## **BASIC FINANCIAL STATEMENTS**

Fiscal Year Ended June 30, 2016

Prepared through the joint efforts of CalPERS' staff.

Available online at www.calpers.ca.gov



California Public Employees' Retirement System

A Component Unit of the State of California



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

## **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 \_\_\_\_\_, 2016 This page intentionally left blank.

## **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 costsharing 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 moneyweighted 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.

 $Net\ Position-PERF\ ({\tt Dollars\ in\ Thousands})$ 

	PERF A	PERF B	PERF C			
	Agent	Cost-Sharing Schools	Cost-Sharing Public Agencies	2016 PERF Total	2015 PERF Total	Increase/ (Decrease)
ASSETS						
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)
Total Assets	\$244,364,392	\$62,602,048	\$27,657,901	\$334,624,341	\$315,783,459	\$18,840,882
LIABILITIES						
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
Total Liabilities	\$26,278,887	\$6,689,083	\$2,952,369	\$35,920,339	\$13,018,941	\$22,901,398
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	\$218,085,505	\$55,912,965	\$24,705,532	\$298,704,002	\$302,764,518	(\$4,060,516)

## $Changes \ in \ Net \ Position - PERF \ ({\tt Dollars} \ in \ {\tt Thousands})$

	PERF A	PERF B	PERF C			
			Cost-Sharing			
	Agent	Cost-Sharing Schools	Public   Agencies	2016 PERF Total	2015 PERF Total	Increase/ (Decrease)
ADDITIONS	Agent	00110013	Agendes	Total	Total	(Decircuse)
Member Contributions	\$2,864,486	\$851,133	\$300,135	\$4,015,754	\$3,826,072	¢190 692
						\$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)
Total Additions	\$12,576,800	\$2,583,323	\$1,346,365	\$16,506,488	\$20,976,462	(\$4,469,974)
DEDUCTIONS						
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)
Total Deductions	\$15,437,441	\$3,581,424	\$1,548,139	\$20,567,004	\$19,973,483	\$593,521
INCREASE (DECREASE) IN NET POSITION	(\$2,860,641)	(\$998,101)	(\$201,774)	(\$4,060,516)	\$1,002,979	(\$5,063,495)
NET POSITION RESTRICTED FOR PENSION BENEFITS						
Beginning of Year	\$220,946,146	\$56,911,066	\$24,907,306	\$302,764,518	\$301,761,539	\$1,002,979
End of Year	\$218,085,505	\$55,912,965	\$24,705,532	\$298,704,002	\$302,764,518	(\$4,060,516)

## 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.

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

		LRF		JRF					
	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)
ASSETS									
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
Total Assets	\$141,389	\$125,869	\$15,520	\$40,461	\$42,168	(\$1,707)	\$1,382,068	\$1,130,535	\$251,533
LIABILITIES									
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
Total Liabilities	\$22,339	\$4,400	\$17,939	\$667	\$991	(\$324)	\$209,115	\$46,393	\$162,722
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	\$119,050	\$121,469	(\$2,419)	\$39,794	\$41,177	(\$1,383)	\$1,172,953	\$1,084,142	\$88,811

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)
ADDITIONS									
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
Total Additions	\$5,191	\$601	\$4,590	\$198,608	\$187,073	\$11,535	\$111,247	\$85,470	\$25,777
DEDUCTIONS									
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)
Total Deductions	\$7,610	\$9,486	(\$1,876)	\$199,991	\$203,095	(\$3,104)	\$22,436	\$15,167	\$7,269
INCREASE (DECREASE) IN NET POSITION	(\$2,419)	(\$8,885)	\$6,466	(\$1,383)	(\$16,022)	\$14,639	\$88,811	\$70,303	\$18,508
NET POSITION RESTRICTED FOR PENSION BENEFITS									
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	\$119,050	\$121,469	(\$2,419)	\$39,794	\$41,177	(\$1,383)	\$1,172,953	\$1,084,142	\$88,811

# 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 taxexempt 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 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.

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

		SPOFF		DCF				SCPF	
	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)
ASSETS									
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)
Total Assets	\$0	\$6,816	(\$6,816)	\$1,292,182	\$1,341,869	(\$49,687)	\$125,407	\$134,138	(\$8,731)
LIABILITIES									
Retirement Benefits, Investment Settlement & Other	\$0	\$1,234	(\$1,234)	\$1,775	\$2,299	(\$524)	\$1,053	\$259	\$794
Total Liabilities	\$0	\$1,234	(\$1,234)	\$1,775	\$2,299	(\$524)	\$1,053	\$259	\$794
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	\$0	\$5,582	(\$5,582)	\$1,290,407	\$1,339,570	(\$49,163)	\$124,354	\$133,879	(\$9,525)

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)
ADDITIONS									
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
Total Additions	\$0	(\$5,850)	\$5,850	\$119,876	\$146,050	(\$26,174)	\$1,353	\$129,196	(\$127,843)
DEDUCTIONS									
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
Total Deductions	\$0	\$511,195	(\$511,195)	\$169,039	\$93,293	\$75,746	\$16,460	\$15,886	\$574
Interfund Transfer In/(Out)	(\$5,582)	\$0	(\$5,582)	\$0	\$0	\$0	\$5,582	\$0	\$5,582
INCREASE (DECREASE) IN NET POSITION	(\$5,582)	(\$517,045)	\$511,463	(\$49,163)	\$52,757	(\$101,920)	(\$9,525)	\$113,310	(\$122,835)
NET POSITION RESTRICTED FOR PENSION BENEFITS									
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	\$0	\$5,582	(\$5,582)	\$1,290,407	\$1,339,570	(\$49,163)	\$124,354	\$133,879	(\$9,525)

# 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)
ASSETS			
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)
Total Assets	\$5,794,732	\$4,578,018	\$1,216,714
LIABILITIES			
Other Post-Employment Benefits, Investment Settlement & Other	\$624,705	\$36,285	\$588,420
Securities Lending Obligations	47,839	49,389	(1,550)
Total Liabilities	\$672,544	\$85,674	\$586,870
TOTAL NET POSITION RESTRICTED FOR OPEB	\$5,122,188	\$4,492,344	\$629,844

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

	CERBTF					
	2016	2015	Increase/ (Decrease)			
ADDITIONS						
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)			
Total Additions	\$1,860,926	\$1,705,004	\$155,922			
DEDUCTIONS						
Administrative Expenses	\$1,559	\$2,044	(\$485)			
Reimbursements	1,229,523	1,099,376	130,147			
Total Deductions	\$1,231,082	\$1,101,420	\$129,662			
INCREASE IN NET POSITION	\$629,844	\$603,584	\$26,260			
NET POSITION RESTRICTED FOR OPEB						
Beginning of Year	\$4,492,344	\$3,888,760	\$603,584			
End of Year	\$5,122,188	\$4,492,344	\$629,844			

## **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.

## $Net\ Position-Enterprise\ Funds\ {\scriptstyle (Dollars\ in\ Thousands)}$

	HCF/CRF				LTCF	
	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)
ASSETS						
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)		_	
Total Assets	\$1,482,322	\$1,545,168	(\$62,846)	\$4,358,310	\$4,134,397	\$223,913
LIABILITIES						
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
Total Liabilities	\$1,158,023	\$1,265,724	(\$107,701)	\$4,110,317	\$3,720,725	\$389,592
TOTAL UNRESTRICTED NET POSITION	\$324,299	\$279,444	\$44,855	\$247,993	\$413,672	(\$165,679)

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

	HCF/CRF				LTCF	
	2016	2015	Increase/ (Decrease)	2016	2015	Increase/ (Decrease)
REVENUES						
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	_	_	_
Total Revenues	\$3,830,097	\$3,669,721	\$160,376	\$508,952	\$235,812	\$273,140
EXPENSES						
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
Total Expenses	\$3,785,242	\$3,833,835	(\$48,593)	\$674,631	\$585,388	\$89,243
INCREASE (DECREASE) IN UNRESTRICTED NET POSITION	\$44,855	(\$164,114)	\$208,969	(\$165,679)	(\$349,576)	\$183,897
UNRESTRICTED NET POSITION						
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,

