BASIC FINANCIAL STATEMENTS

Fiscal Year Ended June 30, 2018

Prepared through the joint efforts of CalPERS' team members.

Available online at www.calpers.ca.gov

CalPERS

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

This page intentionally left blank.

Management's Discussion & Analysis (Unaudited)

INTRODUCTION

This section presents Management's Discussion & Analysis of the California Public Employees' Retirement System's (CalPERS or the System) financial performance during the fiscal year ended June 30, 2018. It is a narrative overview and analysis that we present in conjunction with the Chief Executive Officer's Letter of Transmittal included in the Introductory Section of this Comprehensive Annual Financial Report (CAFR). 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 & Analysis includes certain forward-looking statements, which involve currently known facts and 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 prepared the *2017-22 Strategic Plan*, which succeeded the *2012-17 Strategic Plan*. This new plan is a blueprint that will guide the enterprise to meet the investment, retirement, and health benefit needs of our members and their families for the coming five years.

The *2017-22 Strategic Plan* was developed over the course of a year-long effort by CalPERS Board members, senior leaders, and team members, with contributions from multiple stakeholders including employer associations, labor groups, retiree associations, federal representatives, health and investment business partners, and state government officials.

This new strategic plan took effect on July 1, 2017, and has five overarching goals:

- Strengthen long-term sustainability of the pension fund
- Transform health care purchasing and delivery to achieve affordability
- Reduce complexity across the enterprise
- Cultivate a risk-intelligent organization
- Promote a high-performing and diverse workforce

Also commencing on July 1, 2017, was the 2017-18 Business Plan Initiatives, which will allow the organization to set priorities and assist in the allocation of resources as well as align to the 2017-18 budget cycle. Each business plan initiative provides the means and major inputs to accomplish the goals and objectives of the strategic plan. CalPERS identified 37 initiatives to begin the work needed to support the overall strategic direction of the organization.

Key Initiatives

CalPERS continued to enhance its operations as follows:

- CalPERS continues the Asset Liability Management (ALM) process to expand its review of assets and liabilities to ensure financial risks to the System are better understood, communicated, and mitigated. To establish appropriate levels of risk, ALM is focused on investment and actuarial policies. These policies include key decision factors and are intended to drive optimum asset allocations, while stabilizing employer contribution rates and the volatility of those rates from year to year. Additionally, in order to better manage risks arising from terminating agencies, CalPERS has enhanced its oversight of contracting public agencies' financial health through its development of a standardized review criteria. These improvements include streamlining the collection and termination process to reduce the timeframe, accelerating notifications to the Board and members, and adopting a risk oversight process to improve early detection of financial hardship issues. In Fiscal Year 2017-18, CalPERS adopted a new four-year asset allocation of the Fund's investment portfolio to align with a phased lowering of the discount rate to 7.0 percent; CalPERS also adopted new actuarial assumptions and approved modifications to the amortization policy, shortening the period over which actuarial gains and losses are amortized from 30 to 20 years.

- CalPERS' 5-year sustainable investment strategy (2017-22) takes an enterprise-wide view on improving the sustainability of long-term pension benefits and actively managing business risks. CalPERS has associated key performance indicators (KPIs) with this strategy, and includes a strategic focus on:
    - Data and Corporate Reporting Standards
    - Climate Action 100+ Engagement (formerly UN PRI Montreal Pledge)
    - Diversity and Inclusion
    - Manager Expectations
    - Research
    - Private Equity Fee and Profit Sharing Transparency

Core work areas are integration of environmental, social and governance (ESG) factors into investment process, Financial Markets Advocacy, Shareowner Campaigns, Corporate & Manager Engagement, Proxy Voting, Responsible Contractor Program, Carbon Footprinting, and Ad Hoc Media and Stakeholder Requests.

OVERVIEW OF THE FINANCIAL STATEMENTS AND ACCOMPANYING INFORMATION

Management's Discussion & 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, replacement benefits, and the unrestricted net position of the proprietary funds administered by CalPERS as of June 30, 2018. It also summarizes the combined changes in fiduciary net position restricted for pension, other post-employment, and replacement 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 single-employer and cost-sharing multiple-employer defined benefit pension plans.

FINANCIAL HIGHLIGHTS

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

- The Public Employees' Retirement Fund (PERF) realized a money-weighted rate of return (MWRR) of 8.4 percent in Fiscal Year 2017-18 resulting from positive performance across most globally diversified asset classes. Drivers of the PERF's investment return include strong performances from public equity, private equity, and real assets investments. Additionally, fixed income and liquidity asset classes outperformed their respective benchmarks.

- During the first of a three-year plan to lower the discount rate for the PERF, the rate was lowered from 7.5 percent to 7.375 percent. Lowering the discount rate, also known as the assumed rate of return, is one step in ensuring the long-term stability of the Fund. An incremental approach over three years will give employers more time to prepare for the changes in contribution costs. Lowered funding discount rates for the Legislators' Retirement Fund (LRF), Judges' Retirement Fund (JRF), and Judges' Retirement Fund II (JRF II) are also in effect.

- The Board approved a two-year value-based insurance design (VBID) pilot for the PERS Select Basic Preferred Provider Organization (PPO) plan in March 2018. The VBID approach allows members to choose a personal care physician to coordinate their health care to ensure they are obtaining needed care. In addition, it provides incentives to members to become more involved in their health decisions and earn credits to reduce their annual deductible costs.

- In June 2018, the Board adopted "buy down" proposals for the PERSCare Basic PPO plan and all Medicare PPO plans. Using funds from PPO plan reserves, the Board adopted lower rates for these plans compared to what they would have been had the reserve funds not been used. While the buy-down lessens rate increases, PERSCare Basic PPO plan members will still see a 19.8 percent increase in 2019 premiums.

- In May 2016, the CalPERS Board approved the Blue Shield of California (Blue Shield) request to terminate its NetValue Health Maintenance Organization (HMO) health plan. In accordance with the BlueShield NetValue contract, CalPERS and Blue Shield agreed to settle all amounts for administrative services fees, capitation, outstanding fees for service claims, and other expenses. In May 2018, Blue Shield accepted a final settlement agreement and the CalPERS Health Team successfully unwound the Blue Shield NetValue Health Plan contract.

- In Fiscal Year 2017-18 CalPERS reported its proportionate share of post-employment liabilities and restated the beginning net position for all funds, excluding the Replacement Benefit Fund (RBF).

BASIC FINANCIAL STATEMENTS

The June 30, 2018, 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 function for proprietary funds is the payment of services.

Fiduciary Funds – include the PERF (split into PERF A, PERF B, and PERF C); LRF; JRF; JRF II; Public Employees' Deferred Compensation Fund (DCF); Supplemental Contributions Program Fund (SCPF); Annuitants' Health Care Coverage Fund, also known as California Employers' Retiree Benefit Trust Fund (CERBTF); and 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, 2018, along with comparative total information as of and for fiscal year ended June 30, 2017. 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 – include the Health Care Fund (HCF), 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, 2018, along with comparative total information as of and for fiscal year ended June 30, 2017. 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 general information on CalPERS, each of the funds administered, employer and member participation in the pension plans, and other post-employment benefit plans administered by CalPERS.

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 cash and cash equivalents information.

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 the net pension liabilities/(asset) and actuarial assumptions for cost-sharing and single-employer plans.

Note 9 – provides information about the CERBTF, including plan members, participating employers, and contributions.

Note 10 – provides information about the RBF, as well as applicable internal revenue and government codes.

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

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 on potential contingencies of CalPERS.

Note 15 – 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 MWRR expresses investment performance, net of investment expense, and is disclosed per the requirements of GASB 67 and GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* (GASB 74).

The Schedule of Claims Development Information for the HCF 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 expenses, and other professional services expenses incurred.

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 financial reporting 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 fewer than 100 active members. Under applicable law, the CalPERS Board may terminate or a public agency may terminate that agency's plan under either PERF A or PERF C. The terminated agency is liable to the system for all costs to fund all benefits under the agency's contract. An unpaid deficit in funding will result in a commensurate reduction in benefits provided under that agency's contract.

Movements of member account asset balances occur between PERF A, PERF B, and PERF C when employer rate plans have fewer than 100 members, or when there are other member accounting adjustments. These plan-to-plan resource 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 increased by $28.5 billion or 8.8 percent from the restated beginning balance of $325.5 billion to $354.0 billion as of June 30, 2018, primarily due to continued market growth. Receivables increased $6.0 billion or 83.1 percent due to higher investment balance for unitized investments presented from a security level perspective as opposed to net asset value (NAV). Investment balances increased by $31.6 billion from $326.4 billion as of June 30, 2017, to $358.0 billion as of June 30, 2018. Securities lending collateral increased $1.2 billion or 26.1 percent and securities lending obligations increased $1.2 billion or 26.0 percent as a result of an overall increase in demand to borrow securities at year-end. Similar to receivables, retirement benefits, investment settlement, net pension and OPEB obligations, and other liabilities increased $10.1 billion or 111.7 percent due to higher outstanding investment trades, and the accrual of post-employment obligations at year-end.

Additions to the PERF net position include member contributions, employer contributions, and investment income. Despite a decrease in total active member count, member contributions increased $0.2 billion or 4.8 percent, primarily due to an increase in the number of Public Employees' Pension Reform Act (PEPRA) members who contribute at a higher rate. Employer contribution rates increased between 0.7 percent and 4.1 percent for state, 1.6 percent for schools, and between 1.1 percent and 1.7 percent on average for public agency miscellaneous and safety plans. The increase in additional unfunded liability payments, employer contribution rates, and active members who contribute resulted in an increase in employer contributions of $7.6 billion or 61.6 percent.

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 was $27.4 billion in Fiscal Year 2017-18, compared to $33.0 billion in Fiscal Year 2016-17. The current year returns were helped by strong absolute performance in CalPERS' private equity and public equity portfolios. Additionally, the PERF recognized a MWRR of 8.4 percent for Fiscal Year 2017-18 compared with 11.2 percent for Fiscal Year 2016-17.

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 2017-18, retirement, death, and survivor benefits increased $1.4 billion or 6.8 percent, primarily due to a rise in the number of retirees and beneficiaries from 668,059 as of June 30, 2017, to 694,570 as of June 30, 2018. Administrative expenses increased $64.2 million or 14.6 percent, primarily due to implementation of and GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (GASB 75) in Fiscal Year 2017-18, resulting in additional post-employment expense allocations to the fund—refer to Note 2 in the Notes to the Basic Financial Statements, subheading Adoption of New Accounting Standard and Immaterial Correction.

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

Fiduciary Net Position – PERF (Dollars in Thousands)

	PERF A Agent	PERF B Cost-Sharing Schools	PERF C Cost-Sharing Public Agencies	2018 PERF Total	2017 PERF Total	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	$965,945	$240,215	$109,079	$1,315,239	$1,319,053	($3,814)
Receivables	9,807,228	2,425,042	993,211	13,225,481	7,227,566	5,997,915
Investments	262,742,748	65,507,596	29,739,267	357,989,611	326,406,112	31,583,499
Securities Lending Collateral	4,405,604	1,098,844	498,973	6,003,421	4,761,792	1,241,629
Capital Assets, Net & Other Assets	368,600	91,936	41,747	502,283	599,225	(96,942)
Total Assets	**$278,290,125**	**$69,363,633**	**$31,382,277**	**$379,036,035**	**$340,313,748**	**$38,722,287**
Deferred Outflows of Resources	$95,702	$23,870	$10,839	$130,411	$0	$130,411
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	**$278,385,827**	**$69,387,503**	**$31,393,116**	**$379,166,446**	**$340,313,748**	**$38,852,698**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement Benefits, Investment Settlement & Other	$13,223,221	$3,276,469	$1,487,446	$17,987,136	$9,059,331	$8,927,805
Net Pension & OPEB Obligation	870,218	217,049	98,560	1,185,827	—	1,185,827
Securities Lending Obligations	4,397,897	1,096,922	498,100	5,992,919	4,755,419	1,237,500
Total Liabilities	**$18,491,336**	**$4,590,440**	**$2,084,106**	**$25,165,882**	**$13,814,750**	**$11,351,132**
Deferred Inflows of Resources	$3,715	$927	$421	$5,063	$0	$5,063
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	**$18,495,051**	**$4,591,367**	**$2,084,527**	**$25,170,945**	**$13,814,750**	**$11,356,195**
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	**$259,890,776**	**$64,796,136**	**$29,308,589**	**$353,995,501**	**$326,498,998**	**$27,496,503**

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

	PERF A Agent	PERF B Cost-Sharing Schools	PERF C Cost-Sharing Public Agencies	2018 PERF Total	2017 PERF Total	Increase/ (Decrease)
ADDITIONS						
Member Contributions	$3,128,010	$952,979	$334,140	$4,415,129	$4,214,578	$200,551
Employer Contributions	16,664,278	2,070,832	1,182,686	19,917,796	12,329,837	7,587,959
Net Investment Income	20,076,739	5,072,864	2,298,495	27,448,098	32,977,020	(5,528,922)
Securities Lending & Other Income	89,310	22,200	10,063	121,573	153,008	(31,435)
Plan to Plan Resource Movement	—	2	116,550	116,552	134,661	(18,109)
Total Additions	**$39,958,337**	**$8,118,877**	**$3,941,934**	**$52,019,148**	**$49,809,104**	**$2,210,044**
DEDUCTIONS						
Retirement, Death & Survivor Benefits	$16,971,812	$3,952,123	$1,730,509	$22,654,444	$21,215,889	$1,438,555
Refund of Contributions	160,752	100,996	25,231	286,979	222,275	64,704
Administrative Expenses	371,085	92,448	41,980	505,513	441,283	64,230
Plan to Plan Resource Movement	116,552	—	—	116,552	134,661	(18,109)
Total Deductions	**$17,620,201**	**$4,145,567**	**$1,797,720**	**$23,563,488**	**$22,014,108**	**$1,549,380**
INCREASE IN NET POSITION	**$22,338,136**	**$3,973,310**	**$2,144,214**	**$28,455,660**	**$27,794,996**	**$660,664**
NET POSITION						
Beginning of Year	$238,256,516	$60,998,387	$27,244,095	$326,498,998	$298,704,002	$27,794,996
Adjustments, See Note 2	($703,876)	($175,561)	($79,720)	($959,157)	$0	($959,157)
Beginning of Year (as adjusted)	**$237,552,640**	**$60,822,826**	**$27,164,375**	**$325,539,841**	**$298,704,002**	**$26,835,839**
End of Year	**$259,890,776**	**$64,796,136**	**$29,308,589**	**$353,995,501**	**$326,498,998**	**$27,496,503**

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 others who are 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 based on a declining number of active members, CalPERS expects the net position of the fund to steadily decrease over time.

Fiscal Year 2017-18 net position of the LRF decreased by $1.6 million or 1.4 percent from the restated beginning balance of $115.4 million to $113.9 million. Receivables decreased by $3.2 million or 96.4 percent due to reduced outstanding investment trades as of year end. Investments at fair value decreased $5.5 million or 4.6 percent. As the number of active members continues to decline, LRF investments are sold to assist in paying benefits. Securities lending cash collateral and securities lending obligations decreased as a result of a decrease in demand to borrow securities versus cash collateral at year end. Similar to receivables, retirement benefits, investment settlement, and other liabilities decreased $5.0 million or 68.4 percent primarily due to reduced outstanding investment trades as of year-end.

Additions to the LRF's net position primarily came from net investment income of $5.5 million in Fiscal Year 2017-18. This was an increase of $0.5 million or 9.0 percent and was primarily due to improved performance in investment markets. The LRF recognized a MWRR of 4.8 percent for Fiscal Year 2017-18 compared with 4.3 percent for Fiscal Year 2016-17. Partially offsetting this increase was a decrease in combined member and employer contributions.

Deductions from the LRF are primarily comprised of benefit payments, refunds, and administrative expenses. Total deductions decreased by $0.2 million or 3.0 percent due primarily to decreases of $0.3 million or 4.6 percent in benefit payments and refunds of contributions. Partially offsetting this, administrative expenses increased $0.1 million or 16.7 percent primarily due to implementation of GASB 75 in Fiscal Year 2017-18 resulting in additional post-employment expense allocations to the fund—refer to Note 2 in the Notes to the Basic Financial Statements, subheading Adoption of New Accounting Standard and Immaterial Correction.

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 and the benefits are funded on a pay-as-you-go basis.

Fiscal Year 2017-18 net position decreased $4.2 million or 9.7 percent from the restated beginning balance of $43.9 million to $39.6 million primarily due to lower contributions from the State General Fund. Liabilities increased $5.4 million, primarily due to post-employment obligations due at the current year-end.

Additions to the JRF come primarily from employer, member, and state "balancing contributions," from the General Fund, which decreased as a whole $5.6 million or 2.7 percent, primarily due to a decrease in the State General Fund contributions. General Fund contributions to pay participant benefits were reduced in Fiscal Year 2017-18 because of a surplus cash balance.

Deductions from the JRF include benefit payments, which increased $7.4 million or 3.7 percent due in part to an increase in the amount of Extended Service Incentive benefits paid. Administrative expenses increased $0.3 million or 18.9 percent, primarily due to implementation of GASB 75 in Fiscal Year 2017-18 resulting in additional post-employment expense allocations to the fund—refer to Note 2 in the Notes to the Basic Financial Statements, subheading Adoption of New Accounting Standard and Immaterial Correction.

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 $174.9 million or 12.9 percent from the restated beginning balance of $1.4 billion to $1.5 billion. Receivables decreased by $32.4 million or 81.1 percent, primarily due to reduced outstanding investment trades as of year-end. JRF II investment balances increased by $146.8 million or 10.7 percent, primarily due to continued positive investment returns. Securities lending cash collateral and securities lending obligations decreased as a result of a decrease in demand to borrow securities versus cash collateral at year-end. Similar to receivables, retirement benefits, investment settlement, and other liabilities decreased $67.7 million or 81.6 percent, primarily due to reduced outstanding investment trades as of year-end.

Additions to the JRF II net position include member contributions, employer contributions, and investment income. Member and employer contributions in the JRF II increased, primarily due to an increase in the number of active members from 1,508 as of June 30, 2017, to 1,543 as of June 30, 2018. Member contributions increased $2.4 million or 9.7 percent, while employer contributions increased $12.6 million or 18.8 percent. The fund had a decrease in net investment income of $13.1 million from $114.3 million in Fiscal Year 2016-17, to $101.2 million in Fiscal Year 2017-18. This decrease resulted from lower performance gains in investment markets. Additionally, the JRF II recognized a MWRR of 7.4 percent for Fiscal Year 2017-18 compared with 9.6 percent for Fiscal Year 2016-17.

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 $9.4 million or 42.2 percent due to an increase in benefit recipients from 170 in Fiscal Year 2016-17 to 231 in Fiscal Year 2017-18. Administrative expenses increased $0.7 million or 40.8 percent primarily due to implementation of GASB 75 in Fiscal Year 2017-18, resulting in additional post-employment expense allocations to the fund—refer to Note 2 in the Notes to the Basic Financial Statements, subheading Adoption of New Accounting Standard and Immaterial Correction.

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

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

	LRF			JRF			JRF II		
	2018	2017	Increase/ (Decrease)	2018	2017	Increase/ (Decrease)	2018	2017	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES									
Cash & Cash Equivalents	$1,207	$350	$857	$6	$5	$1	$80	$4,122	($4,042)
Receivables	121	3,356	(3,235)	2,629	2,464	165	7,543	39,919	(32,376)
Investments	114,225	119,724	(5,499)	42,033	46,048	(4,015)	1,523,927	1,377,120	146,807
Securities Lending Collateral	444	766	(322)	—	—	—	8,555	17,979	(9,424)
Total Assets	**$115,997**	**$124,196**	**($8,199)**	**$44,668**	**$48,517**	**($3,849)**	**$1,540,105**	**$1,439,140**	**$100,965**
Deferred Outflows of Resources	$198	$0	$198	$598	$0	$598	$741	$0	$741
Total Assets and Deferred Outflows of Resources	**$116,195**	**$124,196**	**($8,001)**	**$45,266**	**$48,517**	**($3,251)**	**$1,540,846**	**$1,439,140**	**$101,706**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES									
Retirement Benefits, Investment Settlement & Other	$70	$6,547	($6,477)	$177	$242	($65)	$23	$65,086	($65,063)
Net Pension & OPEB Obligation	1,798	—	1,798	5,435	—	5,435	6,740	—	6,740
Securities Lending Obligations	443	765	(322)	—	—	—	8,540	17,955	(9,415)
Total Liabilities	**$2,311**	**$7,312**	**($5,001)**	**$5,612**	**$242**	**$5,370**	**$15,303**	**$83,041**	**($67,738)**
Deferred Inflows of Resources	$8	$0	$8	$23	$0	$23	$29	$0	$29
Total Liabilities and Deferred Inflows of Resources	**$2,319**	**$7,312**	**($4,993)**	**$5,635**	**$242**	**$5,393**	**$15,332**	**$83,041**	**($67,709)**
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	**$113,876**	**$116,884**	**($3,008)**	**$39,631**	**$48,275**	**($8,644)**	**$1,525,514**	**$1,356,099**	**$169,415**

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

	LRF			JRF			JRF II		
	2018	2017	Increase/ (Decrease)	2018	2017	Increase/ (Decrease)	2018	2017	Increase/ (Decrease)
ADDITIONS									
Member Contributions	$82	$94	($12)	$3,062	$3,398	($336)	$27,513	$25,076	$2,437
Employer Contributions	467	516	(49)	199,241	204,475	(5,234)	79,699	67,102	12,597
Net Investment Income	5,458	5,006	452	845	424	421	101,244	114,331	(13,087)
Securities Lending & Other Income	28	42	(14)	2,533	2,395	138	576	726	(150)
Total Additions	**$6,035**	**$5,658**	**$377**	**$205,681**	**$210,692**	**($5,011)**	**$209,032**	**$207,235**	**$1,797**
DEDUCTIONS									
Retirement, Death & Survivor Benefits	$6,918	$6,960	($42)	$207,815	$200,440	$7,375	$31,745	$22,326	$9,419
Refund of Contributions	—	289	(289)	8	—	8	50	80	(30)
Administrative Expenses	671	575	96	2,106	1,771	335	2,370	1,683	687
Total Deductions	**$7,589**	**$7,824**	**($235)**	**$209,929**	**$202,211**	**$7,718**	**$34,165**	**$24,089**	**$10,076**
INCREASE (DECREASE) IN NET POSITION	**($1,554)**	**($2,166)**	**$612**	**($4,248)**	**$8,481**	**($12,729)**	**$174,867**	**$183,146**	**($8,279)**
NET POSITION									
Beginning of Year	$116,884	$119,050	($2,166)	$48,275	$39,794	$8,481	$1,356,099	$1,172,953	$183,146
Adjustments, See Note 2	(1,454)	—	(1,454)	(4,396)	—	(4,396)	(5,452)	—	(5,452)
Beginning of Year (as adjusted)	**$115,430**	**$119,050**	**($3,620)**	**$43,879**	**$39,794**	**$4,085**	**$1,350,647**	**$1,172,953**	**$177,694**
End of Year	**$113,876**	**$116,884**	**($3,008)**	**$39,631**	**$48,275**	**($8,644)**	**$1,525,514**	**$1,356,099**	**$169,415**

ASSET LIABILITY MANAGEMENT – DEFINED BENEFIT PLANS

The Asset Liability Management (ALM) process is an integrated review of pension assets and liabilities to inform decisions designed to achieve a sound and sustainable fund. CalPERS continues to expand its review 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 are intended to drive an optimum asset allocation while stabilizing employer rates and the volatility of those rates from 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-term and long-term priorities.

The allocation of investment assets in order to maintain focus on long-term returns is an important factor in the sustainability of the PERF. In September 2016, the CalPERS Board adopted an interim asset allocation for the PERF through July 2018 that lowered investment risk but largely kept investment strategy unchanged. The new interim strategy established target thresholds that shifted the allocation of some assets out of growth strategies and primarily into inflation, liquidity, and real assets strategies.

In December 2017, the CalPERS Board voted on the asset allocation of the PERF's investment portfolio for the next four years. The Board examined four potential portfolios and their impact on the PERF. Each portfolio represented different distributions of assets based on varying rates of expected return and risk of volatility. The Board selected the portfolio with expected volatility of 11.4 percent and a return of 7.0 percent, which aligns with the December 2016 decision to lower the discount rate to 7.0 percent over three years.

