	\$0	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	1	2	—	—	—	—	—
<b>2007-08</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$8,624	\$7,748	\$0	\$0	\$0	\$0
Average Final Compensation	\$0	\$14,638	\$15,244	\$0	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	1	4	—	—	—	—
<b>2006-07</b>							
Average Monthly Allowance <sup>2</sup>	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Average Final Compensation	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Number of Recipients <sup>2</sup>	—	—	—	—	—	—	—

(1) These averages and totals are for retired members only.

(2) These averages and totals are for retired members and community property only.



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# STATISTICAL SECTION

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## Statistical Section: Other Programs

### HEALTH CARE FUND/CONTINGENCY RESERVE FUND

Expenses & Revenues – 10-Year Review (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>OPERATING REVENUES</b>										
Premiums	\$3,741,352	\$3,594,279	\$2,744,305	\$1,921,838	\$1,846,210	\$1,709,975	\$1,362,081	\$1,586,942	\$1,509,064	\$1,390,819
Federal Government Subsidies	32,539	36,077	43,900	22,375	—	—	—	—	—	—
Federal Government Reimbursements	—	—	—	17	32,710	42,583	—	—	—	—
Administrative Fees Earned & Other	27,668	26,712	24,899	17,809	25,490	23,956	22,528	25,633	14,928	16,509
<b>Total Operating Revenues</b>	<b>\$3,801,559</b>	<b>\$3,657,068</b>	<b>\$2,813,104</b>	<b>\$1,962,039</b>	<b>\$1,904,410</b>	<b>\$1,776,514</b>	<b>\$1,384,609</b>	<b>\$1,612,575</b>	<b>\$1,523,992</b>	<b>\$1,407,328</b>
<b>OPERATING EXPENSES</b>										
Claims Expense	\$3,404,222	\$3,411,618	\$2,449,655	\$1,824,082	\$1,765,453	\$1,684,029	\$1,596,473	\$1,433,064	\$1,299,905	\$1,198,348
Increase (Decrease) in Estimated Liabilities	13,258	20,484	173,796	16,781	(37,222)	44,127	(24,389)	28,537	14,626	14,358
Administrative Expenses	367,685	401,650	221,878	132,556	124,116	115,839	117,357	112,799	103,504	95,625
<b>Total Operating Expenses</b>	<b>\$3,785,165</b>	<b>\$3,833,752</b>	<b>\$2,845,329</b>	<b>\$1,973,419</b>	<b>\$1,852,347</b>	<b>\$1,843,995</b>	<b>\$1,689,441</b>	<b>\$1,574,400</b>	<b>\$1,418,035</b>	<b>\$1,308,331</b>
<b>OPERATING INCOME (LOSS)</b>	<b>\$16,394</b>	<b>(\$176,684)</b>	<b>(\$32,225)</b>	<b>(\$11,380)</b>	<b>\$52,063</b>	<b>(\$67,481)</b>	<b>(\$304,832)</b>	<b>\$38,175</b>	<b>\$105,957</b>	<b>\$98,997</b>
<b>NON-OPERATING REVENUES</b>										
Investment Income	\$28,538	\$12,653	\$20,846	\$4,964	\$34,342	\$23,440	\$48,611	\$25,502	\$42,616	\$29,348
<b>Total Non-Operating Revenues</b>	<b>\$28,538</b>	<b>\$12,653</b>	<b>\$20,846</b>	<b>\$4,964</b>	<b>\$34,342</b>	<b>\$23,440</b>	<b>\$48,611</b>	<b>\$25,502</b>	<b>\$42,616</b>	<b>\$29,348</b>
<b>NON-OPERATING EXPENSES</b>										
Other Investment Expenses	\$77	\$83	\$157	\$87	\$76	\$0	\$0	\$0	\$0	\$0
<b>Total Non-Operating Expenses</b>	<b>\$77</b>	<b>\$83</b>	<b>\$157</b>	<b>\$87</b>	<b>\$76</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Securities Lending Income	\$0	\$0	\$15	\$41	\$54	\$0	\$0	\$0	\$0	\$0
Cost of Lending Securities	—	—	(3)	(8)	(12)	—	—	—	—	—
<b>Net Securities Lending</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12</b>	<b>\$33</b>	<b>\$42</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>NON-OPERATING INCOME</b>	<b>\$28,461</b>	<b>\$12,570</b>	<b>\$20,701</b>	<b>\$4,910</b>	<b>\$34,308</b>	<b>\$23,440</b>	<b>\$48,611</b>	<b>\$25,502</b>	<b>\$42,616</b>	<b>\$29,348</b>
<b>CHANGE IN UNRESTRICTED NET POSITION</b>	<b>\$44,855</b>	<b>(\$164,114)</b>	<b>(\$11,524)</b>	<b>(\$6,470)</b>	<b>\$86,371</b>	<b>(\$44,041)</b>	<b>(\$256,221)</b>	<b>\$63,677</b>	<b>\$148,573</b>	<b>\$128,345</b>
<b>TOTAL UNRESTRICTED NET POSITION</b>										
Beginning of Year	\$279,444	\$443,558	\$455,082	\$461,552	\$375,181	\$419,222	\$675,443	\$611,766	\$463,193	\$334,848
End of Year	\$324,299	\$279,444	\$443,558	\$455,082	\$461,552	\$375,181	\$419,222	\$675,443	\$611,766	\$463,193

## LONG-TERM CARE FUND

Expenses &amp; Revenues – 10-Year Review (Dollars in Thousands)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>Operating Revenues</b>										
Premiums	\$282,426	\$272,362	\$286,571	\$307,812	\$313,466	\$314,099	\$285,948	\$296,529	\$299,489	\$241,495
<b>Total Operating Revenues</b>	<b>\$282,426</b>	<b>\$272,362</b>	<b>\$286,571</b>	<b>\$307,812</b>	<b>\$313,466</b>	<b>\$314,099</b>	<b>\$285,948</b>	<b>\$296,529</b>	<b>\$299,489</b>	<b>\$241,495</b>
<b>Operating Expenses</b>										
Claims Expense	\$271,742	\$248,785	\$225,691	\$198,185	\$174,896	\$156,118	\$133,042	\$116,191	\$101,349	\$87,324
Increase (Decrease) in Estimated Liabilities	376,284	310,565	345,547	(631,804)	1,063,318	(115,600)	(208,200)	469,800	(600,900)	487,800
Administrative Expenses	24,999	24,304	22,946	21,819	21,718	21,303	19,663	18,421	18,479	18,198
<b>Total Operating Expenses</b>	<b>\$673,025</b>	<b>\$583,654</b>	<b>\$594,184</b>	<b>(\$411,800)</b>	<b>\$1,259,932</b>	<b>\$61,821</b>	<b>(\$55,495)</b>	<b>\$604,412</b>	<b>(\$481,072)</b>	<b>\$593,322</b>
<b>OPERATING INCOME (LOSS)</b>	<b>(\$390,599)</b>	<b>(\$311,292)</b>	<b>(\$307,613)</b>	<b>\$719,612</b>	<b>(\$946,466)</b>	<b>\$252,278</b>	<b>\$341,443</b>	<b>(\$307,883)</b>	<b>\$780,561</b>	<b>(\$351,827)</b>
<b>Non-Operating Revenues</b>										
Investment Income	\$226,526	(\$36,550)	\$393,354	\$119,607	\$114,947	\$537,156	\$351,745	(\$369,021)	(\$73,039)	\$281,068
<b>Total Non-Operating Revenues</b>	<b>\$226,526</b>	<b>(\$36,550)</b>	<b>\$393,354</b>	<b>\$119,607</b>	<b>\$114,947</b>	<b>\$537,156</b>	<b>\$351,745</b>	<b>(\$369,021)</b>	<b>(\$73,039)</b>	<b>\$281,068</b>
<b>Non-Operating Expenses</b>										
Other Investment Expenses	\$1,606	\$1,734	\$1,615	\$1,160	\$540	\$0	\$0	\$0	\$0	\$0
<b>Total Non-Operating Expenses</b>	<b>\$1,606</b>	<b>\$1,734</b>	<b>\$1,615</b>	<b>\$1,160</b>	<b>\$540</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Securities Lending Income	\$0	\$0	\$0	\$909	\$1,624	\$0	\$0	\$0	\$0	\$0
Cost of Lending Securities	—	—	—	(120)	(274)	—	—	—	—	—
<b>Net Securities Lending</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$789</b>	<b>\$1,350</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>NON-OPERATING INCOME (LOSS)</b>	<b>\$224,920</b>	<b>(\$38,284)</b>	<b>\$391,739</b>	<b>\$119,236</b>	<b>\$115,757</b>	<b>\$537,156</b>	<b>\$351,745</b>	<b>(\$369,021)</b>	<b>(\$73,039)</b>	<b>\$281,068</b>
<b>CHANGE IN UNRESTRICTED NET POSITION</b>	<b>(\$165,679)</b>	<b>(\$349,576)</b>	<b>\$84,126</b>	<b>\$838,848</b>	<b>(\$830,709)</b>	<b>\$789,434</b>	<b>\$693,188</b>	<b>(\$676,904)</b>	<b>\$707,522</b>	<b>(\$70,759)</b>
<b>TOTAL UNRESTRICTED NET POSITION</b>										
Beginning of Year	\$413,672	\$763,248	\$679,122	(\$159,726)	\$670,983	(\$118,451)	(\$811,639)	(\$134,735)	(\$842,257)	(\$771,498)
End of Year	\$247,993	\$413,672	\$763,248	\$679,122	(\$159,726)	\$670,983	(\$118,451)	(\$811,639)	(\$134,735)	(\$842,257)