Cheugh Kason

Cheryl Eason, MBA, CPA (Can), CGA, RPA, DMC

Chief Financial Officer

## **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			
ASSETS									
Cash & Cash Equivalents	\$810,557	\$208,039	\$91,896	\$75	\$0	\$1,369			
Receivables									
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			
Total Receivables	\$13,366,923	\$3,317,225	\$1,431,422	\$12,838	\$2,597	\$115,318			
Investments, at Fair Value									
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	_	_	_			
Total Investments	\$220,395,302	\$56,563,789	\$25,022,960	\$124,962	\$37,864	\$1,211,586			
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	_	_	_			
TOTAL ASSETS	\$244,364,392	\$62,602,048	\$27,657,901	\$141,389	\$40,461	\$1,382,068			
LIABILITIES									
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	Ψ0	155,161			
Due to Members & Employers	5,353	- 1,010,002	- 1,771,000	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		-, .50	_	_	_	_			
Other Program	131,070	14,363	6,272	10	504	1			
TOTAL LIABILITIES	\$26,278,887	\$6,689,083	\$2,952,369	\$22,339	\$667	\$209,115			
NET POSITION – RESTRICTED FOR PENSION				. ,	·				
AND OTHER POST-EMPLOYMENT BENEFITS	\$218,085,505	\$55,912,965	\$24,705,532	\$119,050	\$39,794	\$1,172,953			

Pe	nsion Trust Funds		Pension Trust Funds		Other Post- Employment Benefit Trust Fund	Agency Fund	Tot	als
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		
φ0	φυ,υ4υ	φ093	φυ	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		
			<u> </u>		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	
ADDITIONS							
Retirement and OPEB Contributions							
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	0,374,000	1,434,032	002,991	543	186,953	05,059	
Employer Contributions Direct – OPEB	_	_	_	_	100,933	_	
to the state of th	_	_	_	_	_	_	
Employer Contributions Outside of Trust – OPEB	£44 420 252	#2 20E 7CE	<u> </u>		#40E 04C	<u> </u>	
Total Retirement and OPEB Contribution	\$11,439,352	\$2,285,765	\$1,183,126	\$646	\$195,846	\$90,437	
Investment Income							
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	ψ+,502	195	40	
Dividends	918,665	235,787	104,152		-	<del>-</del>	
Other Investment Income	51,344	13,177	5,821				
Less Investment Expenses:	01,044	10,177	0,021				
Management & Performance Fees	(453,249)	(116,332)	(51,386)	_	_	_	
Other	(152,905)	(39,245)	(17,335)	(52)	(1)	(422)	
Net Investment Income	\$1,014,523	\$269,667	\$114,758	\$4,511	\$194	\$20,213	
Securities Lending Income	\$134,708	\$34,575	\$15,272	\$45	\$0	\$785	
Securities Lending Expense	(35,153)	(9,022)	(3,986)	(11)	φο	(190)	
Net Securities Lending	\$99,555	\$25,553	\$11,286	\$34	\$0	\$595	
Other Income	\$9,807	\$2,294	\$999	\$0	\$2,568	\$2	
Plan to Plan Resource Movement	13,563	44	36,196	ψ0 —	Ψ2,500	Ψ2	
TOTAL ADDITIONS	\$12,576,800	\$2,583,323	\$1,346,365	\$5,191	\$198,608	\$111,247	
				•		· ·	
DEDUCTIONS	<b>A</b> . <b>-</b>	<b>^</b> 4 0	<b>*</b> 4 <b>-</b> 00 40-	4- 000	<b>*</b> 400.0=4	401 - 10	
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				<del></del>			
TOTAL DEDUCTIONS	\$15,437,441	\$3,581,424	\$1,548,139	\$7,610	\$199,991	\$22,436	
Interfund Transfer In/(Out)	\$0	\$0	\$0	\$0	\$0	\$0	
INCREASE (DECREASE) IN NET POSITION	(\$2,860,641)	(\$998,101)	(\$201,774)	(\$2,419)	(\$1,383)	\$88,811	
NET POSITION-RESTRICTED FOR PENSION AND OTHER POST-EMPLOYMENT BENEFITS							
Beginning of Year	\$220,946,146	\$56,911,066	\$24,907,306	\$121,469	\$41,177	\$1,084,142	
End of year	\$218,085,505	\$55,912,965	\$24,705,532	\$119,050	\$39,794	\$1,172,953	

Pe	Pension Trust Funds			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
\$0	\$106,981	\$269	\$1,780,240	\$17,082,662	\$16,026,961
\$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)		(696)	(210,704)	(209,786)
\$0	\$7,541	\$416	\$76,638	\$1,508,461	\$6,588,326
\$0	\$0	\$0	\$211	\$185,596	\$145,787
	_		(75)	(48,437)	(33,807)
\$0	\$0	\$0	\$136	\$137,159	\$111,980
\$0	\$5,354	\$668	\$3,912	\$25,604	\$27,051
			<u> </u>	49,803	469,688
\$0	\$119,876	\$1,353	\$1,860,926	\$18,803,689	\$23,224,006
\$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	- 00 700	180,492	614,318
_	_	_	82,728	82,728	72,777
	\$460.020	¢16.460	1,146,795	1,146,795	1,026,599
(\$5,582)	<b>\$169,039</b> \$0	<b>\$16,460</b> \$5,582	<b>\$1,231,082</b> \$0	<b>\$22,213,622</b> \$0	<b>\$21,923,025</b> \$0
(\$5,582)			\$629,844	(\$3,409,933)	\$1,300,981
\$5,582	\$1,339,570	\$133,879	\$4,492,344	\$309,982,681	\$308,681,700
\$0	\$1,290,407	\$124,354	\$5,122,188	\$306,572,748	\$309,982,681

## STATEMENT OF NET POSITION – PROPRIETARY FUNDS

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

	Proprietary Funds		Tot	als
	HCF/CRF	LTCF	2016	2015
ASSETS				
Current Assets				
Cash & Cash Equivalents	\$36	\$4,670	\$4,706	\$2,443
Short-Term Investments	699,449	5,016	704,465	917,457
Receivables				
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
Total Receivables	\$336,966	\$35,295	\$372,261	\$223,978
Subtotal Current Assets	\$1,036,451	\$44,981	\$1,081,432	\$1,143,878
Noncurrent Assets				
Investments, at Fair Value				
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
Total Investments	\$445,871	\$4,313,329	\$4,759,200	\$4,531,187
Long-Term Loan Receivable	\$0	\$0	\$0	\$4,500
Subtotal Noncurrent Assets	\$445,871	\$4,313,329	\$4,759,200	\$4,535,687
TOTAL ASSETS	\$1,482,322	\$4,358,310	\$5,840,632	\$5,679,565
LIABILITIES				
Current Liabilities				
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
Total Current Liabilities	\$1,158,023	\$378,930	\$1,536,953	\$1,593,573
Long-Term Liabilities				
Estimated Liability for Future Policy Benefits	\$0	\$3,731,387	\$3,731,387	\$3,392,876
Total Long-Term Liabilities	\$0	\$3,731,387	\$3,731,387	\$3,392,876
TOTAL LIABILITIES	\$1,158,023	\$4,110,317	\$5,268,340	\$4,986,449
TOTAL UNRESTRICTED NET POSITION	\$324,299	\$247,993	\$572,292	\$693,116
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)