Also in December 2017, the CalPERS Board voted to adopt the new actuarial assumptions that were presented in the December 2017 CalPERS Experience Study report, to be effective with the June 30, 2017 actuarial valuations (June 30, 2018 for the schools plan). With these changes, contribution rates for the State will be impacted in Fiscal Year 2018-19, and contribution rates for schools and public agencies will result in Fiscal Year 2019-20.

Additionally, in February 2018 the Board approved modifications to the amortization policy shortening the period over which actuarial gains and losses are amortized from 30 to 20 years. Amortization payments for all unfunded accrued liability bases will be computed to remain a level dollar amount throughout the amortization period. The five-year ramps (up and down) were removed for non-investment gains and losses. The five-year ramp down was removed for investment gains and losses. These changes will have an effective date of June 30, 2019. These changes will not apply to unfunded accrued liability bases created before June 30, 2019.

In order to better manage risks arising from terminating agencies, CalPERS has enhanced its oversight of contracting public agencies' financial health through its development of a standardized review criteria. These improvements include streamlining the collection and termination process to reduce the timeframe, accelerating notifications to the Board and members, and adopting a risk oversight process to improve early detection of financial hardship issues. These process and monitoring improvements support Fund Sustainability and Risk Management Goals of the CalPERS *2017-22 Strategic Plan*, which aims to strengthen the long-term sustainability of the pension funds.

FUNDING ANALYSIS – DEFINED BENEFIT PLANS

The CalPERS Board has made several important decisions in the recent past, which impact the current funding of pension benefits at CalPERS. In December 2016, the CalPERS board voted to lower the discount rate from 7.5 percent to 7.0 percent. In December 2017, the CalPERS Board adopted a new asset allocation which supports the 7.0 percent discount rate and adopted new actuarial assumptions. Also, in February 2018 the CalPERS Board voted to shorten the period over which actuarial gains and losses are amortized from 30 to 20 years. Over time, these policies are designed to improve funding levels and help reduce overall funding level risk.

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 2018-19.

As of June 30, 2017, the funded status of the PERF was 70.1 percent. The funded status as of June 30, 2018, is estimated to be approximately 71.0 percent. PERF funded status values were calculated using a 7.00 percent discount rate. As of June 30, 2017, the funded status of the JRF II was 99.3 percent. The funded status as of June 30, 2018, is estimated to increase to approximately 100.1 percent, mostly as a result of investment returns in Fiscal Year 2017-18. Both JRF II funded status values were calculated using a 6.5 percent discount rate. As of June 30, 2017, the funded status of the LRF was 115.9 percent. The funded status as of June 30, 2018, is estimated to increase to approximately

116.7 percent. Both LRF funded status values were calculated using a 5.0 percent discount rate. All these funded statuses were calculated based on the market value of assets used in actuarial valuations that set funding requirements for employers.

Over the course of a three-year phase-in, and beginning with the June 30, 2016 valuation (June 30, 2017 valuation for the schools plan), the funding discount rates for PERF employers decreased from 7.50 percent to 7.00 percent. The final scheduled decrease to 7.00 percent will occur with the June 30, 2018 valuation (June 30, 2019 valuation for the schools plan).

Under GASB 67, there is a difference between the assumptions and components used to determine the net pension liabilities that must be reported in financial statements and the actuarial accrued liabilities and actuarial value of assets used to determine 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.

The GASB 67 financial reporting discount rate for the PERF remained at 7.15 percent. 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 B, PERF C, LRF, and JRF II are adjusted for administrative expenses as compared with the rates used for funding, which are net of administrative expenses. The funding discount rate in the JRF differs from the financial reporting discount rate. The JRF uses yields on 20-year tax-exempt General Obligation Municipal Bonds.

In April 2017, the CalPERS Board voted to also lower the funding discount rates for the LRF, JRF, and JRF II, which impacted employer rates beginning in Fiscal Year 2017-18. These funding rates were used in the June 30, 2017, actuarial valuation reports for the LRF, JRF, and JRF II. The LRF funding discount rate was 5.00 percent, JRF was 3.00 percent, and JRF II was 6.50 percent. The financial reporting discount rate used in the JRF was not impacted as its benefit obligations are funded by the State using the pay-as-you-go method.

The following table displays the difference between discount rates for the LRF, JRF, and JRF II that were effective as of June 30, 2018:

Fund	Funding Discount Rate	Financial Reporting Discount Rate
LRF	5.00%	5.25%
JRF	3.00%	3.62%
JRF II	6.50%	6.65%

DEFINED CONTRIBUTION PLANS

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 increased by $55.3 million or 3.8 percent from the restated beginning balance of $1.4 billion to $1.5 billion. Investment balances increased by $54.5 million from Fiscal Year 2016-17 to Fiscal Year 2017-18 due to favorable market conditions. Member contributions in the fund increased $2.3 million or 2.1 percent compared with prior year.

Total additions decreased $20.4 million primarily due to less favorable investment returns in Fiscal Year 2017-18 compared with Fiscal Year 2016-17.

Overall total deductions in the DCF increased by $78.4 million or 82.7 percent. This was primarily due to an increase in participant withdrawals from the plan of $77.7 million from $90.3 million in Fiscal Year 2016-17 to $168.0 million in Fiscal Year 2017-18. Administrative expenses increased $0.7 million or 15.7 percent, primarily due to implementation of GASB 75 in Fiscal Year 2017-18 resulting in additional post-employment expense allocations to the fund—refer to Note 2 in the Notes to the Basic Financial Statements, subheading Adoption of New Accounting Standard and Immaterial Correction.

SUPPLEMENTAL CONTRIBUTIONS PROGRAM FUND (SCPF)

The SCPF was established effective January 1, 2000, to provide supplemental retirement benefits to State of California employees who are members of CalPERS and is entirely member-funded.

The net position of the SCPF decreased $4.2 million or 3.5 percent from the restated beginning balance of $120.3 million to $116.1 million. While positive returns were achieved in both current and prior years, Fiscal Year 2017-18 was slightly less favorable. Net investment income decreased by $2.5 million, from $6.9 million in Fiscal Year 2016-17 to $4.4 million in Fiscal Year 2017-18.

Total additions decreased $2.5 million primarily due to less favorable investment returns in Fiscal Year 2017-18 compared with Fiscal Year 2016-17.

The primary deductions in the SCPF reflect withdrawals made by participants. Participant withdrawals decreased $2.0 million, from $11.0 million as of Fiscal Year 2016-17 to $9.0 million as of Fiscal Year 2017-18. Administrative expenses increased $25.0 thousand or 6.7 percent, primarily due to implementation of GASB 75 in Fiscal Year 2017-18, resulting in additional post-employment expense allocations to the fund—refer to Note 2 in the Notes to the Basic Financial Statements, subheading Adoption of New Accounting Standard and Immaterial Correction.

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

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

	DCF			SCPF		
	2018	2017	Increase/ (Decrease)	2018	2017	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	$0	$2	($2)	$1	$1	$0
Receivables	17,369	16,147	1,222	714	838	(124)
Investments	1,485,771	1,431,283	54,488	116,679	120,818	(4,139)
Total Assets	**$1,503,140**	**$1,447,432**	**$55,708**	**$117,394**	**$121,657**	**($4,263)**
Deferred Outflows of Resources	$569	$0	$569	$48	$0	$48
Total Assets and Deferred Outflows of Resources	**$1,503,709**	**$1,447,432**	**$56,277**	**$117,442**	**$121,657**	**($4,215)**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement Benefits, Investment Settlement & Other	$2,761	$2,826	($65)	$863	$953	($90)
Net Pension & OPEB Obligation	5,180	—	5,180	442	—	442
Total Liabilities	**$7,941**	**$2,826**	**$5,115**	**$1,305**	**$953**	**$352**
Deferred Inflows of Resources	$22	$0	$22	$2	$0	$2
Total Liabilities and Deferred Inflows of Resources	**$7,963**	**$2,826**	**$5,137**	**$1,307**	**$953**	**$354**
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	**$1,495,746**	**$1,444,606**	**$51,140**	**$116,135**	**$120,704**	**($4,569)**

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

	DCF			SCPF		
	2018	2017	Increase/ (Decrease)	2018	2017	Increase/ (Decrease)
ADDITIONS						
Member Contributions	$112,586	$110,258	$2,328	$252	$246	$6
Employer Contributions	977	962	15	—	—	—
Net Investment Income	108,821	132,305	(23,484)	4,362	6,890	(2,528)
Other Income	6,306	5,583	723	619	628	(9)
Total Additions	**$228,690**	**$249,108**	**($20,418)**	**$5,233**	**$7,764**	**($2,531)**
DEDUCTIONS						
Administrative Expenses	$5,296	$4,576	$720	$398	$373	$25
Participant Withdrawals	168,064	90,333	77,731	9,046	11,041	(1,995)
Total Deductions	**$173,360**	**$94,909**	**$78,451**	**$9,444**	**$11,414**	**($1,970)**
INCREASE (DECREASE) IN NET POSITION	**$55,330**	**$154,199**	**($98,869)**	**($4,211)**	**($3,650)**	**($561)**
NET POSITION						
Beginning of Year	$1,444,606	$1,290,407	$154,199	$120,704	$124,354	($3,650)
Adjustments, See Note 2	(4,190)	—	(4,190)	(358)	—	(358)
Beginning of Year (as adjusted)	**$1,440,416**	**$1,290,407**	**$150,009**	**$120,346**	**$124,354**	**($4,008)**
End of Year	**$1,495,746**	**$1,444,606**	**$51,140**	**$116,135**	**$120,704**	**($4,569)**

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.

Net position restricted for OPEB benefits on June 30, 2018, increased $1.5 billion or 22.3 percent from the restated beginning balance of $6.8 billion to $8.3 billion, primarily due to continued employer contributions in Fiscal Year 2017-18, combined with continued positive investment returns. Receivables decreased $108.0 million or 73.8 percent, primarily due to reduced outstanding investment trades as of year end. Investments at fair value increased $1.4 billion or 19.9 percent due to continued favorable market conditions and assets under management growing from employer contributions. Securities lending cash collateral and securities lending obligations increased as a result of a larger allocation to assets which participated in the securities lending program the past fiscal year.

Similar to receivables, other post-employment benefits, investment settlement, and other liabilities decreased $228.2 million or 72.8 percent, primarily due to reduced outstanding investment trades as of year-end.

Additions to the CERBTF net position restricted for OPEB benefits are primarily made up of employer contributions (directly to the Trust and outside the Trust) and net investment income. Employer contributions increased $161.3 million or 4.3 percent, primarily due to higher contributions from existing participating employers. During Fiscal Year 2017-18, the fund experienced net investment income of $530.2 million, a decrease of $29.8 million from a net investment return of $560.0 million in Fiscal Year 2016-17. The decrease resulted from lower performance gains in investment markets. Additionally, the CERBTF recognized a MWRR of 7.3 percent in Fiscal Year 2017-18, compared with 10.0 percent in Fiscal Year 2016-17.

Deductions from the CERBTF net position restricted for OPEB benefits were primarily made up of employer reimbursements (directly from the Trust and outside the Trust), which increased $259.7 million or 9.8 percent, due to increased volume of reimbursement requests among existing participating employers. The amounts reported for contributions and reimbursements made directly by employers to healthcare providers outside the trust amounted to $2.9 billion for Fiscal Year 2017-18 compared with $2.6 billion in Fiscal Year 2016-17. Administrative expenses increased $0.8 million or 28.1 percent primarily due to implementation of GASB 75 in Fiscal Year 2017-18, resulting in additional post-employment expense allocations to the fund—refer to Note 2 in the Notes to the Basic Financial Statements, subheading Adoption of New Accounting Standard and Immaterial Correction.

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

	CERBTF		
	2018	2017	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES			
Cash & Cash Equivalents	$1	$12,590	($12,589)
Receivables	38,364	146,309	(107,945)
Investments	8,327,899	6,944,685	1,383,214
Securities Lending Collateral	11,891	1,069	10,822
Total Assets	**$8,378,155**	**$7,104,653**	**$1,273,502**
Deferred Outflows of Resources	$1,222	$0	$1,222
Total Assets and Deferred Outflows of Resources	**$8,379,377**	**$7,104,653**	**$1,274,724**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES			
Other Post-Employment Benefits, Investment Settlement & Other	$62,179	$312,296	($250,117)
Net Pension & OPEB Obligation	11,109	—	11,109
Securities Lending Obligations	11,870	1,068	10,802
Total Liabilities	**$85,158**	**$313,364**	**($228,206)**
Deferred Inflows of Resources	$47	$0	$47
Total Liabilities and Deferred Inflows of Resources	**$85,205**	**$313,364**	**($228,159)**
TOTAL NET POSITION RESTRICTED FOR OPEB	**$8,294,172**	**$6,791,289**	**$1,502,883**

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

	CERBTF		
	2018	2017	Increase/ (Decrease)
ADDITIONS			
Employer Contributions	$3,915,969	$3,754,709	$161,260
Net Investment Income	530,189	559,967	(29,778)
Securities Lending & Other Income	6,985	5,599	1,386
Total Additions	**$4,453,143**	**$4,320,275**	**$132,868**
DEDUCTIONS			
Administrative Expenses	$3,862	$3,014	$848
Employer Withdrawals	30,193	680	29,513
OPEB Reimbursements	2,907,220	2,647,480	259,740
Total Deductions	**$2,941,275**	**$2,651,174**	**$290,101**
INCREASE (DECREASE) IN NET POSITION	**$1,511,868**	**$1,669,101**	**($157,233)**
NET POSITION			
Beginning of Year	$6,791,289	$5,122,188	$1,669,101
Adjustments, See Note 2	(8,985)	—	(8,985)
Beginning of Year (as adjusted)	**$6,782,304**	**$5,122,188**	**$1,660,116**
End of Year	**$8,294,172**	**$6,791,289**	**$1,502,883**

CUSTODIAL FUND

REPLACEMENT BENEFIT FUND (RBF)

The RBF is a qualified excess benefit arrangement pursuant to IRC section 415(m), and provides for the replacement of the portion of retirement allowance that exceeds Internal Revenue Code (IRC) section 415(b) dollar limits. Employers are invoiced by CalPERS for amounts payable to their former employees, and CalPERS subsequently pays the replacement benefit to retirees. Participants of the RBF cover the administrative costs to maintain the fund.

The net position of the RBF increased by $157 thousand or 93.0 percent, primarily due to an increase in administrative fee revenues received and the number of retirees receiving benefits in Fiscal Year 2017-18 compared to prior year.

Deductions from the RBF include benefit payments, which increased $1.9 million or 9.0 percent due to an increase in the number of retirees receiving benefits from 978 as of June 30, 2017, to 1,167 as of June 30, 2018. Administrative expense increased by $211 thousand or 88.0 percent, primarily due to a full cost recovery to administer the plan.

Fiduciary Net Position – Custodial Fund (Dollars in Thousands)

	RBF		
	2018	2017	Increase/ (Decrease)
ASSETS			
Cash & Cash Equivalents	$1	$0	$1
Receivables	224	374	(150)
Investments	13,329	11,633	1,696
Total Assets	**$13,554**	**$12,007**	**$1,547**
LIABILITIES			
Unearned Replacement Benefits & Other	$13,229	$11,839	$1,390
Total Liabilities	**$13,229**	**$11,839**	**$1,390**
TOTAL NET POSITION RESTRICTED FOR REPLACEMENT BENEFITS	**$325**	**$168**	**$157**

Changes in Fiduciary Net Position – Custodial Fund (Dollars in Thousands)

	RBF		
	2018	2017	Increase/ (Decrease)
ADDITIONS			
Replacement Benefits	$22,487	$20,573	$1,914
Investment Income	163	168	(5)
Other Income	444	239	205
Total Additions	**$23,094**	**$20,980**	**$2,114**
DEDUCTIONS			
Replacement Benefit Payments	$22,487	$20,573	$1,914
Administrative Expenses	450	239	211
Total Deductions	**$22,937**	**$20,812**	**$2,125**
INCREASE (DECREASE) IN NET POSITION	**$157**	**$168**	**($11)**
NET POSITION			
Beginning of Year[1]	**$168**	**$0**	**$168**
End of Year	**$325**	**$168**	**$157**

(1) The Fiscal Year 2016-17 Beginning of Year Net Position balance was restated due to the implementation of GASB 84.

ENTERPRISE FUNDS

PUBLIC EMPLOYEES' HEALTH CARE FUND (HCF)

The HCF accounts for the activities of the CalPERS self-funded health plans, PERS Choice, PERSCare, and PERS Select, and Flex-funded health plans, Anthem Blue Cross, Blue Shield of California, Health Net, Sharp, UnitedHealthcare, and Western Health Advantage.

In June 2018, in order to offset the financial impact of changes in patient utilization and other medical cost increases, the Board adopted two "buy-down" efforts to smooth PERSCare plan premium increases for 2019. Using funds from its health reserve, CalPERS opted to buy down the premiums for its PERSCare PPO plan, and Medicare PPO plans. While the buy-down efforts lessen the impact, PERSCare members will still see a 19.8 percent increase in 2019 premiums.

The net position of the HCF at the end of the year was $485.6 million, an increase of $100.4 million or 26.1 percent from the restated beginning net position of $385.2 million.

Revenues include premiums collected from members and employers, federal subsidies, and investment income (non-operating revenues). Premiums collected increased $119.7 million or 3.1 percent, primarily due to an increase in health care rates. Net investment income increased $13.9 million or 463.8 percent due to an increase in the short-term interest rate.

Expenses are comprised of claims, investment fees, and costs incurred to oversee the plans. Claim expenses and estimated liabilities increased $207.5 million, or 6.2 percent, primarily due to an increase in medical claims. Costs incurred to administer the plans decreased by $8.5 million or 2.7 percent due to a decrease in Affordable Care Act taxes and fees. This was partially offset by the required reporting of GASB 75 in Fiscal Year 2017-18—refer to Note 2 in the Notes to the Basic Financial Statements, subheading Adoption of New Accounting Standard and Immaterial Correction.

PUBLIC EMPLOYEES' CONTINGENCY RESERVE FUND (CRF)

The CRF was established to fund administrative costs related to the CalPERS health care programs and to provide a contingency reserve for potential increase in future health care premiums rates and health care benefit costs.

The net position of the CRF at the end of year was negative $57.8 million, a decrease of $1.4 million or 2.6 percent from the restated beginning net position of negative $56.3 million.

Revenues include administrative fees collected and investment income. Administrative fees are determined as a percentage of total active and retired health premiums. These fees increased $2.6 million or 9.6 percent because of an increase of administrative fee rate from 0.31 percent in Fiscal Year 2016-17 to 0.33 percent in Fiscal Year 2017-18. Investment income increased $1.1 million or 56.3 percent due to an increase in the short-term interest rate.

Expenses are comprised of investment fees and costs incurred to administer the CRF. Administrative expenses increased $7.5 million or 27.6 percent, primarily due to the required reporting of GASB 75 in Fiscal Year 2017-18—refer to Note 2 in the Notes to the Basic Financial Statements, subheading Adoption of New Accounting Standard and Immaterial Correction.

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 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 from 5 percent to 20 percent on services for participants and have total annual savings of approximately $1.2 million. The third-party administrator has continued its efforts to enroll more providers and educate participants on the benefits of utilizing a preferred provider.

Unrestricted net position of the LTCF decreased by $166.4 million or 185.6 percent, primarily due to an increase in the estimated liability for future policy benefits resulting from a discount rate change from 5.75 percent to 5.25 percent, which was approved by the Board in February 2018, and lower than expected investment returns. Receivables increased $2.8 billion or 24.8 percent primarily due to higher investment balance for unitized investments presented from a security level perspective as opposed to net asset value (NAV). Cash and cash equivalents also increased by $2.5 million or 33.4 percent due to the reserve established and held at the bank to manage potential funding risk if a stress event were to occur.

The LTCF revenues include premiums collected from participants and investment income. Participation in the plan decreased by 3.0 percent mainly due to participant deaths, coverage cancellations, non-payment of premiums, and exhaustion of benefits. This resulted in the decrease of premium revenue of $10.0 million or 3.3 percent. Non-operating revenues are comprised of net appreciation or depreciation in fair value of investments and interest, dividend, and other investment income. The investment income for Fiscal Year 2017-18 was $177.6 million, an increase of $108.6 million or 157.4 percent from the prior year due to higher investment returns and more favorable market conditions for equity securities.

Total expenses are comprised of claims, changes in estimated liabilities for future policy benefits, administrative costs to the program, and investment expenses. The overall increase in total expenses is primarily attributable to the increase in the estimated future policy liabilities. Refer to Note 13 for additional information regarding the calculation of the estimated liabilities for future policy benefits. Administrative expenses increased $1.5 million or 5.8 percent primarily due to the required reporting of GASB 75 in Fiscal Year 2017-18—refer to Note 2 in the Notes to the Basic Financial Statements, subheading Adoption of New Accounting Standard and Immaterial Correction.