## HEALTH BENEFITS PROGRAM DATA

Total Covered Lives by Health Plan as of June 30, 2016

	Basic					Medicare					Total Covered Lives
	State		Public Agency		Total	State		Public Agency		Total	
	Active	Retired	Active	Retired		Active	Retired	Active	Retired		
Health Maintenance Organization (HMO)											
Anthem HMO Select	13,146	1,161	13,933	803	29,043	—	—	—	—	—	29,043
Anthem HMO Traditional	4,588	444	10,640	980	16,652	—	—	—	—	—	16,652
Blue Shield Access+	59,968	13,136	65,689	8,001	146,794	—	—	—	—	—	146,794
Blue Shield NetValue	48,342	8,850	22,506	3,026	82,724	—	—	—	—	—	82,724
Health Net Salud y Más	2,021	63	1,474	23	3,581	—	—	—	—	—	3,581
Health Net SmartCare	10,030	765	2,973	231	13,999	—	—	—	—	—	13,999
Kaiser	224,282	33,281	187,948	17,552	463,063	42	63,363	28	36,482	99,915	562,978
Kaiser/Out of State	5	183	—	203	391	—	1,319	—	686	2,005	2,396
Sharp	7,975	481	1,225	81	9,762	—	—	—	—	—	9,762
UnitedHealthcare	25,966	1,471	20,090	951	48,478	13	26,098	4	16,320	42,435	90,913
SUBTOTAL	396,323	59,835	326,478	31,851	814,487	55	90,780	32	53,488	144,355	958,842
Preferred Provider Organization (PPO)											
Anthem EPO Del Norte	82	8	—	2	92	—	—	—	—	—	92
Anthem EPO Monterey	1,412	75	1,243	15	2,745	—	—	—	—	—	2,745
Blue Shield EPO	656	262	—	—	918	—	—	—	—	—	918
PERS Choice	63,147	25,531	57,305	10,160	156,143	24	49,200	11	27,408	76,643	232,786
PERS Select	22,013	1,526	16,994	942	41,475	2	831	—	1,283	2,116	43,591
PERSCare	6,064	2,897	11,824	3,618	24,403	6	42,929	—	18,102	61,037	85,440
SUBTOTAL	93,374	30,299	87,366	14,737	225,776	32	92,960	11	46,793	139,796	365,572
Association (ASN) Plans											
CAHP	22,010	5,471	—	—	27,481	—	4,802	—	—	4,802	32,283
CCPOA North	7,760	2,031	—	—	9,791	—	577	—	—	577	10,368
CCPOA South	25,630	4,335	—	—	29,965	—	760	—	—	760	30,725
PORAC	656	296	18,311	5,311	24,574	—	192	2	2,425	2,619	27,193
SUBTOTAL	56,056	12,133	18,311	5,311	91,811	—	6,331	2	2,425	8,758	100,569
TOTAL	545,753	102,267	432,155	51,899	1,132,074	87	190,071	45	102,706	292,909	1,424,983

### 10-Year Enrollments

Members	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Total Covered Lives	1,424,983	1,400,960	1,385,386	1,377,587	1,367,282	1,354,279	1,305,401	1,285,299	1,264,996	1,237,419
Subscribers	684,436	669,127	657,904	645,658	636,107	631,295	621,764	606,707	593,047	575,984

Total Covered Lives Summary as of June 30, 2016

	State	Public Agency	Total
Total Covered Lives	838,178	586,805	1,424,983

## Statistical Section: Other Programs (continued)

### HEALTH BENEFITS PROGRAM DATA (CONTINUED)

#### State HMO Total Covered Lives by County as of June 30, 2016

County	Anthem HMO Select	Anthem HMO Traditional	Blue Shield Access+	Blue Shield NetValue	Health Net Salud y Más	Health Net SmartCare	Kaiser	Kaiser/ Out of State	Sharp	United Healthcare	Total
Alameda	284	105	3,146	8	—	89	11,623	—	—	1,227	16,482
Alpine	—	—	—	—	—	—	—	—	—	—	—
Amador	—	—	—	2	—	—	1,654	—	—	10	1,666
Butte	—	30	4,427	—	—	—	1	—	—	711	5,169
Calaveras	—	—	2	—	—	—	17	—	—	1	20
Colusa	—	—	—	—	—	—	—	—	—	17	17
Contra Costa	100	90	1,989	484	—	218	8,095	—	—	676	11,652
Del Norte	—	—	—	2	—	—	—	—	—	—	2
El Dorado	484	70	456	1,007	—	3	4,521	—	—	248	6,789
Fresno	144	185	1,572	5,163	—	423	9,295	—	—	6,118	22,900
Glenn	—	1	241	—	—	—	—	—	—	38	280
Humboldt	—	464	2,531	—	—	—	1	—	—	296	3,292
Imperial	361	77	1,006	1,073	—	—	8	—	1	118	2,644
Inyo	—	—	—	—	—	—	—	—	—	—	—
Kern	233	61	904	1,874	99	565	9,144	—	—	754	13,634
Kings	—	125	1,495	1,585	—	432	696	—	—	2,182	6,515
Lake	—	—	—	—	—	—	—	—	—	2	2
Lassen	—	—	—	—	—	—	—	—	—	—	—
Los Angeles	1,409	533	7,077	3,307	893	862	38,067	—	—	3,251	55,399
Madera	—	38	430	808	—	—	1,935	—	—	260	3,471
Marin	—	20	415	136	—	—	1,460	—	—	193	2,224
Mariposa	—	—	191	—	—	—	4	—	—	26	221
Mendocino	—	9	—	—	—	—	1	—	—	180	190
Merced	345	28	1,097	—	—	—	6	—	—	209	1,685
Modoc	—	—	—	—	—	—	—	—	—	—	—
Mono	—	—	—	—	—	—	—	—	—	—	—
Monterey	—	1	5	—	—	—	7	—	—	7	20
Napa	—	55	—	1	—	21	4,574	—	—	3	4,654
Nevada	115	21	169	505	—	—	37	—	—	246	1,093
Orange	418	233	3,795	1,739	391	191	11,131	—	—	1,767	19,665
Placer	584	190	1,262	2,068	—	—	12,270	—	—	2,500	18,874
Plumas	—	—	—	—	—	—	—	—	—	2	2
Riverside	441	166	4,195	1,539	101	158	15,281	—	4	1,469	23,354
Sacramento	5,495	941	11,355	18,166	—	4,612	97,586	—	—	15,475	153,630
San Benito	—	35	—	—	—	—	—	—	—	—	35
San Bernardino	734	193	2,784	2,356	283	456	20,944	—	—	1,995	29,745
San Diego	159	2	3,459	1,348	312	227	12,735	—	8,451	2,068	28,761
San Francisco	76	69	1,311	759	—	248	4,024	—	—	1,303	7,790
San Joaquin	282	108	1,099	2,114	—	465	8,657	—	—	1,476	14,201
San Luis Obispo	—	430	2,185	7,096	—	—	3	—	—	594	10,308
San Mateo	—	39	1,223	281	—	83	3,180	—	—	794	5,600
Santa Barbara	2	59	893	3	—	—	1	—	—	259	1,217
Santa Clara	197	76	1,464	269	—	86	8,299	—	—	814	11,205
Santa Cruz	58	16	738	179	—	35	34	—	—	547	1,607
Shasta	—	—	—	1	—	—	—	—	—	6	7
Sierra	—	—	—	—	—	—	—	—	—	16	16
Siskiyou	—	—	—	—	—	—	—	—	—	—	—
Solano	—	190	1,424	4	—	29	15,263	—	—	864	17,774
Sonoma	—	73	1,515	169	—	43	7,277	—	—	864	9,941
Stanislaus	312	95	1,005	417	—	—	3,098	—	—	938	5,865

## HEALTH BENEFITS PROGRAM DATA (CONTINUED)

## State HMO Total Covered Lives by County as of June 30, 2016 (continued)

County	Anthem HMO Select	Anthem HMO Traditional	Blue Shield Access+	Blue Shield NetValue	Health Net Salud y Más	Health Net SmartCare	Kaiser	Kaiser/ Out of State	Sharp	United Healthcare	Total
Sutter	—	—	—	—	—	—	124	—	—	4	128
Tehama	—	—	—	—	—	—	—	—	—	5	5
Trinity	—	—	—	—	—	—	—	—	—	1	1
Tulare	1,103	15	4,515	9	—	1,111	67	—	—	441	7,261
Tuolumne	5	4	—	—	—	—	7	—	—	—	16
Ventura	410	26	441	1,009	—	—	2,618	—	—	543	5,047
Yolo	549	159	1,266	1,699	—	433	6,444	—	—	1,897	12,447
Yuba	2	—	—	1	—	5	713	—	—	2	723
Out of State	5	—	22	11	5	—	65	1,507	—	131	1,746
Out of Country/ Unknown	—	—	—	—	—	—	1	—	—	—	1
<b>Total Covered Lives</b>	<b>14,307</b>	<b>5,032</b>	<b>73,104</b>	<b>57,192</b>	<b>2,084</b>	<b>10,795</b>	<b>320,968</b>	<b>1,507</b>	<b>8,456</b>	<b>53,548</b>	<b>546,993</b>

## State PPO Total Covered Lives by County as of June 30, 2016

County	Anthem EPO Del Norte	Anthem EPO Monterey	Blue Shield EPO	PERS Choice	PERS Select	PERSCare	Total
Alameda	—	—	—	1,436	137	921	2,494
Alpine	—	—	—	26	6	4	36
Amador	—	—	—	1,169	143	235	1,547
Butte	—	—	—	3,092	559	1,144	4,795
Calaveras	—	—	—	1,035	154	176	1,365
Colusa	—	—	105	43	8	24	180
Contra Costa	—	—	—	880	84	725	1,689
Del Norte	87	—	—	2,495	1,701	170	4,453
El Dorado	—	—	—	1,688	284	707	2,679
Fresno	—	—	—	4,054	865	1,402	6,321
Glenn	—	—	—	124	22	38	184
Humboldt	—	—	—	2,401	519	629	3,549
Imperial	—	—	—	781	259	178	1,218
Inyo	—	—	—	536	196	73	805
Kern	—	—	—	3,076	605	816	4,497
Kings	—	—	—	903	351	154	1,408
Lake	—	—	2	447	86	159	694
Lassen	—	—	—	3,512	2,735	287	6,534
Los Angeles	—	—	—	12,463	1,904	5,414	19,781
Madera	—	—	—	618	195	205	1,018
Marin	—	—	—	486	24	365	875
Mariposa	—	—	—	193	31	66	290
Mendocino	—	—	785	326	112	167	1,390
Merced	—	—	—	661	217	231	1,109
Modoc	—	—	—	251	61	34	346
Mono	—	—	—	181	44	11	236
Monterey	—	1,487	—	6,298	1,830	639	10,254
Napa	—	—	—	698	83	261	1,042
Nevada	—	—	—	584	84	351	1,019
Orange	—	—	—	5,304	777	2,973	9,054
Placer	—	—	—	1,755	164	1,092	3,011
Plumas	—	—	—	387	180	86	653
Riverside	—	—	—	3,012	497	1,232	4,741



## HEALTH BENEFITS PROGRAM DATA (CONTINUED)

State PPO Total Covered Lives by County as of June 30, 2016 (continued)

