BASIC FINANCIAL STATEMENTS

Fiscal Year Ended June 30, 2020

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

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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, 2020. It is a narrative overview and analysis that is presented 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 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 finished the third year of its *2017-22 Strategic Plan*. This plan is a blueprint that guides the enterprise to meet the investment, retirement, and health benefit needs of our members and their families.

The *2017-22 Strategic Plan* was developed over the course of a year-long effort by CalPERS Board of Administration (the 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.

The current 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

The *2017-22 Strategic Plan* includes the annual Business Plan Initiatives. The 2019-20 Business Plan Initiatives allowed the organization to set priorities and assisted in the allocation of resources. It aligned to the 2019-20 budget cycle to accomplish the goals and objectives of the strategic plan. CalPERS identified 28 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, 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 time frame, accelerating notifications to the Board and members, and adopting a risk oversight process to improve early detection of financial hardship issues. In Fiscal Year 2019-20, CalPERS continued the 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 modifications to the amortization policy during Fiscal Year 2017-18. Changes to the amortization policy included shortening the period over which actuarial gains and losses are amortized from 30 to 20 years for new Unfunded Accrued Liability (UAL) bases established June 30, 2019 and later.

- CalPERS' five-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
    - Diversity and Inclusion
    - Manager Expectations
    - Research
    - Private Equity Fee and Profit Sharing Transparency

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

OVERVIEW OF THE FINANCIAL STATEMENTS AND ACCOMPANYING INFORMATION

Management's Discussion & Analysis provides an overview of the financial position, which is comprised of 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, 2020. 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 5.0 percent and a realized time-weighted rate of return of 4.7 percent in Fiscal Year 2019-20 resulting from positive performance across most globally diversified asset classes. Drivers of the PERF's investment return include a strong performance from fixed income. Real assets and public equity returns reflected market volatility, but performed relatively well. Additionally, investment allocation changes made during the period in response to financial market volatility contributed positively to fund performance.

- CalPERS requested health plans to submit estimated 2021 rates reflecting COVID-19 impacts in May 2020. The preliminary 2021 premiums with COVID-19 impacts for CalPERS health plans were submitted to the CalPERS Board of Administration in June 2020, with final rates adopted the following month. The overall impact of COVID-19 on CalPERS' 2021 rate was projected to be an increase of 0.57 percent.

- The California Employers' Pension Prefunding Trust Fund (CEPPTF) was created on September 21, 2018, pursuant to Senate Bill (SB) 1413, Chapter 665, Statutes of 2018. The CEPPTF is reported as an investment trust fund under the fiduciary statements effective Fiscal Year 2019-20.

- During the calendar year 2020, the World Health Organization announced a global health emergency from a new strain of coronavirus (COVID-19) that has resulted in a global pandemic outbreak. This pandemic has adversely affected global economic activity and greatly contributed to uncertainty and instability in the global financial markets. CalPERS investment portfolio was exposed to the volatility of the financial markets during the last half of Fiscal Year 2019-20 but was also well positioned to take advantage of new investment opportunities that were present during this time. While negative market conditions could have an impact on CalPERS' ability to earn the actuarial assumed rate of return and negatively impact the receipt of contributions and premiums due from public agencies and participants, CalPERS cannot predict the impact of the COVID-19 pandemic. Although CalPERS cannot estimate the length or gravity of the impact of the COVID-19 outbreak at this time, management continues to closely monitor the situation, to assess further possible adverse implications that may occur to operations, investments, public agencies and participants, and to take actions to mitigate resulting consequences.

  On March 27, 2020, President Trump signed into law the "Coronavirus Aid, Relief, and Economic Security (CARES) Act." The CARES Act, among other things, includes several relief provisions available to tax-qualified retirement plans and their participants. CalPERS has assessed the applicability of such funds and has not acted to take part in applying for and receiving any such relief funds. Management is continuing to monitor applicability of any new funding or programs that may become available.

BASIC FINANCIAL STATEMENTS

The June 30, 2020, financial statements separate the funds administered by CalPERS into two categories: fiduciary funds and proprietary funds. With the exception of Old Age and Survivors' Insurance Revolving Fund (OASI), CalPERS' role as a trustee and monitoring of financial position occur in both categories, and 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), Legislators' Retirement Fund (LRF), JRF, Judges' Retirement Fund II (JRF II), Public Employees' Deferred Compensation Fund (DCF), Supplemental Contributions Program Fund (SCPF), CEPPTF, Annuitants' Health Care Coverage Fund, also known as California Employers' Retiree Benefit Trust Fund (CERBTF), OASI, and Replacement Benefit Fund (RBF). Generally, 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, 2020, along with comparative total information as of, and for, fiscal year ended June 30, 2019. 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 Public Employees' Health Care Fund (HCF), Public Employees' 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, 2020, along with comparative total information as of, and for, fiscal year ended June 30, 2019. 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 information on cash and cash equivalents.

Note 4 – provides detail on the fair value of investments, and information on MWRR.

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 CEPPTF, including plan members, participating employers, and contributions.

Note 10 – provides information about the CERBTF, including plan members, participating employers, and contributions.

Note 11 – provides information about the RBF, as well as applicable internal revenue and government codes.

Note 12 – provides detailed information about the OASI.

Note 13 – provides detailed information about the HCF and the estimated claims liability of the HCF.

Note 14 – provides additional information about participating agencies and insurance premiums paid by the CRF.

Note 15 – provides information about the LTCF actuarial valuation and the estimated liability for future policy benefits.

Note 16 – provides information on potential contingencies of CalPERS.

Note 17 – 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, school, 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 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 $19.8 billion or 5.3 percent from $372.6 billion as of June 30, 2019, to $392.5 billion as of June 30, 2020, primarily due to continued market growth. Receivables decreased $0.4 billion or 10.2 percent due to lower outstanding investment trades. Investment balances increased by $19.5 billion from $376.3 billion as of June 30, 2019, to $395.8 billion as of June 30, 2020, due to continued market growth. Securities lending collateral decreased $3.1 billion or 71.7 percent, and securities lending obligations decreased $3.1 billion or 71.7 percent as a result of an overall decrease in demand to borrow securities at year-end. Capital Assets, Net and Other Assets decreased $79.1 million or 18.7 percent primarily due to increased cumulative amortization of capitalized intangible assets related to myCalPERS software development.

Similar to receivables, retirement benefits, investment settlement and other liabilities decreased $1.1 billion or 13.6 percent primarily due to lower outstanding investment trades. Total net pension and OPEB liabilities increased by $28.5 million or 2.8 percent. Net pension liability increased primarily as a result of lower contributions and an unfavorable difference between expected and actual experience. Net OPEB liability also increased due to a decrease in the blended discount rate.

Additions to the PERF net position include member contributions, employer contributions, nonemployer contributions and investment income. Member contributions increased $0.2 billion or 5.1 percent. Employer and nonemployer contributions increased $7.3 billion or 47.0 percent. Employer contribution rates increased between 0.8 percent and 4.0 percent for state, 1.7 percent for schools, and between 1.9 percent and 4.8 percent on average for public agency miscellaneous and safety plans. Additionally, a large state supplemental employer contribution of $2.5 billion and nonemployer contribution of $904 million was received in Fiscal Year 2019-20.

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 $18.5 billion in Fiscal Year 2019-20, compared to $23.0 billion in Fiscal Year 2018-19, a decrease of $4.5 billion or 19.4 percent due to lower investment returns in Fiscal Year 2019-20. The current year returns were bolstered by strong performance in fixed income markets. The PERF recognized a MWRR of 5.0 percent for Fiscal Year 2019-20 compared with 6.5 percent for Fiscal Year 2018-19.

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 2019-20, retirement, death, and survivor benefits payments increased $1.6 billion or 6.5 percent, primarily due to cost-of-living increases in benefit payments, and an increase in the number of retirees and beneficiaries from 712,115 as of June 30, 2019, to 732,529 as of June 30, 2020. Administrative expenses for CalPERS personnel increased $0.3 billion or 107.7 percent, primarily due to an increase in the state's pension and OPEB expenses as a result of increased net pension and OPEB liabilities.

Fiduciary Net Position – PERF (Dollars in Thousands)

	PERF A Agent	PERF B Cost-Sharing Schools	PERF C Cost-Sharing Public Agencies	2020 PERF Total	2019 PERF Total	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	$364,515	$90,632	$41,575	$496,722	$664,713	($167,991)
Receivables	2,825,293	813,062	265,075	3,903,430	4,346,843	(443,413)
Investments	290,570,602	72,097,875	33,150,486	395,818,963	376,301,885	19,517,078
Securities Lending Collateral	899,153	223,563	102,554	1,225,270	4,334,507	(3,109,237)
Capital Assets, Net & Other Assets	251,823	62,613	28,722	343,158	422,242	(79,084)
Total Assets	**$294,911,386**	**$73,287,745**	**$33,588,412**	**$401,787,543**	**$386,070,190**	**$15,717,353**
Deferred Outflows of Resources	$94,443	$23,482	$10,772	$128,697	$108,084	$20,613
Total Assets and Deferred Outflows of Resources	**$295,005,829**	**$73,311,227**	**$33,599,184**	**$401,916,240**	**$386,178,274**	**$15,737,966**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement Benefits, Investment Settlement & Other	$5,251,008	$1,274,146	$579,210	$7,104,364	$8,219,837	($1,115,473)
Net Pension & OPEB Liabilities	758,151	188,505	86,471	1,033,127	1,004,655	28,472
Securities Lending Obligations	899,449	223,636	102,587	1,225,672	4,324,097	(3,098,425)
Total Liabilities	**$6,908,608**	**$1,686,287**	**$768,268**	**$9,363,163**	**$13,548,589**	**($4,185,426)**
Deferred Inflows of Resources	$73,777	$18,344	$8,415	$100,536	$18,252	$82,284
Total Liabilities and Deferred Inflows of Resources	**$6,982,385**	**$1,704,631**	**$776,683**	**$9,463,699**	**$13,566,841**	**($4,103,142)**
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	**$288,023,444**	**$71,606,596**	**$32,822,501**	**$392,452,541**	**$372,611,433**	**$19,841,108**