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

Net Position – Enterprise Funds (Dollars in Thousands)

	HCF			CRF			LTCF		
	2018	2017	Increase/ (Decrease)	2018	2017	Increase/ (Decrease)	2018	2017	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES									
Cash & Cash Equivalents	$583,293	$225,971	$357,322	$658,268	$597,371	$60,897	$10,059	$7,540	$2,519
Receivables	469,770	606,339	(136,569)	24,702	32,775	(8,073)	14,195	11,371	2,824
Investments	443,242	444,679	(1,437)	—	—	—	4,514,213	4,374,447	139,766
Total Assets	**$1,496,305**	**$1,276,989**	**$219,316**	**$682,970**	**$630,146**	**$52,824**	**$4,538,467**	**$4,393,358**	**$145,109**
Deferred Outflows of Resources	$13,828	$0	$13,828	$9,333	$0	$9,333	$1,341	$0	$1,341
Total Assets and Deferred Outflows of Resources	**$1,510,133**	**$1,276,989**	**$233,144**	**$692,303**	**$630,146**	**$62,157**	**$4,539,808**	**$4,393,358**	**$146,450**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES									
Claims Payable, Unearned Premiums, Estimated Insurance Claims Due & Due to Carriers	$857,259	$735,146	$122,113	$347,897	$220,536	$127,361	$35,226	$35,471	($245)
Due to Employers	—	84	(84)	13,488	18,348	(4,860)	—	—	—
Other Liabilities	40,962	54,832	(13,870)	303,483	378,964	(75,481)	20,990	15,285	5,705
Estimated Liability for Future Policy Benefits	—	—	—	—	—	—	4,548,100	4,252,959	295,141
Net Pension & OPEB Obligation	125,739	—	125,739	84,860	—	84,860	12,195	—	12,195
Total Liabilities	**$1,023,960**	**$790,062**	**$233,898**	**$749,728**	**$617,848**	**$131,880**	**$4,616,511**	**$4,303,715**	**$312,796**
Deferred Inflows of Resources	$537	$0	$537	$362	$0	$362	$52	$0	$52
Total Liabilities and Deferred Inflows of Resources	**$1,024,497**	**$790,062**	**$234,435**	**$750,090**	**$617,848**	**$132,242**	**$4,616,563**	**$4,303,715**	**$312,848**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)	**$485,636**	**$486,927**	**($1,291)**	**($57,787)**	**$12,298**	**($70,085)**	**($76,755)**	**$89,643**	**($166,398)**

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

	HCF			CRF			LTCF		
	2018	2017	Increase/ (Decrease)	2018	2017	Increase/ (Decrease)	2018	2017	Increase/ (Decrease)
REVENUES									
Premiums	$3,945,826	$3,826,107	$119,719	$0	$0	$0	$296,323	$306,303	($9,980)
Federal Government Subsidies	22,720	29,534	(6,814)	—	—	—	—	—	—
Non-Operating Revenues	16,847	2,988	13,859	3,165	2,025	1,140	177,562	68,986	108,576
Administrative Fees & Other	—	—	—	30,152	27,487	2,665	—	—	—
Total Revenues	**$3,985,393**	**$3,858,629**	**$126,764**	**$33,317**	**$29,512**	**$3,805**	**$473,885**	**$375,289**	**$98,596**
EXPENSES									
Claims Expense	$3,543,962	$3,387,753	$156,209	$0	$0	$0	$306,879	$293,693	$13,186
Increase (Decrease) in Estimated Liabilities	36,609	(14,701)	51,310	—	—	—	295,142	213,048	82,094
Non-Operating Expenses	89	92	(3)	—	—	—	1,853	1,816	37
Administrative Expenses	304,319	312,832	(8,513)	34,763	27,239	7,524	26,545	25,082	1,463
Total Expenses	**$3,884,979**	**$3,685,976**	**$199,003**	**$34,763**	**$27,239**	**$7,524**	**$630,419**	**$533,639**	**$96,780**
INCREASE (DECREASE) IN UNRESTRICTED NET POSITION	**$100,414**	**$172,653**	**($72,239)**	**($1,446)**	**$2,273**	**($3,719)**	**($156,534)**	**($158,350)**	**$1,816**
UNRESTRICTED NET POSITION									
Beginning of Year	$486,927	$314,274	$172,653	$12,298	$10,025	$2,273	$89,643	$247,993	($158,350)
Adjustments, See Note 2	(101,705)	—	(101,705)	(68,639)	—	(68,639)	(9,864)	—	(9,864)
Beginning of Year (as adjusted)	**$385,222**	**$314,274**	**$70,948**	**($56,341)**	**$10,025**	**($66,366)**	**$79,779**	**$247,993**	**($168,214)**
End of Year	**$485,636**	**$486,927**	**($1,291)**	**($57,787)**	**$12,298**	**($70,085)**	**($76,755)**	**$89,643**	**($166,398)**

REQUESTS FOR INFORMATION

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

Basic Financial Statements

STATEMENT OF FIDUCIARY NET POSITION – FIDUCIARY FUNDS

As of June 30, 2018, with Comparative Totals as of June 30, 2017 (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 AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	**$965,945**	**$240,215**	**$109,079**	**$1,207**	**$6**	**$80**
Receivables						
Members	$544,750	$113,427	$49,859	$38	$1,411	$695
Employers	942,625	236,486	1,047	47	975	6,628
Investment Sales & Other	8,065,272	2,011,637	913,462	5	—	79
Interest & Dividends	196,013	48,884	22,209	1	140	54
Due from Other Funds	915	228	104	19	69	71
Note Receivable	—	—	—	—	—	—
Other Program	57,653	14,380	6,530	11	34	16
Total Receivables	**$9,807,228**	**$2,425,042**	**$993,211**	**$121**	**$2,629**	**$7,543**
Investments, at Fair Value						
Short-Term Investments	$15,660,201	$3,904,436	$1,772,543	$228	$42,033	$2,617
Global Equity Securities	119,640,765	29,829,097	13,541,872	40,063	—	920,718
Global Debt Securities	79,588,195	19,843,102	9,008,411	73,934	—	600,592
Real Assets	27,895,607	6,954,994	3,157,442	—	—	—
Private Equity	19,957,980	4,975,967	2,258,999	—	—	—
Total Investments	**$262,742,748**	**$65,507,596**	**$29,739,267**	**$114,225**	**$42,033**	**$1,523,927**
Securities Lending Collateral	$4,405,604	$1,098,844	$498,973	$444	$0	$8,555
Capital Assets, Net & Other Assets	368,600	91,936	41,747	—	—	—
TOTAL ASSETS	**$278,290,125**	**$69,363,633**	**$31,382,277**	**$115,997**	**$44,668**	**$1,540,105**
Deferred Outflows of Resources	$95,702	$23,870	$10,839	$198	$598	$741
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	**$278,385,827**	**$69,387,503**	**$31,393,116**	**$116,195**	**$45,266**	**$1,540,846**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement & Other Benefits	$79,090	$18,432	$8,071	$49	$0	$0
Investment Purchases & Other	13,029,952	3,249,925	1,475,755	1	—	18
Due to Members & Employers	6,319	—	—	11	27	3
Net Pension & OPEB Obligation	870,218	217,049	98,560	1,798	5,435	6,740
Securities Lending Obligations	4,397,897	1,096,922	498,100	443	—	8,540
Due to Other Funds	3,227	805	366	—	—	—
Management & Third-Party Administrator Fees	—	—	—	—	—	—
Unearned Replacement Benefits	—	—	—	—	—	—
Other Program	104,633	7,307	3,254	9	150	2
TOTAL LIABILITIES	**$18,491,336**	**$4,590,440**	**$2,084,106**	**$2,311**	**$5,612**	**$15,303**
Deferred Inflows of Resources	$3,715	$927	$421	$8	$23	$29
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	**$18,495,051**	**$4,591,367**	**$2,084,527**	**$2,319**	**$5,635**	**$15,332**
NET POSITION – RESTRICTED FOR PENSION, OTHER POST-EMPLOYMENT, AND REPLACEMENT BENEFITS	**$259,890,776**	**$64,796,136**	**$29,308,589**	**$113,876**	**$39,631**	**$1,525,514**

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

Basic Financial Statements (continued)

Pension Trust Funds		Other Post-Employment Benefit Trust Fund	Custodial Fund	Totals	
DCF	SCPF	CERBTF	RBF	2018	2017
$0	**$1**	**$1**	**$1**	**$1,316,535**	**$1,336,123**
$4,168	$703	$0	$55	$715,106	$758,341
—	—	37,936	102	1,225,846	1,181,373
—	—	50	—	10,990,505	4,840,414
10	11	119	67	267,508	276,265
—	—	259	—	1,665	2,380
—	—	—	—	—	291,963
13,191	—	—	—	91,815	86,237
$17,369	**$714**	**$38,364**	**$224**	**$13,292,445**	**$7,436,973**
$236,889	$32,319	$148,088	$13,329	$21,812,683	$28,824,235
927,298	41,355	5,281,173	—	170,222,341	150,976,586
321,584	43,005	2,898,638	—	112,377,461	95,211,931
—	—	—	—	38,008,043	35,436,160
—	—	—	—	27,192,946	26,008,511
$1,485,771	**$116,679**	**$8,327,899**	**$13,329**	**$369,613,474**	**$336,457,423**
$0	$0	$11,891	$0	$6,024,311	$4,781,606
—	—	—	—	502,283	599,225
$1,503,140	**$117,394**	**$8,378,155**	**$13,554**	**$390,749,048**	**$350,611,350**
$569	$48	$1,222	$0	$133,787	$0
1,503,709	**117,442**	**8,379,377**	**13,554**	**390,882,835**	**$350,611,350**
$431	$0	$61,386	$0	$167,459	$139,530
—	—	—	—	17,755,651	9,174,430
654	740	—	—	7,754	7,619
5,180	442	11,109	—	1,216,531	—
—	—	11,870	—	6,013,772	4,775,207
570	49	—	37	5,054	2,060
1,101	74	793	—	1,968	1,919
—	—	—	13,192	13,192	11,613
5	—	—	—	115,360	121,949
$7,941	**$1,305**	**$85,158**	**$13,229**	**$25,296,741**	**$14,234,327**
$22	$2	$47	$0	$5,194	$0
7,963	**1,307**	**85,205**	**13,229**	**25,301,935**	**$14,234,327**
$1,495,746	**$116,135**	**$8,294,172**	**$325**	**$365,580,900**	**$336,377,023**

Basic Financial Statements (continued)

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION – FIDUCIARY FUNDS

For the Fiscal Year Ended June 30, 2018, with Comparative Totals for the Fiscal Year Ended June 30, 2017 (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	$3,128,010	$952,979	$334,140	$82	$3,062	$27,513
Employers	16,664,278	2,070,832	1,182,686	467	5,039	79,699
Replacement Benefits	—	—	—	—	—	—
State of California General Fund	—	—	—	—	194,202	—
Employer Contributions Direct – OPEB	—	—	—	—	—	—
Employer Contributions Outside of Trust – OPEB	—	—	—	—	—	—
Total Retirement and OPEB Contribution	**$19,792,288**	**$3,023,811**	**$1,516,826**	**$549**	**$202,303**	**$107,212**
Investment Income						
Net Appreciation/(Depreciation) in Fair Value of Investments	$18,211,721	$4,607,691	$2,087,266	$5,492	$0	$101,529
Interest & Amortization	1,363,039	339,969	154,376	4	848	136
Dividends	1,190,596	296,958	134,845	—	—	—
Other Investment Income	3,279	818	371	—	—	—
Less Investment Expenses:						
Management & Performance Fees	(520,970)	(129,940)	(59,004)	—	—	—
Other	(170,926)	(42,632)	(19,359)	(38)	(3)	(421)
Net Investment Income	**$20,076,739**	**$5,072,864**	**$2,298,495**	**$5,458**	**$845**	**$101,244**
Securities Lending Income	$173,563	$43,290	$19,657	$62	$0	$1,203
Securities Lending Expense	(90,239)	(22,508)	(10,220)	(34)	—	(627)
Net Securities Lending	**$83,324**	**$20,782**	**$9,437**	**$28**	**$0**	**$576**
Other Income	$5,986	$1,418	$626	$0	$2,533	$0
Plan to Plan Resource Movement	—	2	116,550	—	—	—
TOTAL ADDITIONS	**$39,958,337**	**$8,118,877**	**$3,941,934**	**$6,035**	**$205,681**	**$209,032**
DEDUCTIONS						
Retirement, Death & Survivor Benefits	$16,971,812	$3,952,123	$1,730,509	$6,918	$207,815	$31,745
Replacement Benefit Payments	—	—	—	—	—	—
Refund of Contributions	160,752	100,996	25,231	—	8	50
Administrative Expenses	371,085	92,448	41,980	671	2,106	2,370
Plan to Plan Resource Movement	116,552	—	—	—	—	—
Participant & Employer Withdrawals	—	—	—	—	—	—
OPEB Reimbursements Direct	—	—	—	—	—	—
OPEB Reimbursements – Outside Trust	—	—	—	—	—	—
TOTAL DEDUCTIONS	**$17,620,201**	**$4,145,567**	**$1,797,720**	**$7,589**	**$209,929**	**$34,165**
INCREASE (DECREASE) IN NET POSITION	**$22,338,136**	**$3,973,310**	**$2,144,214**	**($1,554)**	**($4,248)**	**$174,867**
NET POSITION						
Beginning of Year	**$238,256,516**	**$60,998,387**	**$27,244,095**	**$116,884**	**$48,275**	**$1,356,099**
Adjustments, See Note 2	($703,876)	($175,561)	($79,720)	($1,454)	($4,396)	($5,452)
Beginning of Year (as adjusted)	**$237,552,640**	**$60,822,826**	**$27,164,375**	**$115,430**	**$43,879**	**$1,350,647**
End of year	**$259,890,776**	**$64,796,136**	**$29,308,589**	**$113,876**	**$39,631**	**$1,525,514**

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

Basic Financial Statements (continued)

Pension Trust Funds		Other Post-Employment Benefit Trust Fund	Custodial Fund	Totals	
DCF	SCPF	CERBTF	RBF	2018	2017
$112,586	$252	$0	$0	$4,558,624	$4,353,650
977	—	—	—	20,003,978	12,403,590
—	—	—	22,487	22,487	20,573
—	—	—	—	194,202	199,302
—	—	1,112,934	—	1,112,934	1,203,175
—	—	2,803,035	—	2,803,035	2,551,534
$113,563	**$252**	**$3,915,969**	**$22,487**	**$28,695,260**	**$20,731,824**
$107,093	$4,271	$532,134	$0	$25,657,197	$32,128,368
2,209	115	446	163	1,861,305	1,030,077
—	—	—	—	1,622,399	1,412,532
108	19	103	—	4,698	45,125
(503)	(36)	(1,373)	—	(711,826)	(597,172)
(86)	(7)	(1,121)	—	(234,593)	(222,819)
$108,821	**$4,362**	**$530,189**	**$163**	**$28,199,180**	**$33,796,111**
$0	$0	$1,304	$0	$239,079	$230,526
—	—	(841)	—	(124,469)	(88,960)
$0	**$0**	**$463**	**$0**	**$114,610**	**$141,566**
$6,306	$619	$6,522	$444	$24,454	$26,654
—	—	—	—	116,552	134,661
$228,690	**$5,233**	**$4,453,143**	**$23,094**	**$57,150,056**	**$54,830,816**
$0	$0	$0	$0	$22,900,922	$21,445,615
—	—	—	22,487	22,487	20,573
—	—	—	—	287,037	222,644
5,296	398	3,862	450	520,666	453,514
—	—	—	—	116,552	134,661
168,064	9,046	30,193	—	207,303	102,054
—	—	104,185	—	104,185	95,946
—	—	2,803,035	—	2,803,035	2,551,534
$173,360	**$9,444**	**$2,941,275**	**$22,937**	**$26,962,187**	**$25,026,541**
$55,330	**($4,211)**	**$1,511,868**	**$157**	**$30,187,869**	**$29,804,275**
$1,444,606	**$120,704**	**$6,791,289**	**$168**	**$336,377,023**	**$306,572,748**
($4,190)	($358)	($8,985)	$0	($983,992)	$0
$1,440,416	**$120,346**	**$6,782,304**	**$168**	**$335,393,031**	**$306,572,748**
$1,495,746	**$116,135**	**$8,294,172**	**$325**	**$365,580,900**	**$336,377,023**

STATEMENT OF NET POSITION – PROPRIETARY FUNDS

As of June 30, 2018, with Comparative Totals as of June 30, 2017 (Dollars in Thousands)

	Proprietary Funds			Totals	
	HCF	CRF	LTCF	2018	2017
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES					
Current Assets					
Cash & Cash Equivalents	$0	$0	$9,611	$9,611	$7,445
Short-Term Investments	583,293	658,268	448	1,242,009	823,437
Receivables					
Members & Employers	$0	$16,097	$480	$16,577	$20,129
Health Carriers & Pharmacy Benefit Managers	164,792	3,489	—	168,281	226,679
Interest & Dividends	2,718	2,681	—	5,399	2,051
Due from Other Funds	302,249	2,435	—	304,684	390,669
Investment Sales and Other	—	—	13,715	13,715	10,946
Short-Term Loan	—	—	—	—	—
Other Receivables	11	—	—	11	11
Total Receivables	**$469,770**	**$24,702**	**$14,195**	**$508,667**	**$650,485**
Subtotal Current Assets	**$1,053,063**	**$682,970**	**$24,254**	**$1,760,287**	**$1,481,367**
Noncurrent Assets					
Investments, at Fair Value					
Global Equity Securities	$0	$0	$1,605,144	$1,605,144	$1,457,101
Global Debt Securities	443,242	—	2,909,069	3,352,311	3,362,025
Total Investments	**$443,242**	**$0**	**$4,514,213**	**$4,957,455**	**$4,819,126**
Subtotal Noncurrent Assets	**$443,242**	**$0**	**$4,514,213**	**$4,957,455**	**$4,819,126**
TOTAL ASSETS	**$1,496,305**	**$682,970**	**$4,538,467**	**$6,717,742**	**$6,300,493**
Deferred Outflows of Resources	$13,828	$9,333	$1,341	$24,502	$0
Total Assets and Deferred Outflows of Resources	**$1,510,133**	**$692,303**	**$4,539,808**	**$6,742,244**	**$6,300,493**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES					
Current Liabilities					
Claims Payable	$318,737	$0	$22,906	$341,643	$250,315
Unearned Premiums	93,193	—	12,320	105,513	111,582
Due to Employers	—	13,488	—	13,488	18,432
Estimated Insurance Claims Due	445,329	—	—	445,329	408,720
Estimated Future Policy Liability Short-Term	—	—	82,018	82,018	326,728
Due to Carriers	—	347,897	—	347,897	220,536
Due to Other Funds	422	300,283	590	301,295	390,989
Investment Purchases & Other	—	—	13,699	13,699	9,904
Management & Third-Party Administrator Fees	40,540	—	2,559	43,099	30,009
Other	—	3,200	4,142	7,342	18,179
Total Current Liabilities	**$898,221**	**$664,868**	**$138,234**	**$1,701,323**	**$1,785,394**
Long-Term Liabilities					
Estimated Liability for Future Policy Benefits	$0	$0	$4,466,082	$4,466,082	$3,926,231
Net Pension & OPEB Obligation	125,739	84,860	12,195	222,794	—
Total Long-Term Liabilities	**$125,739**	**$84,860**	**$4,478,277**	**$4,688,876**	**$3,926,231**
TOTAL LIABILITIES	**$1,023,960**	**$749,728**	**$4,616,511**	**$6,390,199**	**$5,711,625**
Deferred Inflows of Resources	$537	$362	$52	$951	$0
Total Liabilities and Deferred Inflows of Resources	**$1,024,497**	**$750,090**	**$4,616,563**	**$6,391,150**	**$5,711,625**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)	**$485,636**	**($57,787)**	**($76,755)**	**$351,094**	**$588,868**

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, 2018, with Comparative Totals for the Fiscal Year Ended June 30, 2017 (Dollars in Thousands)

	Proprietary Funds			Totals	
	HCF	CRF	LTCF	2018	2017
Operating Revenues					
Premiums	$3,945,826	$0	$296,323	$4,242,149	$4,132,410
Federal Government Subsidies	22,720	—	—	22,720	29,534
Administrative Fees Earned	—	30,093	—	30,093	27,448
Other	—	59	—	59	39
Total Operating Revenues	**$3,968,546**	**$30,152**	**$296,323**	**$4,295,021**	**$4,189,431**
Operating Expenses					
Claims Expense	$3,543,962	$0	$306,879	$3,850,841	$3,681,446
Increase (Decrease) in Estimated Liabilities	36,609	—	295,142	331,751	198,347
Administrative Expenses	304,319	34,763	26,545	365,627	365,153
Total Operating Expenses	**$3,884,890**	**$34,763**	**$628,566**	**$4,548,219**	**$4,244,946**
OPERATING INCOME (LOSS)	**$83,656**	**($4,611)**	**($332,243)**	**($253,198)**	**($55,515)**
Non-Operating Revenues					
Net Appreciation/(Depreciation) in Fair Value of Investments	($1,737)	$0	$176,224	$174,487	$66,313
Interest, Dividends & Other Investment Income	18,584	3,165	1,338	23,087	7,686
Total Non-Operating Revenues	**$16,847**	**$3,165**	**$177,562**	**$197,574**	**$73,999**
Non-Operating Expenses					
Management Fees	$62	$0	$1,587	$1,649	$1,623
Other Investment Expenses	27	—	266	293	285
Total Non-Operating Expenses	**$89**	**$0**	**$1,853**	**$1,942**	**$1,908**
NON-OPERATING INCOME (LOSS)	**$16,758**	**$3,165**	**$175,709**	**$195,632**	**$72,091**
CHANGE IN UNRESTRICTED NET POSITION	**$100,414**	**($1,446)**	**($156,534)**	**($57,566)**	**$16,576**
TOTAL UNRESTRICTED NET POSITION					
Beginning of Year	**$486,927**	**$12,298**	**$89,643**	**$588,868**	**$572,292**
Adjustments, See Note 2	($101,705)	($68,639)	($9,864)	($180,208)	$0
Beginning of Year (as adjusted)	**385,222**	**(56,341)**	**79,779**	**408,660**	**572,292**
End of Year	**$485,636**	**($57,787)**	**($76,755)**	**$351,094**	**$588,868**

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

STATEMENT OF CASH FLOWS – PROPRIETARY FUNDS

For the Fiscal Year Ended June 30, 2018, with Comparative Totals for the Fiscal Year Ended June 30, 2017 (Dollars in Thousands)

	Proprietary Funds			Totals	
	HCF	CRF	LTCF	2018	2017
Cash Flows From Operating Activities					
Premiums Collected	$4,007,687	$0	$296,159	$4,303,846	$4,212,984
Federal Government Subsidies	22,720	—	—	22,720	29,534
Claims Paid	(3,452,499)	—	(307,014)	(3,759,513)	(3,758,745)
Other (Payments) Receipts, Net	(236,626)	58,910	(23,996)	(201,712)	(374,570)
Net Cash Provided by (Used for) Operating Activities	**$341,282**	**$58,910**	**($34,851)**	**$365,341**	**$109,203**
Cash Flows From Investing Activities					
Net Sales (Purchases) of Investments	($300)	$0	$37,485	$37,185	$6,860
Net Change in Short-Term Investments	(357,323)	(60,897)	(353)	(418,573)	(118,972)
Interest, Amortization & Dividends Received	8,110	1,987	315	10,412	6,308
Other Investment (Payments) Receipts, Net	8,230	—	(429)	7,801	(660)
Net Cash Provided by (Used for) Investing Activities	**($341,283)**	**($58,910)**	**$37,018**	**($363,175)**	**($106,464)**
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	**($1)**	**$0**	**$2,167**	**$2,166**	**$2,739**
Cash & Cash Equivalents, Beginning of Year	**$1**	**$0**	**$7,444**	**$7,445**	**$4,706**
Cash & Cash Equivalents, End of Year	**$0**	**$0**	**$9,611**	**$9,611**	**$7,445**
Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used for) Operating Activities					
Operating Income (Loss)	$83,656	($4,611)	($332,243)	($253,198)	($55,515)
Changes in Assets and Liabilities:					
Receivables:					
Members & Employers	8,138	(4,531)	(55)	3,552	885
Health Carriers & Pharmacy Benefit Managers	59,682	(1,284)	—	58,398	76,906
Due from Other Funds	70,919	15,066	—	85,985	(133,949)
Loans	—	—	—	—	4,500
Other	—	—	—	—	2
Claims Payable	91,463	—	(135)	91,328	(77,299)
Unearned Premiums	(5,959)	—	(110)	(6,069)	4,858
Due to Employers	(84)	(4,860)	—	(4,944)	(5,302)
Estimated Insurance Claims Due	36,609	—	—	36,609	(14,701)
Net Pension & OPEB Liability	10,743	7,250	1,042	19,035	—
Estimated Liability for Future Policy Benefits Short-Term	—	—	(244,710)	(244,710)	18,204
Estimated Liability for Future Policy Benefits Long-Term	—	—	539,852	539,852	194,844
Due to Carriers	—	127,361	—	127,361	45,597
Due to Other Funds	(16,206)	(72,698)	(790)	(89,694)	135,063
Management & Third-Party Administrator Fees Payable	10,907	—	1,766	12,673	(21,004)
Other	(8,586)	(2,783)	532	(10,837)	(63,886)
Net Cash Provided by (Used for) Operating Activities	**$341,282**	**$58,910**	**($34,851)**	**$365,341**	**$109,203**
Noncash Investing, Capital & Financing Activities					
Noncash Increase/(Decrease) in Fair Value of Investments	**($1,737)**	**$0**	**$144,341**	**$142,604**	**$41,602**

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:

CalPERS Plans

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 plans)
Supplemental Contributions Program Fund	Single-employer
Defined Benefit Other Post-Employment Benefit Plan:	
California Employers' Retiree Benefit Trust Fund	Agent multiple-employer

DEFINED BENEFIT PENSION PLANS

Below are summary descriptions of each defined benefit pension plan administered by CalPERS:

Public Employees' Retirement Fund (PERF) – The PERF was established by Chapter 700 of the 1931 Statutes and provides retirement, death and disability benefits to members of its participating 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 options for the public agencies are established by statute and voluntarily selected by contract with the System in accordance with the provisions of the Public Employees' Retirement Law.

For financial reporting purposes only, the PERF is comprised of and reported as three separate entities. PERF A is an agent multiple-employer plan, 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 fewer than 100 active members. Under applicable law, the CalPERS Board may terminate or a public agency may terminate that agency's plan under either PERF A or PERF C. The terminated agency is liable to the system for all costs to fund all benefits under the agency's contract. An unpaid deficit in funding will result in a commensurate reduction in benefits provided under that agency's contract.

As of June 30, 2018, the PERF had the following participating employers:

Employers for PERF

PERF Employers	2018
PERF A	
State	1
Public Agencies[1]	310
Total	**311**
PERF B	
School Districts and Charter Schools	1,313
PERF C	
Public Agencies[1]	1,308
Total Employers	**2,932**

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 by Chapter 879 of the 1947 Statutes and provides retirement, death, and disability benefits to 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 by Chapter 206 of the 1953 Statutes and provides retirement, death, and disability benefits to judges working in the California Supreme Court, the Courts of Appeal, and the Superior Courts, who were appointed or elected before November 9, 1994. 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 2018-19.