County	Anthem EPO Del Norte	Anthem EPO Monterey	Blue Shield EPO	PERS Choice	PERS Select	PERSCare	Total
Sacramento	—	—	—	7,464	1,287	5,797	14,548
San Benito	—	—	—	335	74	61	470
San Bernardino	—	—	—	2,564	501	1,079	4,144
San Diego	—	—	—	3,656	383	2,005	6,044
San Francisco	—	—	—	854	115	696	1,665
San Joaquin	—	—	—	1,206	186	792	2,184
San Luis Obispo	—	—	—	8,411	1,917	2,304	12,632
San Mateo	—	—	—	572	71	422	1,065
Santa Barbara	—	—	—	740	203	367	1,310
Santa Clara	—	—	—	1,636	139	775	2,550
Santa Cruz	—	—	—	602	70	279	951
Shasta	—	—	—	3,600	1,747	618	5,965
Sierra	—	—	26	27	12	12	77
Siskiyou	—	—	—	926	304	128	1,358
Solano	—	—	—	663	33	321	1,017
Sonoma	—	—	—	1,142	88	748	1,978
Stanislaus	—	—	—	860	141	489	1,490
Sutter	—	—	—	1,531	141	243	1,915
Tehama	—	—	—	1,067	354	190	1,611
Trinity	—	—	—	212	73	36	321
Tulare	—	—	—	3,868	854	754	5,476
Tuolumne	—	—	—	1,979	276	271	2,526
Ventura	—	—	—	2,287	307	947	3,541
Yolo	—	—	—	1,090	94	590	1,774
Yuba	—	—	—	658	73	108	839
Out of State	3	—	—	28,697	12	10,855	39,567
Out of Country/ Unknown	—	—	—	340	—	40	380
<b>Total Covered Lives</b>	<b>90</b>	<b>1,487</b>	<b>918</b>	<b>137,902</b>	<b>24,372</b>	<b>51,896</b>	<b>216,665</b>

## Statistical Section: Other Programs (continued)

### HEALTH BENEFITS PROGRAM DATA (CONTINUED)

#### State ASN Total Covered Lives by County as of June 30, 2016

County	CAHP	CCPOA North	CCPOA South	PORAC	Total	County	CAHP	CCPOA North	CCPOA South	PORAC	Total
Alameda	378	37	—	—	415	Placer	1,688	325	—	19	2,032
Alpine	7	—	—	3	10	Plumas	190	—	—	—	190
Amador	153	—	—	—	153	Riverside	2,783	—	4,661	59	7,503
Butte	500	49	—	17	566	Sacramento	1,485	1,514	—	22	3,021
Calaveras	165	—	—	8	173	San Benito	76	—	—	25	101
Colusa	59	—	—	—	59	San Bernardino	1,990	—	3,149	15	5,154
Contra Costa	500	100	—	3	603	San Diego	1,722	—	2,248	43	4,013
Del Norte	110	—	—	3	113	San Francisco	72	40	—	4	116
El Dorado	771	157	—	23	951	San Joaquin	641	1,115	—	4	1,760
Fresno	1,084	1,251	8	58	2,401	San Luis Obispo	937	—	2,859	114	3,910
Glenn	85	—	—	—	85	San Mateo	132	15	—	5	152
Humboldt	314	—	—	31	345	Santa Barbara	429	—	481	11	921
Imperial	317	—	4,431	8	4,756	Santa Clara	432	22	—	3	457
Inyo	122	—	—	1	123	Santa Cruz	220	37	—	36	293
Kern	1,342	3	9,941	25	11,311	Shasta	1,069	—	—	33	1,102
Kings	257	1,387	—	—	1,644	Sierra	5	—	—	—	5
Lake	175	—	—	16	191	Siskiyou	409	—	—	12	421
Lassen	125	—	—	4	129	Solano	666	345	—	—	1,011
Los Angeles	2,577	1	2,188	113	4,879	Sonoma	529	72	—	7	608
Madera	360	322	—	4	686	Stanislaus	603	509	1	8	1,121
Marin	115	30	—	—	145	Sutter	269	—	—	8	277
Mariposa	80	—	—	—	80	Tehama	341	—	—	7	348
Mendocino	195	—	—	—	195	Trinity	71	—	—	1	72
Merced	382	330	—	5	717	Tulare	721	2,522	1	2	3,246
Modoc	91	—	—	5	96	Tuolumne	152	—	—	8	160
Mono	42	—	—	2	44	Ventura	897	—	423	57	1,377
Monterey	344	—	—	77	421	Yolo	259	157	—	—	416
Napa	201	—	—	6	207	Yuba	123	—	—	2	125
Nevada	354	22	—	26	402	Out of State	918	6	1	108	1,033
Orange	1,240	—	333	93	1,666	Out of Country/ Unknown	9	—	—	—	9
						<b>Total Covered Lives</b>	<b>32,283</b>	<b>10,368</b>	<b>30,725</b>	<b>1,144</b>	<b>74,520</b>

#### Public Agency HMO Total Covered Lives by County as of June 30, 2016

Plans by County	Anthem HMO Select	Anthem HMO Traditional	Blue Shield Access+	Blue Shield NetValue	Health Net Salud y Más	Health Net SmartCare	Kaiser	Kaiser/ Out of State	Sharp	United Healthcare	Total
Alameda	1,258	1,200	3,795	—	—	99	26,920	—	—	1,472	34,744
Alpine	—	—	—	—	—	—	—	—	—	—	—
Amador	—	—	—	—	—	—	103	—	—	1	104
Butte	—	4	1,022	—	—	—	2	—	—	355	1,383
Calaveras	—	—	—	—	—	—	2	—	—	2	4
Colusa	—	—	191	—	—	—	—	—	—	55	246
Contra Costa	1,621	1,439	3,576	1,117	—	647	29,038	—	—	1,651	39,089
Del Norte	—	—	—	—	—	—	—	—	—	1	1
El Dorado	60	20	275	263	—	—	2,030	—	—	66	2,714
Fresno	4	2	45	267	—	21	740	—	—	1,492	2,571
Glenn	—	—	388	—	—	—	1	—	—	101	490
Humboldt	—	13	319	—	—	—	—	—	—	79	411
Imperial	24	—	63	111	—	—	—	—	—	10	208

## Statistical Section: Other Programs (continued)

### HEALTH BENEFITS PROGRAM DATA (CONTINUED)

Public Agency HMO Total Covered Lives by County as of June 30, 2016 (continued)

Plans by County	Anthem HMO Select	Anthem HMO Traditional	Blue Shield Access+	Blue Shield NetValue	Health Net Salud y Más	Health Net SmartCare	Kaiser	Kaiser/ Out of State	Sharp	United Healthcare	Total
Inyo	—	—	—	—	—	—	—	—	—	2	2
Kern	1	12	170	176	—	4	588	—	—	209	1,160
Kings	—	—	22	25	—	31	12	—	—	122	212
Lake	—	—	—	—	—	—	1	—	—	7	8
Lassen	—	—	—	—	—	—	—	—	—	1	1
Los Angeles	1,566	1,613	23,964	7,034	1,150	377	49,881	—	—	6,427	92,012
Madera	—	1	1,196	238	—	—	880	—	—	501	2,816
Marin	—	118	424	123	—	—	3,451	—	—	230	4,346
Mariposa	—	—	21	—	—	—	4	—	—	24	49
Mendocino	—	1	42	—	—	—	1	—	—	24	68
Merced	93	21	493	—	—	—	3	—	—	77	687
Modoc	—	—	—	—	—	—	—	—	—	—	—
Mono	—	—	—	—	—	—	—	—	—	1	1
Monterey	1	—	—	—	—	—	1	—	—	24	26
Napa	—	57	—	—	—	15	6,124	—	—	—	6,196
Nevada	1,985	87	110	194	—	—	31	—	—	571	2,978
Orange	329	256	5,946	2,534	59	88	9,299	—	—	3,384	21,895
Placer	54	119	1,230	1,674	—	—	8,032	—	—	2,373	13,482
Plumas	—	—	—	—	—	—	—	—	—	—	—
Riverside	214	203	4,765	1,144	18	82	9,090	—	—	3,588	19,104
Sacramento	76	57	1,101	1,363	—	336	10,555	—	—	2,222	15,710
San Benito	—	107	—	—	—	—	—	—	—	16	123
San Bernardino	327	237	4,813	1,672	137	40	10,109	—	—	1,704	19,039
San Diego	41	—	1,373	475	133	52	2,374	—	1,306	1,599	7,353
San Francisco	88	246	721	127	—	16	2,249	—	—	191	3,638
San Joaquin	2,033	482	886	821	—	548	9,570	—	—	469	14,809
San Luis Obispo	—	39	2,199	2,755	—	—	—	—	—	282	5,275
San Mateo	5	1,183	3,195	156	—	115	9,239	—	—	1,151	15,044
Santa Barbara	—	36	2,561	—	—	—	—	—	—	170	2,767
Santa Clara	1,022	992	2,342	252	—	47	19,576	—	—	917	25,148
Santa Cruz	3,179	1,649	2,327	227	—	54	64	—	—	1,144	8,644
Shasta	—	—	1	—	—	—	1	—	—	13	15
Sierra	—	—	38	—	—	—	—	—	—	3	41
Siskiyou	—	—	—	—	—	—	—	—	—	5	5
Solano	13	884	1,111	—	—	65	18,636	—	—	669	21,378
Sonoma	—	161	582	140	—	27	4,871	—	—	185	5,966
Stanislaus	221	78	539	343	—	1	3,091	—	—	781	5,054
Sutter	—	—	—	—	—	—	23	—	—	3	26
Tehama	—	—	—	—	—	—	—	—	—	2	2
Trinity	—	—	—	—	—	—	1	—	—	—	1
Tulare	14	—	236	—	—	20	25	—	—	35	330
Tuolumne	—	3	—	—	—	—	8	—	—	6	17
Ventura	414	280	1,300	1,627	—	—	2,560	—	—	682	6,863
Yolo	84	20	288	668	—	519	2,599	—	—	1,903	6,081
Yuba	4	—	—	—	—	—	196	—	—	3	203
Out of State	5	—	20	6	—	—	29	889	—	360	1,309
Out of Country/ Unknown	—	—	—	—	—	—	—	—	—	—	—
<b>Total Covered Lives</b>	<b>14,736</b>	<b>11,620</b>	<b>73,690</b>	<b>25,532</b>	<b>1,497</b>	<b>3,204</b>	<b>242,010</b>	<b>889</b>	<b>1,306</b>	<b>37,365</b>	<b>411,849</b>