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

	PERF A Agent	PERF B Cost-Sharing Schools	PERF C Cost-Sharing Public Agencies	2020 PERF Total	2019 PERF Total	Increase/ (Decrease)
ADDITIONS						
Member Contributions	$3,470,691	$1,047,983	$382,326	$4,901,000	$4,664,618	$236,382
Employer Contributions	17,576,280	2,866,144	1,597,137	22,039,561	15,612,678	6,426,883
Nonemployer Contributions	—	904,000	—	904,000	—	904,000
Net Investment Income	13,575,714	3,378,674	1,562,606	18,516,994	22,969,664	(4,452,670)
Securities Lending & Other Income	80,151	19,861	9,092	109,104	111,079	(1,975)
Plan-to-Plan Resource Movement	—	164	185,743	185,907	167,612	18,295
Total Additions	**$34,702,836**	**$8,216,826**	**$3,736,904**	**$46,656,566**	**$43,525,651**	**$3,130,915**
DEDUCTIONS						
Retirement, Death & Survivor Benefits	$19,206,411	$4,549,797	$2,025,712	$25,781,920	$24,209,283	$1,572,637
Refund of Contributions	177,375	121,560	24,245	323,180	280,266	42,914
Administrative Expenses	384,977	95,614	43,860	524,451	252,558	271,893
Plan-to-Plan Resource Movement	185,907	—	—	185,907	167,612	18,295
Total Deductions	**$19,954,670**	**$4,766,971**	**$2,093,817**	**$26,815,458**	**$24,909,719**	**$1,905,739**
INCREASE IN NET POSITION	**$14,748,166**	**$3,449,855**	**$1,643,087**	**$19,841,108**	**$18,615,932**	**$1,225,176**
NET POSITION						
Beginning of Year	**$273,275,278**	**$68,156,741**	**$31,179,414**	**$372,611,433**	**$353,995,501**	**$18,615,932**
End of Year	**$288,023,444**	**$71,606,596**	**$32,822,501**	**$392,452,541**	**$372,611,433**	**$19,841,108**

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.

Because 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 decrease over time.

The LRF's net position in Fiscal Year 2019-20 decreased by less than $0.4 million or 0.3 percent from the beginning balance of $114.4 million to $114.0 million mainly due to lower return on investments. Investments at fair value decreased $0.2 million or 0.2 percent, due to the shift in the investment asset allocation and decreased market values of the holdings. The total liabilities increased slightly, mainly due to the increased net pension and OPEB liabilities in Fiscal Year 2019-20. The net pension liability increased primarily as a result of lower contributions and unfavorable difference between expected and actual experience. Net OPEB liability also increased due to a decrease in the blended discount rate.

Additions to the LRF's net position primarily were the result of net investment income of $7.0 million in Fiscal Year 2019-20, which is 10.8 percent lower than in the prior year, or $0.8 million decrease due to unfavorable investment market conditions. The LRF recognized a MWRR of 6.2 percent for Fiscal Year 2019-20 compared with 7.0 percent for Fiscal Year 2018-19. In addition, both member and employer contributions decreased by a total of $0.2 million or 64.8 percent due to a decrease in the active members contributing to the fund.

Deductions from the LRF are primarily comprised of benefit payments, refunds, and administrative expenses. Total deductions decreased by $0.2 million or 2.4 percent due to a slight decrease in benefit payments and no refunds of contributions in Fiscal Year 2019-20, as opposed to $0.3 million refund in the prior fiscal year. This was partially offset by an increase of $0.2 million or 69.8 percent in administrative expenses for CalPERS personnel due to higher state pension and OPEB expenses as a result of increased net pension and OPEB liabilities.

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.

The net position of the JRF increased $33.6 million or 330.0 percent, primarily due to increased contributions from the State General Fund. Also, the increased contributions from the State resulted in the $29.5 million or 160.8 percent increase in short-term investments. Total liabilities decreased $5.0 million or 46.1 percent, primarily due to reduced outstanding unclaimed benefits.

Additions to the JRF come from employer, member, and state balancing contributions from the General Fund. Additions increased $46.5 million or 23.0 percent, primarily due to an increase in the State General Fund contributions.

Deductions from JRF are primarily comprised of benefit payments, refunds, and administrative expenses. Retirement, death, and survivor benefits decreased by $9.2 million, or 4.1 percent, as well as administrative expenses for CalPERS personnel decreased $7.8 million or 77.4 percent, due to Fiscal Year 2018-19 costs associated with the back wages, including 10.0 percent interest, awarded to plan members in Fiscal Year 2018-19 by the court decision in the Robert Mallano judgment.

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 JRF II in Fiscal Year 2019-20 increased by $169.9 million or 9.9 percent from the beginning net position of $1.7 billion to $1.9 billion. Receivables decreased by $1.2 million or 11.4 percent, primarily due to decreased outstanding employers' contributions owed to the fund as of fiscal year ended June 30, 2020. JRF II investments increased by $171.8 million or 10.1 percent primarily due to positive net cash inflows from contributions less benefit payments, combined with a positive market return in Fiscal Year 2019-20. Total liabilities increased by $0.4 million or 6.0 percent primarily due to an increase in the net pension and OPEB liabilities and an increase in other liabilities. Net pension liability increased primarily as a result of lower contributions and unfavorable difference between expected and actual experience. Net OPEB liability also increased due to a decrease in the blended discount rate.

Additions to the JRF II net position include member contributions, employer contributions, and investment income. Despite a decrease in the number of active members from 1,645 as of June 30, 2019, to 1,625 as of June 30, 2020, member and employer contributions increased due to an increase in the required contribution rate and a general salary increase for state employees. Member contributions increased by $4.4 million or 14.1 percent, while employer contributions increased by $7.0 million or 8.4 percent. Net investment income decreased by $26.7 million or 25.0 percent from $106.8 million in Fiscal Year 2018-19 to $80.1 million in Fiscal Year 2019-20. This decrease resulted from a lower investment return in Fiscal Year 2019-20. The JRF II recognized a MWRR of 4.1 percent for Fiscal Year 2019-20 compared with 6.9 percent for Fiscal Year 2018-19.

Deductions from the JRF II are comprised of benefit payments, refunds of contributions to members and beneficiaries, and costs of administering the JRF II. Despite an increase in benefit recipients from 281 in Fiscal Year 2018-19 to 390 in Fiscal Year 2019-20, benefit payments decreased by $1.5 million or 4.2 percent due to a decrease in monetary credit payments in Fiscal Year 2019-20. Administrative expenses increased by $1.1 million or 72.8 percent primarily due to an increase in the state's pension and OPEB expenses as a result of increased net pension and OPEB liabilities.

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

	LRF			JRF			JRF II		
	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES									
Cash & Cash Equivalents	$1,200	$1,200	$0	$0	$1	($1)	$2	$1	$1
Receivables	54	49	5	1,613	2,267	(654)	9,392	10,601	(1,209)
Investments	114,960	115,207	(247)	47,843	18,342	29,501	1,876,676	1,704,904	171,772
Total Assets	**$116,214**	**$116,456**	**($242)**	**$49,456**	**$20,610**	**$28,846**	**$1,886,070**	**$1,715,506**	**$170,564**
Deferred Outflows of Resources	$187	$165	$22	$540	$452	$88	$677	$579	$98
Total Assets and Deferred Outflows of Resources	**$116,401**	**$116,621**	**($220)**	**$49,996**	**$21,062**	**$28,934**	**$1,886,747**	**$1,716,085**	**$170,662**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES									
Retirement Benefits, Investment Settlement & Other	$676	$661	$15	$1,436	$6,529	($5,093)	$666	$450	$216
Net Pension & OPEB Liabilities	1,560	1,529	31	4,375	4,255	120	5,557	5,421	136
Total Liabilities	**$2,236**	**$2,190**	**$46**	**$5,811**	**$10,784**	**($4,973)**	**$6,223**	**$5,871**	**$352**
Deferred Inflows of Resources	$117	$27	$90	$458	$109	$349	$517	$125	$392
Total Liabilities and Deferred Inflows of Resources	**$2,353**	**$2,217**	**$136**	**$6,269**	**$10,893**	**($4,624)**	**$6,740**	**$5,996**	**$744**
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	**$114,048**	**$114,404**	**($356)**	**$43,727**	**$10,169**	**$33,558**	**$1,880,007**	**$1,710,089**	**$169,918**

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

	LRF			JRF			JRF II		
	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)
ADDITIONS									
Member Contributions	$22	$91	($69)	$2,843	$2,679	$164	$35,796	$31,376	$4,420
Employer Contributions	98	250	(152)	243,131	195,903	47,228	91,147	84,099	7,048
Net Investment Income	7,011	7,860	(849)	885	1,166	(281)	80,074	106,781	(26,707)
Securities Lending & Other Income	2	—	2	2,202	2,776	(574)	—	—	—
Total Additions	**$7,133**	**$8,201**	**($1,068)**	**$249,061**	**$202,524**	**$46,537**	**$207,017**	**$222,256**	**($15,239)**
DEDUCTIONS									
Retirement, Death & Survivor Benefits	$6,939	$7,005	($66)	$212,775	$221,954	($9,179)	$34,547	$36,045	($1,498)
Refund of Contributions	—	344	(344)	458	—	458	—	159	(159)
Administrative Expenses	550	324	226	2,270	10,032	(7,762)	2,552	1,477	1,075
Total Deductions	**$7,489**	**$7,673**	**($184)**	**$215,503**	**$231,986**	**($16,483)**	**$37,099**	**$37,681**	**($582)**
INCREASE (DECREASE) IN NET POSITION	**($356)**	**$528**	**($884)**	**$33,558**	**($29,462)**	**$63,020**	**$169,918**	**$184,575**	**($14,657)**
NET POSITION									
Beginning of Year	**$114,404**	**$113,876**	**$528**	**$10,169**	**$39,631**	**($29,462)**	**$1,710,089**	**$1,525,514**	**$184,575**
End of Year	**$114,048**	**$114,404**	**($356)**	**$43,727**	**$10,169**	**$33,558**	**$1,880,007**	**$1,710,089**	**$169,918**

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.