Premiums \$3,741,352 Federal Government Subsidies 32,539 Administrative Fees Earned 27,598 Other 70  Total Operating Revenues \$3,801,559  Operating Expenses Claims Expense \$3,404,222 Increase in Estimated Liabilities 13,258 Administrative Expenses 367,685  Total Operating Expenses 367,685  Total Operating Expenses \$3,785,165  OPERATING INCOME (LOSS) \$16,394  Non-Operating Revenues  Net Appreciation/(Depreciation) in Fair Value of Investments \$25,163 Interest, Dividends, & Other Investment Income 3,375	\$282,426 —	\$4,023,778 32,539	<b>2015</b> \$3,866,641
Premiums         \$3,741,352           Federal Government Subsidies         32,539           Administrative Fees Earned         27,598           Other         70           Total Operating Revenues         \$3,801,559           Operating Expenses         \$3,404,222           Increase in Estimated Liabilities         13,258           Administrative Expenses         367,685           Total Operating Expenses         \$3,785,165           OPERATING INCOME (LOSS)         \$16,394           Non-Operating Revenues         \$25,163           Net Appreciation/(Depreciation) in Fair Value of Investments         \$25,163	\$282,426 — —		\$3,866,641
Premiums         \$3,741,352           Federal Government Subsidies         32,539           Administrative Fees Earned         27,598           Other         70           Total Operating Revenues         \$3,801,559           Operating Expenses         \$3,404,222           Increase in Estimated Liabilities         13,258           Administrative Expenses         367,685           Total Operating Expenses         \$3,785,165           OPERATING INCOME (LOSS)         \$16,394           Non-Operating Revenues         \$25,163           Net Appreciation/(Depreciation) in Fair Value of Investments         \$25,163	\$282,426 — —		\$3,866,641
Federal Government Subsidies         32,539           Administrative Fees Earned         27,598           Other         70           Total Operating Revenues         \$3,801,559           Operating Expenses         \$3,404,222           Increase in Estimated Liabilities         13,258           Administrative Expenses         367,685           Total Operating Expenses         \$3,785,165           OPERATING INCOME (LOSS)         \$16,394           Non-Operating Revenues         \$25,163           Net Appreciation/(Depreciation) in Fair Value of Investments         \$25,163	· -		1 <del>1</del> 0,000,00
Other         70           Total Operating Revenues         \$3,801,559           Operating Expenses         \$3,404,222           Increase in Estimated Liabilities         13,258           Administrative Expenses         367,685           Total Operating Expenses         \$3,785,165           OPERATING INCOME (LOSS)         \$16,394           Non-Operating Revenues         \$25,163           Net Appreciation/(Depreciation) in Fair Value of Investments         \$25,163	_	·	36,077
Other         70           Total Operating Revenues         \$3,801,559           Operating Expenses         \$3,404,222           Increase in Estimated Liabilities         13,258           Administrative Expenses         367,685           Total Operating Expenses         \$3,785,165           OPERATING INCOME (LOSS)         \$16,394           Non-Operating Revenues         \$25,163           Net Appreciation/(Depreciation) in Fair Value of Investments         \$25,163		27,598	26,712
Operating Expenses Claims Expense \$3,404,222 Increase in Estimated Liabilities 13,258 Administrative Expenses 367,685 Total Operating Expenses \$3,785,165 OPERATING INCOME (LOSS) \$16,394  Non-Operating Revenues Net Appreciation/(Depreciation) in Fair Value of Investments \$25,163	_	70	· <u> </u>
Claims Expense \$3,404,222 Increase in Estimated Liabilities 13,258 Administrative Expenses 367,685  Total Operating Expenses \$3,785,165  OPERATING INCOME (LOSS) \$16,394  Non-Operating Revenues Net Appreciation/(Depreciation) in Fair Value of Investments \$25,163	\$282,426	\$4,083,985	\$3,929,430
Claims Expense \$3,404,222 Increase in Estimated Liabilities 13,258 Administrative Expenses 367,685  Total Operating Expenses \$3,785,165  OPERATING INCOME (LOSS) \$16,394  Non-Operating Revenues Net Appreciation/(Depreciation) in Fair Value of Investments \$25,163			
Increase in Estimated Liabilities 13,258 Administrative Expenses 367,685  Total Operating Expenses \$3,785,165  OPERATING INCOME (LOSS) \$16,394  Non-Operating Revenues  Net Appreciation/(Depreciation) in Fair Value of Investments \$25,163	\$271,742	\$3,675,964	\$3,660,403
Administrative Expenses 367,685  Total Operating Expenses \$3,785,165  OPERATING INCOME (LOSS) \$16,394  Non-Operating Revenues  Net Appreciation/(Depreciation) in Fair Value of Investments \$25,163	376,284	389,542	331,049
Total Operating Expenses \$3,785,165  OPERATING INCOME (LOSS) \$16,394  Non-Operating Revenues  Net Appreciation/(Depreciation) in Fair Value of Investments \$25,163	24,999	392.684	425,954
OPERATING INCOME (LOSS) \$16,394  Non-Operating Revenues  Net Appreciation/(Depreciation) in Fair Value of Investments \$25,163	\$673,025	\$4,458,190	\$4,417,406
Net Appreciation/(Depreciation) in Fair Value of Investments \$25,163	(\$390,599)		(\$487,976)
Net Appreciation/(Depreciation) in Fair Value of Investments \$25,163			
	\$225,739	\$250,902	(\$33,807)
	Ψ220,703 787	4,162	9,910
Total Non-Operating Revenues (Loss) \$28,538	\$226,526	\$255,064	(\$23,897)
Non-Operating Expenses			
Management Fees \$62	\$1,463	\$1,525	\$1,578
Other Investment Expenses 15	143	158	239
Total Non-Operating Expenses \$77	\$1,606	\$1,683	\$1,817
NON-OPERATING INCOME (LOSS) \$28,461	\$224,920	\$253,381	(\$25,714)
CHANGE IN UNRESTRICTED NET POSITION \$44,855	(\$165,679)	(\$120,824)	(\$513,690)
TOTAL UNRESTRICTED NET POSITION			
Beginning of Year \$279,444	\$413,672	\$693,116	\$1,206,806
End of Year \$324,299	\$247,993	\$572,292	\$693,116

## 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		Tot	als
	HCF/CRF	LTCF	2016	2015
Cash Flows From Operating Activities				
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)
Net Cash Provided by (Used for) Operating Activities	(\$220,930)	(\$12,022)	(\$232,952)	\$88,889
Cash Flows From Investing Activities				
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
Net Cash Provided by (Used for) Investing Activities	\$220,965	\$14,250	\$235,215	(\$86,799)
	. ,		<u> </u>	<u> </u>
NET INCREASE IN CASH AND CASH EQUIVALENTS	\$35	\$2,228	\$2,263	\$2,090
Cash & Cash Equivalents, Beginning of Year	\$1	\$2,442	\$2,443	\$353
Cash & Cash Equivalents, End of Year	\$36	\$4,670	\$4,706	\$2,443
Reconciliation of Operating Income (Loss) to Net Cash				
Provided by (Used for) Operating Activities				
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
Net Cash Provided by (Used for) Operating Activities	(\$220,930)	(\$12,022)	(\$232,952)	\$88,889
Noncash Investing, Capital & Financing Activities				
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:

California Employers' Retiree Benefit

Trust Fund

Plan Name	Type of Plan
Defined Benefit Pension Plans:	
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
Defined Contribution Plans:	
Public Employees' Deferred Compensation Fund	Multiple-employer (457 & 401K plan)
Supplemental Contributions Program Fund	Single-employer
Defined Benefit Other Post-Employme	nt Benefit Plan:

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

1) 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

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

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

#### **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 Co	ntribution Rates	Employer - Required
	Classic	PEPRA	Contribution Rates
PERF A – Agent			
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%
PERF B – Schools Cost-Sharing			
Classified School	7.00%	6.00%	11.85%
PERF C – Public Agency Cost- Sharing			
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%
LRF	4% or 8%	N/A	42.27% <sup>1</sup>
JRF	8.00%	N/A	8.00%2
JRF II	8.00%	15.25%	23.37% <sup>1</sup>

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

<sup>(2)</sup> 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 taxpreferred 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%	<b>—</b> %	34%
Real Assets	12%	12%	12%	%	—%	-%
Liquidity	1%	1%	1%	-%	100%	-%
Inflation	6%	6%	6%	26%	—%	5%
REITs	—%	-%	—%	8%	-%	8%
Commodities	%	-%	%	3%	—%	3%
Total	100%	100%	100%	100%	100%	100%