## HEALTH BENEFITS PROGRAM DATA (CONTINUED)

Public Agency PPO Total Covered Lives by County as of June 30, 2016

County	Anthem EPO Del Norte	Anthem EPO Monterey	Blue Shield EPO	PERS Choice	PERS Select	PERSCare	Total
Alameda	—	—	—	2,145	174	1,039	3,358
Alpine	—	—	—	15	2	3	20
Amador	—	—	—	248	31	47	326
Butte	—	—	—	1,178	1,357	255	2,790
Calaveras	—	—	—	627	194	98	919
Colusa	—	—	—	163	138	45	346
Contra Costa	—	—	—	2,201	307	1,184	3,692
Del Norte	2	—	—	115	32	15	164
El Dorado	—	—	—	731	91	243	1,065
Fresno	—	—	—	314	74	95	483
Glenn	—	—	—	221	154	43	418
Humboldt	—	—	—	1,308	1,429	83	2,820
Imperial	—	—	—	46	18	11	75
Inyo	—	—	—	1,156	167	197	1,520
Kern	—	—	—	414	75	91	580
Kings	—	—	—	30	16	2	48
Lake	—	—	—	182	20	76	278
Lassen	—	—	—	213	88	26	327
Los Angeles	—	—	—	20,388	2,271	8,626	31,285
Madera	—	—	—	366	63	101	530
Marin	—	—	—	555	62	269	886
Mariposa	—	—	—	92	10	37	139
Mendocino	—	—	—	76	22	36	134
Merced	—	—	—	236	62	133	431
Modoc	—	—	—	20	1	3	24
Mono	—	—	—	657	4	50	711
Monterey	—	1,258	—	10,196	1,085	581	13,120
Napa	—	—	—	994	206	270	1,470
Nevada	—	—	—	685	169	295	1,149
Orange	—	—	—	4,736	861	2,560	8,157
Placer	—	—	—	1,765	210	699	2,674
Plumas	—	—	—	374	41	52	467
Riverside	—	—	—	2,637	435	1,373	4,445
Sacramento	—	—	—	748	253	380	1,381
San Benito	—	—	—	993	278	89	1,360
San Bernardino	—	—	—	1,792	235	1,013	3,040
San Diego	—	—	—	955	174	469	1,598
San Francisco	—	—	—	327	81	233	641
San Joaquin	—	—	—	1,734	1,079	262	3,075
San Luis Obispo	—	—	—	2,718	916	607	4,241
San Mateo	—	—	—	1,892	177	991	3,060
Santa Barbara	—	—	—	838	340	382	1,560
Santa Clara	—	—	—	4,068	867	1,408	6,343
Santa Cruz	—	—	—	2,122	328	549	2,999
Shasta	—	—	—	1,883	1,695	335	3,913
Sierra	—	—	—	28	1	2	31
Siskiyou	—	—	—	839	758	57	1,654
Solano	—	—	—	738	127	255	1,120
Sonoma	—	—	—	719	70	214	1,003
Stanislaus	—	—	—	1,252	564	243	2,059
Sutter	—	—	—	313	37	35	385
Tehama	—	—	—	211	206	45	462

## HEALTH BENEFITS PROGRAM DATA (CONTINUED)

Public Agency PPO Total Covered Lives by County as of June 30, 2016

County	Anthem EPO Del Norte	Anthem EPO Monterey	Blue Shield EPO	PERS Choice	PERS Select	PERSCare	Total
Trinity	—	—	—	441	79	23	543
Tulare	—	—	—	203	41	31	275
Tuolumne	—	—	—	900	282	254	1,436
Ventura	—	—	—	2,285	534	1,013	3,832
Yolo	—	—	—	510	96	198	804
Yuba	—	—	—	967	132	51	1,150
Out of State	—	—	—	10,251	—	5,736	15,987
Out of Country/ Unknown	—	—	—	73	—	31	104
<b>Total Covered Lives</b>	<b>2</b>	<b>1,258</b>	<b>0</b>	<b>94,884</b>	<b>19,219</b>	<b>33,544</b>	<b>148,907</b>

Public Agency ASN Total Covered Lives by County as of June 30, 2016

County	CAHP	CCPOA North	CCPOA South	PORAC	Total	County	CAHP	CCPOA North	CCPOA South	PORAC	Total
Alameda	—	—	—	617	617	Placer	—	—	—	457	457
Alpine	—	—	—	—	—	Plumas	—	—	—	303	303
Amador	—	—	—	194	194	Riverside	—	—	—	1,400	1,400
Butte	—	—	—	1,028	1,028	Sacramento	—	—	—	239	239
Calaveras	—	—	—	62	62	San Benito	—	—	—	557	557
Colusa	—	—	—	55	55	San Bernardino	—	—	—	863	863
Contra Costa	—	—	—	651	651	San Diego	—	—	—	222	222
Del Norte	—	—	—	12	12	San Francisco	—	—	—	40	40
El Dorado	—	—	—	269	269	San Joaquin	—	—	—	366	366
Fresno	—	—	—	24	24	San Luis Obispo	—	—	—	281	281
Glenn	—	—	—	110	110	San Mateo	—	—	—	191	191
Humboldt	—	—	—	537	537	Santa Barbara	—	—	—	168	168
Imperial	—	—	—	25	25	Santa Clara	—	—	—	704	704
Inyo	—	—	—	224	224	Santa Cruz	—	—	—	811	811
Kern	—	—	—	54	54	Shasta	—	—	—	832	832
Kings	—	—	—	19	19	Sierra	—	—	—	21	21
Lake	—	—	—	92	92	Siskiyou	—	—	—	304	304
Lassen	—	—	—	82	82	Solano	—	—	—	110	110
Los Angeles	—	—	—	3,047	3,047	Sonoma	—	—	—	166	166
Madera	—	—	—	31	31	Stanislaus	—	—	—	101	101
Marin	—	—	—	81	81	Sutter	—	—	—	409	409
Mariposa	—	—	—	29	29	Tehama	—	—	—	188	188
Mendocino	—	—	—	17	17	Trinity	—	—	—	35	35
Merced	—	—	—	40	40	Tulare	—	—	—	1	1
Modoc	—	—	—	67	67	Tuolumne	—	—	—	309	309
Mono	—	—	—	65	65	Ventura	—	—	—	972	972
Monterey	—	—	—	2,280	2,280	Yolo	—	—	—	65	65
Napa	—	—	—	101	101	Yuba	—	—	—	332	332
Nevada	—	—	—	341	341	Out of State	—	—	—	2,003	2,003
Orange	—	—	—	3,443	3,443	Out of Country/ Unknown	—	—	—	2	2
						<b>Total Covered Lives</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26,049</b>	<b>26,049</b>

## DEFINED CONTRIBUTION PLANS

CalPERS administers a defined contribution plan and a deferred compensation plan to certain members to save for retirement.

These plans include:

- Deferred Compensation Program
- Supplemental Contributions Program

## DEFERRED COMPENSATION PROGRAM

The Deferred Compensation Program is a way for participants to defer a portion of pre-tax salary into investments of an individual's choosing. It allows both the amount deferred and the amount earned on the investment to be protected from income tax until the money is distributed. The plan is intended to supplement the retirement benefit plans offered by CalPERS. All California public agencies and school employers may adopt the Program for the benefit of their employees.

The CalPERS Board designates the investment fund options made available to participants and provides the administrative functions of the Program. Assets are held in trust by the Board for the exclusive benefit of participating employees.

As of June 30, 2016, the Deferred Compensation Program was adopted by 758 California public agencies and school districts. For a full listing of the Program participating public agencies, please visit our public agency employer page at [www.calpers.ca.gov](http://www.calpers.ca.gov).

## SUPPLEMENTAL CONTRIBUTIONS PROGRAM

The Supplemental Contributions Program is available to State of California employees who are members of CalPERS, and active judges who are members of the Judges' Retirement System I or II. Participants may invest after-tax contributions through payroll deductions or cash contributions by check. Participant earnings grow tax-deferred until the Program participants begin to take withdrawals in retirement or upon separation from state employment.

Additionally, the California State Legislature designated the Supplemental Contributions Program Fund (SCPF) as the default option for those State Peace Officers' and Firefighters' Supplemental Plan (SPOFF) participants who did not make an affirmative election to request a distribution from their SPOFF account balance prior to the plan terminating.

## INVESTMENT FUND LINEUP

The Deferred Compensation Program and Supplemental Contributions Program for the Fiscal Year 2015-16 investment line-up allows participants to choose from 10 target retirement date funds and six core funds.

The investment fund lineup includes:

### Ten Target Retirement Date Funds

- Structured with five-year increments to allow participants to target their retirement date.
- Utilizes glide path strategy intended to reduce volatility risk as the member approaches retirement.

### Six Core Funds

- Provides a broad range of asset class coverage to create a portfolio consistent with the participants' individual investment goals, time horizons, and risk tolerance.
- Spans the risk-return spectrum, without duplication.

## LONG-TERM CARE (LTC) PROGRAM DATA

As of June 30, 2016, the total long-term care participant count decreased 2.9 percent to 132,274. This decrease may be attributable to the LTC program stabilization and sustainability measures and realized participant population attrition. Annual premiums as of June 30, 2016 were \$282.4 million.

### Long-Term Care Program Data – Comprehensive Plans

Benefit Period	LTC 1 (1995-2002)		LTC 2 (2003-2004)		LTC 3 (2005-2008)		Total
	With Inflation	No Inflation	With Inflation	No Inflation	With Inflation	No Inflation	
Lifetime	20,370	5,926	1,151	654	1,121	1,065	30,287
10 Year	—	18,999	—	1,664	—	5	20,668
6 Year	2,109	17,840	20	1,495	3,204	3,489	28,157
3 Year	3,098	13,460	244	1,462	2,787	880	21,931
<b>TOTAL</b>	<b>25,577</b>	<b>56,225</b>	<b>1,415</b>	<b>5,275</b>	<b>7,112</b>	<b>5,439</b>	<b>101,043</b>

### Long-Term Care Program Data – Facility Only Plans

Benefit Period	LTC 1 (1995-2002)		LTC 2 (2003-2004)		LTC 3 (2005-2008)		Total
	With Inflation	No Inflation	With Inflation	No Inflation	With Inflation	No Inflation	
Lifetime	3,024	1,345	129	59	174	147	4,878
10 Year	—	4,556	—	261	—	—	4,817
6 Year	374	5,038	9	263	217	822	6,723
3 Year	1,206	6,190	36	307	653	281	8,673
<b>TOTAL</b>	<b>4,604</b>	<b>17,129</b>	<b>174</b>	<b>890</b>	<b>1,044</b>	<b>1,250</b>	<b>25,091</b>

### Partnership Plans with Inflation

Benefit Period	LTC 1 (1995-2002)	LTC 2 (2003-2004)	LTC 3 (2005-2008)	Total
2 Year	2,752	152	64	2,968
1 Year	1,664	81	34	1,779
6 Month	119	9	1	129
<b>TOTAL</b>	<b>4,535</b>	<b>242</b>	<b>99</b>	<b>4,876</b>

### LTC 4<sup>1</sup> Comprehensive and Partnership Plans

Benefit Period	5% Compound Inflation	3% Compound Inflation	5% Simple Inflation	3% Simple Inflation	Benefit Increase Offer	No Inflation	Total
10 Year	12	18	5	142	31	15	223
6 Year	17	81	6	277	33	14	428
3 Year	31	101	10	389	39	20	590
2 Year	20	—	—	—	—	—	20
1 Year	3	—	—	—	—	—	3
<b>TOTAL</b>	<b>83</b>	<b>200</b>	<b>21</b>	<b>808</b>	<b>103</b>	<b>49</b>	<b>1,264</b>

(1) LTC 4 opened for enrollment in December 2013.