In December 2017, the 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 an expected return of 7.0 percent, which aligns with the December 2016 decision to lower the discount rate to 7.0 percent over three years.

In February 2018, the Board approved modifications to the amortization policy that shorten the period over which actuarial gains and losses are amortized from 30 to 20 years and amortize unfunded liability with level dollar payments rather than increasing payments. The effective date of the policy changes was June 30, 2019, and the changes apply only to unfunded accrued liability bases created on and after this date.

In June 2020, CalPERS' investment staff presented updates on capital market assumptions and economic assumptions to the Board. The capital market assumptions update compared the 10-year 2020 expected returns to 2017 for the PERF and 2018 for the affiliates. The economic assumptions presented an economic overview based on the unprecedented impact caused by COVID-19. Topics addressed were U.S. unemployment, U.S. GDP, U.S. & Global responses, and the economic uncertainty forecasted. Last, the Board received a presentation regarding next step planning and preparation for the ALM cycle set to begin in 2021.

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 time frame, accelerating notifications to the Board and members, and adopting a risk oversight process to improve early detection of financial hardship issues. These processes 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 Board has made several important decisions in the recent past which impact the current funding of pension benefits at CalPERS. In February 2018, the 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 2020-21.

As of June 30, 2019, the funded status of the PERF was 70.2 percent. This percentage was determined by dividing the total assets in the PERF by the sum of liabilities for all plans reported under the PERF. CalPERS calculated the PERF funded status value using a 7.0 percent discount rate. As of June 30, 2019, the funded status of the JRF II was 99.4 percent. CalPERS calculated JRF II funded status value using a 6.5 percent discount rate. As of June 30, 2019, the funded status of the LRF was 116.8 percent. CalPERS calculated LRF funded status value 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.

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 the former 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 set equal to the unadjusted long-term expected return assumption for each plan. The discount rates used for funding are net of administrative expenses. The funding discount rate used in the JRF valuation differs from the financial reporting discount rate which is based on 20-year tax-exempt General Obligation Municipal Bonds.

The LRF funding discount rate is 5.00 percent, JRF is 3.00 percent, and JRF II is 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 discount rates for the LRF, JRF, and JRF II for funding and financial reporting purposes as of June 30, 2020:

Fund	Funding Discount Rate	Financial Reporting Discount Rate
LRF	5.00%	5.25%
JRF	3.00%	2.45%
JRF II	6.50%	6.65%

DEFINED CONTRIBUTION PLANS

PUBLIC EMPLOYEES' DEFERRED COMPENSATION FUND (DCF)

The DCF is a fund into which CalPERS deposits contributions by employees of public agencies and school districts within the State of California that have elected to contract for a deferred compensation plan. To help administer the program, CalPERS contracts with a third-party adminstrator (TPA). In January 2020, the Board approved the renewal of a five-year contract through December 2025 with Voya Financial, LLC (Voya). As the TPA, Voya provides full recordkeeping, plan administration services, and new business development in support of the DCF.

The net position of the DCF increased by $95.2 million or 5.6 percent from the beginning balance of $1.7 billion to $1.8 billion. Investment balances increased by $96.3 million or 5.8 percent from Fiscal Year 2018-19 to Fiscal Year 2019-20, due to the investment of net inflows from contributions and return on investment exceeding participant withdrawal outflows. There was a slight decrease of $0.9 million or 4.9 percent in receivables due to less outstanding contributions at year-end. Total liabilities also decreased by $0.5 million or 7.0 percent, mainly due to lower amounts of outstanding distributions and TPA and external investment management fees payables, offset by a $0.1 million or 2.8 percent increase in total net pension and OPEB liabilities.

Member contributions in the fund decreased $101.0 million or 40.2 percent compared with the prior year primarily due to a new public agency transferring into the fund with a $130.1 million balance in July 2018, partially offset by increased contributions as a result of an increase in members from 30,733 in Fiscal Year 2018-19 to 31,821 in Fiscal Year 2019-20.

Total additions decreased $121.7 million primarily due to the $130.1 million transfer in the prior year, combined with slightly less favorable investment returns in Fiscal Year 2019-20 compared with Fiscal Year 2018-19.

Total deductions in the DCF decreased by $27.6 million or 17.2 percent. This was primarily due to a decrease of $28.6 million in participant withdrawals from the plan from $156.8 million in Fiscal Year 2018-19 to $128.2 million in Fiscal Year 2019-20. Administrative expenses for CalPERS personnel increased $1.0 million or 24.2 percent, primarily due to an increase in the state's pension and OPEB expenses resulting from increased net pension and OPEB liabilities.

SUPPLEMENTAL CONTRIBUTIONS PROGRAM FUND (SCPF)

Established on January 1, 2000, the SCPF is a member-funded program that provides supplemental retirement benefits to State of California employees who are CalPERS members. To help administer the program, CalPERS contracts with a TPA. In January 2020, the Board approved the renewal of a five-year contract through December 2025 with Voya. As the TPA, Voya provides full recordkeeping, plan administration services, and new business development in support of the SCPF.

The net position of the SCPF decreased $0.6 million or 0.5 percent from the beginning balance of $114.1 million to $113.4 million, primarily due to participant withdrawals exceeding contributions and investment income by $0.4 million. Total assets decreased by $0.7 million or 0.6 percent mainly due to a decrease in investments, and total liabilities also decreased by less than $0.1 million or 5.1 percent due to lower amounts of outstanding distributions and TPA and external investment management fees payables.

While positive returns were achieved in both current and prior years, Fiscal Year 2019-20 was slightly less favorable. Net investment income increased by $0.1 million, from $5.4 million in Fiscal Year 2018-19 to $5.5 million in Fiscal Year 2019-20 due to higher volume of investments sold.

Total additions decreased $0.1 million primarily due to decreased fee revenue from participants as a result of a decrease in members from 6,897 in Fiscal Year 2018-19 to 6,661 in Fiscal Year 2019-20.

The primary deductions in the SCPF reflect withdrawals made by participants. Participant withdrawals decreased $1.6 million, from $7.7 million as of Fiscal Year 2018-19 to $6.1 million as of Fiscal Year 2019-20. Administrative expenses for CalPERS personnel increased $0.04 million or 15.5 percent, primarily due to an increase in the state's pension and OPEB expenses as a result of increased net pension and OPEB liabilities. Net pension liability increased primarily as a result of lower contributions and unfavorable difference between expected and actual experience. Net OPEB liability also increased due to a decrease in the blended discount rate.

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

	DCF			SCPF		
	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	$1	$398	($397)	$1	$67	($66)
Receivables	18,177	19,113	(936)	703	732	(29)
Investments	1,768,226	1,671,915	96,311	113,929	114,503	(574)
Total Assets	**$1,786,404**	**$1,691,426**	**$94,978**	**$114,633**	**$115,302**	**($669)**
Deferred Outflows of Resources	$551	$462	$89	$47	$41	$6
Total Assets and Deferred Outflows of Resources	**$1,786,955**	**$1,691,888**	**$95,067**	**$114,680**	**$115,343**	**($663)**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement Benefits, Investment Settlement & Other	$1,909	$2,508	($599)	$834	$908	($74)
Net Pension & OPEB Liabilities	4,431	4,309	122	386	377	9
Total Liabilities	**$6,340**	**$6,817**	**($477)**	**$1,220**	**$1,285**	**($65)**
Deferred Inflows of Resources	$439	$85	$354	$31	$7	$24
Total Liabilities and Deferred Inflows of Resources	**$6,779**	**$6,902**	**($123)**	**$1,251**	**$1,292**	**($41)**
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	**$1,780,176**	**$1,684,986**	**$95,190**	**$113,429**	**$114,051**	**($622)**

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

	DCF			SCPF		
	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)
ADDITIONS						
Member Contributions	$150,108	$251,102	($100,994)	$254	$251	$3
Net Investment Income	71,266	92,546	(21,280)	5,495	5,360	135
Other Income	7,192	6,590	602	93	337	(244)
Total Additions	**$228,566**	**$350,238**	**($121,672)**	**$5,842**	**$5,948**	**($106)**
DEDUCTIONS						
Administrative Expenses	$5,217	$4,202	$1,015	$327	$283	$44
Participant Withdrawals	128,159	156,796	(28,637)	6,137	7,749	(1,612)
Total Deductions	**$133,376**	**$160,998**	**($27,622)**	**$6,464**	**$8,032**	**($1,568)**
INCREASE (DECREASE) IN NET POSITION	**$95,190**	**$189,240**	**($94,050)**	**($622)**	**($2,084)**	**$1,462**
NET POSITION						
Beginning of Year	**$1,684,986**	**$1,495,746**	**$189,240**	**$114,051**	**$116,135**	**($2,084)**
End of Year	**$1,780,176**	**$1,684,986**	**$95,190**	**$113,429**	**$114,051**	**($622)**

PENSION PREFUNDING TRUST FUND

CALIFORNIA EMPLOYERS' PENSION PREFUNDING TRUST FUND (CEPPTF)

The California Employers' Pension Prefunding Trust Fund (CEPPTF) was created on September 21, 2018, pursuant to Senate Bill (SB) 1413, Chapter 665, Statutes of 2018. Funding on a reimbursement basis from the State of California's General Fund is effective for Fiscal Year 2019-20. The CEPPTF is a trust dedicated to prefunding employer contributions to defined benefit pension systems for eligible California public agencies.

The net position of the CEPPTF was $10.9 million as of June 30, 2020. Additions to the CEPPTF net position are primarily employer contributions and net investment income. Employers contributed $10.5 million to the CEPPTF during the Fiscal Year 2019-20. The net investment income was $0.5 million in Fiscal Year 2019-20. Deductions from the CEPPTF are primarily costs incurred to administer the fund. Administrative expenses were $0.1 million in Fiscal Year 2019-20.