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%
Total	100%	100%	100%

#### 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.

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)
Investments by Fair Value Level	Julie 30, 2010	(Level 1)	(LGVG1 Z)	(Level 3)
Global Equity				
Domestic Equity	\$74,246,038	\$74,246,038	\$0	\$0
International Equity	62,421,645	62,421,645	_	_
Total Global Equity	\$136,667,683	\$136,667,683	\$0	\$0
Global Debt				
Asset-Backed	\$15,869,451	\$0	\$14,019,711	\$1,849,740
International Debt Securities	10,412,487	Ψ0	10,412,487	Ψ1,0+0,1+0
Bank Loans	510,810	_	510,810	_
U.S. Treasuries	27,249,667	_	27,249,667	_
U.S. Corporate	16,420,484	_	16,420,484	_
Total Global Debt	\$70,462,899	\$0	\$68,613,159	\$1,849,740
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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)	
Total Derivatives	\$304,910	\$120,750	\$184,160	\$0
Other				
Rule 144(a) Securities	\$13,383,150	\$0	\$0	\$13,383,150
Securitized Assets	1,122,806	_	<u>.</u>	1,122,806
Real Assets <sup>2</sup>	223,530	_	_	223,530
Private Equity	186,472	_	_	186,472
Total Other	\$14,915,958	\$0	\$0	\$14,915,958
Total Investments by Fair Value Level	\$222,351,450	\$136,788,433	\$68,797,319	\$16,765,698
Investments Measured at NAV				
Commingled/Pooled Funds	\$8,899,873	\$0	\$0	\$0
Real Assets <sup>2</sup>	31,001,992	<del>-</del>	_	_
Private Equity	25,966,883	_	_	_
Other Investments	5,085,469	_	_	_
Total Investments Measured at NAV	\$70,954,217	\$0	\$0	\$0
Total Investments Measured at Fair Value	\$293,305,667	\$0	\$0	\$0

<sup>(1)</sup> 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.

<sup>(2)</sup> 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.

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
Total	\$70,954,217	\$17,054,858

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

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
U.S. Treasuries and Ager		Φ44 F00 700	40.00/
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	—%
No Effective Duration:			
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	—%
Total <sup>1</sup>		\$86,623,462	100.0%

<sup>(1)</sup> 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 Rating¹	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	Α	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
Total	\$3,533,555	:	

<sup>(1)</sup> 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.

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%
No Effective Duration:			
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%
Total <sup>3</sup>		\$5,869,606	100.0%

<sup>(1)</sup> 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).

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	—%
NA¹	28,261,006	32.63%
NR <sup>2</sup>	19,546,879	22.56%
Total <sup>3</sup>	\$86,623,462	100.00%

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

<sup>(2)</sup> 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

<sup>(2)</sup> NR represents those securities that are not rated.

<sup>(3)</sup> 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.

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	65.3%
P-2	155,052	1.5%
NR <sup>1,2</sup>	3,835,710	2.7%
Total <sup>3</sup>	\$5,869,606	100.0%

- (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.

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 Jur	20 2046	
Investment	· ·			N (1 1/5 II )
Derivatives (by Type)	Amount	Classification	Amount	Notional (Dollars)
Commodity Futures Long	(\$995)	Equity Securities	(\$785)	\$25,310
Commodity Futures Short	(3,620)	· · ·	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
Total	\$644,596		\$304,910	

<sup>(1)</sup> 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.

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

		Investment Maturities (in years)			
Investment Type	Fair Value June 30, 2016	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	_	_	_
Total	\$22,920	\$20,971	(\$6,898)	\$4,902	\$3,945

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

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

		Fair Value at	
Investment type	Reference rate	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 MTIIE	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
Subtotal – Interest Rate Swaps		\$7,005	\$473,968
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
Subtotal – Total Return Bond Swa	ps	\$20,581	\$4,945,155
TOTAL		\$27,586	\$5,419,123

## 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%	
Barclays Bank Plc Wholesale	1.25%	A2
State Street Bank And Trust Company	1.14%	
Standard Chartered Bank	0.45%	Aa3
Bank of Montreal	0.24%	
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%	
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
TOTAL	100.00%	

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	<u> </u>	_	(1,460)	835,385
United Arab Emirates Dirham	376	85,993					86,369
Total	\$378,593	\$62,785,403	\$11,545,298	\$3,351,754	\$2,701,936	\$12,186	\$80,775,170

<sup>(1)</sup> 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/(Assets) (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
PERF B:				
Schools Cost-Sharing Plan	\$75,663,026	\$55,912,965	\$19,750,061	73.9%
PERF C:				
Public Agencies Cost-Sharing Plan	33,358,628	24,705,532	8,653,096	74.1%
LRF:				
State of California	102,220	119,050	(16,830)	116.5%
JRF:				
State of California	3,794,944	39,794	3,755,150	1.0%
JRF II:				
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%	

<sup>(1)</sup> 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%)

<sup>(1)</sup> An expected inflation of 2.50% 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%

<sup>(1)</sup> An expected inflation of 2.50% used for this period.

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

Asset Class			Real Return Years 11+ <sup>2</sup>
Cash	100.0%	(0.55%)	(1.05%)

<sup>(1)</sup> An expected inflation of 2.50% 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%

<sup>(1)</sup> An expected inflation of 2.50% used for this period.

<sup>(2)</sup> An expected inflation of 3.00% used for this period.

<sup>(2)</sup> An expected inflation of 3.00% used for this period.

<sup>(2)</sup> An expected inflation of 3.00% used for this period.

<sup>(2)</sup> 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.

#### 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
PERF B				
Schools Cost-Sharing	\$75,663,026	\$55,912,965	\$19,750,061	73.9%
PERF C				
Public Agency Cost-Sharing	33,358,628	24,705,532	8,653,096	74.1%
LRF				
State of California	102,220	119,050	(16,830)	116.5%
JRF				
State of California	3,794,944	39,794	3,755,150	1.0%
JRF II				
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
PERF B				
Schools Cost-Sharing PERF C	\$85,380,167	\$55,912,965	\$29,467,202	65.5%
Public Agency Cost-Sharing	37,870,832	24,705,532	13,165,300	65.2%
LRF				
State of California	113,818	119,050	(5,232)	104.6%
JRF				
State of California	4,261,453	39,794	4,221,659	0.9%
JRF II				
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
PERF B				
Schools Cost-Sharing	\$67,571,595	\$55,912,965	\$11,658,630	82.7%
PERF C				
Public Agency Cost-Sharing	29,643,807	24,705,532	4,938,275	83.3%
LRF				
State of California	92,678	119,050	(26,372)	128.5%
JRF				
State of California	3,406,173	39,794	3,366,379	1.2%
JRF II				
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 postemployment 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 moneyweighted 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
Total	\$195,337

# 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

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>
Total Estimated Claims at Beginning of Fiscal Year	\$689,202	\$635,956
Total Incurred Claims and Claim Adjustment Expenses	3,417,480	3,432,102
Total Payments	(3,377,365)	(3,378,856)
Total Estimated Claims at End of Fiscal Year	\$729,317	\$689,202

(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.

## **Required Supplementary Information**

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

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

	2016	2015	2014
Total Pension Liability:			
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)
Net Change in Total Pension Liability	\$4,011,862	\$3,344,468	\$3,256,860
Total Pension Liability – Beginning	71,651,164	68,306,696	65,049,836
Total Pension Liability – Ending (a)	\$75,663,026	\$71,651,164	\$68,306,696
Plan Fiduciary Net Position:			
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)
Net Change in Plan Fiduciary Net Position	(\$998,101)	(\$100,630)	\$7,361,019
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
Net Pension Liability (a) - (b)	\$19,750,061	\$14,740,098	\$11,295,000
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	73.9%	79.4%	83.5%
Covered Payroll	\$11,747,602	\$10,964,872	\$10,120,248
Net Pension Liability as a Percentage of Covered Payroll	168.1%	134.4%	111.6%

<sup>(1)</sup> 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.

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

#### $PERF\ C-Three-Year\ Review^1\ ({\tt Dollars\ in\ Thousands})$

	2016	2015	2014
Total Pension Liability:			
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)
Net Change in Total Pension Liability	\$1,587,410	\$1,010,861	\$1,547,646
Total Pension Liability – Beginning	\$31,800,055	\$30,789,194	\$29,241,548
Adjustment to Beginning Amount	(28,837)	_	_
Total Adjusted Pension Liability – Beginning	\$31,771,218	\$30,789,194	\$29,241,548
Total Pension Liability – Ending (a)	\$33,358,628	\$31,800,055	\$30,789,194
Plan Fiduciary Net Position:			
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)
Net Change in Plan Fiduciary Net Position	(\$201,774)	(\$33,222)	\$3,442,980
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
Net Pension Liability (a) - (b)	\$8,653,096	\$6,892,749	\$5,848,666
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	74.1%	78.3%	81.0%
Covered Payroll	\$3,472,950	\$3,356,312	\$3,248,018
Net Pension Liability as a Percentage of Covered Payroll	249.2%	205.4%	180.1%

<sup>(1)</sup> 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.