### Seven-Year Historical Participant Counts

	2016	2015	2014	2013	2012	2011	2010
TOTAL COVERED LIVES	132,274	136,253	139,947	144,933	150,330	154,634	159,528



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# COMPLIANCE SECTION

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## SECTION HIGHLIGHTS

**Completed 125** audits and reviews of contracting public agencies

**Implemented five-year compliance plan** to build and enhance compliance capabilities

- Strengthen compliance & control foundations
- Expand capabilities in program areas
- Targeted enhancements



**Commitment** to strong ethics, compliance, and risk management practices

### **The three lines of defense:**

- 1<sup>st</sup>** – Program area management
- 2<sup>nd</sup>** – Oversight
- 3<sup>rd</sup>** – Internal and external audits

## OVERVIEW

Each year the California Public Employees' Retirement System (CalPERS) compiles an Annual Compliance Report for inclusion in the Comprehensive Annual Financial Report (CAFR). This year's report highlights activities and accomplishments for the Fiscal Year ended June 30, 2016.

Compliance is embedded into our strategy, culture, and day-to-day business operations as our activities and accomplishments directly support our organization's business plan and core values.

CalPERS launched our compliance program in 2004 to support our commitment of strong ethics, compliance, and risk management practices. In 2015, we developed a new multi-year compliance plan, building upon the already effective compliance practices in place. This new compliance plan takes into account current industry trends along with management input in establishing compliance focused priorities.

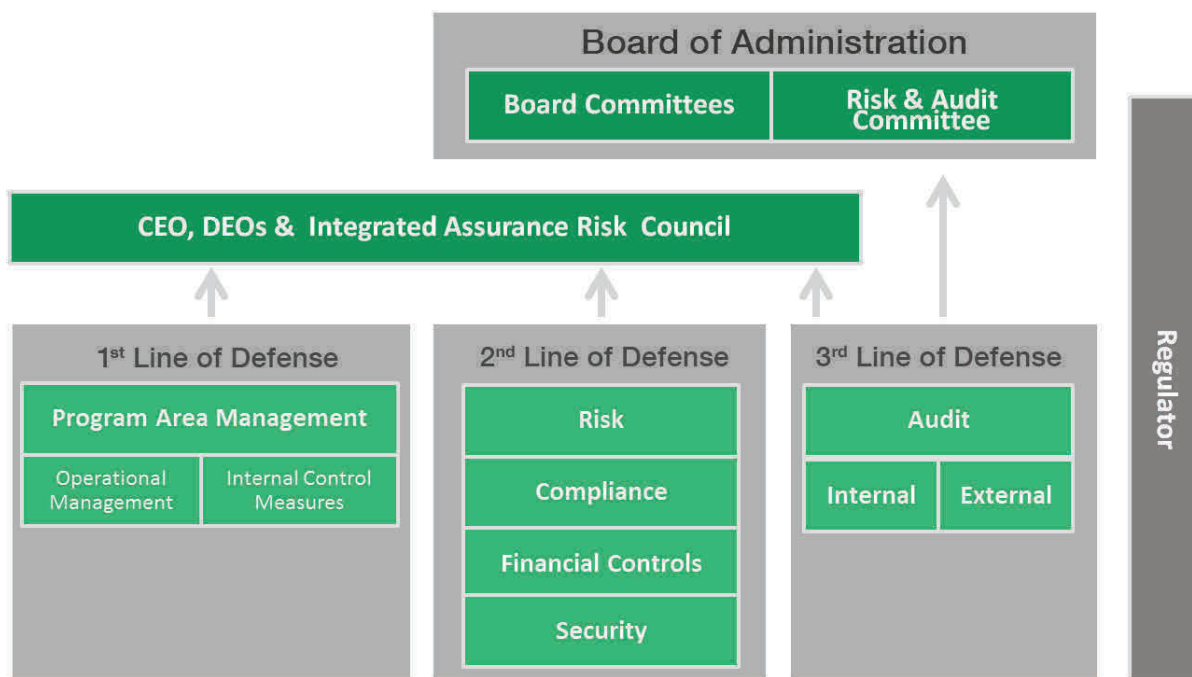
As part of implementing the compliance plan, we are developing frameworks and tools aimed at enhancing our control environment, addressing operating events, and improving the management of policies and delegations of authority. Additionally, the compliance plan focuses on fostering a compliance-aware culture through communication, education, and training. Fiscal Year 2015-16 is especially significant as it highlights activities and accomplishments during "Year One" of our compliance plan.

Compliance awareness, risk management and internal controls are integral to cultivating a high-performing, risk-intelligent, and innovative organization. To implement our governance, risk, and compliance practices, we have embraced an Integrated Assurance Model to promote a multi-faceted approach to compliance awareness and accountability. The model centers on a Three Lines of Defense framework, which promotes collaboration and an increased understanding of roles and responsibilities in an effort to detect and prevent instances of non-compliance.

The Board of Administration and executive management team provide direction and oversee the effectiveness of our organization's compliance practices using the Three Lines of Defense.

- **First Line of Defense** – The first level of the control environment are the program areas, which perform day-to-day risk management activities.
- **Second Line of Defense** – Oversight functions, such as Enterprise Compliance and Enterprise Risk Management, set direction, define policy, and provide assurance.
- **Third Line of Defense** – Internal and external audits offer an independent challenge to the levels of assurance provided by program areas and oversight functions.

## INTEGRATED ASSURANCE MODEL: THE THREE LINES OF DEFENSE



The Integrated Assurance Model helps clarify roles and responsibilities and promote ownership of compliance throughout the organization. Through the Three Lines of Defense, CalPERS encourages a culture of “doing the right thing.” By fostering a work environment based on our core values of quality, respect, integrity, openness, accountability and balance, CalPERS also recognizes that “compliance is everyone’s responsibility.”

### FY 2015-16 HIGHLIGHTS

Fiscal Year 2015-16 was a significant year for CalPERS as we began implementing our new compliance plan. Programs launched many initiatives and activities that laid the foundation for long-term success, focusing on five key areas: (1) roles and responsibilities, (2) operating event management, (3) control environments, (4) policy and delegation management, and (5) education and compliance awareness. These key areas provide the foundation for our compliance efforts and will continue to remain a focus for multiple years to strengthen CalPERS’ culture of compliance.

### FIRST LINE OF DEFENSE

The First Line of Defense in any control environment is program functional area management and staff, who are responsible for the performance of activities. In addition to performing day-to-day operations, the functional areas are responsible for compliance and risk mitigation. Highlights of our program area activities are described below.

#### HEALTH ADMINISTRATION

In Fiscal Year 2015-16, CalPERS completed a multi-year Dependent Eligibility Verification project, conducted to ensure that only eligible dependents are enrolled in CalPERS health plans.

In accordance with California Code of Regulations Title 2, section 599.500(o), CalPERS clarified health enrollment eligibility standards for a parent-child relationship by requiring health plan subscribers to submit specific documents, in addition to the Affidavit of Parent-Child Relationship, to clearly substantiate the parental role within that dependent type.

As of September 1, 2015, a total of 18,282 ineligible dependents, 2.6 percent of the entire project’s dependent population, were removed from coverage. Savings and claims cost avoidance are estimated to be almost \$122 million for the complete project. The initiative and its expected cost savings are part of CalPERS’ ongoing endeavors to help our employers and members manage their healthcare costs.

Under the Affordable Care Act (ACA) CalPERS enhanced the compliance processes, by taking the following steps:

- Issued Circular Letter 600-064-15 to inform contracting public agencies of changes to reporting requirements for applicable large employers under sections 4980H and 6056 of the Internal Revenue Code and for providers of minimum essential coverage under section 6055.
- Partnered with the California Department of Human Resources and the State Controller’s Office to identify process and financial impacts to the state including implementing changes to comply with Employer Shared Responsibility regulations, and the applicable large employer reporting requirements pursuant to the ACA on an ongoing basis.
- Collaborated with health plan partners to ensure accurate and timely minimum essential coverage reporting to the Internal Revenue Service and information statements to CalPERS members pursuant to section 6055 of the Internal Revenue Code.

In October 2015, CalPERS expanded eligibility for its Long-Term Care (LTC) Program to all classes of persons who meet the eligibility requirements of the Internal Revenue Code. This now includes current and former California Public Employees (including retirees), as well as grandparents, grandchildren, non-adult children, nephews, nieces, aunts, uncles, sons-in-law, daughters-in-law, brothers-in-law and sisters-in-law.

To improve our procurement process, CalPERS developed and executed a Pharmacy Benefit Manager (PBM) procurement using an innovative competitive solicitation process that assessed bidding firms’ capabilities, management, work and staff plans, finances, and pricing. CalPERS also designed and produced model contracts with all pricing elements and negotiated pricing and contract terms with all final vendors prior to the CalPERS Board awarding a contract. This process significantly reduces the risk of nonperformance due to insufficient assessment of capabilities and secures pricing for the next five-year contract.

To ensure that resolutions are accurately and consistently completed, CalPERS conducted a review and revision of all health resolution templates that strengthened contract language during Fiscal Year 2015-16. The number of templates used by staff was reduced by 74 percent. This will also make maintenance more manageable and improve the health contracting process for public agencies and schools moving forward.

Finally, CalPERS completed a comprehensive compliance review of the CalPERS program that operates under the regulation of the Health Insurance Portability and Accountability Act (HIPAA). This included implementation of automated methods to evaluate our compliance with the policies specified in the Information Security Section of the

### FIRST LINE OF DEFENSE (CONTINUED)

California State Administrative Manual. Additionally, we performed an exhaustive analysis of privacy laws, regulations, and policies to create a library of standards that will enable measurement of compliance in regards to privacy.

### PENSION ADMINISTRATION

In an effort to address threats to our ability to provide pension funding, we have taken steps toward understanding and strengthening the ability of our fund to pay promised benefits. As a result of a process instituted by the Chief Financial Officer, the Finance, the Investment, the Actuarial and the Communication and Stakeholder Relations offices have coordinated in an unprecedented way to assess and address threats to our ability to maintain the necessary levels of pension funding. This process, deemed Asset Liability Management (ALM), provides an integrated ALM framework and establishes an ALM committee to oversee the process. We developed a funding risk mitigation concept that helps to pay down the pension fund's unfunded liability, providing greater predictability and less volatility in contribution rates for employers.