Fiduciary Net Position – Pension Prefunding Trust Fund (Dollars in Thousands)

	CEPPTF
	2020
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	
Investments	$11,036
Total Assets	**$11,036**
Deferred Outflows of Resources	$19
Total Assets and Deferred Outflows of Resources	**$11,055**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	
Other Post-Employment Benefits, Investment Settlement & Other	$16
Net Pension & OPEB Obligation	26
Total Liabilities	**$42**
Deferred Inflows of Resources	$74
Total Liabilities and Deferred Inflows of Resources	**$116**
TOTAL NET POSITION RESTRICTED FOR PENSION	**$10,939**

Changes in Fiduciary Net Position – Pension Prefunding Trust Fund (Dollars in Thousands)

	CEPPTF
	2020
ADDITIONS	
Employer Contributions	$10,523
Net Investment Income	502
Other Income	10
Total Additions	**$11,035**
DEDUCTIONS	
Administrative Expenses	$96
Total Deductions	**$96**
INCREASE IN NET POSITION	**$10,939**
NET POSITION	
Beginning of Year	**$0**
End of Year	**$10,939**

OTHER POST-EMPLOYMENT BENEFIT TRUST FUND

CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST FUND (CERBTF)

The CERBTF is a trust for employers to pre-fund health, dental, and other non-pension post-employment benefits. CalPERS contracts with a TPA, Northeast Retirement Services (NRS), to perform recordkeeping for individual CERBTF employer accounts.

Net position restricted for OPEB benefits on June 30, 2020, increased $1.9 billion or 19.2 percent from the prior year, primarily due to continued employer contributions in Fiscal Year 2019-20, combined with continued positive investment returns. Receivables increased $43.5 million or 100.8 percent, primarily due to higher outstanding employer contributions pending at year-end. Investments at fair value increased $1.9 billion or 18.9 percent due to continued positive return on investments and the growth of assets under management from employer contributions.

Total liabilities increased $12.3 million or 17.2 percent, primarily due to increased member distributions payable. Additionally, total net pension and OPEB liabilities increased by $0.3 million or 3.7 percent. Net pension liability increased primarily as a result of lower contributions and an unfavorable difference between expected and actual experience. Net OPEB liability also increased due to a decrease in the blended discount rate.

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 $626.5 million or 15.6 percent, primarily due to higher contributions from existing participating employers. During Fiscal Year 2019-20, the fund experienced net investment income of $402.6 million, a decrease of $166.2 million from a net investment return of $568.8 million in Fiscal Year 2018-19. Additionally, the CERBTF recognized a MWRR of 4.0 percent in Fiscal Year 2019-20, compared with 6.5 percent in Fiscal Year 2018-19.

Deductions from the CERBTF net position restricted for OPEB benefits were primarily made up of OPEB reimbursements to employers (directly from the trust and outside the trust), which increased $154.4 million or 5.2 percent, due to increased volume of reimbursement requests among existing participating employers. Employer withdrawals decreased by $63.3 million or 83.3 percent, due to a lower amount of balance transfers out of the plan. The amounts reported for contributions and reimbursements made directly by employers to health care providers outside the trust amounted to $3.0 billion for Fiscal Year 2019-20 compared with $2.9 billion in Fiscal Year 2018-19. Administrative expenses for CalPERS personnel increased $3.3 million primarily due to an increase in the state's pension and OPEB expenses as a result of increased net pension and OPEB liabilities.

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

	CERBTF		
	2020	2019	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES			
Cash & Cash Equivalents	$1	$669	($668)
Receivables	86,749	43,211	43,538
Investments	11,700,758	9,841,991	1,858,767
Total Assets	**$11,787,508**	**$9,885,871**	**$1,901,637**
Deferred Outflows of Resources	$1,198	$956	$242
Total Assets and Deferred Outflows of Resources	**$11,788,706**	**$9,886,827**	**$1,901,879**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES			
Other Post-Employment Benefits, Investment Settlement & Other	$74,310	$62,367	$11,943
Net Pension & OPEB Liabilities	9,285	8,950	335
Total Liabilities	**$83,595**	**$71,317**	**$12,278**
Deferred Inflows of Resources	$1,172	$205	$967
Total Liabilities and Deferred Inflows of Resources	**$84,767**	**$71,522**	**$13,245**
TOTAL NET POSITION RESTRICTED FOR OPEB	**$11,703,939**	**$9,815,305**	**$1,888,634**

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

	CERBTF		
	2020	2019	Increase/ (Decrease)
ADDITIONS			
Employer Contributions	$4,634,449	$4,007,941	$626,508
Net Investment Income	402,609	568,801	(166,192)
Other Income	9,094	7,490	1,604
Total Additions	**$5,046,152**	**$4,584,232**	**$461,920**
DEDUCTIONS			
Administrative Expenses	$5,161	$1,882	$3,279
Employer Withdrawals	12,711	75,991	(63,280)
OPEB Reimbursements	3,139,646	2,985,226	154,420
Total Deductions	**$3,157,518**	**$3,063,099**	**$94,419**
INCREASE IN NET POSITION	**$1,888,634**	**$1,521,133**	**$367,501**
NET POSITION			
Beginning of Year	**$9,815,305**	**$8,294,172**	**$1,521,133**
End of Year	**$11,703,939**	**$9,815,305**	**$1,888,634**

CUSTODIAL FUNDS

REPLACEMENT BENEFIT FUND (RBF)

The RBF is a qualified excess benefit arrangement pursuant to Internal Revenue Code (IRC) section 415(m) and provides for the replacement of the portion of retirement allowance that exceeds 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 $0.3 million or 43.5 percent, primarily due to an increase in the number of retirees receiving benefits. As a result, employer contributions increased $3.4 million or 13.1 percent, primarily due to more retirees participating in the plan.

Additions to the fund include replacement benefits, investment income and other income. Other income decreased $226 thousand or 46.9 percent, primarily due to a temporary cancellation of the administrative fees beginning January 1, 2020.

Deductions from the RBF include benefit payments, which increased $3.4 million or 13.1 percent due to an increase in the number of retirees receiving benefits from 1,383 as of June 30, 2019, to 1,496 as of June 30, 2020.

OLD AGE AND SURVIVORS' INSURANCE REVOLVING FUND (OASI)

The OASI was established to consolidate the collection and payment of employee and employer contributions for California public agencies under the provisions of the federal Social Security regulations.

The Board serves as the State Social Security Administrator (SSSA). Between 1955 and 1986, the SSSA was responsible for collecting Social Security and Medicare taxes from public employers. Effective January 1, 1987, with the enactment of the Omnibus Budget Reconciliation Act of 1986, the responsibility of collecting taxes moved from CalPERS to the Internal Revenue Service and the SSSA has been operating since 1987 using the interest that was earned on the OASI. The OASI funds have diminished, requiring additional funding to pay for the costs of administering the SSSA program. CalPERS started charging participating agencies a specified fee to pay for these costs in Fiscal Year 2019-20.

The net position of the OASI increased by $0.9 million or 82.4 percent, primarily due to the collection of fees from the participating agencies. Total assets increased $0.4 million or 25.8 percent in Fiscal Year 2019-20 due to an increased number of fee receivables. Total liabilities decreased in Fiscal Year 2019-20 by $0.5 million or 80.8 percent due to a lower outstanding liability for administrative expenses than in the prior fiscal year.

Additions to the fund include investment income and fees that amounted to $2.0 million for the fiscal year. Deductions from the OASI are primarily costs incurred to administer the fund. Administrative expenses for CalPERS personnel increased $0.5 million or 76.6 percent in Fiscal Year 2019-20 due to an increased involvement in the fund.

Fiduciary Net Position – Custodial Funds (Dollars in Thousands)

	RBF			OASI		
	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	$1	$0	$1	$1	$0	$1
Receivables	204	309	(105)	1,057	1	1,056
Investments	18,138	16,005	2,133	1,086	1,703	(617)
Total Assets	**$18,343**	**$16,314**	**$2,029**	**$2,144**	**$1,704**	**$440**
Deferred Outflows of Resources	$0	$0	$0	$41	$0	$41
Total Assets and Deferred Outflows of Resources	**$18,343**	**$16,314**	**$2,029**	**$2,185**	**$1,704**	**$481**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Due to Members & Employers	$0	$0	$0	$0	$0	$0
Due to Other Funds	44	37	7	71	667	(596)
Net Pension & OPEB Liabilities	—	—	—	57	—	57
Unearned Replacement Benefits	17,355	15,619	1,736	—	—	—
Total Liabilities	**$17,399**	**$15,656**	**$1,743**	**$128**	**$667**	**($539)**
Deferred Inflows of Resources	$0	$0	$0	$165	$0	$165
Total Liabilities and Deferred Inflows of Resources	**$17,399**	**$15,656**	**$1,743**	**$293**	**$667**	**($374)**
TOTAL NET POSITION RESTRICTED FOR REPLACEMENT BENEFITS/PROGRAM ADMINISTRATION	**$944**	**$658**	**$286**	**$1,892**	**$1,037**	**$855**

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

	RBF			OASI		
	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)
ADDITIONS						
Replacement Benefits	$29,125	$25,756	$3,369	$0	$0	$0
Investment Income	276	301	(25)	21	1	20
Other Income	256	482	(226)	2,012	—	2,012
Total Additions	**$29,657**	**$26,539**	**$3,118**	**$2,033**	**$1**	**$2,032**
DEDUCTIONS						
Replacement Benefit Payments	$29,125	$25,756	$3,369	$0	$0	$0
Administrative Expenses	246	450	(204)	1,178	667	511
Total Deductions	**$29,371**	**$26,206**	**$3,165**	**$1,178**	**$667**	**$511**
INCREASE (DECREASE) IN NET POSITION	**$286**	**$333**	**($47)**	**$855**	**($666)**	**$1,521**
NET POSITION						
Beginning of Year	**$658**	**$325**	**$333**	**$1,037**	**$0**	**$1,037**
Adjustments	—	—	—	—	1,703[1]	(1,703)
End of Year	**$944**	**$658**	**$286**	**$1,892**	**$1,037**	**$855**

(1) In anticipation of future income and expense reporting, the beginning balance was restated to more accurately depict the nature of the fund.