Judges' Retirement Fund II (JRF II) – The JRF II was established by Chapter 879 of the 1994 Statutes and provides retirement, death, and disability benefits to 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. 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 in the defined benefit pension plans.

As of June 30, 2018, membership in the defined benefit pension plans consisted of the following:

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

Plan	Retirees	Survivors & Beneficiaries	Members		Total
			Active	Inactive or Deferred	
PERF A					
Agent	370,096	62,207	480,621	195,236	1,108,160
PERF B					
Schools Cost-Sharing	190,244	31,245	332,659	183,031	737,179
PERF C					
Public Agency Cost-Sharing	35,677	5,101	47,607	24,173	112,558
Total PERF	**596,017**	**98,553**	**860,887**	**402,440**	**1,957,897**
LRF	121	106	7	7	241
JRF	1,312	550	168	2	2,032
JRF II	207	24	1,543	—	1,774
Total	**597,657**	**99,233**	**862,605**	**402,449**	**1,961,944**

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 vested in their retirement benefits earned to date, to the extent funded, 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 adjustments (COLA) 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.

Notes to the Basic Financial Statements (continued)

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. Member and 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 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 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 six 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 will generally be considered classic members.

Required contribution rates for active plan members and employers as a percentage of payroll for the fiscal year ended June 30, 2018, were as follows:

Required Contribution Rates

	Employee Contribution Rates		Employer - Required Contribution Rates
	Classic	PEPRA	
PERF A – Agent			
State:			
Miscellaneous – First Tier	5% to 11%	6% to 11%	28.33%
Miscellaneous – Second Tier	3.75%	3.75%	28.33%
Industrial - First Tier	5% to 11%	6% to 11%	19.53%
Industrial - Second Tier	3.75%	3.75%	19.53%
Safety	11%	11%	19.40%
Peace Officers and Firefighters	8% to 13%	11% to 13%	42.60%
California Highway Patrol	11.50%	11.50%	52.79%
Public Agency:			
Miscellaneous	5% to 8%	5.25% to 8.25%	7.63% to 52.79%
Safety	7% to 9%	8.25% to 13.75%	25.86% to 71.67%
PERF B – Schools Cost-Sharing			
Classified School	7%	6.50%	15.53%
PERF C – Public Agency Cost-Sharing			
Public Agency:			
Miscellaneous	2% to 8%	4% to 7.25%	4.18% to 637.93%
Safety	7% to 10.10%	9.5% to 15.25%	9.33% to 1092.77%
LRF	4% or 8%	N/A	41.696%[1]
JRF	8%	N/A	8%[2]
JRF II	8%	16.75%	26.41%[1]

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

(2) The employee and employer contribution rates for the JRF are set by state statute and are equal to 8% of payroll. The 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. These funds are further described below:

Public Employees' Deferred Compensation Fund (DCF) – The DCF was established by Chapter 1659 of the 1990 Statutes, granting the maximum tax-preferred retirement saving opportunities. 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 Chapter 307 of the 1999 Statutes. The 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 made voluntarily in addition to defined benefit contributions. Participants may contribute to a deferred compensation plan in conjunction with the SCPF, subject to IRC section 415(c) limits. Distributions are allowed only at retirement or permanent separation from employment.

As of June 30, 2018, membership in the defined contribution plans consisted of the following:

Members in DCF and SCPF

Plan	Employers	Members
DCF	794	27,264
SCPF	1	7,254

OTHER ADMINISTRATIVE ACTIVITIES

CalPERS administers other activities as follows:

The California Employers' Retiree Benefit Trust Fund (CERBTF) – The Annuitants' Health Care Coverage Fund, also known as CERBTF, was established by Chapter 331 of the 1988 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 (OPEB). Currently, the CERBTF has 542 participating employers. Of the 542 participating employers, 531 employers have contributed assets in the CERBTF as of June 30, 2018. 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 Internal Revenue Service (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. 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 by Chapter 1129 of the 1987 Statutes under the Public Employees' Medical and Hospital Care Act (PEMHCA), providing health insurance coverage to CalPERS members through a pooled risk plan. The HCF is more fully described in Note 11 to the financial statements.

Public Employees' Contingency Reserve Fund (CRF) – The CRF was established by Chapter 1236 of the 1961 Statutes with the passage of PEMHCA, and provides a contingency reserve for items such as future rates or future benefits. The CRF is more fully described in Note 12 to the financial statements.

Public Employees' Long-Term Care Fund (LTCF) – The LTCF was established by Chapter 1154 of the 1992 Statutes as part of the Public Employees Long-Term Care Act to administer the long-term care insurance plans available to eligible 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 798 of the 1990 Statutes, providing replacement benefits to members of the defined benefit pension plans. The RBF is more fully described in Note 10 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 (CAFR).

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, 2018:

Fiduciary Funds – include pension trusts (PERF A, PERF B, PERF C, LRF, JRF, JRF II, DCF, SCPF), an other post-employment trust (CERBTF), and a custodial fund (RBF), which account for assets held by the government in a trustee capacity or as a custodian 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 a custodial fund and is fiduciary in nature, accounted for on the flow of economic resources measurement focus and the accrual basis of accounting.

Proprietary Funds – include the HCF, CRF and the LTCF. 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 March 2018, CalPERS adopted an interim asset allocation strategy to carry through July 2018.

The following table shows the Board-adopted target asset allocation policy for the defined benefit pension plans, which was in effect as of June 30, 2018:

Target Asset Allocation

Asset Class	PERF A	PERF B	PERF C	LRF	JRF	JRF II
Global Equity	49%	49%	49%	24%	—%	50%
Private Equity	8%	8%	8%	—	—	—
Global Debt Securities	22%	22%	22%	39%	—	34%
Real Assets	12%	12%	12%	—	—	—
Liquidity	3%	3%	3%	—	100%	—
Inflation	6%	6%	6%	26%	—	5%
REITs	—	—	—	8%	—	8%
Commodities	—	—	—	3%	—	3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

The California Employers' Retiree Benefit Trust (CERBT) Fund allows employers to pre-fund non-pension, post-employment benefits. Three diversified policy portfolios (Strategy 1, 2, and 3) are available for employers to select depending on employer preferences for return and risk (volatility) expectations. 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 acquisition value. 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.

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 all fees paid to external managers for public and private markets. Other investment-related fees include expenses for fund administration, internal investment staff salaries, dividend tax withholding, certain trading fees, consultants, data, analytics, certain other taxes, custody, appraisals, legal services, technology, trading and portfolio management systems, audits, and tax advisory services. These other investment-related fees are reported in 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 and private equity profit sharing realized by the PERF. These are reported in the Net Appreciation in Fair Value of Investments line in the Statement of Changes in Fiduciary Net Position. For additional detail, refer to the Schedule of Commissions & Fees table and the Private Equity Management Fees & Profit Sharing table within the Investment Section.

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 Note 8 to the Basic 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.

The estimated liability for future policy benefits in the Long-Term Care Fund is based on the present value of future benefits and expenses less the present value of future premiums. This liability is reported in the Statement of Net Position, and is measured based on certain assumptions including a discount rate of 5.25 percent, morbidity lapse rates, voluntary termination, mortality, and plan expenses.

Due to uncertainties inherent in the estimations and assumptions described in this section, 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, 2017, to conform to the presentation as of and for the fiscal year ended June 30, 2018.

COMPARATIVE TOTALS

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 U.S. generally accepted accounting principles. Accordingly, such information should be read in conjunction with CalPERS' financial statements for the fiscal year ended June 30, 2017, 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.

ADOPTION OF NEW ACCOUNTING STANDARD AND IMMATERIAL CORRECTION

During Fiscal Year 2017-18, as a result of Governmental Accounting Standards Board Statement (GASB) No. 75, *Accounting and Financial Reporting for Postemployment Benefit Plans Other than Pensions* (GASB 75), CalPERS reported its proportionate share of activity related to post-employment benefits for its participation in the State of California’s agent OPEB plan. Accordingly, CalPERS adjusted its previously reported fiduciary net position as a result of the adoption of GASB 75.

CalPERS' employees also participate in various State of California agent pension plans and during Fiscal Year 2017-18, CalPERS recorded an immaterial correction to its previously reported financial statements to properly reflect its proportionate share of activity related to pensions in accordance with GASB Statement No. 68, *Accounting and Financial Reporting for Pensions* (GASB 68).

The table below presents the effect on CalPERS' previously reported net position as a result of the adoption of GASB 75 and the immaterial correction related to GASB 68.

Adoption of Accounting Standards (Dollars in Thousands)

Fund	2017 Net Position as Previously Reported	Adoption of GASB Statement No. 75	Immaterial Correction	2017 Net Position as Restated
PERF A	$238,256,516	(420,370)	(283,506)	$237,552,640
PERF B	60,998,387	(104,849)	(70,712)	60,822,826
PERF C	27,244,095	(47,611)	(32,109)	27,164,375
LRF	116,884	(868)	(586)	115,430
JRF	48,275	(2,625)	(1,771)	43,879
JRF II	1,356,099	(3,256)	(2,196)	1,350,647
DCF	1,444,606	(2,502)	(1,688)	1,440,416
SCPF	120,704	(214)	(144)	120,346
CERBTF	6,791,289	(5,366)	(3,619)	6,782,304
RBF	168	—	—	168
Subtotal Fiduciary Funds	**$336,377,023**	**($587,661)**	**($396,331)**	**$335,393,031**
HCF	$486,927	($60,740)	($40,965)	$385,222
CRF	12,298	(40,993)	(27,646)	(56,341)
LTCF	89,643	(5,891)	(3,973)	79,779
Subtotal Proprietary Funds	**$588,868**	**($107,624)**	**($72,584)**	**$408,660**
Total	**$336,965,891**	**($695,285)**	**($468,915)**	**$335,801,691**

EMPLOYER SHARE OF POSTEMPLOYMENT BENEFITS

As of June 30, 2018, CalPERS has recorded its proportionate share of the State's net pension and OPEB liabilities totaling approximately $656 million and $783 million. CalPERS has recorded these post-employment liabilities along with the corresponding amount of deferred inflow and outflows of resources and related post-employment benefit expense for all affected funds. CalPERS is not providing additional disclosures as it has concluded that presenting such employer related post-employment obligations disclosures would be misleading to the users of CalPERS financial statements where the focus is on plans, not individual employer post-employment obligations.

3. CASH AND CASH EQUIVALENTS

Cash and cash equivalents of approximately $1.3 billion at June 30, 2018, represent amounts held in the CalPERS general operating accounts with the State Treasury and the master custodian, State Street Bank and Trust. 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. Note that short-term investments are excluded from the Investments at Fair Value table.

INVESTMENTS AT FAIR VALUE

GASB Statement No. 72, *Fair Value Measurement and Application* (GASB 72) requires investments measured at fair value to 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 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 net asset value (NAV). NAV is used as a practical expedient to estimate the fair value of CalPERS' interest therein, unless it is probable that all or a portion of the investment will be sold for an amount different from NAV. As of June 30, 2018, CalPERS had no specific plans or intentions to sell investments at amounts different from NAV.

Notes to the Basic Financial Statements (continued)

The following table presents a summary of CalPERS' investments by type as of June 30, 2018, at fair value:

CalPERS – Investments at Fair Value[1] (Dollars in Thousands)

	Fair Value June 30, 2018	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				
Global Equity				
Domestic Equity	$86,611,368	$86,611,368	$0	$0
International Equity	70,302,116	70,302,116	—	—
Total Global Equity	**$156,913,484**	**$156,913,484**	**$0**	**$0**
Global Debt				
Asset-Backed	$17,142,185	$0	$16,405,831	$736,354
Bank Loans	343,046	—	343,046	—
International Debt	2,275,510	—	2,275,510	—
Municipal/Public Bonds	6,412	—	6,412	—
Sovereign Debt	16,912,259	—	16,912,259	—
U.S. Corporate	15,954,760	—	15,954,760	—
U.S. Treasuries, STRIPS and TIPS	38,277,724	—	38,277,724	—
Total Global Debt	**$90,911,896**	**$0**	**$90,175,542**	**$736,354**
Derivatives				
Futures	$3,164	$3,164	$0	$0
Options	99,543	—	99,543	—
Rights & Warrants	6,044	—	6,044	—
Forward Contract Assets	285,122	—	285,122	—
Forward Contract (Liabilities)	(96,190)	—	(96,190)	—
Swap Assets	469,538	—	469,538	—
Swap (Liabilities)	(229,093)	—	(229,093)	—
Total Derivatives	**$538,128**	**$3,164**	**$534,964**	**$0**
Other				
Rule 144(a) Securities	$17,358,981	$0	$17,358,981	$0
Securitized Assets	700,689	—	—	700,689
Private Equity[2]	484,715	—	—	484,715
Total Other	**$18,544,385**	**$0**	**$17,358,981**	**$1,185,404**
Total Investments by Fair Value Level	**$266,907,893**	**$156,916,648**	**$108,069,487**	**$1,921,758**
Investments Measured at NAV				
Commingled/Pooled Funds	$16,283,567			
Real Assets	38,008,043			
Private Equity[2]	26,149,406			
Other Investments	6,059,112			
Total Investments Measured at NAV	**$86,500,128**			
Total Investments Measured at Fair Value	**$353,408,021**			

(1) Certain securities and derivatives disclosed in this table may be 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 of investments presented in those statements.
(2) Private Equity is shown at NAV on the Statement of Fiduciary Net Position – Fiduciary Funds, while the direct holdings categorized in level 3 represent the fair value of the assets for each private equity investment for GASB 72 purposes. Remaining real assets are valued at NAV.

Notes to the Basic Financial Statements (continued)

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

Global debt securities consist primarily of asset-backed securities (securitized offerings backed by residential and commercial mortgages, credit cards, auto and student loans), bank loans, international debt securities, municipal/public bonds, sovereign debt, 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. Index, commodity, and fixed income futures are publicly traded on active markets, which is the market approach to valuing securities. All other derivatives are classified in Level 2 of the fair value hierarchy. For swaps, observable inputs may include yield curves or interest rates. Options, rights, warrants, and forward contracts are priced using the cost approach and/or are on a dealer market traded on lower frequencies. When these derivative 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 pricing inputs that are observable either directly or indirectly, which include quoted prices for similar securities in active or inactive markets, or market-corroborated inputs, these securities are classified as Level 2. Additionally, other investments include securitized investments, which contain pooled debt instruments, limited partnership investments, and various other investment structures. 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 equities are investments in which CalPERS owns 100 percent of the assets. Private equity 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	$16,283,567	$0
Real Assets	38,008,043	3,705,075
Private Equities	26,149,406	14,320,017
Other Investments	6,059,112	19,046
Total	**$86,500,128**	**$18,044,138**

A commingled fund/pooled investment vehicle is a fund with capital pooled from multiple investors that is deployed to a mutually agreed upon strategy. Commingled funds/pooled investment vehicles fair value is measured at NAV, where fair value is measured either based on the CalPERS' pro rata share of the total NAV or by multiplying the pool's share price by the number of shares held.

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.

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.

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

- Emerging Managers Program – objectives include:
  - Generating appropriate risk-adjusted returns by identifying early stage funds and managers with strong potential for success.
  - Accessing unique investment opportunities that may be otherwise overlooked.
  - Cultivating the next generation of external investment manager talent.
- 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 invests with vehicles such as separate accounts, direct investments, and commingled funds. Separate accounts, with co-invested external managers, are the predominant vehicle and operate through an annual investment process where commitments are generally revocable and excluded from the unfunded commitment disclosure. Direct vehicles generally entail a contractual commitment to an operating company, not controlled by a general partner. With commingled funds, CalPERS commits to funding amounts at the partners' request and these are included in the unfunded commitment disclosure.

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, 2018:

Money-Weighted Rate of Return

Plan	Rate of Return
PERF A	
Agent	8.4%
PERF B	
Schools Cost-Sharing	8.4%
PERF C	
Public Agency Cost-Sharing	8.4%
LRF	4.8%
JRF	1.9%
JRF II	7.4%
CERBTF	7.3%

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, 2018, 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 Risk

Other than U.S. Government Securities, which are not subject 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 negative 50 percent to 10 percent of the relevant 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, 2018:

CalPERS – Debt Securities Subject to Interest Rate Risk

(Dollars in Thousands)

Debt Security Type	Portfolio Weighted Average Effective Duration	Fair Value June 30, 2018	Percent of Debt Securities
U.S. Treasuries and Age			
U.S. Treasury Notes	6.95	$20,392,887	18.81%
U.S. Treasury Bonds	18.26	17,466,833	16.11%
U.S. Agencies	12.03	764,116	0.71%
U.S. Treasury Strips	11.60	44,383	0.04%
Corporate	9.71	21,396,094	19.74%
Foreign Government	8.19	17,732,937	16.36%
Mortgages	3.97	15,660,012	14.44%
Asset-Backed	0.34	14,234,109	13.13%
Municipals	10.07	6,412	0.01%
No Effective Duration:			
Commingled Fund	N/A	$498,608	0.46%
Foreign Government	N/A	242,546	0.22%
Asset-Backed	N/A	57,611	0.05%
Mortgages	N/A	12,932	0.01%
Corporate	N/A	361	—%
Swaps	N/A	(94,512)	(0.09%)
Total[1]		**$108,415,329**	**100.00 %**

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

CalPERS invests in the State Treasury pool and State Street Bank Global Advisors' (SSGA) short-term investment fund (STIF). These investments are included as part of the short-term investments in the financial statements. As of June 30, 2018, the pooled money investment account with the State Treasury totaled approximately $1.4 billion, and the SSGA STIF totaled approximately $6.1 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, 2018, the weighted average maturity was 193 days for the State Treasury pool and 30 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 LRF, JRF II, CERBTF, SCPF, DCF, HCF, and LTCF invest in various SSGA funds, with weighted average maturities and credit ratings as of June 30, 2018:

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

SSGA Fund	Fair Value June 30, 2018	Credit Rating[1]	Weighted Average Maturity[2]
U.S. Aggregate Bond Index	$443,242	AA2	8.37
3-10 Year U.S. Agency Index	2,669	AA1	4.74
3-10 Year U.S. Credit Index	202,187	A3	6.11
3-10 Year U.S. Treasury Index	242,644	AAA	5.58
Long U.S. Agency Index	20,704	AA1	16.83
Long U.S. Credit Corporate Index	439,416	BAA1	23.61
Long U.S. Credit Non-Corporate Index	68,892	A3	24.21
Long U.S. Treasury Index	580,422	AAA	24.99
U.S. Asset-Backed/Commercial Mortgage Backed Index	63,519	AA1	5.12
U.S. High Yield Bond Index	95,296	B1	6.34
U.S. Inflation Protected Bond Index	6,757	AAA	8.38
U.S. Mortgage Backed Index	732,695	AAA	7.52
U.S. Short-Term Govt/Credit Bond Index	33,838	AA2	1.99
U.S. Bond Index	331,052	AA2	8.42
U.S. Tips Index	913,607	AAA	8.40
Bloomberg Barclays Long Liability Index	2,967,462	AA3	14.25
Total	**$7,144,402**		

(1) Credit rating reflects market value weight of all the rated securities held by the portfolio (excludes unrated securities) using the middle rating provided by either S&P, Moody's, and Fitch or lower if only two agency ratings are available.
(2) The weighted average maturity disclosed in this table is in days.

Notes to the Basic Financial Statements (continued)

The following table presents the weighted average duration for securities lending collateral subject to interest rate risk as of June 30, 2018:

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

Security Type	Portfolio Weighted Average Effective Duration	Fair Value June 30, 2018	Percent of Securities Lending Collateral
Asset-Backed Securities	0.04	$9,292	0.2%
No Effective Duration:			
Money Market Fund[1]	N/A	$55,297	1.3%
Short-Term Investment Fund[2]	N/A	4,209,722	98.5%
Total[3]		**$4,274,311**	**100.0%**

(1) Money Market Fund is invested in U.S. Treasury securities with a weighted average maturity (to final maturity) of 1 day.
(2) Short-Term Investment Fund has a weighted average maturity (to final maturity) of 1 day.
(3) This figure does not include $1,750,000 in repurchase agreements since those investments are not subject to GASB 40 disclosure. The fair value of the investments in the securities lending collateral portfolio is $6,024,311 for fiduciary funds.

As of June 30, 2018, 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, 2018, the collateral invested in CalPERS Internal Securities Lending had an aggregate weighted average maturity (to final maturity) of 37.59 days. eSecLending (eSec) has a weighted average maturity (to final maturity) of 32.19 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, 2018:

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

Moody's Quality Rating	Fair Value June 30, 2018	Fair Value as a Percent of Debt Security Investments
Aaa	$51,271,014	47.29%
Aa1	1,074,808	0.99%
Aa2	5,287,870	4.88%
Aa3	1,350,940	1.25%
A1	2,388,060	2.20%
A2	1,724,819	1.59%
A3	3,761,773	3.47%
Baa1	3,027,394	2.79%
Baa2	4,167,953	3.85%
Baa3	2,235,614	2.06%
Ba1	1,447,964	1.34%
Ba2	1,046,968	0.97%
Ba3	1,081,961	1.00%
B1	933,932	0.86%
B2	658,057	0.61%
B3	943,743	0.87%
Caa1	477,882	0.44%
Caa2	129,981	0.12%
Caa3	34,617	0.03%
Caa	2,082	—%
Ca	22,744	0.02%
C	3,306	—%
NA[1]	857,310	0.79%
NR[2]	24,484,537	22.58%
Total[3]	**$108,415,329**	**100.00%**

(1) NA represents U.S. government securities that are not applicable to the GASB 40 disclosure requirements.
(2) NR represents those securities that are not rated.
(3) Certain securities disclosed in this table are classified as short-term investments in the financial statements. As such the total presented in this table will not agree to the total global debt securities on the financial statements.

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	$2,119,111	49.6%
NR[1,2]	2,155,200	50.4%
Total[3]	**$4,274,311**	**100.0%**

(1) NR represents those securities that are not rated.
(2) This figure includes $55,297 invested in a money market fund and $1,000,000 invested in short-term investments.
(3) This figure does not include $1,750,000 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 $6,024,311 for fiduciary funds.

Notes to the Basic Financial Statements (continued)

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, investing includes exposure to non-dollar denominated issues. 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.

CalPERS – International Investment Securities[1] – Fair Value at June 30, 2018 (U.S. Dollars in Thousands)

Currency	Cash	Equity	Debt Securities	Real Assets	Private Equity	Forward Contracts	Total
Australian Dollar	$3,202	$3,279,004	$509,864	$811,390	$0	$16,434	$4,619,894
Brazilian Real	3,352	966,638	252,297	807,253	—	7,975	2,037,515
British Pound	73,266	8,042,326	3,407,995	1,019,341	56,263	78,108	12,677,299
Canadian Dollar	27,331	4,430,720	781,496	444,285	142,117	5,866	5,831,815
Chilean Peso	533	175,545	115,960	8,200	—	100	300,338
Chinese Yuan Renminbi	5	—	—	1,100,032	—	(1,931)	1,098,106
Colombian Peso	103	68,501	3,577	—	—	(123)	72,058
Czech Koruna	207	43,140	21,839	—	—	(68)	65,118
Danish Krone	204	913,316	107,174	—	—	423	1,021,117
Egyptian Pound	635	14,761	—	—	—	—	15,396
Euro Currency	253,684	15,831,228	5,076,006	585,069	3,157,672	40,264	24,943,923
Guatemala Quetzal	—	—	—	94,109	—	—	94,109
Hong Kong Dollar	8,108	5,886,995	—	—	—	(5)	5,895,098
Hungarian Forint	978	104,560	4,380	—	—	(881)	109,037
Indian Rupee	5,378	1,531,221	—	830	—	(76)	1,537,353
Indonesian Rupiah	1,547	330,868	15,208	—	—	157	347,780
Israeli Shekel	451	278,124	856,571	—	—	14,509	1,149,655
Japanese Yen	74,461	13,475,484	2,292,192	77,770	18,009	25,951	15,963,867
Kazakhstani Tenge	—	—	—	—	—	(50)	(50)
Malaysian Ringgit	(1,853)	347,497	72,668	38	—	(71)	418,279
Mexican Peso	9,813	421,441	589,226	6,400	—	(1,291)	1,025,589
Moroccan Dirham	1	—	—	—	—	—	1
New Taiwan Dollar	20,465	2,292,466	—	—	—	1,024	2,313,955
New Zealand Dollar	585	146,429	142,867	—	—	9,578	299,459
Norwegian Krone	1,662	610,571	70,954	—	—	(435)	682,752
Pakistan Rupee	217	56,964	—	—	—	182	57,363
Peruvian Nuevo Sol	526	583	105,814	—	—	(15)	106,908
Philippine Peso	218	144,377	—	—	—	3,304	147,899
Polish Zloty	407	167,518	146,147	—	—	—	314,072
Qatari Riyal	136	86,043	—	—	—	—	86,179
Romanian Leu	197	—	27,640	—	—	(263)	27,574
Russian Ruble	25	—	429,827	353,715	—	544	784,111
Singapore Dollar	2,941	738,015	63,236	2,146	—	116	806,454
South African Rand	5,929	986,873	203,362	—	—	1,066	1,197,230
South Korean Won	1,959	2,708,088	—	23,882	—	39	2,733,968
Swedish Krona	27,978	1,465,883	166,076	—	—	(588)	1,659,349
Swiss Franc	2,337	3,716,508	101,571	—	—	(247)	3,820,169
Thailand Baht	314	667,778	92,040	—	—	(778)	759,354
Turkish Lira	4,708	321,154	376,106	—	—	(10,727)	691,241
UAE Dirham	155	84,988	—	—	—	14	85,157
Uruguayan Peso	—	—	489	—	—	—	489
Total	**$532,165**	**$70,335,607**	**$16,032,582**	**$5,334,460**	**$3,374,061**	**$188,105**	**$95,796,980**

(1) This table presents investment securities of all CalPERS managed funds, including derivative instruments that are subject to foreign currency risk; investment securities includes partnership level information for private assets.