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

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

	2016	2015	2014
Total Pension Liability:			
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)
Net Change in Total Pension Liability	(\$4,351)	(\$8,791)	(\$285)
Total Pension Liability – Beginning	\$106,730	\$115,521	\$115,806
Adjustment to Beginning Amount	(159)	_	_
Total Adjusted Pension Liability – Beginning	\$106,571	\$115,521	\$115,806
Total Pension Liability – Ending (a)	\$102,220	\$106,730	\$115,521
Plan Fiduciary Net Position:			
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)
Net Change in Plan Fiduciary Net Position	(\$2,419)	(\$8,885)	\$8,206
Plan Fiduciary Net Position – Beginning	\$121,469	\$130,354	\$122,148
Plan Fiduciary Net Position – Ending (b)	119,050	121,469	130,354
Net Pension Asset (a) - (b)	(\$16,830)	(\$14,739)	(\$14,833)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	116.5%	113.8%	112.8%
Covered Payroll	\$1,313	\$1,545	\$1,470
Net Pension Asset as a Percentage of Covered Payroll	(1,281.8%)	(954.0%)	(1,009.0%)

<sup>(1)</sup> 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.

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

 $JRF-Three-Year\ Review^1\ (\hbox{\scriptsize Dollars in Thousands})$ 

	2016	2015	2014
Total Pension Liability:			
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)
Net Change in Total Pension Liability	\$262,365	\$175,182	(\$26,098)
Total Pension Liability – Beginning	\$3,532,394	\$3,357,212	\$3,383,310
Adjustment to Beginning Amount	185	_	_
Total Adjusted Pension Liability – Beginning	\$3,532,579	\$3,357,212	\$3,383,310
Total Pension Liability – Ending (a)	\$3,794,944	\$3,532,394	\$3,357,212
Plan Fiduciary Net Position:			
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)
Net Change in Plan Fiduciary Net Position	(\$1,383)	(\$16,022)	\$3,379
Plan Fiduciary Net Position – Beginning	\$41,177	\$57,199	\$53,820
Plan Fiduciary Net Position – Ending (b)	39,794	41,177	57,199
Net Pension Liability (a) - (b)	\$3,755,150	\$3,491,217	\$3,300,013
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	1.0%	1.2%	1.7%
Covered Payroll	\$34,301	\$41,378	\$54,649
Net Pension Liability as a Percentage of Covered Payroll	10,947.6%	8,437.4%	6,038.6%

<sup>(1)</sup> 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.

## $JRF\ II-Three-Year\ Review^1\ ({\tt Dollars\ in\ Thousands})$

	2016	2015	2014
Total Pension Liability:			
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)
Net Change in Total Pension Liability	\$138,797	\$105,826	\$130,764
Total Pension Liability – Beginning	\$1,073,788	\$967,962	\$837,198
Adjustment to Beginning Amount	(5,035)	_	_
Total Adjusted Pension Liability – Beginning	\$1,068,753	\$967,962	\$837,198
Total Pension Liability – Ending (a)	\$1,207,550	\$1,073,788	\$967,962
Plan Fiduciary Net Position:			
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)
Net Change in Plan Fiduciary Net Position	\$88,811	\$70,303	\$217,873
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
Net Pension Liability/(Asset) (a) - (b)	\$34,597	(\$10,354)	(\$45,877)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	97.1%	101.0 %	104.7 %
Covered Payroll	\$280,879	\$259,133	\$249,248
Net Pension Liability/(Asset) as a Percentage of Covered Payroll	12.3%	(4.0%)	(18.4%)

<sup>(1)</sup> 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.

<sup>(2)</sup> 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
PERF 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
Contribution Excess			
Covered Payroll	\$11,747,602	\$10,964,872	\$10,120,248
Contributions as a Percentage of Covered Payroll	12.0%	11.9%	11.8%
PERF C:			
Actuarially Determined Contribution	\$788,908	\$691,602	\$732,142
Contributions in Relation to the Actuarially Determined Contribution	788,908	691,602	732,142
Contribution Excess		_	_
Covered Payroll	\$3,472,950	\$3,356,312	\$3,248,018
Contributions as a Percentage of Covered Payroll	22.7%	20.6%	22.5%
LRF:			
Actuarially Determined Contribution	\$141	\$260	\$33
Contributions in Relation to the Actuarially Determined Contribution <sup>2</sup>	549	590	565
Contribution Excess	(\$408)	(\$330)	(\$532)
Covered Payroll	\$1,313	\$1,545	\$1,470
Contributions as a Percentage of Covered Payroll	41.8%	38.2%	38.4%
JRF:			
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
Contribution Deficiency	\$270,786	\$1,703,645	\$1,378,482
Covered Payroll	\$34,301	\$41,378	\$54,649
Contributions as a Percentage of Covered Payroll	560.6%	437.2%	349.8%
JRF II:			
Actuarially Determined Contribution	\$65,839	\$63,193	\$55,538
Contributions in Relation to the Actuarially Determined Contribution	65,839	63,193	55,538
Contribution Excess			
Covered Payroll	\$280,879	\$259,133	\$249,248
Contributions as a Percentage of Covered Payroll	23.4%	24.4%	22.3%
(4) This is a 10 year abodula Information in this appendix is not available prior to 2014. Additional years		dula in futura finant van	ro until 10 waara of data

<sup>(1)</sup> 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.

<sup>(2)</sup> Because of the provisions of PEPRA, 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.

<sup>(4)</sup> 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 1

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%	— %	—%

<sup>(1)</sup> 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.

<sup>(2)</sup> 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
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	\$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	φo	\$270.47 <i>F</i>	(¢60.045)	(\$40E 270)	/¢20 440\	(\$02.004)	(064.442)	(600 120)	(¢60,664)	/\$70.00E\
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:

<sup>(1)</sup> This line shows the total earned premium revenues and investment revenues for each fiscal year.

<sup>(2)</sup> This line shows other HCF/CRF operating costs, including overhead and claims expense not allocable to individual claims, for each fiscal year.

<sup>(3)</sup> 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.

<sup>(4)</sup> This section shows the cumulative amounts paid as of the end of each policy year and years succeeding the policy year.

<sup>(5)</sup> 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.

<sup>(6)</sup> 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.

## Other Supplementary Information

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

	2016
PERSONNEL SERVICES	
Salaries & Wages	\$171,691
Employee Benefits	81,026
Total Personnel Services	\$252,717
CONSULTANT & PROFESSIONAL SERVICES	
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
Total Consultant & Professional Services	\$343,100
OPERATING EXPENSES & EQUIPMENT	
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
Total Operating Expenses & Equipment	\$99,370
OTHER EXPENSES & ADJUSTMENTS	
Depreciation Expense	\$18,968
Decrease in Paid Absence Obligation	(2,456)
Reversal of OPEB Obligation	(195,337)
Amortization	2,354
Miscellaneous	66,558
Total Other Expenses & Adjustments	(\$109,913)
TOTAL ADMINISTRATIVE EXPENSES — ALL FUNDS	\$585,274

## INVESTMENT EXPENSE – ALL FUNDS

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

	Fees		Fees
Equity Managers		Pacific Investment Management Co.	\$964
Alliance Bernstein, LP	\$61	Rogge Global Partners	48
Allianz Global Investors U.S., LLC	4,133	Total Fixed Income Managers	<u>\$1,586</u>
Arrowstreet Capital, LP	5,778		
Ashmore Equities Investment Management	1,003	Real Asset Managers	
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
	679	CIM Infrastructure Fund, LP	
Relational Mid-Cap			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.	, ,	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
Total Equity Managers	<u>\$84,659</u>	GI Partners Fund III, LP	2,357
		Global Infrastructure Partners II, LP (GIP II)	3,210
Fixed Income Managers		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 Management Fees<sup>1,2</sup> (Dollars in Thousands) (continued)