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).

The net position of the HCF in Fiscal Year 2019-20 decreased by $49.9 million or 13.3 percent from the beginning net position of $375.4 million to $325.5 million.

Total assets decreased by $33.3 million or 2.5 percent. Cash and cash equivalents decreased by $94.4 million or 25.4 percent as the fund continues to liquidate its short-term investments to cover claim expenses in excess of the premiums revenue. Total liabilities increased $10.2 million or 1.0 percent primarily due to an increase in estimated insurance claims due.

Revenues include premiums collected from members and employers, federal subsidies, and investment income (non-operating revenue). Premiums collected increased by $25.4 million or 0.7 percent, primarily due to an increase in premium rates. Investment income increased by $2.0 million or 3.8 percent due to improved performance in the fixed income market.

Expenses are comprised of claims, investment fees, and costs incurred to oversee the plans. Claim expenses decreased by $68.2 million, or 1.9 percent due to a decrease in medical claims. Administrative expenses for CalPERS personnel increased by $32.3 million or 10.8 percent, primarily due to an increase in the state's pension and OPEB expenses resulting from increased net pension and OPEB liabilities.

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 increases in future health care premium rates and health care benefit costs.

The net position of the CRF in Fiscal Year 2019-20 was negative $54.2 million, a decrease of $5.9 million or 12.3 percent from the beginning net position of negative $48.3 million primarily due to an increase in pension and OPEB expenses.

Cash and cash equivalents increased by $84.8 million or 13.2 percent primarily due to timing as there was an increase in outstanding payables to health carriers in Fiscal Year 2019-20 compared to the prior year. Total receivables decreased by $5.6 million or 20.6 percent primarily due to a decrease in direct pay premiums due from health carriers combined with a decrease in outstanding interest receivables. Total liabilities increased by $80.5 million or 11.1 percent primarily due to more premiums pending to be remitted to health carriers as of June 30, 2020. Net pension and OPEB liabilities increased by $2.2 million or 3.0 percent. Net pension liability increased primarily as a result of lower contributions and unfavorable differences between expected and actual experience. Net OPEB liability also increased due to a decrease in the blended discount rate.

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 by $3.4 million or 15.4 percent primarily due to an increase in the administrative fee rate from 0.23 percent in Fiscal Year 2018-19 to 0.27 percent in Fiscal Year 2019-20. Investment income increased by $0.2 million or 3.6 percent due to an increase in short-term investments.

Expenses are comprised of investment fees and costs incurred to administer the CRF. Administrative expenses for CalPERS personnel increased by $19.1 million or 101.4 percent, primarily due to an increase in the state's pension and OPEB expenses resulting from increased net pension and OPEB liabilities.

PUBLIC EMPLOYEES' LONG-TERM CARE FUND (LTCF)

The LTCF provides 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. Long-Term Care Group (LTCG) is the third-party administrator (TPA) for the CalPERS Long-Term Care program. CalPERS has temporarily suspended open enrollment on the CalPERS Long-Term Care Program due to current uncertainty in the long-term care market. Therefore, effective June 17, 2020, and until further notice, the CalPERS Long-Term Care Program will not be accepting new applications for coverage.

Unrestricted net position of the LTCF decreased by $2.3 billion from beginning net position $0.1 billion to negative $2.2 billion primarily due to a $2.4 billion increase in estimated future policy liabilities in Fiscal Year 2019-20. Total assets increased by $146.4 million or 3.1 percent primarily due to positive investment returns in Fiscal Year 2019-20. Investments increased by $140.4 million or 2.9 percent. Based on updated actuarial assumptions, the program is considering asset allocation changes, benefit design changes including benefit reduction options, and/or future premium increase mitigation options. The CalPERS Chief Health Director will be presenting to the Board options for adoption in November 2020.

Total liabilities increased by $2.4 billion or 51.9 percent primarily due to the increase in the estimated liabilities for future policy benefits. The increased liability reflects the assumption updates in the June 30, 2019, actuarial valuation, which include increasing the morbidity assumptions to project longer length of stay on claim and higher claim utilization rate, and lowering the lapse assumption to project lower future lapses. In addition, the liability is calculated using a 4 percent discount rate reflecting the low interest rate environment.

The LTCF revenues include premiums collected from participants and investment income. Participation in the plan decreased by 3.2 percent mainly due to participant deaths, coverage cancellations, nonpayment of premiums, and exhaustion of benefits. This resulted in the decrease of premium revenue of $4.9 million or 1.7 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 2019-20 was $224.2 million, a decrease of $97.6 million or 30.3 percent from the prior year due to a decrease in the annual investment return from 7.1 percent in Fiscal Year 2018-19 to 4.7 percent in Fiscal Year 2019-20.

Total expenses are comprised of claims, changes in estimated liabilities for future policy benefits, administrative costs to the program, and investment expenses. In Fiscal Year 2019-20, total expenses increased by $2.4 billion due to an increase of $2.4 billion in the estimated future policy liabilities. The overall increase in total expenses is primarily attributable to a higher increase in the estimated future policy liabilities compared to Fiscal Year 2018-19. Refer to Note 15 for additional information regarding the calculation of the estimated liabilities for future policy benefits. Administrative expenses for CalPERS personnel increased $3.2 million or 13.2 percent, primarily due to an increase in the state's pension and OPEB expenses as a result of increased net pension and OPEB liabilities.

Net Position – Enterprise Funds (Dollars in Thousands)

	HCF			CRF			LTCF		
	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES									
Cash & Cash Equivalents	$277,089	$371,537	($94,448)	$728,826	$644,041	$84,785	$17,060	$11,250	$5,810
Receivables	515,913	497,015	18,898	21,535	27,117	(5,582)	610	414	196
Investments	520,342	478,102	42,240	—	—	—	4,910,167	4,769,798	140,369
Total Assets	**$1,313,344**	**$1,346,654**	**($33,310)**	**$750,361**	**$671,158**	**$79,203**	**$4,927,837**	**$4,781,462**	**$146,375**
Deferred Outflows of Resources	$13,458	$11,344	$2,114	$9,197	$7,637	$1,560	$1,372	$1,046	$326
Total Assets and Deferred Outflows of Resources	**$1,326,802**	**$1,357,998**	**($31,196)**	**$759,558**	**$678,795**	**$80,763**	**$4,929,209**	**$4,782,508**	**$146,701**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES									
Claims Payable, Unearned Premiums, Estimated Insurance Claims Due & Due to Carriers	$853,565	$839,094	$14,471	$398,597	$345,063	$53,534	$48,864	$38,993	$9,871
Due to Employers	—	—	—	192	642	(450)	—	—	—
Other Liabilities	28,798	35,958	(7,160)	334,171	308,941	25,230	8,461	8,725	(264)
Estimated Liability for Future Policy Benefits	—	—	—	—	—	—	7,053,071	4,628,993	2,424,078
Net Pension & OPEB Liabilities	108,500	105,579	2,921	73,255	71,100	2,155	10,249	9,799	450
Total Liabilities	**$990,863**	**$980,631**	**$10,232**	**$806,215**	**$725,746**	**$80,469**	**$7,120,645**	**$4,686,510**	**$2,434,135**
Deferred Inflows of Resources	$10,446	$2,005	$8,441	$7,592	$1,364	$6,228	$1,528	$226	$1,302
Total Liabilities and Deferred Inflows of Resources	**$1,001,309**	**$982,636**	**$18,673**	**$813,807**	**$727,110**	**$86,697**	**$7,122,173**	**$4,686,736**	**$2,435,437**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)	**$325,493**	**$375,362**	**($49,869)**	**($54,249)**	**($48,315)**	**($5,934)**	**($2,192,964)**	**$95,772**	**($2,288,736)**

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

	HCF			CRF			LTCF		
	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)	2020	2019	Increase/ (Decrease)
REVENUES									
Premiums	$3,706,490	$3,681,106	$25,384	$0	$0	$0	$278,535	$283,445	($4,910)
Federal Government Subsidies	12,489	18,753	(6,264)	—	—	—	—	—	—
Non-Operating Revenues	53,522	51,547	1,975	6,111	5,896	215	224,152	321,711	(97,559)
Administrative Fees & Other	—	—	—	25,817	22,375	3,442	—	—	—
Total Revenues	**$3,772,501**	**$3,751,406**	**$21,095**	**$31,928**	**$28,271**	**$3,657**	**$502,687**	**$605,156**	**($102,469)**
EXPENSES									
Claims Expense	$3,480,089	$3,548,295	($68,206)	$0	$0	$0	$337,298	$324,841	$12,457
Increase (Decrease) in Estimated Liabilities	10,885	14,332	(3,447)	—	—	—	2,424,078	80,892	2,343,186
Non-Operating Expenses	160	166	(6)	—	—	—	2,547	2,596	(49)
Administrative Expenses	331,236	298,887	32,349	37,862	18,799	19,063	27,500	24,300	3,200
Total Expenses	**$3,822,370**	**$3,861,680**	**($39,310)**	**$37,862**	**$18,799**	**$19,063**	**$2,791,423**	**$432,629**	**$2,358,794**
INCREASE (DECREASE) IN UNRESTRICTED NET POSITION	**($49,869)**	**($110,274)**	**$60,405**	**($5,934)**	**$9,472**	**($15,406)**	**($2,288,736)**	**$172,527**	**($2,461,263)**
UNRESTRICTED NET POSITION (DEFICIT)									
Beginning of Year	**$375,362**	**$485,636**	**($110,274)**	**($48,315)**	**($57,787)**	**$9,472**	**$95,772**	**($76,755)**	**$172,527**
End of Year	**$325,493**	**$375,362**	**($49,869)**	**($54,249)**	**($48,315)**	**($5,934)**	**($2,192,964)**	**$95,772**	**($2,288,736)**