In November 2015, the CalPERS Board of Administration adopted the new Funding Risk Mitigation Policy to ensure that the CalPERS Fund is sustainable over multiple generations. The Funding Risk Mitigation Policy supports CalPERS' goal to increase the long-term sustainability of pension benefits for its members. Based on our integrated ALM framework, the approved policy supports the concept of reducing risk and volatility in the pension system by incrementally lowering the discount rate in years of good investment returns and adjusting the asset allocation to account for the new discount rate. The policy also includes periodic reviews to assess the progress toward reducing risk as part of the ALM process that will be presented annually to the Board of Administration. This enterprise-level discussion of risk enables us to assess and monitor the economic impacts of risk and helps to inform investment and strategic decisions. The Funding Risk Mitigation Policy is the ultimate product of this collaborative effort and seeks to help strengthen overall pension funding.

During Fiscal Year 2015-16, our Disability Retirement program area began removing disability retirees from the retirement roll who were non-compliant with the re-evaluation process in accordance with the California Government Code. Those removed had failed to provide either medical substantiation for their claimed disability or visit an Independent Medical Examiner to validate an ongoing disability.

Effective April 2016, Section 555.5 was added in to Title 2 of the California Code of Regulations mandating appropriate interest when any payment owed to a participant from a

defined benefit plan has been delayed beyond a reasonable administrative processing time. (2 Cal. Code Regs. section 555.5) In compliance with this newly approved regulation, we added the ability to automatically identify delayed retirement payments exceeding 45 days, calculate interest amounts, and provide a method for users to pay interest based on an approved claim.

This year, significant enhancements were made to improve my|CalPERS to ensure compliance, minimize risk, and enhance the user experience, including:

- Improved system validations by generating an error message for our business partners when reporting payroll that spans multiple employer and/or member contribution rates.
- Implemented system validations to require business partner certification of pay rates exceeding specified thresholds.
- Applied new logic to require payroll transactions to identify special compensation category and type for all members.
- Implemented new my|CalPERS system functionality for the Compensation Review Units (CRU) to increase our cross-divisional efficiencies that aid in maintaining the integrity of the fund and further reduce organizational risks.
- Automated my|CalPERS system reports that significantly reduced the manual production of reports required by Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions, an amendment of GASB Statement No. 27* (GASB 68).

CalPERS restructured its Complementary Annuitant Premium Program to ensure compliance with statutes and regulations. We also completed User Access Review assessments to maintain member data integrity and privacy and restrict access to designated staff. We ensured increased quality outcomes by refining processes and strengthening procedures for member refund documentation.

During Fiscal Year 2015-16, we also developed new system functionality that allows for a more effective and accurate reconciliation of the annual and daily activity in the member record and employer risk pools. The automated functionality reports discrepancies between the member record, risk pools, and deductions from benefit roll. This allows staff to resolve reconciling items and complete reconciliations in a timely manner.

During Fiscal Year 2015-16, we produced 3,627 annual government-mandated actuarial valuations that set employer contribution rates and reported plan assets and liabilities for state and public agencies, schools, the Legislators' Retirement System, the Judges' Retirement Systems I and II, and the 1959 Survivor Benefit Program.

### FIRST LINE OF DEFENSE (CONTINUED)

#### INTERNAL OPERATIONS

##### Financial Controls & Reporting

During Fiscal Year 2015-16, CalPERS developed new Enterprise Compliance Activity reports for management, which focus on improving the level of disclosure effectiveness. Our continual review and attention ensures that compliance reporting and disclosures remain timely and relevant.

In compliance with our enterprise-wide policy management process, we comprehensively reviewed and consolidated six actuarial policies into two new policies: the Actuarial Cost Method Policy and the Actuarial Amortization Policy. The new consolidated policies generally kept the same content of the past policies, but adds dollar billing for the unfunded liability portion of all public agency plans. Dollar billing allows unfunded liabilities to be invoiced monthly as a dollar amount.

Additionally, the Actuarial Amortization Policy added elements of the newly adopted Funding Risk Mitigation Policy. This review followed a collaborative process involving subject matter experts from across CalPERS and consultation with employers, employee organizations, and other stakeholders. The review ensures consistency with actuarial and policy management best practices.

In October 2015, we implemented the Treasury Management Reserves Policy and developed a funding contingency plan. The Treasury Management Reserves Policy was created to ensure the payment of member benefits and other obligations without interruption while optimizing the use of the fund assets. This policy reduces funding risk by implementing pre-funding processes for funds with large predictable outflows. The funding contingency plan defines the asset-based and financial options available to our organization, their usage criteria, and the management protocols to be followed during a liquidity event.

The CalPERS Budget is an annual financial plan, and its purpose is to promote long-term economic sustainability and responsible resource allocation to meet our mission of providing and maintaining retirement and health security for our members. We received Board approval for the CalPERS Budget Policy to ensure that our budgeting practices align with the allocation and use of resources to meet our organization's mission and strategic objectives.

Establishing the policy ensures our organization maintains a fiscally sustainable balanced budget that translates the intentions of our strategic plan and objectives.

To meet statutory requirements, we also developed and submitted the following reports:

- Annual report to the Legislature, State Controller, Director of Finance, and Legislative Analyst Office within 100 days

of adopting annual health premium increases and decreases that describes methods employed to moderate annual increases in premiums pursuant to the Budget Act of 2015 (Stats. 2015, Ch. 10, Sec. 2.00, Item 7900-015-0822 (2)).

- One-time report to the Joint Legislative Budget Committee and the Department of Finance on the administration of the State retiree health care program that details compliance with Government Code section 22844 and California Code of Regulations sections 599.516 and 599.517 pursuant to the Budget Act of 2015 (Stats. 2015, Ch. 10, Sec. 2.00, Item 7900-001-0950 (2)).

In March 2016, CalPERS received the first Semi-Annual Treasury Analysis and Liquidity Status Report. The report provided information regarding the funding coverage of our organization, including liquidity ratio and cash flow forecasting analysis. A coverage ratio analysis manages risk by indicating whether the fund is operating at inadequate or at excessive levels of liquidity during normal, stressed, and crisis scenarios. Cash flow forecasts were created for organizational areas where business activity can result in a material impact to our organization's liquidity.

This year, two additional types of internal reporting were added that validate the information used to calculate benefits and tax liabilities improving quality assurance related to the payment of benefits. This also improves the accuracy of tax reporting.

For the first time in 2015, we produced 3,627 Governmental Accounting Standards Board (GASB) 68 Cost-Sharing and Agent Multiple Employer valuations. Once the first year of GASB 68 valuations were completed, we began the second year of GASB 68 valuations and immediately redesigned and transformed 3,195 GASB 68 Cost-Sharing Multiple Employer valuations into two reports; one for miscellaneous plans and one for safety plans. A total of 432 GASB 68 Agent Multiple Employer valuations were also completed as part of this process.

GASB No. 72, *Fair Value Measurement and Application*, was also implemented. It prescribes how assets and liabilities should be measured at fair value as well as expands disclosures related to fair value measurements.

##### Investment Office

Investment Compliance and Operational Risk (ICOR) serves as an embedded compliance function and assists our Investment Office staff by ensuring compliance with key policies, laws, and regulations that impact the Investment Office.



### FIRST LINE OF DEFENSE (CONTINUED)

In Fiscal Year 2015-16, CalPERS ICOR organized and administered investment compliance training for Investment Office employees. The training addressed ethics, conflicts of interest, and the impact of Dodd-Frank legislation on the private and public asset classes.

During Fiscal Year 2015-16, we substantially completed Phase II of the Investment Policy Revision Project to align our various asset class investment policies with the new Total Fund Policy framework. This was done in an effort to minimize complexity, improve transparency and strengthen processes, systems, governance and controls. The project resulted in a substantial reduction of investment policies, standardization and clarity of language, and efficiency for ongoing maintenance activities.

### Human Resources

As of July 1, 2016, we attained an enterprise-wide annual mandatory training completion rate of 99.3 percent. As of June 30, 2016, the training included Health Insurance Portability and Accountability Act (HIPAA), Information Security Awareness, and Working Values: Ethical Decision Making.

We also conducted an annual workforce analysis to establish an effective Equal Employment Opportunity (EEO) program and to provide EEO to all employees.

In support of labor relations activities, we achieved the following:

- Resolved 11 represented and excluded employee grievances at the lowest level
- Negotiated and implemented the Actuarial Study Program
- Continued work on the 5.10 and 14.8 Joint Labor Management Committee (JLMCs) to address issues of mutual concern and contracting out with the Service Employees International Union (SEIU) in a problem solving and information sharing context

### Education and Training

In compliance with CalPERS' related Board Member Education Policy (Cal. Gov't Code Section 20100), Board Members attended eight educational sessions for a total of 16.25 hours toward the 24-hours required in every two-year period. CalPERS also developed a program schedule to continue to offer sessions to assist Board members and designees in meeting the educational requirement on an ongoing basis. A report of Board member compliance was posted on the CalPERS website.

In support of State Administrative Manual section 5300, CalPERS implemented asset management software and strengthened internal software inventory processes and procedures.

For security awareness, a training program was enhanced to include ongoing phishing education exercises.

Additionally, 2,800 staff members were provided with information security training and we performed three independent information security assessments during the year.

To support and enhance understanding and compliance with the law of the CalPERS Public Records Act (PRA) process, we conducted a training session in February 2016 for all coordinators, backups, and managers. Training was also delivered to executive staff and senior leadership, as well as one-on-one training sessions with individual staff members, on the overall PRA process and statute.

We implemented mandatory contract manager training to strengthen controls and role clarity around contract management. Along with this training, we added processes and procedures, and developed reports to better assist with Small Business and Disabled Veteran Business Enterprise (DVBE) participation goals and annual reporting. These efforts contributed to CalPERS recognition, for the second consecutive year, as the Small Business and DVBE Advocate of the Year by the Department of General Services for exceeding participation goals.

### Administration

The California legislature enacted the California's Dymally-Alatorre Bilingual Services Act in order to ensure that California residents would appropriately receive services from public agencies regardless of the person's English language skills. Each state agency is required to conduct a language survey and develop and update an implementation plan every two years (Cal. Gov't Code section 7299.4). The plan should identify significant problems or deficiencies and propose solutions where warranted. In compliance with this Code, we conducted a statewide language survey to determine the number of annual public contacts by native language, the number of bilingual employees in public contact positions, and available options to serve language needs. As a result of the survey, we were able to provide alternative complaint forms to customers with languages identified as frequently used both on the CalPERS' website and in regional offices.