	Fees
Harbert European Real Estate Fund II, LP	\$107
Harbert Gulf Pacific Power, LLC (HGPP)	2,677
Harbert Power Fund V, LP (HPF V)	424
HC Green Development Fund, LP	442
HC NOP Holdings, LP	118
HCB Interests II, LP	1,935
HCB LTH	7,128
HCC Interests, LP	259
HCM Holdings II, LP	397
HCR LTH, LLC	4,006
Hearthstone Housing Partners II, LLC	1,292
Hearthstone Housing Partners III, LLC	151
Hines European Development Fund, LP	66
IHP Investment Fund I, LP	1,157
HP Investment Fund II, LP	992
HP Investment Fund III, LP	1,188
L&FS India Realty Fund II, LLC	943
L&FS India Realty Fund, LLC	565
MI - Base	16,247
MI - DT 2011	1,465
MP - Base	4,829
MP - DT 2011	1,772
MP - DT 2012 and Beyond	264
nstitutional Core Multifamily Investors	3,050
nstitutional Logistics Partners, LLC	1,745
Institutional Multifamily Partners	4,433
JER Europe Fund III, LP	31
KAREC California Development Program, LLC	(881
CC 2011, LLC	2,922
KSC Affordable Housing Investment Fund, LLC	951
Land Management Company, LLC	2,025
_aSalle Asia Opportunity Fund III, LP	463
LaSalle French Fund II, LP	23
_aSalle 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	(26

	Fees
Stockbridge Real Estate Fund II -B, LP	\$356
Strategic Partners Value Enhancement Fund, LP	74
Sun-Apollo India Real Estate Fund, LLC	159
Sylvanus, LLC	2,289
TechCore, LLC	5,925
TPG Hospitality Investments IV, LLC	766
UBS International Infrastructure Fund II (B), LP	585
UBS International Infrastructure Fund II (C), LP	1,244
UrbanAmerica, LP II	204
Whitney Ranch Venture, LLC	1,030
Windsor Realty Fund VII, LP	95
Xander Co-Investment	1,131
Xander JV Fund I (India Realty)	301
Total Real Asset Managers	\$178,583
Other Investment Management Fees	
AQR Capital Management, LLC	\$3,385
Black River Commodity Multi-Strategy Fund, LLC	(10)
Brookside Capital Partners Fund, LP	70
Chatham Eureka Fund, LP	2,299
Deephaven Market Neutral, LLC	4
Double Haven Eureka, LLC	78
Kylin Eureka Fund, LLLP	424
Lansdowne Eureka Fund, LP	32
OZ Domestic Partners II, LP	109
OZ Eureka Fund, LP	3,271
Rock Creek 1848 Fund, LP	7
Standard Life Investments Limited	4,730
Symphony Eureka Fund, LP	(56)
Total Other Investment Management Fees	\$14,343
Total Management Ease	¢270 474
Total Management Fees	\$279,171

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

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

	Fees
Absolute Return Strategy Managers	***
Brookside Capital Partners Fund, LP	\$352
Chatham Eureka Fund, LP	(146)
Kylin Eureka Fund, LLLP	187
Lansdowne Eureka Fund, LP	(93)
OZ Eureka Fund, LP	(1,120)
Symphony Eureka Fund, LP	21
Rock Creek 1848 Fund, LP	18
Total Absolute Return Strategy Managers	(\$781)
Equity Managers	
Alliance Bernstein, LP	\$1,264
Arrowstreet Capital, LP	18,636
Baillie Gifford Overseas, Ltd.	5,620
Blum Strategic Partners II	(1)
First Quadrant, LP	12,917
FIS Group, Inc.	159
J.P. Morgan Investment Management, Inc.	208
Lazard Asset Management, LLC	(165)
Leading Edge Investment Advisors, LLC	76
New Mountain Vantage (California), LP	(93)
Pzena Investment Management, LLC	2,827
Research Affiliates, LLC	3,335
Taiyo Fund, LP	12,545
The Boston Company Asset Management, LLC	5,416
Total Equity Managers	<b>600 744</b>
rotal =quity managoro	<u>\$62,744</u>
Total =quity managoro	<u>\$62,744</u>
Fixed Income Managers	
Fixed Income Managers Alliance Bernstein, LP	\$854
Fixed Income Managers Alliance Bernstein, LP Baring International Investment Limited	\$854 226
Fixed Income Managers Alliance Bernstein, LP Baring International Investment Limited Pacific Investment Management Co.	\$854 226 2,283
Fixed Income Managers Alliance Bernstein, LP Baring International Investment Limited	\$854 226
Fixed Income Managers Alliance Bernstein, LP Baring International Investment Limited Pacific Investment Management Co. Total Fixed Income Managers	\$854 226 2,283
Fixed Income Managers Alliance Bernstein, LP Baring International Investment Limited Pacific Investment Management Co. Total Fixed Income Managers Real Asset Managers	\$854 226 2,283 <b>\$3,363</b>
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC	\$854 226 2,283 <b>\$3,363</b>
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067)
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063)
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063)
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III  CUC III, LLC	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III  CUC III, LLC  CIM Fund III, LP	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160 (18,997)
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III  CUC III, LLC  CIM Fund III, LP  CIM Infrastructure Fund, LP	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160 (18,997) 4,475
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III  CUC III, LLC  CIM Fund III, LP  CIM Infrastructure Fund, LP  DB Real Estate Global Opportunities IB, LP	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160 (18,997) 4,475 (235)
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III  CUC III, LLC  CIM Fund III, LP  CIM Infrastructure Fund, LP  DB Real Estate Global Opportunities IB, LP  ERPMI	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160 (18,997) 4,475 (235)
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III  CUC III, LLC  CIM Fund III, LP  CIM Infrastructure Fund, LP  DB Real Estate Global Opportunities IB, LP  ERPMI  FSP - Base	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160 (18,997) 4,475 (235) 22
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III  CUC III, LLC  CIM Fund III, LP  CIM Infrastructure Fund, LP  DB Real Estate Global Opportunities IB, LP  ERPMI  FSP - Base  FSP - DT 2011	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160 (18,997) 4,475 (235) 22 10,271 11,666
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III  CUC III, LLC  CIM Fund III, LP  CIM Infrastructure Fund, LP  DB Real Estate Global Opportunities IB, LP  ERPMI  FSP - Base  FSP - DT 2011  FSP - DT 2012 and Beyond	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160 (18,997) 4,475 (235) 22 10,271 11,666 12,408
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III  CUC III, LLC  CIM Fund III, LP  CIM Infrastructure Fund, LP  DB Real Estate Global Opportunities IB, LP  ERPMI  FSP - Base  FSP - DT 2011  FSP - DT 2012 and Beyond  GI Partners Fund III, LP	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160 (18,997) 4,475 (235) 22 10,271 11,666 12,408 (3,034)
Fixed Income Managers Alliance Bernstein, LP Baring International Investment Limited Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC CalEast Canada Limited Partnership CalEast Solstice, LLC CalSmart, LLC (Canyon) Canyon Catalyst Fund, LLC Canyon Johnson Urban Fund, III CUC III, LLC CIM Fund III, LP CIM Infrastructure Fund, LP DB Real Estate Global Opportunities IB, LP ERPMI FSP - Base FSP - DT 2011 FSP - DT 2012 and Beyond GI Partners Fund III, LP Global Infrastructure Partners II, LP (GIP II)	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160 (18,997) 4,475 (235) 22 10,271 11,666 12,408 (3,034) 6,333
Fixed Income Managers  Alliance Bernstein, LP  Baring International Investment Limited  Pacific Investment Management Co.  Total Fixed Income Managers  Real Asset Managers  AGI Resmark Housing Fund, LLC  CalEast Canada Limited Partnership  CalEast Solstice, LLC  CalSmart, LLC (Canyon)  Canyon Catalyst Fund, LLC  Canyon Johnson Urban Fund, III  CUC III, LLC  CIM Fund III, LP  CIM Infrastructure Fund, LP  DB Real Estate Global Opportunities IB, LP  ERPMI  FSP - Base  FSP - DT 2011  FSP - DT 2012 and Beyond  GI Partners Fund III, LP	\$854 226 2,283 <b>\$3,363</b> \$2,799 (1,067) (14,063) 131 2,350 2,638 160 (18,997) 4,475 (235) 22 10,271 11,666 12,408 (3,034)