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, 2020, with Comparative Totals as of June 30, 2019 (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	**$364,515**	**$90,632**	**$41,575**	**$1,200**	**$0**	**$2**
Receivables						
Members	$472,245	$120,541	$42,310	$44	$1,028	$1,278
Employers	966,700	347,823	64,644	—	478	8,067
Investment Sales & Other	677,215	168,381	77,240	—	—	4
Interest & Dividends	636,012	158,136	72,541	1	76	43
Due from Other Funds	7,487	1,862	854	—	—	—
Other Program	65,634	16,319	7,486	9	31	—
Total Receivables	**$2,825,293**	**$813,062**	**$265,075**	**$54**	**$1,613**	**$9,392**
Investments, at Fair Value						
Short-Term Investments	$20,711,863	$5,139,134	$2,362,965	$704	$47,843	$9,791
Global Equity Securities	143,910,669	35,707,857	16,418,415	42,977	—	1,231,610
Global Debt Securities	74,924,759	18,590,717	8,547,982	71,279	—	635,275
Real Assets	31,572,296	7,833,881	3,602,005	—	—	—
Private Equity	19,451,015	4,826,286	2,219,119	—	—	—
Total Investments	**$290,570,602**	**$72,097,875**	**$33,150,486**	**$114,960**	**$47,843**	**$1,876,676**
Securities Lending Collateral	$899,153	$223,563	$102,554	$0	$0	$0
Capital Assets, Net & Other Assets	251,823	62,613	28,722	—	—	—
TOTAL ASSETS	**$294,911,386**	**$73,287,745**	**$33,588,412**	**$116,214**	**$49,456**	**$1,886,070**
Deferred Outflows of Resources	$94,443	$23,482	$10,772	$187	$540	$677
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	**$295,005,829**	**$73,311,227**	**$33,599,184**	**$116,401**	**$49,996**	**$1,886,747**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement & Other Benefits	$1,623,271	$385,308	$171,551	$582	$0	$0
Investment Purchases & Other	3,533,228	878,493	402,985	—	—	—
Due to Members & Employers	8,154	—	—	16	44	2
Net Pension & OPEB Liabilities	758,151	188,505	86,471	1,560	4,375	5,557
Securities Lending Obligations	899,449	223,636	102,587	—	—	—
Due to Other Funds	—	—	—	49	177	270
Management & Third-Party Administrator Fees	3,319	825	379	20	—	324
Unearned Replacement Benefits	—	—	—	—	—	—
Other Program	83,036	9,520	4,295	9	1,215	70
TOTAL LIABILITIES	**$6,908,608**	**$1,686,287**	**$768,268**	**$2,236**	**$5,811**	**$6,223**
Deferred Inflows of Resources	$73,777	$18,344	$8,415	$117	$458	$517
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	**$6,982,385**	**$1,704,631**	**$776,683**	**$2,353**	**$6,269**	**$6,740**
NET POSITION – RESTRICTED FOR PENSION, OTHER POST-EMPLOYMENT, REPLACEMENT BENEFITS, AND PROGRAM ADMINISTRATION	**$288,023,444**	**$71,606,596**	**$32,822,501**	**$114,048**	**$43,727**	**$1,880,007**

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

Pension Trust Funds		Investment Trust Fund	Other Post-Employment Benefit Trust Fund	Custodial Funds		Totals	
DCF	SCPF	CEPPTF	CERBTF	RBF	OASI	2020	2019
$1	**$1**	$0	**$1**	**$1**	$1	**$497,918**	**$667,049**
$4,267	$701	$0	$0	$16	$0	$642,430	$676,908
—	—	—	86,694	119	—	1,474,522	1,362,639
—	—	—	—	—	—	922,840	1,452,262
3	2	—	55	69	2	866,940	822,444
—	—	—	—	—	—	10,203	3,114
13,907	—	—	—	—	1,055	104,441	105,759
$18,177	**$703**	**$0**	**$86,749**	**$204**	**$1,057**	**$4,021,376**	**$4,423,126**
$149,016	$11,266	$11	$60,682	$18,138	$1,086	$28,512,499	$10,120,470
1,251,713	64,632	4,852	7,971,301	—	—	206,604,026	193,792,729
367,497	38,031	6,173	3,668,775	—	—	106,850,488	118,633,362
—	—	—	—	—	—	43,008,182	40,768,569
—	—	—	—	—	—	26,496,420	26,471,325
$1,768,226	**$113,929**	**$11,036**	**$11,700,758**	**$18,138**	**$1,086**	**$411,471,615**	**$389,786,455**
$0	$0	$0	$0	$0	$0	$1,225,270	$4,334,507
—	—	—	—	—	—	343,158	422,242
$1,786,404	**$114,633**	**$11,036**	**$11,787,508**	**$18,343**	**$2,144**	**$417,559,337**	**$399,633,379**
$551	$47	$19	$1,198	$0	$41	$131,957	$110,739
$1,786,955	**$114,680**	**$11,055**	**$11,788,706**	**$18,343**	**$2,185**	**$417,691,294**	**$399,744,118**
$0	$0	$0	$71,928	$0	$0	$2,252,640	$2,117,988
—	—	—	—	—	—	4,814,706	6,070,626
618	751	—	—	—	—	9,571	7,726
4,431	386	26	9,285	—	57	1,058,804	1,029,496
—	—	—	—	—	—	1,225,672	4,324,097
467	32	—	863	44	71	1,973	3,548
824	51	16	1,519	—	—	7,277	4,309
—	—	—	—	17,355	—	17,355	15,619
—	—	—	—	—	—	98,145	89,767
$6,340	**$1,220**	**$42**	**$83,595**	**$17,399**	**$128**	**$9,486,143**	**$13,663,176**
$439	$31	$74	$1,172	$0	$165	$103,509	$18,810
$6,779	**$1,251**	**$116**	**$84,767**	**$17,399**	**$293**	**$9,589,652**	**$13,681,986**
$1,780,176	**$113,429**	**$10,939**	**$11,703,939**	**$944**	**$1,892**	**$408,101,642**	**$386,062,132**

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION – FIDUCIARY FUNDS

For the Fiscal Year Ended June 30, 2020, with Comparative Totals for the Fiscal Year Ended June 30, 2019 (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	$3,470,691	$1,047,983	$382,326	$22	$2,843	$35,796
Employers	17,576,280	2,866,144	1,597,137	98	3,799	91,147
Nonemployer Contribution	—	904,000	—	—	—	—
Replacement Benefits	—	—	—	—	—	—
State of California General Fund	—	—	—	—	239,332	—
Employer Contributions Direct – OPEB	—	—	—	—	—	—
Employer Contributions Outside of Trust – OPEB	—	—	—	—	—	—
Total Retirement and OPEB Contribution	**$21,046,971**	**$4,818,127**	**$1,979,463**	**$120**	**$245,974**	**$126,943**
Investment Income						
Net Appreciation in Fair Value of Investments	$8,823,809	$2,197,172	$1,020,625	$7,051	$0	$80,569
Interest & Amortization	2,036,305	506,302	232,251	6	891	208
Dividends	3,410,919	848,082	389,035	—	—	—
Other Investment Income	18,583	4,621	2,120	17	—	266
Less Investment Expenses:						
Management & Performance Fees	(510,689)	(126,977)	(58,247)	(42)	—	(656)
Other	(203,213)	(50,526)	(23,178)	(21)	(6)	(313)
Net Investment Income	**$13,575,714**	**$3,378,674**	**$1,562,606**	**$7,011**	**$885**	**$80,074**
Securities Lending Income	$115,186	$28,639	$13,137	$0	$0	$0
Securities Lending Expense	(45,281)	(11,258)	(5,164)	—	—	—
Net Securities Lending	**$69,905**	**$17,381**	**$7,973**	**$0**	**$0**	**$0**
Other Income	$10,246	$2,480	$1,119	$2	$2,202	$0
Plan-to-Plan Resource Movement	—	164	185,743	—	—	—
TOTAL ADDITIONS	**$34,702,836**	**$8,216,826**	**$3,736,904**	**$7,133**	**$249,061**	**$207,017**
DEDUCTIONS						
Retirement, Death & Survivor Benefits	$19,206,411	$4,549,797	$2,025,712	$6,939	$212,775	$34,547
Replacement Benefit Payments	—	—	—	—	—	—
Refund of Contributions	177,375	121,560	24,245	—	458	—
Administrative Expenses	384,977	95,614	43,860	550	2,270	2,552
Plan-to-Plan Resource Movement	185,907	—	—	—	—	—
Participant & Employer Withdrawals	—	—	—	—	—	—
OPEB Reimbursements Direct	—	—	—	—	—	—
OPEB Reimbursements – Outside Trust	—	—	—	—	—	—
TOTAL DEDUCTIONS	**$19,954,670**	**$4,766,971**	**$2,093,817**	**$7,489**	**$215,503**	**$37,099**
INCREASE (DECREASE) IN NET POSITION	**$14,748,166**	**$3,449,855**	**$1,643,087**	**($356)**	**$33,558**	**$169,918**
NET POSITION						
Beginning of Year	**$273,275,278**	**$68,156,741**	**$31,179,414**	**$114,404**	**$10,169**	**$1,710,089**
Adjustments	$0	$0	$0	$0	$0	$0
Beginning of Year (as adjusted)	**$273,275,278**	**$68,156,741**	**$31,179,414**	**$114,404**	**$10,169**	**$1,710,089**
End of year	**$288,023,444**	**$71,606,596**	**$32,822,501**	**$114,048**	**$43,727**	**$1,880,007**