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' fair value. CalPERS cannot seize the collateral without borrower default; the collateral is therefore 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 fair value of the securities loaned. The securities loaned are priced daily by third-party sources, and margins are delivered/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, 2018, the fair value of the securities on loan was approximately $15.0 billion. The securities on loan remain on CalPERS’ Statement of Fiduciary Net Position in their respective investment categories. At June 30, 2018, cash collateral received totaling $6.0 billion is reported as securities lending obligation, and the fair value of reinvested cash collateral totaling $6.0 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 December 2017 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 earns 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, 2018.

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, 2018, the aggregate fair value of investment derivatives in an asset position subject to counterparty credit risk was approximately $747.1 million. The aggregate amount of cash collateral held by CalPERS on behalf of over-the-counter derivatives was approximately $473.7 million.

Notes to the Basic Financial Statements (continued)

CalPERS – Derivative Instruments Summary (Dollars in Thousands)

Investment	Net Appreciation/ (Depreciation) in Fair Value for the Fiscal Year Ended June 30, 2018	Fair value at June 30, 2018		
Derivatives (by Type)	Amount	Classification	Amount	Notional (Dollars)
Commodity Futures Short	($26,674)	Equity Securities	($3,893)	($261,103)
Credit Default Swaps Bought	230	Debt Securities	(71)	46,800
Credit Default Swaps Written	(415)	Debt Securities	(1,873)	46,802
Currency Swaps	11,050	Debt Securities	(194)	13,500
Equity Options Bought	148,504	Equity Securities	98,315	1,938
Equity Options Written	23,261	Equity Securities	—	—
Fixed Income Futures Long	(59,016)	Equity Securities	28	68,097,441
Fixed Income Futures Short	15,469	Equity Securities	(2)	(26,946,657)
Fixed Income Options Bought	(42)	Equity Securities	—	—
Fixed Income Options Written	464	Equity Securities	(131)	(99,745)
Foreign Currency Options Bought	(48,069)	Equity Securities	4,237	1,056,021
Foreign Currency Options Written	25,622	Equity Securities	(2,244)	(1,050,085)
Futures Options Bought	(95,055)	Equity Securities	—	—
Futures Options Written	7,192	Equity Securities	(29)	(138)
FX Forwards	(53,623)	Investment Sales/ Purchases	188,932	17,994,549
Index Futures Long	737,680	Equity Securities	7,634	6,737,693
Index Futures Short	(40,040)	Equity Securities	(603)	(589,764)
Index Options Written	(943)	Debt Securities	(604)	(52)
Pay Fixed Interest Rate Swaps	4,424	Debt Securities	1,273	106,617
Receive Fixed Interest Rate Swaps	(1,333)	Debt Securities	(968)	253,048
Rights	1,692	Equity Securities	5,974	51,389
Total Return Swaps Bond	11,920	Debt Securities	236,375	11,867,237
Total Return Swaps Equity	5,484	Debt Securities	5,903	(352,231)
Warrants[1]	(5,551)	Equity Securities	69	4,214
Total	**$662,231**		**$538,128**	

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

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

		Investment Maturities (in years)			
Investment Type	Fair Value June 30, 2018	Under–1	1–5	6–10	10+
Credit Default Swaps Bought	($71)	$0	($279)	$208	$0
Credit Default Swaps Written	(1,873)	—	(1,795)	(78)	—
Currency Swaps	(194)	—	—	(194)	—
Fixed Income Options Written	(131)	(131)	—	—	—
Pay Fixed Interest Rate Swaps	1,273	—	659	264	350
Receive Fixed Interest Rate Swaps	(968)	—	(2,381)	279	1,134
Total Return Swaps Bond	236,375	236,375	—	—	—
Total Return Swaps Equity	5,903	5,903	—	—	—
Total	**$240,314**	**$242,147**	**($3,796)**	**$479**	**$1,484**

Notes to the Basic Financial Statements (continued)

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

Investment Type	Reference Rate	Fair Value at June 30, 2018	Notional
Interest Rate Swaps	Receive Fixed 0.500%, Pay Variable 6-month EURIB	$389	$42,849
Interest Rate Swaps	Receive Fixed 1.000%, Pay Variable 6-month LIBOR	8	181
Interest Rate Swaps	Receive Fixed 1.250%, Pay Variable 6-month EURIB	2,889	99,591
Interest Rate Swaps	Receive Fixed 1.500%, Pay Variable 6-month LIBOR	(31)	6,601
Interest Rate Swaps	Receive Fixed 1.750%, Pay Variable 3-month CDOR	(1,399)	7,450
Interest Rate Swaps	Receive Fixed 2.480%, Pay Variable 6-month THBSR	12	3,100
Interest Rate Swaps	Receive Fixed 2.550%, Pay Variable 6-month THBSR	107	9,671
Interest Rate Swaps	Receive Fixed 2.810%, Pay Variable 6-month THBSR	5	942
Interest Rate Swaps	Receive Fixed 3.795%, Pay Variable 3-month BKBM	126	2,167
Interest Rate Swaps	Receive Fixed 5.570%, Pay Variable 1-month TIIE	(652)	7,173
Interest Rate Swaps	Receive Fixed 6.000%, Pay Variable 1-month TIIE	(1,363)	20,350
Interest Rate Swaps	Receive Fixed 7.250%, Pay Variable 3-month JIBAR	(515)	22,647
Interest Rate Swaps	Receive Fixed 7.740%, Pay Variable 1-month TIIE	(272)	17,186
Interest Rate Swaps	Receive Fixed 7.750%, Pay Variable 3-month JIBAR	(329)	9,959
Interest Rate Swaps	Receive Fixed 8.250%, Pay Variable 3-month JIBAR	14	693
Interest Rate Swaps	Receive Fixed 8.500%, Pay Variable 3-month JIBAR	43	2,488
Interest Rate Swaps	Receive Variable 3 month LIBOR, Pay Fixed 2.00%	41	1,000
Interest Rate Swaps	Receive Variable 3 month LIBOR, Pay Fixed 2.50%	20	200
Interest Rate Swaps	Receive Variable 3 month PRIBOR, Pay Fixed 1.94%	3	359
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.694%	798	16,940
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.00%	11	1,100
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.157%	262	5,230
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.25%	35	600
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.75%	340	7,300
Interest Rate Swaps	Receive Variable 6 month EURIB, Pay Fixed 1.50%	(10)	1,401
Interest Rate Swaps	Receive Variable 6 month LIBOR, Pay Fixed 1.50%	(192)	56,507
Interest Rate Swaps	Receive Variable 6-month LIBOR, Pay Fixed .30%	(35)	15,980
Subtotal – Interest Rate Swaps		**$305**	**$359,665**
Total Return Bond Swaps	Receive Fixed .00%, Pay Fixed .00%	($18,332)	$24,846
Total Return Bond Swaps	Receive Fixed .00%, Pay Fixed .07%	150,150	2,878,628
Total Return Bond Swaps	Receive Fixed .00%, Pay Fixed .08%	188,835	3,620,279
Total Return Bond Swaps	Receive Fixed .00%, Pay Fixed .09%	83,716	1,604,970
Total Return Bond Swaps	Receive Fixed .00%, Pay Fixed .15%	9	184,290
Total Return Bond Swaps	Receive Fixed .00%, Pay Fixed .40%	—	64,822
Total Return Bond Swaps	Receive Fixed .07%, Pay Fixed .00%	(80,449)	1,542,338
Total Return Bond Swaps	Receive Fixed .08%, Pay Fixed .00%	(80,801)	1,569,095
Total Return Bond Swaps	Receive Fixed .09%, Pay Fixed .00%	(9,897)	269,750
Total Return Bond Swaps	Receive Fixed .09%, Pay Fixed .09%	—	23,085
Total Return Bond Swaps	Receive Fixed .3Y%, Pay Fixed .78%	(93)	23,085
Total Return Bond Swaps	Receive Fixed 0%, Pay Fixed .08%	3,237	62,049
Subtotal – Total Return Bond Swaps		**$236,375**	**$11,867,237**
TOTAL		**$236,680**	**$12,226,902**

CalPERS – Derivative Instruments Subject to Counterparty Credit Risk

Counterparty	Percentage of Net Exposure	Moody's Ratings
Goldman Sachs Intl. London	19.99%	A3
JP Morgan	16.66%	A3
Bnp Paribas, S.A.	6.49%	Aa3
Citibank N.A.	5.10%	A1
Goldman Sachs + Co	5.01%	A3
Deutsche Bank Ag	4.71%	Baa2
Goldman Sachs International	4.44%	A1
Morgan Stanley Capital Services, Inc.	4.38%	A3
Societe Generale	4.01%	A1
Bank of America	3.92%	A3
HSBC Bank USA	3.71%	Aa3
JP Morgan Chase Bank	3.56%	Aa3
Barclays Bank Plc Wholesale	3.30%	A2
Bank of America, N.A.	2.81%	Aa3
BNP Paribas	2.73%	Aa3
Macquarie Securities Limited	2.47%	N/A
Morgan Stanley	1.99%	A3
UBS AG	1.50%	Aa3
Royal Bank Of Scotland Plc	1.28%	Baa2
Standard Chartered Bank	0.56%	A1
JP Morgan Chase Bank N.A., London	0.34%	Aa3
Bank Of New York	0.28%	A1
Credit Suisse International	0.19%	A1
State Street Bank and Trust Company	0.08%	Aa3
JP Morgan Securities Inc	0.08%	A3
Royal Bank Of Canada	0.06%	A1
Goldman Sachs Bank Usa	0.06%	A3
UBS AG London	0.05%	Aa3
Goldman Sachs Cme	0.05%	A3
Northern Trust Company, The	0.05%	A2
Morgan Stanley And Co. International	0.04%	A3
Australia And New Zealand Banking	0.03%	Aa3
Goldman Sachs Ice	0.03%	NR
HSBC	0.02%	A2
Credit Agricole Cib	0.01%	A1
Bank Of Montreal	0.01%	A1
TOTAL	**100.00%**	

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, 2018, are reported below. PERF A is an agent multiple-employer plan and therefore not disclosed in the following tables, consistent with GASB Statement No. 67, *Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25* (GASB 67) reporting requirements.

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

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of Total Pension Liability
PERF B				
Schools Cost-Sharing	$91,459,284	$64,796,136	$26,663,148	70.8%
PERF C				
Public Agencies Cost-Sharing	38,944,855	29,308,589	9,636,266	75.3%
LRF				
State of California	96,781	113,876	(17,095)	117.7%
JRF				
State of California	3,036,999	39,631	2,997,368	1.3%
JRF II				
State of California	1,498,155	1,525,514	(27,359)	101.8%

The total pension liability for each defined benefit plan was determined by actuarial valuations as of June 30, 2017, which were rolled forward to June 30, 2018, 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	2.50%	2.50%	2.50%	2.50%	2.50%
Salary Increases	Varies by Entry Age and Service	Varies by Entry Age and Service	2.75%	2.75%	2.75%
Mortality Rate Table[1]	Derived using CalPERS membership data for all funds				
The above actuarial assumptions were based upon the following experience study periods:	1997-2015	1997-2015	1997-2015	1997-2015	1997-2015
Post-Retirement Benefit Increase	2.00% until PPPA floor on purchasing power applies, 2.50% thereafter	Contract COLA up to 2.50% until PPPA floor on purchasing power applies, 2.50% thereafter	2.50%	2.50%	2.50%
Long-term rate of return assumption on plan investments used in discounting liabilities	7.15%	7.15%	5.25%	3.62%	6.65%

(1) The mortality table was developed based on CalPERS specific data. The table includes 15 years of mortality improvement using the Society of Actuaries 90 percent of scale MP 2016. For more details on this table, please refer to the December 2017 experience study report (based on CalPERS demographic data from 1997 to 2015) that can be found on the CalPERS website.

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 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, CalPERS 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+ 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 rounded 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 equal to the single equivalent rate calculated above and adjusted to account for assumed administrative expenses.

The tables to the right 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.

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

Asset Class[1]	Assumed Asset Allocation	Real Return Years 1 - 10[2]	Real Return Years 11+[3]
Global Equity	50.0%	4.80%	5.98%
Fixed Income	28.0%	1.00%	2.62%
Inflation Assets	0.0%	0.77%	1.81%
Private Equity	8.0%	6.30%	7.23%
Real Assets	13.0%	3.75%	4.93%
Liquidity	1.0%	0.00%	(0.92%)

(1) In the Basic Financial Statements, Fixed Income is included in Global Debt Securities; Liquidity is included in Short-Term Investments; Inflation Assets are included in both Global Equity Securities and Global Debt Securities.
(2) An expected inflation of 2.00% used for this period.
(3) An expected inflation of 2.92% used for this period.

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

Asset Class[1]	Assumed Asset Allocation	Real Return Years 1 - 10[2]	Real Return Years 11+[3]
Global Equity	22.0%	4.80%	5.98%
Fixed Income	49.0%	1.10%	2.62%
TIPs	16.0%	0.25%	1.46%
Commodities	5.0%	1.50%	2.87%
REITs	8.0%	3.50%	5.00%

(1) In the Basic Financial Statements, Commodities and REITS are included in Global Equity Securities; Fixed Income and TIPS are included in Global Debt Securities.
(2) An expected inflation of 2.00% used for this period.
(3) An expected inflation of 2.92% used for this period.

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

Asset Class[1]	Assumed Asset Allocation	Real Return Years 1 - 10[2]	Real Return Years 11+[3]
Global Equity	52.0%	4.80%	5.98%
Fixed Income	32.0%	1.10%	2.62%
TIPs	5.0%	0.25%	1.46%
Commodities	3.0%	1.50%	2.87%
REITs	8.0%	3.50%	5.00%

(1) In the Basic Financial Statements, Commodities and REITS are included in Global Equity Securities; Fixed Income and TIPS are included in Global Debt Securities.
(2) An expected inflation of 2.00% used for this period.
(3) An expected inflation of 2.92% used for this period.

DISCOUNT RATE

PERF B, PERF C, LRF, and JRF II

The discount rates used to measure the total pension liability as of June 30, 2018, for the PERF B, PERF C, LRF, and JRF II were 7.15 percent, 7.15 percent, 5.25 percent, and 6.65 percent, respectively. These discount rates are not adjusted for administrative expenses.

PERF B, PERF C, LRF and JRF II fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return for those pension plans' investments were applied to all periods of projected benefit payments to determine the total pension liability.

JRF

The discount rate used to measure the total pension liability as of June 30, 2018, was 3.62 percent, which differs from the discount rate used as of June 30, 2017, of 3.56 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. The discount rate is based on a 20-year tax-exempt General Obligation Municipal Bond with an average rating of AA (as reported in Fidelity Index's “20-Year Municipal GO AA Index") and 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	$91,459,284	$64,796,136	$26,663,148	70.8%
PERF C				
Public Agencies Cost-Sharing	38,944,855	29,308,589	9,636,266	75.3%
LRF				
State of California	96,781	113,876	(17,095)	117.7%
JRF				
State of California	3,036,999	39,631	2,997,368	1.3%
JRF II				
State of California	1,498,155	1,525,514	(27,359)	101.8%

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	$103,616,404	$64,796,136	$38,820,268	62.5%
PERF C				
Public Agencies Cost-Sharing	44,269,986	29,308,589	14,961,397	66.2%
LRF				
State of California	108,208	113,876	(5,668)	105.2%
JRF				
State of California	3,360,746	39,631	3,321,115	1.2%
JRF II				
State of California	1,686,916	1,525,514	161,402	90.4%

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	$81,373,212	$64,796,136	$16,577,076	79.6%
PERF C				
Public Agencies Cost-Sharing	34,567,784	29,308,589	5,259,195	84.8%
LRF				
State of California	87,439	113,876	(26,437)	130.2%
JRF				
State of California	2,761,600	39,631	2,721,969	1.4%
JRF II				
State of California	1,347,490	1,525,514	(178,024)	113.2%

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, 2018, 542 employers had elected to participate in the fund. Of the 542 participating employers, 531 employers have contributed assets in the CERBTF as of June 30, 2018. The purpose of the fund is to receive contributions from participating employers and establish separate employer prefunding accounts to pay for health care or other post-employment benefits in accordance with the terms of the participating employers' plans. Contributions are voluntarily determined by the employer's own funding schedule, and there are no long-term contracts for contributions to the plan. As such, contributions to the CERBTF are elective and not required. The CERBTF is an agent multiple-employer plan as defined in GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* (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) the transfer will satisfy applicable requirements of the Internal Revenue Code, other law and accounting standards, and the Board's fiduciary duties, or 2) the employer substantiates to the Board that in conformance with applicable requirements of the Internal Revenue Code, other laws and accounting standards, and the Board's fiduciary duties that all of the employer's obligations for the payment of post-employment benefits have been satisfied.

As of June 30, 2018, there were 485,552 active plan members, 290,644 inactive plan members currently receiving benefit payments, and 9,941 inactive plan members entitled to but not yet receiving benefit payments.

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

The total Fiscal Year 2017-18 actual OPEB employer contributions from 542 participating employers representing 558 OPEB plans was $3.9 billion. In compliance with GASB 74, this amount includes the $1.1 billion in contributions made to the CERBTF, plus an additional $2.8 billion in retiree health care premiums paid by employers directly to healthcare 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 investment alternatives dependent upon expected levels of return and volatility. Overall, the CERBTF recognized an annual money-weighted rate of return of 7.3 percent for Fiscal Year 2017-18.

10. REPLACEMENT BENEFIT FUND (RBF)

The RBF was established as a custodial fund by Chapter 938 of the 1995 Statutes. Initially established in 1998, it provides benefits to retirees of the PERF whose retirement allowance 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 on a calendar year basis and upon receipt of payment by the employers, CalPERS remits the replacement benefits to the retirees on a monthly basis. 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, 2018, there were 1,167 retirees receiving replacement benefits.

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

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. Effective January 1, 2014, flex-funded plans, Anthem Blue Cross, Blue Shield of California, Health Net, Sharp, UnitedHealthcare and effective January 1, 2018, Western Health Advantage. 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. Health insurance 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 2017-18, the Board approved aggregate increases in member premiums to continue 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.

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, 2018, 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 $445.3 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, 2018, but have not been reported to the HCF. The total of the estimated claims liabilities at the end of the Fiscal Year 2017-18 also includes $318.7 million of known claims, 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 the HCF's risk to a maximum aggregate monthly cost per member.

The following schedule represents changes in the aggregate estimated claims liabilities for the fiscal years ended June 30, 2018, and June 30, 2017.

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

Year Ended June 30	2018	2017
Total Estimated Claims at Beginning of Fiscal Year	**$635,994**	**$729,317**
Total Incurred Claims and Claim Adjustment Expenses	3,580,571	3,373,052
Total Payments	(3,452,499)	(3,466,375)
Total Estimated Claims at End of Fiscal Year	**$764,066**	**$635,994**

12. PUBLIC EMPLOYEES' CONTINGENCY RESERVE FUND (CRF)

The CRF was established in 1962, with the passage of PEMHCA, to fund administrative expenses 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 expenses incurred for administering the program.

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 employer's contribution toward the CRF administrative expenses is determined as a percentage of gross health insurance premiums paid by the employer and employees. The percentage of the insurance premiums paid for the fiscal year ended June 30, 2018, was 0.33 percent. Administrative rates are reviewed annually and are adjusted, if needed, to cover budgeted administrative expenses.

Health insurance premiums are initially received in the CRF and then remitted to health insurance carriers, apart from premium dollars designated for self-funded and flex-funded health plans, which are transferred to the HCF. As of June 30, 2018, there were 1,162 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, normally for a period of five years. CalPERS conducted a procurement in 2017, which resulted in awarding a new five-year contract to Long-Term Care Group, Inc., the current third-party administrator of the LTC program.The LTC program is a voluntary member-paid program and is not funded or subsidized by the employers.

There are four LTC policy series:

- 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, 2018, there are 124,472 active participants in the LTC 1, LTC 2, LTC 3, and LTC 4 policy series, of which 6,778 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.

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 5.25 percent, morbidity, lapse rates, voluntary termination, mortality, and plan expenses. In Fiscal Year 2017-18, the actual investment returns were approximately $177.5 million lower than expected. Economic assumptions are evaluated periodically in accordance with Board policy. An evaluation of assumptions used in the long-term care actuarial valuation is currently in progress. Any changes resulting from the experience study will be applied prospectively. The estimated liability for future policy benefits at June 30, 2018, has been rolled forward from the June 30, 2017, actuarial valuation using standard actuarial techniques, and all assumptions remained the same as the previous year.

Total LTCF investments as of June 30, 2018, were approximately $4.5 billion. For Fiscal Year 2017-18, the annual premium was $296.3 million and the total benefits paid out were $306.9 million. Since the program's inception in 1995 through June 30, 2018, the total benefits paid were approximately $2.5 billion.

14. CONTINGENCIES

CalPERS is a Defendant in litigation involving investments, individual pension, 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 affected employer's contribution rate or rates and, where applicable, member premiums. During the fiscal year, specific pending cases were litigated and new ones 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*, the 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 was that they were not paid salary required by applicable statutes over the prior five years, and that JRS and JRS II must in the future independently raise pension benefits to these retirees and beneficiaries based on the statutory salary mandates. JRS and JRS II in turn contended that they did not have statutory authority to increase benefits until the active judges have received an actual pay increase and JRS and JRS II have received a copy of an official Pay Letter from California Department of Human Resources to 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.

A Statement of Decision was issued on December 16, 2015, entering declaratory judgment in favor of the Plaintiff class and against JRS, JRS II, and SCO. The court found that, since Fiscal Year 2008-09, 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, 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% 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 SCO filed an appeal on May 5, 2016. On April 5, 2017, the Court of Appeal issued its unpublished Decision affirming the judgment of the Superior Court and the attorney fee award. Plaintiffs filed a Motion to Enforce Judgment in the Superior Court, which was heard on July 27, 2017. At that hearing, the Superior Court granted the motion and ordered that retroactive damages be paid by the Defendants in amounts consistent with the court's interpretation of the salary provisions in Government Code section 68203.

Defendants have already implemented the court's Order on a prospective basis. However, on September 19, 2017, Defendants filed a Notice of Appeal from Post-Remittitur Order Entered July 28, 2017. The appeal is taken from paragraph 1 of the Order, directing "Defendants pay to Plaintiff and the class members the difference between what Defendants actually paid Plaintiff and class members and the amounts that should have been paid, as specified in the judgment, together with the pre and post judgment interest at the rate of 10% per annum from the date on which the additional payment should have been paid to the actual date of payment." The grounds for this appeal are that the Order directs retroactive monetary relief to the Plaintiff class for past alleged wrongs, by ordering Defendants to pay prior salary increases. In so doing, Defendants argue that the trial court has disregarded the ruling of the Court of Appeal, which expressly held that, "the judgment includes no monetary damages award."