Governor's Executive Order B-18-12 directed California state agencies and departments to take immediate steps to "green" the state's buildings, reduce greenhouse gas emissions and improve energy efficiency. Additionally, in order to address the anticipated statewide drought conditions, state agencies were also directed to establish baseline water use figures at their facilities going back to 2010, and to report



### FIRST LINE OF DEFENSE (CONTINUED)

annual water use. During Fiscal Year 2015-16, we continued to implement sustainable building practices and energy and water efficiency improvements in compliance with these mandates. Water savings measures from January through December 2015 resulted in a 32 percent reduction (over 8 million gallons) compared to the 2010 water usage baseline. CalPERS headquarters energy use was reduced by 33 percent in 2015 based on the 2003 baseline through major data center energy efficiency projects.

CalPERS proudly supported “Sunshine Week 2015,” a week dedicated to promoting transparent and open government. We used established social media channels to share the goals of Sunshine Week and to remind the public about steps we have taken to become more transparent.

### SECOND LINE OF DEFENSE

CalPERS Enterprise Compliance Division and Enterprise Risk Management Division partnered and collaborated under the Second Line of Defense in order to provide oversight, guidance, and monitoring of governance, risk, and compliance activities. Through these efforts, we are able to support the organization in mitigating strategic and operational risks along with strengthening the organization’s control environment and promoting strong ethical business practices. To demonstrate this alignment, both divisions work closely together to develop and implement their annual plans.

The Office of Audit Services, while independent and considered the Third Line of Defense, partnered with the Risk

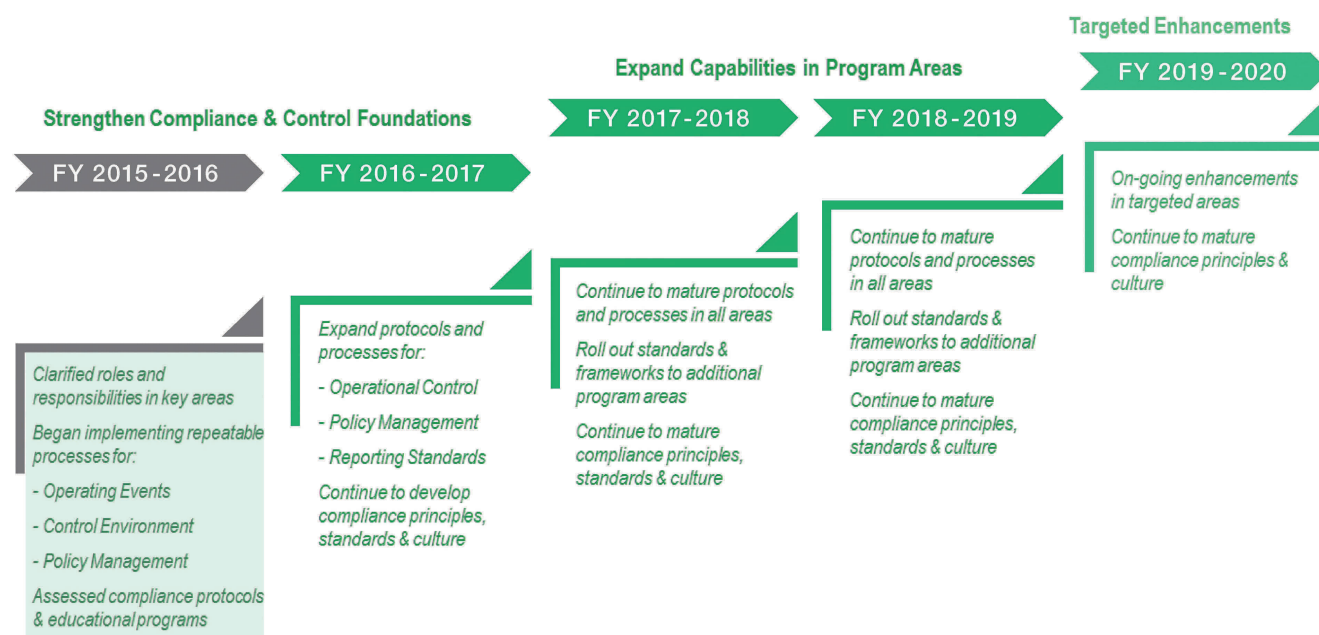
and Compliance divisions during the annual risk assessment process in an effort to strengthen their understanding of risks and mitigation strategies underway. The participation of the Office of Audit Services will ultimately help to maximize integrated assurance practices.

### ENTERPRISE COMPLIANCE

The mission of the Enterprise Compliance Division is to ensure that CalPERS maintains compliance with the letter and spirit of all applicable laws and regulations, in partnership with the areas responsible for delivering services (i.e. pension, administration, operations, customer support services.) The oversight role of the Enterprise Compliance Division, as a Second Line of Defense, was enhanced through compliance activity reporting and the creation of compliance governance structures. Through increased dialogue and awareness with program management, roles and responsibilities were clarified resulting in enhanced internal control functions, identification of new compliance priorities, and stronger partnerships throughout our System.

The implemented Five-Year Compliance plan is aimed at building and enhancing compliance capabilities to mature the program and is consistent with changes in the broader compliance landscape. The compliance plan focuses on strengthening our compliance and ethics program by fostering a culture of compliance, clarifying the compliance governance structure, and providing our Board and management with compliance tools and information to fulfill their oversight responsibilities.

### FIVE-YEAR COMPLIANCE PLAN



### SECOND LINE OF DEFENSE (CONTINUED)

During Fiscal Year 2015-16, we implemented the initial framework, outreach, and reporting structure of embedded compliance and risk programs for the Operations and Technology and Customer Services and Support branches. This helped to strengthen our own internal control processes and aid in role clarity. Previously implemented embedded compliance frameworks in our Investment Office served as a model for rollout to the rest of our organization. The embedded compliance and risk liaisons are responsible for working directly with their respective program areas and Enterprise Compliance and Risk divisions to enhance CalPERS' ability to identify and resolve compliance issues.

Liaisons communicate compliance efforts across their respective branches. The work performed this year allows for future program development and designation of staff to assist with the program. Effective July 1, 2016, new positions were approved for each embedded compliance and risk program area to assist with the branch-wide operating event reporting structure and additional compliance and risk activities in the upcoming year.

### Operating Event Management

An operating event management process is a systematic way to detect, correct, diagnose and resolve potential incidences of non-compliance or gaps in internal controls discovered during "day to day" operations. This approach empowers our program management and front line supervisors to identify, triage and resolve potential internal control and non-compliance issues.

The operating event management process allows for aggregated reporting of operating events to management. The end result will be an enterprise-wide incident management system; allowing senior leadership to identify and track trends across our organization.

In Fiscal Year 2015-16, the operating event management process was rolled out to embedded compliance and risk liaisons in the Customer Service and Support and Operations and Technology branches. The system is also modeled on the existing processes used by our Investment Office embedded compliance and risk personnel.

### Control Environment

Program areas continue to develop and enhance standard operating procedures and processes to guide us in effectively carrying out business operations while promoting a culture of effective internal controls and compliance. A robust control environment allows us to (1) run our operations efficiently and effectively, (2) report reliable information to management and stakeholders, and (3) comply with applicable laws and

regulations. Below is an overview of efforts that were completed in Fiscal Year 2015-16.

### Conflict of Interest Code

The Political Reform Act (Cal. Gov't. Code section 81000 et seq.) requires us to adopt and periodically update a Conflict of Interest Code (the Code). The Code designates positions at CalPERS that are required to file a Statement of Economic Interests—Form 700. The CalPERS Conflict of Interest Code (Code) was amended and approved by the CalPERS Board effective October 8, 2015. The revisions to the Code: (1) ensure that designated positions are reflected by state classification instead of working titles meaning greater alignment to statutory requirements; (2) organize disclosure categories at the agency-level rather than at the division-level which provides consistent levels of disclosure across the organization; and (3) promote further transparency.

Given the significant changes to the Code, 363 staff members were required to file a Statement of Economic Interests—Form 700 indicating their changed status under the Code. During October and November of 2015, the Enterprise Compliance Division notified impacted individuals, and partnered with CalPERS' Legal Office to hold informal "office hours" to address any inquiries or concerns. As of December 7, 2015, all 363 staff members had filed their statements.

In accordance with the Political Reform Act, members of CalPERS Board, designated staff, and consultants are required to annually file a Form 700—Statement of Economic Interests, disclosing their financial interests. Consistent with Fair Political Practices Commission (FPPC) requirements, CalPERS filing officer provided the oversight and monitoring of all filings. The 2015 Annual Form 700 Statements were due March 1, 2016, for elected Board Members and April 1, 2016, for all other filers. Enterprise Compliance began notifying affected individuals in January 2016. The Enterprise Compliance Division also partnered with CalPERS Investment and Legal offices to provide communications, training and office hours for staff to ask questions about the amended filing requirements. To ensure more complete and accurate filing, Enterprise Compliance staff made a significant effort to encourage electronic filing. As of April 1, 2016, 100 percent of CalPERS staff filers had completed their annual statements in a timely manner.

### SECOND LINE OF DEFENSE (CONTINUED)

#### **CalPERS Personal Trading Regulation**

The Regulations Enacting Personal Trading Guidelines for CalPERS Employees Personal Trading (Regulations) require that CalPERS covered persons and their spouses or registered domestic partners disclose personal investment holdings and use a personal trading pre-clearance system. (2 Cal. Code Regs. section 558.1) This requirement is intended to safeguard against trading with material non-public information and ensure that our staff meets their fiduciary obligations to our fund and members. Enterprise Compliance administers the regulations via an automated platform and provides additional safeguards thereby reducing the risk of restricted trading. Annually, covered persons are responsible for completing Personal Trading Attestations certifying they (1) have disclosed all covered accounts and (2) have read and understand the Regulations. As of June 30, 2016, all CalPERS covered persons had completed their Annual Attestation requirements.

#### **Ethics Helpline and Citizen Complaint Act of 1997**

CalPERS maintains and monitors a third-party hosted Ethics Helpline that provides a means to confidentially, anonymously and securely report allegations of unethical behavior. In compliance with the Citizen Complaint Act of 1997 (Cal. Gov't. Code section 8330 et seq.), CalPERS Online also provides a plain-language online form that members of the public may submit comments, complaints, or suggestions about our performance.

To strengthen our program, we refined administration and reporting procedures for the Ethics Helpline and Citizen Complaint portal. These process changes and enhancements to reports provide more meaningful information to our stakeholders and adds a means to measure the success, or need for improvements to our Ethics Program.