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

Pension Trust Funds		Investment Trust Fund	Other Post-Employment Benefit Trust Fund	Custodial Funds		Totals	
DCF	SCPF	CEPPTF	CERBTF	RBF	OASI	2020	2019
$150,108	$254	$0	$0	$0	$0	$5,090,023	$4,950,117
—	—	10,523	—	—	—	22,145,128	15,701,215
—	—	—	—	—	—	904,000	—
—	—	—	—	29,125	—	29,125	25,756
—	—	—	—	—	—	239,332	191,715
—	—	—	1,655,173	—	—	1,655,173	1,148,521
—	—	—	2,979,276	—	—	2,979,276	2,859,420
$150,108	**$254**	**$10,523**	**$4,634,449**	**$29,125**	**$0**	**$33,042,057**	**$24,876,744**
$69,259	$5,407	$501	$406,742	$0	$0	$12,611,135	$19,348,131
2,601	131	2	691	276	21	2,779,685	2,776,240
—	—	—	—	—	—	4,648,036	2,490,753
81	1	—	—	—	—	25,689	141,383
(375)	(24)	(1)	(2,999)	—	—	(700,010)	(737,168)
(300)	(20)	—	(1,825)	—	—	(279,402)	(266,859)
$71,266	**$5,495**	**$502**	**$402,609**	**$276**	**$21**	**$19,085,133**	**$23,752,480**
$0	$0	$0	$0	$0	$0	$156,962	$262,507
—	—	—	—	—	—	(61,703)	(158,164)
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$95,259**	**$104,343**
$7,192	$93	$10	$9,094	$256	$2,012	$34,706	$24,411
—	—	—	—	—	—	185,907	167,612
$228,566	**$5,842**	**$11,035**	**$5,046,152**	**$29,657**	**$2,033**	**$52,443,062**	**$48,925,590**
$0	$0	$0	$0	$0	$0	$26,036,181	$24,474,287
—	—	—	—	29,125	—	29,125	25,756
—	—	—	—	—	—	323,638	280,769
5,217	327	96	5,161	246	1,178	542,048	271,875
—	—	—	—	—	—	185,907	167,612
128,159	6,137	—	12,711	—	—	147,007	240,536
—	—	—	160,370	—	—	160,370	125,806
—	—	—	2,979,276	—	—	2,979,276	2,859,420
$133,376	**$6,464**	**$96**	**$3,157,518**	**$29,371**	**$1,178**	**$30,403,552**	**$28,446,061**
$95,190	**($622)**	**$10,939**	**$1,888,634**	**$286**	**$855**	**$22,039,510**	**$20,479,529**
$1,684,986	**$114,051**	**$0**	**$9,815,305**	**$658**	**$1,037**	**$386,062,132**	**$365,580,900**
$0	$0	$0	$0	$0	$0	$0	$1,703
$1,684,986	**$114,051**	**$0**	**$9,815,305**	**$658**	**$1,037**	**$386,062,132**	**$365,582,603**
$1,780,176	**$113,429**	**$10,939**	**$11,703,939**	**$944**	**$1,892**	**$408,101,642**	**$386,062,132**

STATEMENT OF NET POSITION – PROPRIETARY FUNDS

As of June 30, 2020, with Comparative Totals as of June 30, 2019 (Dollars in Thousands)

	Proprietary Funds			Totals	
	HCF	CRF	LTCF	2020	2019
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES					
Current Assets					
Cash & Cash Equivalents	$0	$1	$16,827	$16,828	$11,233
Short-Term Investments	277,089	728,825	233	1,006,147	1,015,595
Receivables					
Members & Employers	$0	$17,330	$610	$17,940	$17,554
Health Carriers & Pharmacy Benefit Managers	188,251	1,581	—	189,832	192,195
Interest & Dividends	690	2,547	—	3,237	6,020
Due from Other Funds	326,961	77	—	327,038	308,766
Other Receivables	11	—	—	11	11
Total Receivables	**$515,913**	**$21,535**	**$610**	**$538,058**	**$524,546**
Subtotal Current Assets	**$793,002**	**$750,361**	**$17,670**	**$1,561,033**	**$1,551,374**
Noncurrent Assets					
Investments, at Fair Value					
Global Equity Securities	$0	$0	$1,671,180	$1,671,180	$1,628,790
Global Debt Securities	520,342	—	3,238,987	3,759,329	3,619,110
Total Investments	**$520,342**	**$0**	**$4,910,167**	**$5,430,509**	**$5,247,900**
Subtotal Noncurrent Assets	**$520,342**	**$0**	**$4,910,167**	**$5,430,509**	**$5,247,900**
TOTAL ASSETS	**$1,313,344**	**$750,361**	**$4,927,837**	**$6,991,542**	**$6,799,274**
Deferred Outflows of Resources	$13,458	$9,197	$1,372	$24,027	$20,027
Total Assets and Deferred Outflows of Resources	**$1,326,802**	**$759,558**	**$4,929,209**	**$7,015,569**	**$6,819,301**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES					
Current Liabilities					
Claims Payable	$267,612	$0	$28,912	$296,524	$308,159
Unearned Premiums	115,407	—	19,952	135,359	110,267
Due to Employers	—	192	—	192	642
Estimated Insurance Claims Due	470,546	—	—	470,546	459,661
Estimated Future Policy Liability Short-Term	—	—	109,991	109,991	73,497
Due to Carriers	—	398,597	—	398,597	345,063
Due to Other Funds	4,127	330,208	933	335,268	308,332
Management & Third-Party Administrator Fees	24,671	—	2,466	27,137	37,413
Other	—	3,963	5,062	9,025	7,879
Total Current Liabilities	**$882,363**	**$732,960**	**$167,316**	**$1,782,639**	**$1,650,913**
Long-Term Liabilities					
Estimated Liability for Future Policy Benefits	$0	$0	$6,943,080	$6,943,080	$4,555,496
Net Pension & OPEB Liabilities	108,500	73,255	10,249	192,004	186,478
Total Long-Term Liabilities	**$108,500**	**$73,255**	**$6,953,329**	**$7,135,084**	**$4,741,974**
TOTAL LIABILITIES	**$990,863**	**$806,215**	**$7,120,645**	**$8,917,723**	**$6,392,887**
Deferred Inflows of Resources	$10,446	$7,592	$1,528	$19,566	$3,595
Total Liabilities and Deferred Inflows of Resources	**$1,001,309**	**$813,807**	**$7,122,173**	**$8,937,289**	**$6,396,482**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)	**$325,493**	**($54,249)**	**($2,192,964)**	**($1,921,720)**	**$422,819**

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, 2020, with Comparative Totals for the Fiscal Year Ended June 30, 2019 (Dollars in Thousands)

	Proprietary Funds			Totals	
	HCF	CRF	LTCF	2020	2019
Operating Revenues					
Premiums	$3,706,490	$0	$278,535	$3,985,025	$3,964,551
Federal Government Subsidies	12,489	—	—	12,489	18,753
Administrative Fees Earned	—	25,758	—	25,758	22,339
Other	—	59	—	59	36
Total Operating Revenues	**$3,718,979**	**$25,817**	**$278,535**	**$4,023,331**	**$4,005,679**
Operating Expenses					
Claims Expense	$3,480,089	$0	$337,298	$3,817,387	$3,873,136
Increase in Estimated Liabilities	10,885	—	2,424,078	2,434,963	95,224
Administrative Expenses	331,236	37,862	27,500	396,598	341,986
Total Operating Expenses	**$3,822,210**	**$37,862**	**$2,788,876**	**$6,648,948**	**$4,310,346**
OPERATING LOSS	**($103,231)**	**($12,045)**	**($2,510,341)**	**($2,625,617)**	**($304,667)**
Non-Operating Revenues					
Net Appreciation in Fair Value of Investments	$42,307	$0	$223,252	$265,559	$355,624
Interest, Dividends & Other Investment Income	11,215	6,111	900	18,226	23,530
Total Non-Operating Revenues	**$53,522**	**$6,111**	**$224,152**	**$283,785**	**$379,154**
Non-Operating Expenses					
Management Fees	$68	$0	$1,659	$1,727	$1,624
Other Investment Expenses	92	—	888	980	1,138
Total Non-Operating Expenses	**$160**	**$0**	**$2,547**	**$2,707**	**$2,762**
NON-OPERATING INCOME	**$53,362**	**$6,111**	**$221,605**	**$281,078**	**$376,392**
CHANGE IN UNRESTRICTED NET POSITION	**($49,869)**	**($5,934)**	**($2,288,736)**	**($2,344,539)**	**$71,725**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)					
Beginning of Year	**$375,362**	**($48,315)**	**$95,772**	**$422,819**	**$351,094**
End of Year	**$325,493**	**($54,249)**	**($2,192,964)**	**($1,921,720)**	**$422,819**

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

STATEMENT OF CASH FLOWS – PROPRIETARY FUNDS

For the Fiscal Year Ended June 30, 2020, with Comparative Totals for the Fiscal Year Ended June 30, 2019 (Dollars in Thousands)