	Fees
GRI - Base	\$2,994
GRI - DT 2011	2,245
Harbert Power Fund V, LP (HPF V)	(18)
HCB Interests II, LP	(5,471)
HCC Interests, LP	(2,559)
Hearthstone Housing Partners, LP	(214)
Hearthstone Multi-State Residential Value-Added III	(131)
Hearthstone-MSII Homebuilding Investors, LLC	(23)
IHP Investment Fund I, LP	61,281
IMI - Base	19,324
IMP - Base	(435)
IMP - DT 2011	7,353
IMP - DT 2012 and Beyond	8,505
Institutional Core Multifamily Investors	865
Institutional Logistics Partners, LLC	3,208
Institutional Multifamily Partners	42,646
Ivy Investment Vehicle LDC (SWPM)	24,439
LaSalle Japan Logistics Fund II, LP	2,459
National Office Partners, LLC (CWP)	10,313
ORA Multifamily Investments I, LLC	10,141
ORA Residential Investments I, LP	14,498
Pacific Multifamily Investors, LLC	1,485
SDL Hospitality Co-Invest Fund, LP	64
Secured Capital Japan Real Estate Partners Asia, LP	(814)
Secured Capital Japan Real Estate Partners II, LP	(1,164)
Starwood Capital Hospitality Fund II Global, LP	(5,142)
TechCore, LLC	9,737
Total Real Asset Managers	\$279,343
Total Performance Fees	\$344,669
Total Management and Performance Fees	\$623,840

(1) Negative performance fees are due to the reversal of accruals caused by the fluctuation in market values.

Other Investment Expenses 1,2 (Dollars in Thousands)

	Fees		Fees
Advisory Fees	1 000	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
Total Advisory Fees	\$7,204	Planet Technologies, Inc.	81
	<del></del>	Propoint Technology, Inc.	1,283
Auditor Fees		Pyramid Technical Consultants, Inc.	230
Conrad, LLP	\$184	RG & Associates	16
Katten Muchin Rosenman, LLP	(26)	Ryedale, Inc.	597
KNL Support Services	(20)	SAS International, Inc.	94
KPM & Associates, LLP	226	SRI Infotech, Inc.	116
Total Auditor Fees	\$384	Stanfield Systems, Inc.	413
iotal Additor i ees	<del></del>	StepStone Group, LP	37
Appraisal Fees		Technology Crest Corporation	384
Altus Group U.S. Inc.	\$8,464	The Regents of University of CA	85
Total Appraisal Fees	\$8,464	The Wright Coach	8
Total Applaisal Fees	<del>30,404</del>	Trinity Technology Group, Inc.	440
Company Expense		UBS Alternative & Quantitative Investment	726
		ODS Alternative & Quantitative investment	
Logoto Conital Management LLC	¢つつに	Voyager	1
Legato Capital Management, LLC	\$235	Voyager Willow Millor & Nolson	1
LEIA GEM Investment, LLC	67	Wilcox, Miller & Nelson	62
LEIA GEM Investment, LLC Progress Investments II, LLC	67 71	, ,	
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP	67 71 66	Wilcox, Miller & Nelson  Total Investment Consultant Fees	62
LEIA GEM Investment, LLC Progress Investments II, LLC	67 71	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees	62 <b>\$8,865</b>
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense	67 71 66	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio	\$8,865 \$23
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense Investment Consultant Fees	67 71 66 <b>\$439</b>	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP	\$8,865 \$23 (32)
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense Investment Consultant Fees Altius Associates Limited	67 71 66 <b>\$439</b>	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP	\$23 (32) 108
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense Investment Consultant Fees Altius Associates Limited American Express	67 71 66 <b>\$439</b> \$37 22	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP	\$23 (32) 108 (1)
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc.	67 71 66 <b>\$439</b> \$37 22 6	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC	\$23 (32) 108 (1) 151
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc.	\$37 22 6 28	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP	\$23 (32) 108 (1) 151 374
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC	\$37 22 6 28 812	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP	\$23 (32) 108 (1) 151 374 61
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP	\$37 22 6 28 812 6	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP	\$23 (32) 108 (1) 151 374 61 894
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc.	\$37 22 6 28 812 6 (12)	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP	\$23 (32) 108 (1) 151 374 61 894 27
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc.	\$439 \$37 22 6 28 812 6 (12) (42)	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP	\$23 (32) 108 (1) 151 374 61 894 27
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc. Cambria Solutions, Inc.	67 71 66 \$439  \$37 22 6 28 812 6 (12) (42) 95	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP Morgan Lewis & Bockius, LLP	\$23 (32) 108 (1) 151 374 61 894 27 101 703
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc. Cambridge Associates, LLC	67 71 66 <b>\$439</b> \$37 22 6 28 812 6 (12) (42) 95	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP Morgan Lewis & Bockius, LLP Nixon Peabody, LLP	\$23 (32) 108 (1) 151 374 61 894 27 101 703
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc. Cambria Solutions, Inc. Cambridge Associates, LLC Courtland Partners, Ltd	67 71 66 <b>\$439</b> \$37 22 6 28 812 6 (12) (42) 95 313 248	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP Morgan Lewis & Bockius, LLP Nixon Peabody, LLP Pillsbury Winthrop Shaw Pittman, LLP	\$23 (32) 108 (1) 151 374 61 894 27 101 703 20 2,233
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc. Cambrid Solutions, Inc. Cambridge Associates, LLC Courtland Partners, Ltd Crosswater Realty Advisors, LLC	67 71 66 <b>\$439</b> \$37 22 6 28 812 6 (12) (42) 95 313 248 452	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP Morgan Lewis & Bockius, LLP Nixon Peabody, LLP Pillsbury Winthrop Shaw Pittman, LLP Soltman, Levitt, Flaherty & Wattles, LLP	\$23 (32) 108 (1) 151 374 61 894 27 101 703 20 2,233 (29)
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc. Cambridge Associates, LLC Courtland Partners, Ltd Crosswater Realty Advisors, LLC Cutter Associates, LLC	67 71 66 <b>\$439</b> \$37 22 6 28 812 6 (12) (42) 95 313 248 452 100	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP Morgan Lewis & Bockius, LLP Nixon Peabody, LLP Pillsbury Winthrop Shaw Pittman, LLP Soltman, Levitt, Flaherty & Wattles, LLP Steptoe & Johnson, LLP	\$23 (32) 108 (1) 151 374 61 894 27 101 703 20 2,233 (29)
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc. Cambrida Solutions, Inc. Cambridge Associates, LLC Courtland Partners, Ltd Crosswater Realty Advisors, LLC Cutter Associates, LLC Dee Hansford Consulting	67 71 66 <b>\$439</b> \$37 22 6 28 812 6 (12) (42) 95 313 248 452 100 (12)	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP Morgan Lewis & Bockius, LLP Nixon Peabody, LLP Pillsbury Winthrop Shaw Pittman, LLP Soltman, Levitt, Flaherty & Wattles, LLP	\$23 (32) 108 (1) 151 374 61 894 27 101 703 20 2,233 (29)
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc. Cambria Solutions, Inc. Cambridge Associates, LLC Courtland Partners, Ltd Crosswater Realty Advisors, LLC Cutter Associates, LLC Dee Hansford Consulting Duff & Phelps, LLC	67 71 66 <b>\$439</b> \$37 22 6 28 812 6 (12) (42) 95 313 248 452 100 (12) 500	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP Morgan Lewis & Bockius, LLP Nixon Peabody, LLP Pillsbury Winthrop Shaw Pittman, LLP Soltman, Levitt, Flaherty & Wattles, LLP Steptoe & Johnson, LLP Total Legal Fees	\$23 (32) 108 (1) 151 374 61 894 27 101 703 20 2,233 (29)
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc. Cambria Solutions, Inc. Cambridge Associates, LLC Courtland Partners, Ltd Crosswater Realty Advisors, LLC Cutter Associates, LLC Dee Hansford Consulting Duff & Phelps, LLC Edhec Business School	67 71 66 <b>\$439</b> \$37 22 6 28 812 6 (12) (42) 95 313 248 452 100 (12) 500 189	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP Morgan Lewis & Bockius, LLP Nixon Peabody, LLP Pillsbury Winthrop Shaw Pittman, LLP Soltman, Levitt, Flaherty & Wattles, LLP Steptoe & Johnson, LLP Total Legal Fees  Master Custodian Fees	\$23 (32) 108 (1) 151 374 61 894 27 101 703 20 2,233 (29) 2 <b>\$4,635</b>
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc. Cambria Solutions, Inc. Cambridge Associates, LLC Courtland Partners, Ltd Crosswater Realty Advisors, LLC Cutter Associates, LLC Dee Hansford Consulting Duff & Phelps, LLC Edhec Business School FTI Consulting, Inc.	67 71 66 \$439  \$37 22 6 28 812 6 (12) (42) 95 313 248 452 100 (12) 500 189 434	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP Morgan Lewis & Bockius, LLP Nixon Peabody, LLP Pillsbury Winthrop Shaw Pittman, LLP Soltman, Levitt, Flaherty & Wattles, LLP Steptoe & Johnson, LLP Total Legal Fees  Master Custodian Fees State Street Bank And Trust Company	\$23 (32) 108 (1) 151 374 61 894 27 101 703 20 2,233 (29) 2 \$4,635
LEIA GEM Investment, LLC Progress Investments II, LLC Strategic Investment Management, LP Total Company Expense  Investment Consultant Fees Altius Associates Limited American Express APCO Worldwide, Inc. ATV Video Center, Inc. Bard Consulting, LLC BDO USA, LLP Beacon Consulting Group, Inc. Callan Associates, Inc. Cambria Solutions, Inc. Cambridge Associates, LLC Courtland Partners, Ltd Crosswater Realty Advisors, LLC Cutter Associates, LLC Dee Hansford Consulting Duff & Phelps, LLC Edhec Business School	67 71 66 <b>\$439</b> \$37 22 6 28 812 6 (12) (42) 95 313 248 452 100 (12) 500 189	Wilcox, Miller & Nelson  Total Investment Consultant Fees  Legal Fees Berman DeValerio Chapman and Cutler, LLP Cox, Castle & Nicholson, LLP Downey Brand, LLP Foster Pepper, PLLC Hogan Lovells, US LLP Jackson Walker, LLP K & L Gates, LLP Katten Muchin Rosenman, LLP Keker & Van Nest, LLP Morgan Lewis & Bockius, LLP Nixon Peabody, LLP Pillsbury Winthrop Shaw Pittman, LLP Soltman, Levitt, Flaherty & Wattles, LLP Steptoe & Johnson, LLP Total Legal Fees  Master Custodian Fees	\$23 (32) 108 (1) 151 374 61 894 27 101 703 20 2,233 (29) 2 <b>\$4,635</b>