On June 21, 2018, oral argument was heard on this appeal. On June 26, 2018, an unpublished Decision was issued, denying the appeal in every respect, as follows: "The order enforcing the judgment, including the provision for 'pre and post judgment interest thereon at the rate of 10% per annum from the date on which the additional payment should have been paid to the actual date of payment' is affirmed." On August 3, 2018, the Controller, JRS and JRS II (State Defendants) filed a Petition for Review in the California Supreme Court. Plaintiffs filed an Answer opposing the Petition on the bases that "Defendants' affirmative defenses have already been waived or rejected" and "the interest award was affirmed on appeal." Petitioners filed a Reply on September 5, 2018. On that same day, the Supreme Court requested a copy of the record, which was delivered to the court on September 10, 2018. The Supreme Court has not yet officially granted the Petition. Both JRS and JRS II funds could potentially be impacted, in an unknown amount, depending upon whether the Supreme Court accepts the Petition for Review, and if so, how it rules on the damages issues.

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 increased the premiums, and failed 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.

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 to 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 CalPERS breached the contract by imposing the premium increase and 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 has also asserted other legal defenses.

On January 18, 2016, the court granted Plaintiffs' Motion for Class Certification. 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 CalPERS Defendants filed a Motion for Summary Judgment/Adjudication that was argued on June 8, 2017. The court granted summary judgment as to the claims against the individual Board Defendants. The court also granted summary judgment for CalPERS as to the certified breach of fiduciary duty and rescission claims, but denied summary judgment as to the certified breach of contract claim and the uncertified declaratory relief claim. CalPERS filed a motion for decertification of the class on February 5, 2018. Opposition and Reply briefs were filed on February 26 and March 21, 2018, respectively. After oral argument at a hearing on May 10, 2018, the court issued a ruling denying CalPERS' motion. On July 9, 2018, CalPERS filed a Verified Petition for Writ of Mandate, Prohibition, or Other Appropriate Relief, appealing the denial of its motion for decertification. On July 19, 2018, CalPERS filed its Reply in Support of the Petition. The Petition remains pending at this time. The expert discovery cut-off in Sanchez is, by agreement of the parties, January 31, 2019.

No further court activity has occurred. The previous tentatively set trial date of November 19, 2018 has been continued to May 13, 2019 because of the Court's schedule, and the Court has indicated that it anticipates further continuing the matter for trial to June 10, 2019.

Heinz, et al. v. CalPERS, Anthem et al. is a putative class action lawsuit filed against CalPERS in June 2017. The Complaint alleges breach of contract, breach of fiduciary duties, misrepresentation, and a variety of other claims. The class is described as "people who were enrolled in Preferred Provider Organization health insurance offered and/or administered by CalPERS and Anthem Blue Cross." The primary allegation is that CalPERS and Anthem engaged in a common policy of improperly and artificially reducing the "allowable amount" for "out-of-network" non-emergency medical services.

On May 7, 2018, the court issued a ruling that Plaintiff must proceed with his Petition for Writ of Administrative Mandamus, and that all other causes of action are stayed in their entirety pending the outcome of the writ. The parties are currently meeting and conferring in an attempt to put together the administrative record for the writ proceeding. A hearing on Plaintiff's writ is currently scheduled for January 25, 2019.

A second lawsuit related to CalPERS' administration of health benefits is *County of Monterey dba Natividad Medical Center v. CalPERS, Anthem et al.* CalPERS was served with this Complaint on August 10, 2017. The dispute in this case arises out of a "Facility Agreement" between Natividad Medical Center ("NMC") and Anthem effective August 1, 2012, pursuant to which NMC agreed to provide certain healthcare services to Anthem members for certain agreed-upon reimbursements. The Facility Agreement governs not only claims for Anthem insureds, but also services for and claims by members of "Other Payors" for whom Anthem provides claim processing services for its Managed Care Network, such as CalPERS. No reimbursement rates for "trauma services" were established in the 2012 Agreement because NMC was not yet providing such services and these rates were to be negotiated at a later date, when NMC had set up its trauma care services. However, the parties have been unable to agree upon trauma rates since 2012. As a result, the Complaint alleges that Anthem has been instructing its Other Payors, including CalPERS, to pay NMC's trauma services claims at the "emergency services" rate. With regard to CalPERS' plan members' treatment for trauma, NMC alleges it has been underpaid by $2.8 million. CalPERS filed a demurrer to Natividad's Second Amended Complaint, which was sustained without leave to amend, essentially dismissing the action against CalPERS. On or about June 26, 2018, Natividad filed a Notice of Appeal. To date, no actions have been taken on Natividad's appeal of the Superior Court's decision to dismiss the Second Amended Complaint.

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.

15. FUTURE ACCOUNTING PRONOUNCEMENT

The objective of GASB Statement No. 87, *Leases* (GASB 87), is to improve accounting and financial reporting for leases by governments. GASB 87 requires recognition of certain lease assets and liabilities for leases that were previously classified as operating leases and recognized as inflows or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. The requirements of GASB 87 are effective for fiscal years beginning after December 15, 2019.

Required Supplementary Information

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

PERF B – Five-Year Review[1] (Dollars in Thousands)

	2018	2017	2016	2015	2014
Discount Rate Assumption	7.15%	7.15%	7.65%	7.65%	7.50%
Total Pension Liability:					
Service Cost	$2,172,696	$2,031,914	$1,716,677	$1,624,993	$1,576,667
Interest	6,165,715	5,719,835	5,441,918	5,152,519	4,820,116
Changes of Assumptions	450,064	4,649,299	—	(1,217,974)	—
Differences Between Expected and Actual Experience	1,852,902	531,862	400,103	1,119,011	—
Benefit Payments, Including Refunds of Member Contributions	(4,053,119)	(3,724,910)	(3,546,836)	(3,334,081)	(3,139,923)
Net Change in Total Pension Liability	**$6,588,258**	**$9,208,000**	**$4,011,862**	**$3,344,468**	**$3,256,860**
Total Pension Liability – Beginning	$84,871,026	$75,663,026	$71,651,164	$68,306,696	$65,049,836
Total Pension Liability – Ending (a)	**$91,459,284**	**$84,871,026**	**$75,663,026**	**$71,651,164**	**$68,306,696**
Plan Fiduciary Net Position:					
Contributions – Employer	$2,070,832	$1,783,736	$1,434,632	$1,323,090	$1,203,071
Contributions – Member	952,979	897,438	851,133	773,580	744,437
Total Net Investment Income	5,095,064	6,211,781	297,514	1,272,365	8,625,601
Benefit Payments, Including Refunds of Member Contributions	(4,053,119)	(3,724,910)	(3,546,836)	(3,334,081)	(3,139,923)
Net Plan to Plan Resource Movement	2	(134)	10	(71,460)	—
Administrative Expenses	(92,448)	(82,489)	(34,554)	(64,124)	(72,167)
Net Change in Plan Fiduciary Net Position	**$3,973,310**	**$5,085,422**	**($998,101)**	**($100,630)**	**$7,361,019**
Plan Fiduciary Net Position – Beginning	$60,998,387	$55,912,965	$56,911,066	$57,011,696	$49,650,677
Adjustments, See Note 2	(175,561)	—	—	—	—
Total Adjusted Plan Fiduciary Net Position – Beginning	60,822,826	55,912,965	56,911,066	57,011,696	49,650,677
Plan Fiduciary Net Position – Ending (b)	64,796,136	60,998,387	55,912,965	56,911,066	57,011,696
Net Pension Liability (a) - (b)	**$26,663,148**	**$23,872,639**	**$19,750,061**	**$14,740,098**	**$11,295,000**
Plan Fiduciary Net Position as a Percentage of the Total Pension	**70.8%**	**71.9%**	**73.9%**	**79.4%**	**83.5%**
Covered Payroll	$13,252,995	$12,643,354	$11,747,602	$10,964,872	$10,120,248
Net Pension Liability as a Percentage of Covered Payroll	**201.2%**	**188.8%**	**168.1%**	**134.4%**	**111.6%**

(1) 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.

NOTES TO SCHEDULE

Changes in Benefit Terms

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

In December 2017, the CalPERS Board of Administration (the Board) adopted new mortality assumptions for plans participating in the Public Employees' Retirement Fund (PERF). The new mortality table was developed from the December 2017 experience study and includes 15 years of projected ongoing mortality improvement using 90 percent of scale MP 2016 published by the Society of Actuaries. The inflation assumption is reduced from 2.75 percent to 2.50 percent. The assumptions for individual salary increases and overall payroll growth are reduced from 3.00 percent to 2.75 percent. These changes will be implemented in two steps commencing in the June 30, 2018 funding valuation. However, for financial reporting purposes, these assumption changes are fully reflected in the results for Fiscal Year 2017-18.

In Fiscal Year 2016-17, the financial reporting discount rate for the PERF B was lowered from 7.65 percent to 7.15 percent. In December 2016, the CalPERS Board approved lowering the funding discount rate used in the PERF B from 7.50 percent to 7.00 percent, which is to be phased in over a three-year period (7.50 percent to 7.375 percent, 7.375 percent to 7.25 percent, and 7.25 percent to 7.00 percent) beginning with the June 30, 2017, valuation reports. The funding discount rate includes a 15 basis-point reduction for administrative expenses, and the remaining decrease is consistent with the change in the financial reporting discount rate.

In Fiscal Year 2014-15, the financial reporting discount rate was increased from 7.50 percent to 7.65 percent resulting from eliminating the 15 basis-point reduction for administrative expenses. The funding discount rate remained at 7.50 percent during this period, and remained adjusted for administrative expenses.

Required Supplementary Information (continued)

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

PERF C – Five-Year Review[1] (Dollars in Thousands)

	2018	2017	2016	2015	2014
Discount Rate Assumption	7.15%	7.15%	7.65%	7.65%	7.50%
Total Pension Liability:					
Service Cost	$844,273	$820,583	$712,307	$698,416	$713,731
Interest	2,629,157	2,506,761	2,399,259	2,285,565	2,169,786
Changes of Benefit Terms	668	2,119	1,478	—	—
Changes of Assumptions	(248,318)	2,122,413	—	(543,686)	—
Differences Between Expected and Actual Experience	313,467	(18,554)	(6,333)	(5,678)	—
Benefit Payments, Including Refunds of Member Contributions	(1,755,740)	(1,630,602)	(1,519,301)	(1,423,756)	(1,335,871)
Net Change in Total Pension Liability	**$1,783,507**	**$3,802,720**	**$1,587,410**	**$1,010,861**	**$1,547,646**
Total Pension Liability – Beginning	$37,161,348	$33,358,628	$31,800,055	$30,789,194	$29,241,548
Adjustment to Beginning Amount	—	—	(28,837)	—	—
Total Adjusted Pension Liability – Beginning	**$37,161,348**	**$33,358,628**	**$31,771,218**	**$30,789,194**	**$29,241,548**
Total Pension Liability – Ending (a)	**$38,944,855**	**$37,161,348**	**$33,358,628**	**$31,800,055**	**$30,789,194**
Plan Fiduciary Net Position:					
Contributions – Employer	$1,182,686	$980,359	$882,991	$859,456	$747,694
Contributions – Member	334,140	317,024	300,135	278,529	291,772
Total Net Investment Income	2,308,558	2,774,321	127,043	548,097	3,770,935
Benefit Payments, Including Refunds of Member Contributions	(1,755,740)	(1,630,602)	(1,519,301)	(1,423,756)	(1,335,871)
Net Plan to Plan Resource Movement	116,550	134,513	22,621	(267,581)	—
Administrative Expenses	(41,980)	(37,052)	(15,263)	(27,967)	(31,550)
Net Change in Plan Fiduciary Net Position	**$2,144,214**	**$2,538,563**	**($201,774)**	**($33,222)**	**$3,442,980**
Plan Fiduciary Net Position – Beginning	$27,244,095	$24,705,532	$24,907,306	$24,940,528	$21,497,548
Adjustments, See Note 2	(79,720)	—	—	—	—
Total Adjusted Plan Fiduciary Net Position – Beginning	27,164,375	24,705,532	24,907,306	24,940,528	21,497,548
Plan Fiduciary Net Position – Ending (b)	29,308,589	27,244,095	24,705,532	24,907,306	24,940,528
Net Pension Liability (a) - (b)	**$9,636,266**	**$9,917,253**	**$8,653,096**	**$6,892,749**	**$5,848,666**
Plan Fiduciary Net Position as a Percentage of the Total Pension	**75.3%**	**73.3%**	**74.1%**	**78.3%**	**81.0%**
Covered Payroll	$3,793,609	$3,631,919	$3,472,950	$3,356,312	$3,248,018
Net Pension Liability as a Percentage of Covered Payroll	**254.0%**	**273.1%**	**249.2%**	**205.4%**	**180.1%**

(1) 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.

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

In December 2017, the CalPERS Board adopted new mortality assumptions for plans participating in the PERF. The new mortality table was developed from the December 2017 experience study and includes 15 years of projected ongoing mortality improvement using 90 percent of scale MP 2016 published by the Society of Actuaries. The inflation assumption is reduced from 2.75 percent to 2.50 percent. The assumptions for individual salary increases and overall payroll growth are reduced from 3.00 percent to 2.75 percent. These changes will be implemented in two steps commencing in the June 30, 2017 funding valuation. However, for financial reporting purposes, these assumption changes are fully reflected in the results for Fiscal Year 2017-18.

In Fiscal Year 2016-17, the financial reporting discount rate for the PERF C was lowered from 7.65 percent to 7.15 percent. In December 2016, the CalPERS Board approved lowering the funding discount rate used in the PERF C from 7.50 percent to 7.00 percent, which is to be phased in over a three-year period (7.50 percent to 7.375 percent, 7.375 percent to 7.25 percent, and 7.25 percent to 7.00 percent) beginning with the June 30, 2016, valuation reports. The funding discount rate includes a 15 basis-point reduction for administrative expenses, and the remaining decrease is consistent with the change in the financial reporting discount rate.

In Fiscal Year 2014-15, the financial reporting discount rate was increased from 7.50 percent to 7.65 percent resulting from eliminating the 15 basis-point reduction for administrative expenses. The funding discount rate remained at 7.50 percent during this period, and remained adjusted for administrative expenses.

Required Supplementary Information (continued)

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

LRF – Five-Year Review[1] (Dollars in Thousands)

	2018	2017	2016	2015	2014
Discount Rate Assumption	5.25%	5.25%	6.00%	6.00%	5.75%
Total Pension Liability:					
Service Cost	$542	$639	$608	$769	$732
Interest	4,987	5,291	5,978	6,427	6,465
Changes of Assumptions	(2,529)	7,857	—	(2,655)	—
Differences Between Expected and Actual Experience	(2,061)	(5,998)	(3,530)	(4,246)	—
Benefit Payments, Including Refunds of Member Contributions	(6,918)	(7,249)	(7,407)	(9,086)	(7,482)
Net Change in Total Pension Liability	**($5,979)**	**$540**	**($4,351)**	**($8,791)**	**($285)**
Total Pension Liability – Beginning	$102,760	$102,220	$106,730	$115,521	$115,806
Adjustment to Beginning Amount	—	—	(159)	—	—
Total Adjusted Pension Liability – Beginning	**$102,760**	**$102,220**	**$106,571**	**$115,521**	**$115,806**
Total Pension Liability – Ending (a)	**$96,781**	**$102,760**	**$102,220**	**$106,730**	**$115,521**
Plan Fiduciary Net Position:					
Contributions – Employer	$467	$516	$549	$590	$565
Contributions – Member	82	94	97	105	113
Total Net Investment Income	5,486	5,048	4,545	(94)	15,372
Benefit Payments, Including Refunds of Member Contributions	(6,918)	(7,249)	(7,407)	(9,086)	(7,482)
Administrative Expenses	(671)	(575)	(203)	(400)	(362)
Net Change in Plan Fiduciary Net Position	**($1,554)**	**($2,166)**	**($2,419)**	**($8,885)**	**$8,206**
Plan Fiduciary Net Position – Beginning	$116,884	$119,050	$121,469	$130,354	$122,148
Adjustments, See Note 2	(1,454)	—	—	—	—
Total Adjusted Plan Fiduciary Net Position – Beginning	115,430	119,050	121,469	130,354	122,148
Plan Fiduciary Net Position – Ending (b)	113,876	116,884	119,050	121,469	130,354
Net Pension Asset (a) - (b)	**($17,095)**	**($14,124)**	**($16,830)**	**($14,739)**	**($14,833)**
Plan Fiduciary Net Position as a Percentage of the Total Pension	**117.7%**	**113.7%**	**116.5%**	**113.8%**	**112.8%**
Covered Payroll	$1,242	$1,360	$1,313	$1,545	$1,470
Net Pension Asset as a Percentage of Covered Payroll	**(1,376.4%)**	**(1,038.5%)**	**(1,281.8%)**	**(954.0%)**	**(1,009.0%)**

(1) 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.

NOTES TO SCHEDULE

Changes in Benefit Terms

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

In December 2017, the CalPERS Board adopted new mortality assumptions. The new mortality table was developed from the December 2017 experience study and includes 15 years of projected on-going mortality improvement using 90 percent of scale MP 2016 published by the Society of Actuaries. The inflation assumption is reduced from 2.75 percent to 2.50 percent. The assumptions for individual salary increases and overall payroll growth are reduced from 3.00 percent to 2.75 percent.

In Fiscal Year 2016-17, the financial reporting discount rate for the Legislators' Retirement Fund (LRF) was lowered from 6.00 percent to 5.25 percent. In April 2017, the CalPERS Board approved lowering the funding discount rate used in the LRF from 5.75 percent to 5.00 percent beginning with the June 30, 2016, valuation reports. The funding discount rate includes a 25 basis-point reduction for administrative expenses, and the remaining decrease is consistent with the change in the financial reporting discount rate.

In Fiscal Year 2014-15, the financial reporting discount rate was increased from 5.75 percent to 6.00 percent resulting from eliminating the 25 basis-point reduction for administrative expenses. The funding discount rate remained at 5.75 percent during this period, and remained adjusted for administrative expenses.

Required Supplementary Information (continued)

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

JRF – Five-Year Review[1] (Dollars in Thousands)

	2018	2017	2016	2015	2014
Discount Rate Assumption	3.62%	3.56%	2.85%	3.82%	4.25%
Total Pension Liability:					
Service Cost	$19,131	$22,733	$29,314	$25,372	$27,581
Interest	109,395	115,067	107,515	127,074	140,256
Changes of Assumptions	(20,879)	(107,670)	384,306	167,036	—
Differences Between Expected and Actual Experience	(121,259)	(366,200)	(59,421)	57,568	—
Benefit Payments, Including Refunds of Member Contributions	(207,823)	(200,440)	(199,349)	(201,868)	(193,935)
Net Change in Total Pension Liability	**($221,435)**	**($536,510)**	**$262,365**	**$175,182**	**($26,098)**
Total Pension Liability – Beginning	$3,258,434	$3,794,944	$3,532,394	$3,357,212	$3,383,310
Adjustment to Beginning Amount	—	—	185	—	—
Total Adjusted Pension Liability – Beginning	**$3,258,434**	**$3,794,944**	**$3,532,579**	**$3,357,212**	**$3,383,310**
Total Pension Liability – Ending (a)	**$3,036,999**	**$3,258,434**	**$3,794,944**	**$3,532,394**	**$3,357,212**
Plan Fiduciary Net Position:					
Contributions – Employer	$199,241	$204,475	$192,287	$180,910	$191,148
Contributions – Member	3,062	3,398	3,559	3,877	4,724
Total Net Investment Income	3,378	2,819	2,762	2,286	2,583
Benefit Payments, Including Refunds of Member Contributions	(207,823)	(200,440)	(199,349)	(201,868)	(193,935)
Administrative Expenses	(2,106)	(1,771)	(642)	(1,227)	(1,141)
Net Change in Plan Fiduciary Net Position	**($4,248)**	**$8,481**	**($1,383)**	**($16,022)**	**$3,379**
Plan Fiduciary Net Position – Beginning	$48,275	$39,794	$41,177	$57,199	$53,820
Adjustments, See Note 2	(4,396)	—	—	—	—
Total Adjusted Plan Fiduciary Net Position – Beginning	43,879	39,794	41,177	57,199	53,820
Plan Fiduciary Net Position – Ending (b)	39,631	48,275	39,794	41,177	57,199
Net Pension Liability (a) - (b)	**$2,997,368**	**$3,210,159**	**$3,755,150**	**$3,491,217**	**$3,300,013**
Plan Fiduciary Net Position as a Percentage of the Total Pension	**1.3%**	**1.5%**	**1.0%**	**1.2%**	**1.7%**
Covered Payroll	$35,507	$39,413	$34,301	$41,378	$54,649
Net Pension Liability as a Percentage of Covered Payroll	**8,441.6%**	**8,144.9%**	**10,947.6%**	**8,437.4%**	**6,038.6%**

(1) 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.

NOTES TO SCHEDULE

Changes in Benefit Terms

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

In December 2017, the CalPERS Board adopted new mortality assumptions. The new mortality table was developed from the December 2017 experience study and includes 15 years of projected on-going mortality improvement using 90 percent of scale MP 2016 published by the Society of Actuaries. In Fiscal Year 2017-2018, the discount rate used to measure the total pension liability was 3.62 percent. The State funds the Judges' Retirement Fund (JRF) benefit obligations using the pay-as-you-go method. Member contributions plus state contributions are designed to cover only benefit payments and expenses each year. 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 3.62 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 reported in Fidelity Index's "20-Year Municipal GO AA Index") as of June 30, 2018, was applied to all periods of projected benefit payments to measure the total pension liability. The inflation assumption is reduced from 2.75 percent to 2.50 percent. The assumptions for individual salary increases and overall payroll growth are reduced from 3.00 percent to 2.75 percent. In Fiscal Year 2016-17, the discount rate used to measure the total pension liability was 3.56 percent.

For the 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. These changes were reflected in the total pension liabilities starting June 30, 2015.

Assumption changes were made in the JRF June 30, 2016, valuation that are reflected in the total pension liability starting June 30, 2017. The assumption changes included a lowering of the rates of retirement to reflect that fewer actual retirements over the past six years than were assumed. In addition, pre-retirement termination and disability rates were removed due to low expected future terminations and disability retirements for this group.

Required Supplementary Information (continued)

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

JRF II – Five-Year Review[1] (Dollars in Thousands)

	2018	2017	2016	2015	2014
Discount Rate Assumption	6.65 %	6.65%	7.15%	7.15%	7.00%
Total Pension Liability:					
Service Cost	$95,843	$97,678	$86,635	$81,679	$78,670
Interest	91,419	85,654	78,412	70,389	61,044
Changes of Assumptions	(41,763)	69,233	—	(14,883)	—
Differences Between Expected and Actual Experience	(26,876)	(26,382)	(4,546)	(17,319)	—
Benefit Payments, Including Refunds of Member Contributions	(31,795)	(22,406)	(21,704)	(14,040)	(8,950)
Net Change in Total Pension Liability	**$86,828**	**$203,777**	**$138,797**	**$105,826**	**$130,764**
Total Pension Liability – Beginning	$1,411,327	$1,207,550	$1,073,788	$967,962	$837,198
Adjustment to Beginning Amount	—	—	(5,035)	—	—
Total Adjusted Pension Liability – Beginning	**$1,411,327**	**$1,207,550**	**$1,068,753**	**$967,962**	**$837,198**
Total Pension Liability – Ending (a)	**$1,498,155**	**$1,411,327**	**$1,207,550**	**$1,073,788**	**$967,962**
Plan Fiduciary Net Position:					
Contributions – Employer	$79,699	$67,102	$65,839	$65,629	$57,027
Contributions – Member	27,513	25,076	24,598	22,242	20,413
Total Net Investment Income	101,820	115,057	20,810	(2,401)	150,168
Benefit Payments, Including Refunds of Member Contributions	(31,795)	(22,406)	(21,704)	(14,040)	(8,950)
Administrative Expenses	(2,370)	(1,683)	(732)	(1,127)	(785)
Net Change in Plan Fiduciary Net Position	**$174,867**	**$183,146**	**$88,811**	**$70,303**	**$217,873**
Plan Fiduciary Net Position – Beginning	$1,356,099	$1,172,953	$1,084,142	$1,013,839	$795,966
Adjustments, See Note 2	(5,452)	—	—	—	—
Total Adjusted Plan Fiduciary Net Position – Beginning	1,350,647	1,172,953	1,084,142	1,013,839	795,966
Plan Fiduciary Net Position – Ending (b)	1,525,514	1,356,099	1,172,953	1,084,142	1,013,839
Net Pension Liability/(Asset) (a) - (b)	**($27,359)**	**$55,228**	**$34,597**	**($10,354)**	**($45,877)**
Plan Fiduciary Net Position as a Percentage of the Total Pension	**101.8 %**	**96.1%**	**97.1%**	**101.0 %**	**104.7 %**
Covered Payroll	$299,396	$291,097	$280,879	$259,133	$249,248
Net Pension Liability/(Asset) as a Percentage of Covered Payroll	**(9.1)%**	**19.0%**	**12.3%**	**(4.0%)**	**(18.4%)**

(1) 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.