#### **Policy and Delegation Management**

CalPERS has established enterprise-wide standards for delegations of authority and policy management consistent with professional best practice. These standards include templates, guidelines, definitions, process flows, and establishment of clear oversight and policy management roles and responsibilities. A policy governance group made up of representatives from our compliance, risk, legal, and human resources divisions was created to provide input on policies. The new policy changes will continue to promote and improve accountability, standardization, and good policy management practices. In turn, this will aid in compliance monitoring and testing.

#### **Education and Awareness**

We have reignited awareness of compliance principles throughout our organization as a means to promote a culture of compliance. This was done by expanding our channels of communication by using tools such as the intranet, internal social media page (the SPARK), and enhanced classroom training. Enterprise Compliance also expanded and implemented compliance communication and branding efforts. An example of this is the Enterprise Compliance Division's involvement at the annual CalPERS Career and Education Fair. Compliance staff used creative methods, such the "Debunking Compliance Myths" true or false game to engage visitors.

During the month of September 2015, we hosted a workshop on internal controls, financial reporting, and audits for the CalPERS Board of Administration. An additional Board workshop was held in May 2016, which focused on risk and compliance management. These workshops served to strengthen our Board's understanding of the concepts and enable them to successfully fulfill their roles and responsibilities. Additionally, Enterprise Compliance offered new classroom training sessions to our executives and senior managers on a broad array of compliance and ethics topics. This included conflict of interest disclosure rules, travel guidelines, incompatible activities, and personal trading regulations. A "Compliance Town Hall," included customized compliance scenarios, was also held in May 2016 for managers in our Financial Office.

#### **ENTERPRISE RISK MANAGEMENT**

The Enterprise Risk Management Division supports CalPERS Strategic Plan Goal B: Cultivate a high-performing, risk-intelligent and innovative organization. Enterprise Risk Management Division is responsible for developing, facilitating, and maintaining a risk-intelligent culture at CalPERS. This is accomplished by providing risk management training, conducting risk assessments, performing risk dashboard recalibration, and developing tools to assist our staff in identifying, monitoring, and responding to risks to our organization.

### SECOND LINE OF DEFENSE (CONTINUED)

Risk assessments are performed to identify, analyze, evaluate, treat, communicate, and monitor risks on an on-going basis. Risk assessments provide effective and efficient deployment of enterprise risk management resources by addressing:

- Areas of high risk
- Risks that potentially impact multiple program areas
- Core business activities of our organization
- Assurance on management risk response
- Enhancement of a more robust risk management program

When assessments are performed systematically and consistently throughout CalPERS based upon the Enterprise Risk Management Framework and risk assessment criteria, management is empowered to focus resources on the most significant risks and to make more informed risk decisions.

#### **State Leadership Accountability Act (SLAA) (Formerly known as FISMA)**

The California State Leadership Accountability Act (SLAA), requires state agencies to “maintain effective systems of internal control, to evaluate and monitor the effectiveness of these controls on an ongoing basis, and to biennially report on the adequacy of the agency’s systems of internal control” (Cal. Gov’t Code section 13400 et seq.) Effective

June 24, 2015, SLAA was modified and updated through legislative action. The intent of the change is to provide the Department of Finance (DOF) with assurance that all levels of management are involved in evaluating, strengthening, and monitoring internal controls. SLAA requires each state agency to:

- Maintain effective systems of internal control
- Evaluate and monitor the effectiveness of these controls on an ongoing basis,
- Biannually report on the adequacy of the agency’s systems of internal control

The SLAA reporting was completed and timely filed with the DOF on June 30, 2016.

#### **Integrated Assurance Risk Assessment**

The Enterprise Risk Management Division collaborated with the Enterprise Compliance Division and the Office of Audit Services to develop a joint assessment tool. They also collaborated to conduct the annual integrated assurance risk assessment interviews with each CalPERS division and senior executive. Upon completing the integrated assurance risk assessments, the three program areas convened to analyze findings. This analysis confirmed top enterprise risks and revealed common themes to consider when contemplating the

most effective mitigation measures to determine if present mitigation plans are appropriate.

#### **Risk Management Framework Revision**

In the spring of 2016, Enterprise Risk Management Division led an effort to revise the Enterprise Risk Management Framework. The objectives were to consolidate the current 30 risk domains into more manageable related categories with risk statements that more concisely state the risks from an enterprise perspective. The purpose of these efforts include:

- Focused risks and risk statements will lead to more concise and effective mitigation measures
- Consolidating risks with significant correlations provides the opportunity to implement mitigation strategies that are synergistic and produce an enterprise-wide impact
- Mitigation efforts should be aimed at risk drivers

As a result of the working group’s efforts the 30 enterprise risks presented in November 2015 to the CalPERS Risk and Audit Committee meeting, were revised to 11 Enterprise Risks. In June of 2016, staff presented the revised framework and redefined 11 Enterprise Risks to our Board. In addition, the risk framework produced associated risk statements, identified the executive owner, and specified Board Committee oversight. The revised framework will be presented to the Risk & Audit Committee for approval in November 2016.

### THIRD LINE OF DEFENSE

Internal and external audits are the Third Line of Defense, offering an independent component to the levels of assurance provided by program areas and compliance and risk oversight functions.

#### **OFFICE OF AUDIT SERVICES**

CalPERS maintains an effective audit program comprised of internal audits and contracting public agency reviews. Our internal auditors perform assurance and consulting work consistent with the Institute of Internal Auditors’ International Standards for the Professional Practice of Internal Auditing.

In developing a risk-based audit plan, Audit Services coordinated its risk assessment activity with the Enterprise Compliance Division and Enterprise Risk Management Division to ensure proper coverage and minimize duplication of work while still achieving its respective objectives. Our organization benefits from an integrated assurance approach in identifying the gaps in risk assessment, compliance and internal controls while reducing cost and sharing information more effectively.

In 2015-16, our Audit Services reviewed 100 agencies for both compliance and census data testing and performed 25 limited scope reviews utilizing business intelligence for

### THIRD LINE OF DEFENSE (CONTINUED)

potential pension spiking. In 2014-15, we reviewed 85 agencies for compliance and performed census data testing on 40 agencies. As a result of the 125 compliance reviews, our Public Agency Team identified 643 compliance issues. Compliance reviews often identify misreporting prior to member retirement. The impact of misreporting could result in corrections to members' retirement benefits and increased workload to CalPERS in making those corrections.

As part of the review process, our staff educated employers on the Public Employees' Retirement Law requirements and also communicated the areas of non-compliance to CalPERS internal programs to assist them in identifying training needs for employers.

In Fiscal Year 2015-16, 35 internal audits were also completed. These audits included reviews of health premium receipts and disbursements, Administration of Old Age and Survivors Insurance program, Judges' Retirement System, myCalPERS Users Access Rights, PeopleSoft Human Capital Management, Information Technology Asset Management, health plan contract compliance, and external real estate manager contract compliance.

Additionally, we have engaged DOF to perform a quality assurance review (peer review) of our organization to ensure we comply with internal auditing standards. The report will be completed before the end of December 2016.

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### GLOSSARY OF ACRONYMS

<b>AAL:</b> Actuarial Accrued Liability	<b>GASB 76:</b> GASB Statement No. 76, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments
<b>ACA:</b> Affordable Care Act	<b>HCF:</b> Health Care Fund
<b>ALM:</b> Asset Liability Management	<b>HIPAA:</b> Health Insurance Portability and Accountability Act
<b>ARC:</b> Annual Required Contribution	<b>HMO:</b> Health Maintenance Organization
<b>ASOP 6:</b> Actuarial Standards of Practice 6	<b>IBNR:</b> Incurred But Not Reported
<b>CAFR:</b> Comprehensive Annual Financial Report	<b>IRC:</b> Internal Revenue Code
<b>CalPERS:</b> California Public Employees' Retirement System	<b>IRS:</b> Internal Revenue Service
<b>CERBTf:</b> California Employers' Retiree Benefit Trust Fund	<b>JRF:</b> Judges' Retirement Fund
<b>CODE:</b> Conflict of Interest Code	<b>JRF II:</b> Judges' Retirement Fund II
<b>COLA:</b> Cost-of-Living Adjustments	<b>JRS:</b> Judges' Retirement System
<b>CRF:</b> Contingency Reserve Fund	<b>JRS II:</b> Judges' Retirement System II
<b>DCF:</b> Public Agency Deferred Compensation Fund	<b>LRF:</b> Legislators' Retirement Fund
<b>DVBE:</b> Disabled Veteran Business Enterprise	<b>LRS:</b> Legislators' Retirement System
<b>EEO:</b> Equal Employment Opportunity	<b>LTC:</b> Long-Term Care
<b>EGWP:</b> Federal Employer Group Waiver Plan	<b>LTCF:</b> Long-Term Care Fund
<b>eSec:</b> ESecLending LLC	<b>MWRR:</b> Money-Weighted Rate of Return
<b>ESG:</b> Environmental, Social, and Governance	<b>NAV:</b> Net Asset Value
<b>ETF:</b> Exchange-Traded Fund	<b>OASI:</b> Old Age & Survivors' Insurance Revolving Fund
<b>FPPC:</b> Fair Political Practices Commission	<b>OCC:</b> Options Clearing Corporation
<b>GASB:</b> Governmental Accounting Standards Board	<b>OPEB:</b> Other Post-Employment Benefits
<b>GASB 28:</b> GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions	<b>PBM:</b> Pharmacy Benefit Manager
<b>GASB 40:</b> GASB Statement No. 40, Deposit and Investment Risk Disclosures—an amendment of GASB Statement No. 3	<b>PEMHCA:</b> Public Employees' Medical and Hospital Care Act
<b>GASB 67:</b> GASB Statement No. 67, Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25	<b>PEPRA:</b> Public Employees' Pension Reform Act
<b>GASB 68:</b> GASB Statement No. 68, Accounting and Financial Reporting for Pensions, an amendment of GASB Statement No. 27	<b>PERF:</b> Public Employees' Retirement Fund
<b>GASB 71:</b> GASB Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date—an amendment of GASB Statement No. 68	<b>PERL:</b> Public Employees' Retirement Law
<b>GASB 72:</b> GASB Statement No. 72, Fair Value Measurement and Application	<b>PERS:</b> Public Employees' Retirement System
<b>GASB 74:</b> GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans	<b>PRA:</b> Public Records Act
<b>GASB 75:</b> GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions	<b>RBF:</b> Replacement Benefit Fund
	<b>REIT:</b> Real Estate Investment Trusts
	<b>SCPF:</b> Supplemental Contributions Program Fund
	<b>SPOFF:</b> State Peace Officers' and Firefighters' Defined Contribution Plan Fund
	<b>SSB:</b> State Street Bank
	<b>SSGA:</b> State Street Bank Global Advisors
	<b>STIF:</b> Short-Term Investment Fund
	<b>System:</b> The California Public Employees' Retirement System



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