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

(2511610 111 111 111 111 111 111 111 111 11			
	Fees		Fees
Fund Administration Fees		eVestment Alliance	\$40
State Street Bank And Trust Company	\$4,005	Factset Research Systems, Inc.	3,274
Total Fund Administration Fees	\$4,005	Firstrain, Inc.	10
		Fitch Ratings, Inc.	267
Tax Advisory Fees		FTSE	710
Ernst & Young, LLP	\$986	FX Alliance, Inc.	33
Total Tax Advisory Fees	<u>\$986</u>	Glass Lewis & Co., LLC	528
		Global Investor Collaboration Svcs., LLC	5
Technology Expenses		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	Pregin 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)
·	283	Real Capital Analytics, Inc.	130
Costar Investment Analysis	45	RG & Associates	_
Covenant Review, LLC Credit Suisse Customized Fund Investment	-		8
	(25)	Russell Investment Group SNL Financial LC	
Creditsights	100		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

## Other Investment Expenses $^{1,2}$ (Dollars in Thousands)

Carlot III Countries Expositors (Bollato III Theadailae)	
	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
Total Technology Expenses	\$35,110
Internal Investment Personnel And Administrative	
Internal Investment Personnel And Administrative Expenses	\$69,685
Total Investment Personnel And Administrative	\$69,685
Total Internal Investment resonner And Administrative	\$09,000
Miscellaneous Investment Expense Fees	
Miscellaneous Investment Expense Fees	\$38
Transaction Fees	66,455
Total Miscellaneous Investment Expense Fees	\$66,493
Total Other Investment Fees and Expenses	\$210,862
Total Investment Expenses - All Funds	\$834,702
(1) Expenses and fees less than a thousand dollars are indicated by a dash	

<sup>(1)</sup> 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		Release Management/Quality Assurance/Configuration Management
Ambire Consulting, Inc.		Project Management Services
Anthem Blue Cross	102,727	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention & Disease Management
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.		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		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		Medical Consulting Services
Eagle Management Group, LLC, dba Matran		Marketing Services
Eaton Interpreting Services, Inc.	112	Interpreting Services
Elegant-Enterprise Wide Solutions, Inc.		Application Development, IT Security, Management Support Services, Business Process Reengineering
Elynview Corporation		Data Base Administration
Enclipse Corporation	130	IT Architecture, Release Management/Quality Assurance/Configuration Management

## 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		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.	,	Project Management Services
Kiefer Consulting, Inc.		Application Development, IT Architecture
King & Spalding, LLP		Legal Services
Klausner, Kaufman, Jensen & Levinson		Outside Fiduciary Counsel
Knowledge Structures, Inc.		Employee Training and Development
Kong Consulting, Inc.		Systems Analysis, Design, Implementation, Maintenance and Support
Kronick, Moskovitz, Tiedemann & Girard		Advice on Labor/Employment Law Issues
LCS Technologies, Inc.		Application Development, Data Base Administration
Leading Resources, Inc. (LRI)		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 &
Lussier Group	267	Management Analysis, Legal Services

## 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		Audit Services
Matrix Software Services		Data Base Administration
Maximus Federal Services, Inc.		Medical Consulting Services
Mazel Immigration Law, PC		Legal Services
McLagan		Performance Management
Mellon Bank		Banking services
Mercer Health and Benefits		Actuarial Consulting Services, Medical Consulting Services
Michael Scales Consulting, LLC		Application Development
Michael Strategic Analysis		Survey and Research Services
Milliman, Inc.		Actuarial Consulting Services, Project Management Services
Mindstorm Creative. Inc.		Video and Multimedia Production Services
Modis, Inc.		Architecture, Specialized IT Support Services
Morgan Lewis & Bockius, LLP		Outside Counsel for Board Investment Program
Nexus IS, Inc.	. ,	Systems Analysis, Design, Implementation, Maintenance and Support
Nichols Consulting		Management Support Services
Northeast Retirement Services		Third-Party Member Record-Keeper
Nottreast Retirement Services	31	Application Development, Information Services formerly Data Services, Systems
OnCore Consulting, LLC	10,907	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		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

## $CONSULTANT\ AND\ PROFESSIONAL\ SERVICES\ EXPENSES-ALL\ FUNDS\ (DOLLARS\ IN\ THOUSANDS)\ (CONTINUED)$

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		Employee Training and Development	
Vasquez Benisek & Lindgren, LLP		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		Third-Party Member Record-Keeper	
Worktank		Video and Multimedia Production Services, Web Event Services	
Various	204	·	

Total Consultant and Professional Services
Expenses \$ 343,100

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	Balance June 30, 2016		
ASSETS						
Cash & Cash Equivalents	\$0	\$80,547	\$80,546	\$1		
Employer & Member Receivables	291	39,819	39,834	276		
Interest Receivables	8	40	31	17		
Short-Term Investments	10,524	19,234	19,610	10,148		
TOTAL ASSETS	\$10,823	\$139,640	\$140,021	\$10,442		
LIABILITIES						
Due to Members & Employers	\$10,748	\$74,461	\$74,902	\$10,307		
Due to Other Funds	_	8	7	1		
Other Program	75	67	8	134		
TOTAL LIABILITIES	\$10,823	\$74,536	\$74,917	\$10,442		