NOTES TO SCHEDULE

Changes in Benefit Terms

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

In December 2017, the CalPERS Board adopted new mortality assumptions. The new mortality table was developed from the December 2017 experience study and includes 15 years of projected on-going mortality improvement using 90 percent of scale MP 2016 published by the Society of Actuaries. The inflation assumption is reduced from 2.75 percent to 2.50 percent. The assumptions for individual salary increases and overall payroll growth are reduced from 3.00 percent to 2.75 percent.

In Fiscal Year 2016-17, the financial reporting discount rate for the Judges' Retirement Fund II (JRF II) was lowered from 7.15 percent to 6.65 percent. In April 2017, the CalPERS Board approved lowering the funding discount rate used in the JRF II from 7.00 percent to 6.50 percent beginning with the June 30, 2016, valuation reports. The funding discount rate includes a 15 basis-point reduction for administrative expenses, and the remaining decrease is consistent with the change in the financial reporting discount rate.

In Fiscal Year 2014-15, the financial reporting discount rate was increased from 7.00 percent to 7.15 percent resulting from eliminating the 15 basis-point reduction for administrative expenses. The funding discount rate remained at 7.00 percent during this period, and remained adjusted for administrative expenses.

SCHEDULES OF PLAN CONTRIBUTIONS

Five-Year Review[1] (Dollars in Thousands)

	2018	2017	2016	2015	2014
PERF B:					
Actuarially Determined Contribution	$2,048,531	$1,767,813	$1,421,289	$1,303,162	$1,201,125
Contributions in Relation to the Actuarially Determined Contribution	2,048,531	1,767,813	1,421,289	1,303,162	1,201,125
Contribution Excess	**$0**	**$0**	**$0**	**$0**	**$0**
Covered Payroll	$13,252,995	$12,643,354	$11,747,602	$10,964,872	$10,120,248
Contributions as a Percentage of Covered Payroll	15.5%	14.0%	12.1%	11.9%	11.8%
PERF C:					
Actuarially Determined Contribution	$1,182,686	$858,954	$789,103	$691,602	$732,142
Contributions in Relation to the Actuarially Determined Contribution	1,182,686	858,954	789,103	691,602	732,142
Contribution Excess	**$0**	**$0**	**$0**	**$0**	**$0**
Covered Payroll	$3,793,609	$3,631,919	$3,472,950	$3,356,312	$3,248,018
Contributions as a Percentage of Covered Payroll	31.2%	23.7%	22.7%	20.6%	22.5%
LRF:					
Actuarially Determined Contribution	$20	$0	$141	$260	$33
Contributions in Relation to the Actuarially Determined Contribution[2]	467	516	549	590	565
Contribution Excess	**($447)**	**($516)**	**($408)**	**($330)**	**($532)**
Covered Payroll	$1,242	$1,360	$1,313	$1,545	$1,470
Contributions as a Percentage of Covered Payroll	37.6%	37.9%	41.8%	38.2%	38.4%
JRF:					
Actuarially Determined Contribution[3]	$438,156	$448,636	$463,073	$1,884,555	$1,569,630
Contributions in Relation to the Actuarially Determined Contribution[4]	199,241	204,475	192,287	180,910	191,148
Contribution Deficiency	**$238,915**	**$244,161**	**$270,786**	**$1,703,645**	**$1,378,482**
Covered Payroll	$35,507	$39,413	$34,301	$41,378	$54,649
Contributions as a Percentage of Covered Payroll	561.1%	518.8%	560.6%	437.2%	349.8%
JRF II:					
Actuarially Determined Contribution	$79,699	$67,102	$65,839	$63,193	$55,538
Contributions in Relation to the Actuarially Determined Contribution	79,699	67,102	65,839	63,193	55,538
Contribution Excess	**$0**	**$0**	**$0**	**$0**	**$0**
Covered Payroll	$299,396	$291,097	$280,879	$259,133	$249,248
Contributions as a Percentage of Covered Payroll	26.6%	23.1%	23.4%	24.4%	22.3%

(1) This is a 10-year schedule. Information in this schedule is not available prior to 2014. Additional years will be added to this schedule in future fiscal years until 10 years of data is presented.
(2) Because of the provisions of the Public Employees' Pension Reform Act of 2013 (PEPRA), the required employer contribution is the greater of the actuarially determined employer contribution or the employer normal cost.
(3) The 2016 and 2017 actuarially determined contributions are based on a 10-year amortization period, while the 2015 and 2014 actuarially determined contributions are based on a two-year amortization period.
(4) Contributions to the JRF are made on the pay-as-you-go basis.

Required Supplementary Information (continued)

Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions – Five-Year Review

	2017-18	2016-17	2015-16	2014-15	2013-14
PERF B					
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	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 Percentage of Payroll	Level Percentage of Payroll
Remaining Amortization Periods[1]	13-30 years	14-30 years	15-30 years	16-30 years	17-30 years
Asset Valuation Method	Market Value	Market Value	Market Value	Smoothing of Market Value	Smoothing of 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	Varies, Based on Entry Age and Service	Varies, Based on Entry Age and Service	Varies, Based on Entry Age and Service
Investment Rate of Return	7.50%	7.50%	7.50%	7.50%	7.50%
PERF C					
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	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 Percentage of Payroll	Level Percentage of Payroll
Remaining Amortization Periods[1]	Differs by employer rate plan but no more than 30 years	Differs by employer rate plan but no more than 30 years	Differs by employer rate plan but no more than 30 years	Differs by employer rate plan but no more than 30 years	Differs by employer rate plan but no more than 30 years
Asset Valuation Method	Market Value	Market Value	Market Value	Smoothing of Market Value	Smoothing of 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	Varies, Based on Entry Age and Service	Varies, Based on Entry Age and Service	Varies, Based on Entry Age and Service
Investment Rate of Return	7.50%	7.50%	7.50%	7.50%	7.50%
LRF					
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	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 Percentage of Payroll	Level Percentage of Payroll
Remaining Amortization Periods[1]	30 years	63 years	29-30 years	30 years	30 years
Asset Valuation Method	Market Value	Market Value	Market Value	Smoothing of Market Value	Smoothing of Market Value
Inflation	2.75%	2.75%	2.75%	2.75%	2.75%
Salary Increases	3.00%	3.00%	3.00%	3.00%	3.00%
Investment Rate of Return	5.00%	5.75%	5.75%	5.75%	5.75%
JRF					
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	Level Dollar	Level Dollar	Level Dollar	Level Dollar	Level Dollar
Remaining Amortization Periods	10 years	10 years	10 years	2 years	2 years
Asset Valuation Method	Market Value	Market Value	Market Value	Market Value	Market Value
Inflation	2.75%	2.75%	2.75%	2.75%	2.75%
Salary Increases	3.00%	3.00%	3.00%	3.00%	3.00%
Investment Rate of Return	3.25%	4.25%	4.25%	4.25%	4.25%
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	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 Percentage of Payroll	Level Percentage of Payroll
Remaining Amortization Periods[1]	20-30 years	30 years	30 years	16-30 years	17-30 years
Asset Valuation Method	Market Value	Market Value	Market Value	Smoothing of Market Value	Smoothing of Market Value
Inflation	2.75%	2.75%	2.75%	2.75%	2.75%
Salary Increases	3.00%	3.00%	3.00%	3.00%	3.00%
Investment Rate of Return	6.50%	7.00%	7.00%	7.00%	7.00%

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

SCHEDULE OF INVESTMENT RETURNS

Annual Money-Weighted Rate of Return, Net of Investment Expense – Five-Year Review

Plan	2018 Rate of Return	2017 Rate of Return	2016 Rate of Return	2015 Rate of Return	2014 Rate of Return
PERF A[1]					
Agent	8.4%	11.2%	0.5%	2.2%	17.7%
PERF B[1]					
Schools Cost-Sharing	8.4%	11.2%	0.5%	2.2%	17.7%
PERF C[1]					
Public Agency Cost-Sharing	8.4%	11.2%	0.5%	2.2%	17.7%
LRF[1]	4.8%	4.3%	3.8%	(0.1%)	12.9%
JRF[1]	1.9%	1.0%	0.5%	0.2%	0.1%
JRF II[1]	7.4%	9.6%	1.9%	(0.2%)	18.3%
CERBTF[2]	7.3%	10.0%	1.6%	—	—

(1) This is a 10-year schedule. Information in this schedule is not available prior to 2014. Additional years will be added to this schedule in future years until 10 years of data is presented.
(2) Early implementation of GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* (GASB 74) results in prospective application of calculating the MWRR for the CERBTF. As such, MWRR data prior to 2016 is not available.

Required Supplementary Information (continued)

PUBLIC EMPLOYEES' HEALTH CARE FUND

Schedule of Claims Development Information (Dollars in Thousands)

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
1) Net Earned Required Premium and Investment Revenues	$3,985,393	$3,829,095	$3,801,266	$3,642,206	$2,808,384	$1,948,531	$1,912,355	$1,775,005	$1,409,621	$1,608,738
2) Unallocated Expenses	$304,408	$312,924	$355,779	$371,916	$192,987	$105,154	$96,043	$88,392	$90,292	$85,511
3) Estimated Incurred Claims and Expenses, End of Policy Year	$3,576,081	$3,391,183	$3,424,147	$3,432,102	$2,748,821	$1,921,957	$1,816,245	$1,792,599	$1,654,214	$1,530,264
4) Paid (Cumulative) as of:										
End of Policy Year	$3,039,289	$3,061,085	$3,000,726	$3,378,857	$2,122,865	$1,640,709	$1,635,839	$1,550,306	$1,444,509	$1,313,680
One Year Later	—	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134
Two Years Later	—	—	3,406,016	3,406,016	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134
Three Years Later	—	—	—	3,406,016	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134
Four Years Later	—	—	—	—	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134
Five Years Later	—	—	—	—	—	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134
Six Years Later	—	—	—	—	—	—	1,788,135	1,698,615	1,589,771	1,448,134
Seven Years Later	—	—	—	—	—	—	—	1,698,615	1,589,771	1,448,134
Eight Years Later	—	—	—	—	—	—	—	—	1,589,771	1,448,134
Nine Years Later	—	—	—	—	—	—	—	—	—	1,448,134
5) Re-Estimated Incurred Claims Expenses:										
End of Policy Year	$3,576,081	$3,391,183	$3,424,147	$3,432,102	$2,748,821	$1,921,957	$1,816,245	$1,792,599	$1,654,214	$1,530,264
One Year Later	—	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134
Two Years Later	—	—	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134
Three Years Later	—	—	—	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134
Four Years Later	—	—	—	—	2,678,906	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134
Five Years Later	—	—	—	—	—	1,796,587	1,788,135	1,698,615	1,589,771	1,448,134
Six Years Later	—	—	—	—	—	—	1,788,135	1,698,615	1,589,771	1,448,134
Seven Years Later	—	—	—	—	—	—	—	1,698,615	1,589,771	1,448,134
Eight Years Later	—	—	—	—	—	—	—	—	1,589,771	1,448,134
Nine Years Later	—	—	—	—	—	—	—	—	—	1,448,134
6) Decrease in Estimated Incurred Claims and Expenses From End of Policy Year	$0	$4,490	($18,131)	$370,175	($69,915)	($125,370)	($28,110)	($93,984)	($64,443)	($82,130)

Rows 1 through 6 contain the following information:

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

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

(3) This line shows the HCF incurred claims and allocated claim adjustment expenses (both paid and accrued) as reported at the end of the policy year. The policy year is the first year in which the triggering event under the contract occurred.

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

(5) This section shows re-estimated incurred claims as of the end of each policy year and years succeeding the policy year. Re-estimates are based on new information on new claims not previously reported.

(6) This line compares the amount of the re-estimated incurred claims to the amount initially established (line 3), and shows whether the re-estimate is greater or less than projected. As data mature for individual policy years, the correlation between initial estimates and re-estimates is used to evaluate the accuracy of incurred claims currently recognized.

Other Supplementary Information

ADMINISTRATIVE EXPENSE – ALL FUNDS (DOLLARS IN THOUSANDS)

	2018
PERSONNEL SERVICES	
Salaries & Wages	$184,202
Employee Benefits	92,523
Accrued Pension & OPEB Expense	122,980
Total Personnel Services	**$399,705**
CONSULTANT & PROFESSIONAL SERVICES	
State of California Agencies	$3,876
External Consultants	46,422
Retiree Benefit Trust Management Fees	107
Deferred Compensation Management/Custody Fees	3,565
Health Plan Administrator Fees	252,866
Long-Term Care Administrator Fees	21,221
Total Consultant & Professional Services	**$328,057**
OPERATING EXPENSES & EQUIPMENT	
General Expense	$5,783
Software	1,136
Printing	2,012
Building	25,684
Postage	3,911
Communications	928
Data Processing Services	16,343
Travel	1,575
Training	1,044
Medical Examiners	1,371
Facilities Operation	4,328
Central Administrative Services	20,499
Administrative Hearings	1,395
Consolidated Data Center	84
CSUS Foundation - Students	52
Equipment	1,890
Total Operating Expenses & Equipment	**$88,035**
OTHER EXPENSES & ADJUSTMENTS	
Depreciation Expense	$18,782
Increase in Paid Absence Obligation	1,878
Amortization	65,593
Miscellaneous	(15,757)
Total Other Expenses & Adjustments	**$70,496**
TOTAL ADMINISTRATIVE EXPENSES — ALL FUNDS	**$886,293**

Other Supplementary Information (continued)

INVESTMENT EXPENSE – ALL FUNDS

Investment Management Fees[1,2] (Dollars in Thousands)

	Fees
Equity Managers	
Allianz Global Investors U.S., LLC	$6,232
Arrowstreet Capital, LP	14,775
Baillie Gifford Overseas, Ltd.	2,194
Cartica Corporate Governance Fund, LP	6,594
Epoch Investment Partners, Inc.	8,956
First Quadrant, LP	1,079
FIS Group, Inc.	1,897
Genesis Asset Managers, LLP	110
Hamilton Lane Advisors, LLC	1,302
Hermes European Equities Limited	2,879
Huber Capital Management, LLC	(213)
J.P. Morgan Investment Management, Inc.	1,075
Lazard Asset Management, LLC	5,144
Leading Edge Investment Advisors, LLC	3,135
Legato Capital Management Investments, LLC	6,103
Progress Investment Management Company	3,890
Pyramis Global Advisors Trust Company	2,445
Pzena Investment Management, LLC	2,011
State Street Global Advisors	3,561
Strategic Investment Management, LP	3,467
The Boston Company Asset Management, LLC	592
TOBAM SAS	852
Wellington Management Company, LLP	7,734
Total Equity Managers	**$85,814**
Alliance Bernstein, LP	$410
Baring International Investment Limited	288
Bluebay Asset Management, LLP	397
Investec Asset Management North America	570
Neuberger Berman Investment Advisers, LLC	296
Pacific Investment Management Co. LLC	787
Total Fixed Income Managers	**$2,748**
Private Equity Managers[3]	
57 Stars Global Opportunities Fund 2 (CalPERS), LLC	$606
57 Stars Global Opportunities Fund, LLC	600
Aberdare Ventures IV, LP	259
Advent International GPE V-D, LP	81
Advent International GPE VI-A, LP	2,233
Advent International GPE VII-C, LP	4,373
Advent International GPE VIII-B Limited Partnership	7,455
Advent Latin America Private Equity Fund IV-D, LP	1,200
Advent Latin America Private Equity Fund V-H, LP	1,121
Advent Latin American Private Equity Fund III-D, LP	151
Affinity Asia Pacific Fund III, LP	774
Aisling Capital II, LP	(1)
Aisling Capital III, LP	518
Apollo Investment Fund VI, LP	788
Apollo Investment Fund VII, LP	1,144
Apollo Investment Fund VIII, LP	2,466

	Fees
Apollo Special Opportunities Managed Account, LP	$4,486
ArcLight Energy Partners Fund IV, LP	120
Ares Corporate Opportunities Fund III, LP	1,410
Ares Corporate Opportunities Fund V, LP	5,931
Asia Alternatives Capital Partners II, LP	230
Asia Alternatives Capital Partners, LP	77
Avenue Special Situations Fund VI (A), LP	84
Baring Vostok Private Equity Fund IV, LP	727
BDC III C, LP	2,555
Birch Hill Equity Partners (US) III, LP	13
Birch Hill Equity Partners (US) IV, LP	997
Blackstone / GSO Capital Solutions Fund, LP	550
Blackstone Capital Partners V, LP	78
Blackstone Capital Partners VI, LP	1,992
Blackstone Capital Partners VII, LP	6,250
Blackstone RL Co-Invest, LP	370
Blackstone Tactical Opportunities Fund - C, LP	5,154
Blackstone Tactical Opportunities Fund (KG Co-Invest), LP	481
Blackstone Tactical Opportunities Fund (T4U Co-Invest), LP	203
Blackstone Tactical Opportunities Fund II - C, LP	2,282
Bridgepoint Europe II 'A', LP	(10)
Bridgepoint Europe II 'C', LP	(3)
Bridgepoint Europe III 'C', LP	(6)
Bridgepoint Europe III 'D', LP	(35)
Bridgepoint Europe IV 'B', LP	661
Bridgepoint Europe IV 'D', LP	1,738
Bridgepoint Europe V	6,822
California Asia Investors, LP	303
California Emerging Ventures II, LLC	88
California Emerging Ventures III, LLC	200
California Emerging Ventures IV, LLC	562
California Mezzanine Investment Fund, LP	179
CalPERS Clean Energy & Technology Fund, LLC	568
Capital Link Fund I, LLC	477
Capital Link Fund II, LLC	380
Carlyle Asia Growth Partners III, LP	29
Carlyle Asia Growth Partners IV, LP	759
Carlyle Asia Partners II, LP	203
Carlyle Asia Partners III, LP	774
Carlyle Europe Partners III, LP	343
Carlyle Europe Technology Partners II, LP	384
Carlyle Global Financial Services Partners, LP	838
Carlyle Japan Partners II, LP	296
Carlyle Mexico Partners, LP	93
Carlyle Partners V, LP	709
Carlyle Partners VI, LP	3,486
Carlyle Strategic Partners II, LP	49
Carlyle Strategic Partners IV, LP	1,934
Carlyle U.S. Equity Opportunities II, LP	2,735
Carlyle U.S. Growth Fund III, LP	220
Carlyle/Riverstone Global Energy and Power Fund III, LP	395
CDH Fund V, LP	3,450

INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

Investment Management Fees[1,2] (Dollars in Thousands) (continued)

	Fees
Centerbridge Capital Partners III, LP	$1,555
Cerberus CAL II Partners, LP	166
Cerberus CP Partners, LP	1,043
Cerberus Institutional Partners V, LP	1,122
Clarus Lifesciences II, LP	1,041
Clayton, Dubilier & Rice Fund X, LP	1,412
Clearlake Capital Partners III, LP	(6)
Clearlake Capital Partners IV, LP	846
Clearlake Capital Partners V, LP	153
Clearlake Opportunities Partners (P), LP	691
Clearwater Capital Partners Fund III, LP	570
Coller International Partners V-A, LP	2,441
Craton Equity Investors I, LP	180
CVC Capital Partners Strategic Opportunities Compounding Capital, LP	5,700
CVC Capital Partners VI, LP	6,371
CVC Capital Partners VII (A), LP	1,944
CVC Credit Strategic Investment A, LP	1,996
CVC European Equity Partners IV (D), LP	(3)
CVC European Equity Partners Tandem Fund (B), LP	(4)
CVC European Equity Partners V (B), LP	550
EM Alternatives Investments, LP	200
Essex Woodlands Health Ventures Fund VIII, LP	1,460
First Reserve Fund XII, LP	1,419
First Reserve Fund XIII, LP	4,653
Francisco Partners II, LP	170
Francisco Partners III, LP	881
GCM Grosvenor DEM II, LP	1,250
GCM Grosvenor DEM, LP	459
Golden State Investment Fund, LLC	224
Green Equity Investors IV, LP	(42)
Green Equity Investors V, LP	(136)
GSO Capital Opportunities Fund II, LP	1,345
GSO Capital Opportunities Fund, LP	36
GSO Capital Solutions Fund II, LP	2,982
GSO Energy Partners-C II, LP	1,167
GSO Energy Partners-C, LP	1,925
Hellman & Friedman Capital Partners VI	190
Hellman & Friedman Capital Partners VII	1,190
Hellman & Friedman Capital Partners VIII, LP	4,671
Insight Venture Partners Growth-Buyout Coinvestment Fund (B), LP	4,126
Insight Venture Partners IX, LP	1,810
Insight Venture Partners VI, LP	28
Insight Venture Partners X, LP	1,580
Ithaca, LP	—
Khosla Ventures III, LP	2,000
Khosla Ventures Seed, LP	837
KKR 2006 Fund, LP	365
KKR Asian Fund II, LP	1,475
KKR Asian Fund, LP	270
KKR European Fund II, LP	114

	Fees
KKR European Fund III, LP	$856
KKR Millennium Fund, LP	1
Kline Hawkes Pacific, LP	(33)
KM Corporate Partners Fund II, LP	690
KPS Special Situations Fund III, LP	313
Lime Rock Partners IV, LP	179
Lime Rock Partners V, LP	513
Lindsay Goldberg IV, LP	4,684
Lion Capital Fund II, LP	528
Magnum Capital, LP	144
MHR Institutional Partners III, LP	1,453
Newbridge Asia IV, LP	187
Oak Hill Capital Partners II, LP	50
Oak Hill Capital Partners III, LP	1,432
Oaktree Opportunities Fund VIIIb, LP	1,988
Onex Partners IV, LP	4,684
PAG Asia I, LP	670
Palladium Equity Partners III, LP	(8)
Patria Brazilian Private Equity Fund V, LP	3,010
Permira Europe III	(1)
Permira IV, LP 2	(19)
Permira V, LP	2,842
Permira VI, LP 1	6,435
Polish Enterprise Fund VI, LP	444
Providence Equity Partners VI, LP	383
RFG Private Equity Limited Partnership No. 1A, 1B and 1C	59
Richardson Capital Private Equity Limited Partnership No.2A, 2B and 2C	17
Riverstone Global Energy and Power Fund V, LP	2,274
Riverstone Global Energy and Power Fund VI, LP	7,367
Riverstone/Carlyle Global Energy and Power Fund IV, LP	949
Riverstone/Carlyle Renewable & Alternative Energy Fund II, LP	1,195
Riverwood Capital Partners (Parallel - A), LP	335
Sacramento Private Equity Partners, LP	1,000
SAIF Partners III, LP	1,020
SAIF Partners IV, LP	1,899
Sankaty Managed Account (CalPERS), LP	4,232
Silver Lake Partners III, LP	1,013
Silver Lake Partners IV, LP	3,132
Silver Lake Partners V, LP	711
Siris Partners III, LP	861
SL SPV-1, LP	190
Tailwind Capital Partners (PP), LP	412
Tailwind Capital Partners II, LP	839
The Central Valley Fund II SBIC, LP	208
The Resolute Fund II, LP	687
The Rise Fund (A), LP	1,259
Thomas H. Lee Equity Fund VI, LP	120
TowerBrook Investors III, LP	606
TowerBrook Investors IV (Onshore), LP	6,750
Towerbrook Structured Opportunities Fund (Onshore), LP	1,754

INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

Investment Management Fees[1,2] (Dollars in Thousands) (continued)

	Fees
TPG Asia V, LP	$684
TPG Biotechnology Partners III, LP	185
TPG Growth IV, LP	662
TPG Partners V, LP	(62)
TPG Partners VI, LP	2,647
TPG STAR, LP	181
Trident VI	3,304
Trident VII, LP	3,803
Triton Fund IV, LP	1,465
T-VI Co-Invest-A, LP	(195)
Valor Equity Partners IV, LP	574
VantagePoint CleanTech Partners, LP	67
VantagePoint Venture Partners 2006 (Q), LP	769
Vicente Capital Partners Growth Equity Fund, LP	242
W Capital Partners II, LP	432
Welsh, Carson, Anderson & Stowe X, LP	28
Welsh, Carson, Anderson & Stowe XI, LP	396
Welsh, Carson, Anderson & Stowe XII, LP	4,882
Wigmore Street (BDC III), LP	3
Wigmore Street Co-investment No.1, LP	2
WLR Recovery Fund IV, LP	1,852
Yucaipa American Alliance Fund II, LP	3,035
Yucaipa Corporate Initiatives Fund II, LP	310
Total Private Equity Managers	**$246,376**
Real Asset Managers	
301 Capitol Mall, LP	$92
AGI Resmark Housing Fund, LLC	387
Alinda Infrastructure Fund I, LP	205
Alinda Infrastructure Fund II, LP	2,046
ARA Asia Dragon Fund II	525
ARA China Long Term Hold	6,023
Archmore International Infrastructure Fund II (B), LP	446
Archmore International Infrastructure Fund II (C), LP	947
Asia Pacific Property Fund SCSP	719
CalEast Canada Limited Partnership	19
CalEast Industrial Investors, LLC	197
CalEast Solstice - Base	10,784
CalEast Solstice - DT Land	2,304
CalEast Solstice - DT Other	2,912
CalWest - CalPERS	16
Canyon Catalyst Fund II, LLC	1,200
Canyon Catalyst Fund, LLC	521
Carlyle Infrastructure Partners, LP	169
CBRE Strategic Partners UK Fund II	59
CIM Fund III, LP	4,981
CIM Infrastructure Fund, LP	2,078
CIM Urban Real Estate Fund, LP	4,066
FSP - Base	21,003
FSP - DT 2012 and Beyond	6,154
Global Infrastructure Partners II, LP (GIP II)	2,697
Golden Reef Infrastructure Trust	2,133

	Fees
GRI - Base	$14,483
Harbert Gulf Pacific Power, LLC (HGPP)	3,680
Harbert Power Fund V, LP (HPF V)	1,070
HC Green Development Fund, LP	448
HC NOP Holdings, LP	118
HCB Interests II, LP	1,551
HCB LTH	4,121
HCC Interests, LP	227
HCR LTH, LLC	4,008
Hearthstone Housing Partners II, LLC	172
IHP Investment Fund I, LP	419
IHP Investment Fund III, LP	2,637
IMI - Base	24,328
IMP - Base	21,042
IMP - DT 2012 and Beyond	1,462
Institutional Core Multifamily Investors	3,814
Institutional Logistics Partners, LLC	3,567
KC 2011, LLC	2,448
KSC Affordable Housing Investment Fund, LLC	588
Land Management Company, LLC	2,482
Lincoln Timber, LP	4,693
North Haven Infrastructure Partners II, LP	1,799
ORA Multifamily Investments I, LLC	2,121
ORA Residential Investments I, LP	1,437
Pacific Multifamily Investors, LLC	4,264
PLA Retail Fund I, LP	20
Sacramento Venture - Base	93
Sacramento Venture - DT	102
Stockbridge Hollywood Park Co-Investors, LP	312
Stockbridge Real Estate Fund II -B, LP	114
Sylvanus, LLC	1,938
TechCore, LLC	8,335
Whitney Ranch Venture, LLC	1,184
Xander Co-Investment	55
Total Real Asset Managers	**$191,815**
Other Investment Management Fees	
AQR	$3,973
Brookside Capital Partners Fund, LP	27
Deephaven Market Neutral, LLC	2
Long Tail Alpha	1,577
OZ Domestic Partners II, LP	5
OZ Eureka Fund, LP	453
PWP Dynamic	292
Standard Life	4,761
Universa	9,884
Total Other Investment Management Fees	**$20,974**
Total Management Fees	**$547,727**

(1) Expenses and fees less than a thousand dollars are indicated by a dash.
(2) Negative management fees are due to adjusting entries.
(3) CalPERS makes a good faith attempt to account for fees that are not readily separable. These management fees are net of management fee offsets. For more detail, see the Private Equity Management Fees & Profit Sharing table in the Investment Section.

Other Supplementary Information (continued)

INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

Performance Fees[1] (Dollars in Thousands)

	Fees
Equity Managers	
Arrowstreet Capital, LP	$7,371
Baillie Gifford Overseas, Ltd.	15,591
J.P. Morgan Investment Management, Inc.	2,856
Pzena Investment Management, LLC	138
The Boston Company Asset Management, LLC	794
Total Equity Managers	**$26,750**
Fixed Income Managers	
Alliance Bernstein, LP	$759
Baring International Investment Limited	192
Pacific Investment Management Co. LLC	2,415
Total Fixed Income Managers	**$3,366**
Real Asset Managers	
AGI Resmark Housing Fund, LLC	$1,683
Blackstone Property Partners Europe, LP	1,625
CalEast Canada Limited Partnership	(20)
CalEast Solstice, LLC	(250)
Canyon Catalyst Fund II, LLC	410
Canyon Catalyst Fund, LLC	(540)
Canyon Johnson Urban Fund, III	201
CIM Fund III, LP	(7,482)
CIM Infrastructure Fund, LP	(514)
FSP - DT 2012 and Beyond	(10,420)
Global Infrastructure Partners II, LP (GIP II)	9,930
Golden Reef Infrastructure Trust	747
GRI - Base	10,196
Harbert Gulf Pacific Power, LLC (HGPP)	7,511
Harbert Power Fund V, LP (HPF V)	1,003
HCB Interests II, LP	(230)
IHP Investment Fund I, LP	3,600
IMI - Base	15,782
IMP - DT 2012 and Beyond	10,841
Institutional Core Multifamily Investors	439
Institutional Logistics Partners, LLC	2,808
Ivy Investment Vehicle LDC (SWPM)	52,482
LaSalle Japan Logistics Fund II, LP	117
ORA Multifamily Investments I, LLC	10,128
ORA Residential Investments I, LP	1,225
Pacific Multifamily Investors, LLC	6,138
Sacramento Venture - DT	91
TechCore, LLC	6,497
Total Real Asset Managers	**$123,998**

	Fees
Other Investment Managers	
AQR	$9,987
Brookside Capital Partners Fund, LP	76
OZ Domestic Partners II, LP	(28)
OZ Eureka Fund, LP	1,599
Total Other Investment Managers	**$11,634**
Total Performance Fees	**$165,748**
Total Management and Performance Fees	**$713,475**

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

Other Supplementary Information (continued)

INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

Other Investment Expenses[1,2] (Dollars in Thousands)

	Fees
Advisory Fees	
Alliance Bernstein, LP	$984
AXA Rosenberg Investment Management, LLC	78
FIS Group, Inc.	1,000
Goldman Sachs Asset Management, LP	903
Lazard Asset Management, LLC	748
Leading Edge Investment Advisors, LLC	1,000
Legato Capital Management, LLC	1,750
Progress Investment Management Company	1,000
QS Investors, LLC	910
Quantitative Management Associates, LLC	581
Research Affiliates, LLC	1,249
Strategic Investment Management, LP	1,000
TOBAM SAS	738
Total Advisory Fees	**$11,941**
Appraisal Fees	
Altus Group U.S. Inc.	($329)
RERC, LLC	6,088
Total Appraisal Fees	**$5,759**
Auditor Fees	
Cohn Reznick, LLP	$6
KPM & Associates, LLP	59
Total Auditor Fees	**$65**
Company Expense	
FIS Group, Inc.	$80
Leading Edge Investment Advisors, LLC	146
Legato Capital Management, LLC	272
Long Tail Alpha	64
Progress Investment Management Company	142
Strategic Investment Management, LP	19
Universa	131
Total Company Expense	**$854**
Fund Administration Fees	
State Street Bank and Trust Company	$2,680
Total Fund Administration Fees	**$2,680**
Investment Consultant Fees	
Adviser Compliance Associates, LLC	$40
Bard Consulting, LLC	617
BDO USA, LLP	25
Courtland Partners, Ltd	87
Crosswater Realty Advisors, LLC	351
Cutter Associates, LLC	154
Edhec Business School	—
Edhec Risk Consulting (ERC)	20

	Fees
Ernst & Young, LLP	$276
FTI Consulting, Inc.	—
Garland Associates, Inc.	246
Mercer Investment Consulting, LLC	234
Mosaic Investment Advisors, Inc.	219
MSys International, Inc.	135
Newport Board Group, LLC	86
Northfield Information Services, Inc.	38
Pacific Alternative Asset Mgmt Company	67
Pacific Community Ventures, Inc.	383
Pavilion Alternatives Group, LLC	91
Pension Consulting Alliance, LLC	(24)
Persell Design Group, LLC	18
Propoint Technology, Inc.	2,154
Pyramid Technical Consultants, Inc.	240
Qualapps, Inc.	(16)
RCLCO	81
RVK, Inc.	103
Ryedale, Inc.	534
SRI Infotech, Inc.	337
Technology Crest Corporation	184
The Spaulding Group	84
Trinity Technology Group, Inc.	164
University of California, Davis	23
Wilcox, Miller & Nelson	100
Total Investment Consultant Fees	**$7,051**
Legal Fees	
AlvaradoSmith, a Professional Corporation	$0
Berman Tabacco	201
Cox, Castle & Nicholson, LLP	35
Foster Pepper, PLLC	59
Hogan Lovells, US, LLP	144
Jackson Walker, LLP	102
K & L Gates, LLP	322
Katten Muchin Rosenman, LLP	15
Morgan Lewis & Bockius, LLP	369
Nixon Peabody, LLP	4
Orrick Herrington & Sutcliffe, LLP	184
Pillsbury Winthrop Shaw Pittman, LLP	709
Reed Smith, LLP	116
Steptoe & Johnson, LLP	69
Vasquez Benisek & Lindgren, LLP	4
Wilson Sonsini Goodrich & Rosati	183
Total Legal Fees	**$2,516**
Master Custodian Fees	
State Street Bank and Trust Company	$4,951
Total Master Custodian Fees	**$4,951**

Other Supplementary Information (continued)

INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

Other Investment Expenses[1,2] (Dollars in Thousands) (continued)

	Fees
Tax Advisory Fees	
Ernst & Young, LLP	$1,001
Total Tax Advisory Fees	**$1,001**
Technology Expenses	
13D Research, Inc	$60
Acadiasoft, Inc.	10
Axioma, Inc.	230
Barclays Capital	81
Barra, Inc.	453
Barra, LLC	2,100
BCA Research	259
Blackrock Financial Management, Inc.	9,134
Bloomberg, LP	2,828
Cambridge Associates, LLC	50
Candeal, Inc.	17
Carahsoft Technology Corp.	130
Charles River Systems, Inc.	1,559
Convergence, Inc.	35
Cornerstone Macro, LP	120
Cost Effectiveness Measurement, Inc.	70
Costar Investment Analysis	160
Covenant Review, LLC	47
Credit Market Analysis Limited	24
Creditsights	103
Dow Jones & Company, Inc.	6
eFront Financial Solutions, Inc.	1,822
eMBS, Inc.	9
Empirical Research Partners, LLC	400
ePlus Technology, inc.	2
Equilar, Inc.	52
Esai Energy, LLC	13
Etrali North America, LLC	304
Eurasia Group	138
Euromoney Trading Limited	17
eVestment Alliance	43
Factset Research Systems, Inc.	2,625
Fitch Ratings, Inc.	55
Fitch, Inc.	226
Frank Russell Company	33
FTSE	700
FX Alliance, Inc.	1
Gartner, Inc.	134
GaveKal Capital Management Limited	45
Glass Lewis & Co., LLC	528
Global Investor Collaboration Svcs., LLC	5
Green Street Advisors	125
Heteronomics	8
IHS Global, Inc.	75
Institutional Shareholder Services, Inc.	190
Intex Solutions, Inc.	254
Investment Property Databank	52

	Fees
Ives Group, Inc.	$13
Kyriba Corporation	43
London Stock Exchange PLC	38
Macroeconomic Advisers, LLC	19
Markit Indices Limited	28
Markit North America, Inc.	49
Microsoft Services	4
Moody's Analytics, Inc.	484
Mountainview Analytics, LLC	5
MRB Partners, Inc.	50
MRI Software, LLC	282
MSCI, Inc.	563
MUFG Capital Analytics, LLC	5,288
NYSE Market, Inc.	11
Omgeo	93
Option Research & Technology Services, LLC	38
Options Price Reporting Authority	2
Preqin Limited	44
Quantal International, Inc.	45
Radianz Americas, Inc.	169
Real Capital Analytics, Inc.	143
Ryedale Europe Limited	690
S&P Global Market Intelligence, LLC	1,564
S&P Dow Jones Indices, LLC	66
SASB Foundation, The	4
Shareholder Value Advisors, Inc.	5
StepStone Group, LP	163
Stone & Kanto, LLC	9
Summit Financial Printing, LLC	8
Sustainalytics U.S., Inc.	30
The Depository Trust & Clearing Corp.	20
The Mathworks, Inc.	85
The Statestore, Inc.	5
The Yield Book, Inc.	185
Thomson Financial/Nelson	300
Trade Web	132
Trend Macrolytics, LLC	27
TRGRP, Inc.	196
TriOptima AB	38
TSX, Inc.	20
Viola Risk Advisors, LLC	2
William O'Neil & Company	30
Wood Mackenzie, Inc.	33
Yardeni Research, Inc.	19
Zeno Consulting Group, LLC	48
Total Technology Expenses	**$36,422**
Internal Investment Personnel and Administrative	
Internal Investment Personnel and Administrative Expenses	$76,148
Total Internal Investment Personnel and Administrative	**$76,148**

Other Supplementary Information (continued)

INVESTMENT EXPENSE – ALL FUNDS (CONTINUED)

Other Investment Expenses[1,2] (Dollars in Thousands) (continued)

	Fees
Miscellaneous Investment Expense Fees	
Miscellaneous Investment Expense Fees	$2,309
Transaction Fees	83,189
Total Miscellaneous Investment Expense Fees	**$85,498**
Total Other Investment Fees and Expenses	**$234,886**
Total Investment Expenses - All Funds	**$948,361**

(1) Expenses and fees less than a thousand dollars are indicated by a dash.
(2) Negative expenses are due to market fluctuations, adjusting entries, and reimbursements.

Other Supplementary Information (continued)

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

Individual or Firm	Fees	Nature of Services
314e Corporation	$206	Test Planning, Test Preparation, and Test Execution of the My|CalPERS and CalPERS Education Center Applications
Anthem Blue Cross	110,756	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention and Disease Management Services
ATV Video Center, Inc.	147	Video and Multimedia Production Services
Avenue Solutions	155	Management Analysis
Bedrosian & Associates	26	Succession and Workforce Planning
Belmonte Enterprises, LLC	1,140	Application Development, Information Services, Project Management Services
Blue Shield of California	63,806	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention and Disease Management Services
Capio Group	205	Application Development
Carahsoft Technology Corp.	100	Innovation and Development
Cheiron, Inc.	162	Audit Services
CoachSource, LLC	34	Organizational and Leadership Development
Conduent HR Consulting, LLC	1,178	Systems Analysis, Design, Implementation, Maintenance and Support
Cooperative Personnel Services, Inc.	102	Organizational and Leadership Development
Cornerstone Fitness, Inc.	77	Employee Training and Development
CVS Caremark	(680)	Pharmacy Claims Administration, Account Management, Eligibility, Retail & Other Reporting Services
Delegata Corporation	1,010	Application Development, Project Management Services, Business Intelligence and Reporting
Department of Human Resources	60	Election Forms for the Alternate Retirement Program (ARP) Processing Services
Department of Justice	173	Conduct & Provide External Investigative Services
DLT Solutions	229	Software Installation, Implementation and Configuration Services
Domain Experts Corporation	83	Recruiting and Placement
Drinker Biddle & Reath, LLP	27	Legal Services
DSS Research	148	Medical Consulting Services
Eaton Interpreting Services, Inc.	111	Interpreting Services
Elynview Corporation	197	Systems Analysis, Design, Implementation, Maintenance and Support, Data Base Administration
Enterprise Networking Solutions, Inc.	240	IT Architecture, Systems Analysis, Design, Implementation, Maintenance and Support
Enterprise Services, LLC	223	Data Base Administration, Systems Analysis, Design, Implementation, Maintenance and Support
Equanim Technologies	613	Business Process Re-engineering, Management Support Services, Project Management Services, Project Oversight Services, Technical Writing
Ernst & Young, LLP	132	Consulting Services for Enterprise Business Continuity
Esoft Infosystems, Inc.	619	Data Base Administration, Systems Analysis, Design, Implementation, Maintenance and Support
Eterasys Consulting, Inc.	356	Application Development, Data Base Administration
First Data Merchant Services Corporation	73	Banking Services
Gartner, Inc.	139	Management Support Services
Government Operations Agency	336	Operations and Strategic Business Planning
Grant Thornton, LLP	(27)	Project Management Services, Project Oversight Services, Release Management/Quality Assurance/Configuration Management, Business Transformation/Transition
H&B Joint Venture	685	Release Management/Quality Assurance/Configuration Management, Business Transformation/Transition
Health Net of California	16,857	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention and Disease Management Services
Heidrick & Struggles	109	Recruiting and Placement
HSB Solutions, Inc.	35	CA Privileged Access Management Technical Support Services
Indecomm Holdings, Inc.	58	Professional Services for the Installation, Configuration, and Usage of the AutomationNG Testing Solution
Innovative Software Technologies, Inc.	579	Specialized IT Support Services for Actuarial Systems/Business

Other Supplementary Information (continued)

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

Individual or Firm	Fees	Nature of Services
IVS/Everyone Counts, Inc.	$2,952	Election services
J & K Court Reporting, LLC	97	Legal Services
JLynn Consulting, Inc.	899	Application Development, Information Services
K & L Gates, LLP	306	Legal Services
KearnFord Application Systems Design	3,021	Information Services, Management Support Services, Project Management Services, Business Transformation/Transition, Release Management/Quality Assurance/Configuration Management
King & Spalding, LLP	301	Legal Services
Knowledge Structures, Inc.	45	Employee Training and Development
Kong Consulting, Inc.	511	Systems Analysis, Design, Implementation, Maintenance and Support
Kronick, Moskovitz, Tiedemann & Girard	22	Legal Services
Leadership Strategies, Inc.	26	Training for Meeting Facilitation
Long-Term Care Group, Inc.	20,794	Third-Party Member Record Keeper, Medical Claims Administration, Eligibility, Retail & Other Reporting Services, IT Services
Lussier Group	130	Management Analysis, Legal Services
Macias Gini & O'Connell LLP	3,058	Audit Services
Mara Consulting, Inc.	224	Data Analysis and Data Correction Services for the My|CalPERS Retirement Application
Matrix Software Services	191	Data Base Administration, Systems Analysis, Design, Implementation, Maintenance and Support
Maximus Federal Services, Inc.	27	Medical Consulting Services
Mellon Bank	335	Banking services
Mercer	515	Medical and Health Care Consulting Services
Merrill Communications, LLC	103	Health Open Enrollment Communication Dissemination
Michael Scales Consulting, LLC	265	Application Development
Milliman, Inc.	2,613	Project Management Services
Mindstorm Creative, Inc.	72	Video and Multimedia Production Services
NetCentric Technologies, Inc.	89	PDF Accessibility Remediation, Subscription to CommonLook Global Access
Nexus IS, Inc.	53	Systems Analysis, Design, Implementation, Maintenance and Support
Northeast Retirement Services	107	Third-Party Member Record Keeper
Nossaman, LLP	31	Legal Services
OnCore Consulting, LLC	8,951	Information Services, IT Architecture, Systems Analysis, Design, Implementation, Maintenance and Support, Application Development
Ope Technology, LLC	467	Release Management/Quality Assurance/Configuration Management, Business Transformation/ Transition
OptumRx	18,635	Pharmacy Claims Administration, Account Management, Eligibility, Retail and Other Reporting Services
Orrick Herrington & Sutcliffe, LLP	303	Legal Services
Pasanna Consulting Group, LLC	1,867	Application Development, Data Base Administration, IT Architecture, Systems Analysis, Design, Implementation, Maintenance and Support
Performance Technology Partners, LLC	345	Application Development
Planet Technologies, Inc.	100	Systems Analysis, Design, Implementation, Maintenance and Support
President and Fellows of Harvard College	50	Innovation and Development
Princeton Solutions Group, Inc.	702	Business Transformation/Transition, Project Management Services, Release Management/Quality Assurance/Configuration Management
Providence Technology Group, Inc.	156	Consulting Services for Security Governance Program
Qualapps, Inc.	1,569	Application Development, Business Process Re-engineering, IT Architecture, Technical Writing
Recon Distribution, Inc.	159	Exhibition Management
Reed Smith, LLP	(600)	Legal Services

Other Supplementary Information (continued)

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

Individual or Firm	Fees	Nature of Services
Root9B Technologies, Inc.	$21	Project Oversight Services, Project Management Services
RVK, Inc.	20	Market Analysis
Saba Software, Inc.	89	Employee Training and Development
Shah & Associates, A Professional Law Company	127	Legal Services
Sharp Health Plan	5,614	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention and Disease Management Services
Shooting Star Solutions, LLC	42	IT Security
Sign Language Interpreting Service Agency	21	Interpreting Services
Softsol Technologies, Inc.	373	Business Transformation/Transition, Release Management/Quality Assurance/Configuration Management, Business Intelligence and Reporting
Sophus Consulting	150	Legal Services
SRI Infotech, Inc.	220	Data Base Administration, Systems Analysis, Design, Implementation, Maintenance and Support
State Controller's Office	5,427	Account Management, Performance Management and Program Evaluation, Information Services, Other Post Employment Benefits, General Administrative Services, and Premium Remittance Services
State Personnel Board	95	Compliance Review, Audit, and Processing of Appeals and Complaints
State Treasurer's Office	46	Wiring Services
Steptoe & Johnson, LLP	823	Legal Services
T5 Consulting	1,792	Application Development, Business Intelligence and Reporting, Information Services
Take 1 Productions	80	Video and Multimedia Production Services
Technology Crest Corporation	257	Release Management/Quality Assurance/Configuration Management
Teranomic	26	Project Management Services
The Ballard Group, Inc.	173	Business Transformation/Transition, Release Management/Quality Assurance/Configuration Management
The Regents of the University of California	282	Organizational and Leadership Development
The Taylor Feldman Group, LLC	34	Management Support Services
Trinity Technology Group, Inc.	1,080	Business Intelligence and Reporting, Information Services, IT Architecture
United Health Actuarial Services, Inc.	1,376	Medical Consulting Services
United Healthcare	33,655	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention and Disease Management Services
Unleashing Leaders, Inc.	33	Organizational and Leadership Development
Vantage Consulting Group, Inc.	607	Business Process Re-engineering, IT Architecture, Technical Writing
VanWrite Writing Consultants, LLC	43	Employee Training and Development
Vasquez Benisek & Lindgren, LLP	39	Legal Services, Intellectual Property Law
Viaspire	80	Marketing Services, Social Media Services, Writing and Editorial Services
Visionary Integration Professionals, LLC (VIP)	166	Business Process Re-engineering, Technical Writing
Voya	3,565	Third-Party Member Record Keeper
VPI Strategies	29	Employee Training and Development
Western Health Advantage	1,401	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation & Development, Wellness, Prevention and Disease Management Services
Worktank Enterprises, LLC	60	Video and Multimedia Production Services, Web Event Services
Various	241	
Total Consultant and Professional Services Expenses	**$328,057**	

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