	Proprietary Funds			Totals	
	HCF	CRF	LTCF	2020	2019
Cash Flows From Operating Activities					
Premiums Collected	$3,700,510	$0	$286,681	$3,987,191	$3,941,619
Federal Government Subsidies	12,489	—	—	12,489	18,753
Administrative Fees Collected	—	25,817	—	25,817	22,375
Claims Paid	(3,493,253)	—	(335,392)	(3,828,645)	(3,906,077)
Administrative Expenses Paid	(326,669)	(27,330)	(26,745)	(380,744)	(348,580)
Other (Payments) Receipts, Net	—	78,756	—	78,756	(38,219)
Net Cash Provided by (Used for) Operating Activities	**($106,923)**	**$77,243**	**($75,456)**	**($105,136)**	**($310,129)**
Cash Flows From Investing Activities					
Net Sales of Investments	$67	$0	$82,883	$82,950	$65,195
Net Change in Short-Term Investments	94,447	(84,784)	(215)	9,448	226,415
Interest & Dividends Received	12,557	7,542	471	20,570	22,461
Other Investment (Payments) Receipts, Net	(149)	—	(2,088)	(2,237)	(2,320)
Net Cash Provided by (Used for) Investing Activities	**$106,922**	**($77,242)**	**$81,051**	**$110,731**	**$311,751**
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	**($1)**	**$1**	**$5,595**	**$5,595**	**$1,622**
Cash & Cash Equivalents, Beginning of Year	**$1**	**$0**	**$11,232**	**$11,233**	**$9,611**
Cash & Cash Equivalents, End of Year	**$0**	**$1**	**$16,827**	**$16,828**	**$11,233**
Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used for) Operating Activities					
Operating Income (Loss)	($103,231)	($12,045)	($2,510,341)	($2,625,617)	($304,667)
Changes in Assets and Liabilities:					
Receivables:					
Members & Employers	—	(190)	(196)	(386)	(978)
Health Carriers & Pharmacy Benefit Managers	(551)	2,914	—	2,363	(23,914)
Due from Other Funds	(19,699)	1,427	—	(18,272)	(4,082)
Claims Payable	(13,164)	—	1,529	(11,635)	(33,484)
Unearned Premiums	16,750	—	8,342	25,092	4,754
Due to Employers	—	(450)	—	(450)	(12,846)
Estimated Insurance Claims Due	10,885	—	—	10,885	14,332
Net Pension & OPEB Liabilities	9,248	6,823	1,426	17,497	(29,197)
Estimated Liability for Future Policy Benefits Short-Term	—	—	36,494	36,494	(8,521)
Estimated Liability for Future Policy Benefits Long-Term	—	—	2,387,584	2,387,584	89,414
Due to Carriers	—	53,534	—	53,534	(2,834)
Due to Other Funds	3,085	24,461	(610)	26,936	7,037
Management & Third-Party Administrator Fees Payable	(10,246)	—	(61)	(10,307)	(5,680)
Other	—	769	377	1,146	537
Net Cash Provided by (Used for) Operating Activities	**($106,923)**	**$77,243**	**($75,456)**	**($105,136)**	**($310,129)**
Noncash Investing Activities					
Noncash Increase/(Decrease) in Fair Value of Investments	**$42,292**	**$0**	**($198,814)**	**($156,522)**	**$81,468**

The accompanying notes are an integral part of these 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 all active and retired 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 Senate Rules Committee and the Speaker of the Assembly, 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
Pension Prefunding Plan:	
California Employers' Pension Prefunding Trust Fund	Multiple-employer (Investment Trust Fund)
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 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 benefit 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 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, 2020, the PERF had the following participating employers:

Employers for PERF

PERF Employers	2020
PERF A	
State	1
Public Agencies[1]	309
Total	**310**
PERF B	
School Districts and Charter Schools	1,326
PERF C	
Public Agencies[1]	1,296
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. The only active members in the fund are constitutional officers 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 2020-21.

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, 2020, membership in the defined benefit pension plans consisted of the following:

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

			Members		
Plan	Retirees[1]	Survivors & Beneficiaries[1]	Active	Inactive or Deferred not receiving benefits	Total
PERF A					
Agent	392,840	63,275	492,671	208,464	1,157,250
PERF B					
Schools Cost-Sharing	201,860	30,408	336,019	206,626	774,913
PERF C					
Public Agency Cost-Sharing	38,769	5,377	49,394	26,379	119,919
Total PERF	**633,469**	**99,060**	**878,084**	**441,469**	**2,052,082**
LRF	102	110	2	4	218
JRF	1,382	610	130	1	2,123
JRF II	349	41	1,625	—	2,015
Total	**635,302**	**99,821**	**879,841**	**441,474**	**2,056,438**

(1) Retirees and Survivors & Beneficiaries represent inactives receiving benefits.

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.

Contributions

The benefits for the defined benefit pension plans are funded by contributions from members, employers, non-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. Non-employer contributions are not expected each year, but when provided they are accrued for.

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, changed 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, 2020, 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%	7.25% to 11%	30.98%
Miscellaneous – Second Tier	3.75%	3.75%	30.98%
Industrial – First Tier	5% to 11%	6% to 11%	20.82%
Industrial – Second Tier	3.75%	3.75%	20.82%
Safety	11.00%	11.00%	21.53%
Peace Officers and Firefighters	8% to 13%	11 to 13%	47.20%
California Highway Patrol	11.50%	11.50%	57.81%
Public Agency:			
Miscellaneous	5% to 8%	5.50% to 8.25%	varies[1]
Safety	7% to 9%	9.25% to 14.50%	varies[1]
PERF B – Schools Cost-Sharing			
Classified School	7.00%	7.00%	19.72%
PERF C – Public Agency Cost-Sharing			
Public Agency:			
Miscellaneous	2% to 8%	4.00% to 7.25%	varies[1]
Safety	7.00% to 10.10%	10% to 16%	varies[1]
LRF	4% or 8%	N/A	35.27%[2]
JRF	8.00%	N/A	8.00%[3]
JRF II	8.00%	16.00%	24.96%[2]

(1) Required contributions for individual public agencies' plans are the sum of the normal cost (expressed as a percentage of pay) and a payment toward any unfunded liability. Individual plan results vary.

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

(3) 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 for 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 by 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, 2020, membership in the defined contribution plans consisted of the following:

Members in DCF and SCPF

Plan	Employers	Members
DCF	821	31,821
SCPF	1	6,661

OTHER ADMINISTRATIVE ACTIVITIES

CalPERS administers other activities as follows:

The California Employers' Pension Prefunding Trust Fund (CEPPTF) – The CEPPTF was established by Chapter 665 of the 2018 Statutes, and employers elect to participate in the CEPPTF to prefund pension contributions to their defined benefit pension plans. Currently, the CEPPTF has 15 participating employers. Of the 15 participating employers, eight employers have contributed assets in the CEPPTF as of June 30, 2020. The CEPPTF is more fully described in Note 9 to the financial statements.

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 572 participating employers. Of the 572 participating employers, 557 employers have contributed assets in the CERBTF as of June 30, 2020. The CERBTF is more fully described in Note 10 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 11 to the financial statements.

Old Age and Survivors' Insurance Revolving Fund (OASI) – The OASI was established pursuant to Government Code section 22600 in order to carry out all of the provisions of the Old Age and Survivors' Insurance Program in accordance with Section 218 of Title II of the Social Security Act. The OASI Fund is more fully described in Note 12 to the financial statements.

Public Employees' Health Care Fund (HCF) – The HCF was created 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 13 to the financial statements.

Public Employees' Contingency Reserve Fund (CRF) – The CRF was created 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 14 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 15 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, 2020:

Fiduciary Funds – include pension trusts (PERF A, PERF B, PERF C, LRF, JRF, JRF II, DCF, SCPF), an investment trust (CEPPTF), an other post-employment trust (CERBTF), and custodial funds RBF and OASI, 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. Contributions to the defined contribution plans, the investment plan, and the other post-employment benefit plan are recognized when received. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan. The RBF and OASI are custodial funds and are 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.

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, 2020:

Target Asset Allocation

Asset Class	PERF A	PERF B	PERF C	LRF	JRF	JRF II
Global Equity	50%	50%	50%	22%	—	52%
Private Equity	8%	8%	8%	—	—	—
Global Debt Securities	28%	28%	28%	49%	—	32%
Real Assets	13%	13%	13%	—	—	—
Liquidity	1%	1%	1%	—	100%	—
Inflation	—	—	—	16%	—	5%
REITs	—	—	—	8%	—	8%
Commodities	—	—	—	5%	—	3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

The California Employers' Retiree Benefit Trust Fund (CERBTF) enables employers to pre-fund liabilities for other post-employment benefits (OPEB). 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 higher 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 lower 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	59%	40%	22%
Global Debt Securities	25%	43%	49%
Inflation Assets	5%	5%	16%
REITs	8%	8%	8%
Commodities	3%	4%	5%
Total	**100%**	**100%**	**100%**

The California Employers' Pension Prefunding Trust Fund (CEPPTF) enables employers to prefund employer contributions to defined benefit pension plans. Two diversified policy portfolios (Strategy 1 and 2) are available for employers to select depending on employer preferences for return and risk (volatility) expectations. By comparison, Strategy 1 has the higher long-term expected rate of return and return volatility. Strategy 2 has the lower long-term expected rate of return and return volatility.

The following table shows the Board-adopted target asset allocation policy for the two CEPPTF strategies:

CEPPTF Target Asset Allocation

Asset Class	CEPPTF Strategy 1	CEPPTF Strategy 2
Global Equity	40%	14%
Global Debt Securities	47%	73%
Inflation Assets	5%	5%
REITs	8%	8%
Total	**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 3 to 5 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, deferred outflows of resources, liabilities, and deferred inflows of resources and disclosures of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenue/additions and expenses/deductions 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, and foreign currency risks. 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 4.0 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 may 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, 2019, to conform to the presentation as of and for the fiscal year ended June 30, 2020.

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, 2019, from which the summarized information was derived. The Fiscal Year 2018-19 beginning of the year net position of the OASI was restated as a result of it being reported separately to more accurately depict the custodial nature of the fund.

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.

EMPLOYER SHARE OF POST-EMPLOYMENT BENEFITS

As of June 30, 2020, CalPERS has adjusted its proportionate share of the state's net pension and OPEB liabilities totaling approximately $592 million and $659 million, respectively. CalPERS recorded these post-employment liabilities along with the corresponding amount of deferred inflows 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 pension and post-employment obligations disclosures would be misleading to the users of CalPERS financial statements where the focus is on plans, not individual employer pension and post-employment obligations. Refer to the State of California CAFR for additional information on CalPERS pension and OPEB liabilities.

INTERFUND BALANCES

The Basic Financial Statements include amounts Due from Other Funds and Due to Other Funds. The principal purposes for these interfund balances include administration expense reimbursements due from other CalPERS funds to the PERF; incoming health premiums in transit and due from the CRF and due to the HCF; and member transfers in transit and due to and due from one pension plan to another. The balance of Health premiums due from CRF to HCF was $327 million at June 30, 2020. All interfund balances are expected to be repaid within one year from the date of these financial statements. This interfund activity occurs on a routine basis and is consistent with the activities of the fund making the transfer.

3. CASH AND CASH EQUIVALENTS

Cash and cash equivalents of approximately $0.5 billion at June 30, 2020, represent amounts held in the CalPERS general operating accounts with the State Treasury and the master custodian, State Street Bank and Trust Company. 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, bonds issued by U.S. corporations, and other allowable instruments that meet short-term maturity or average life, diversification, and credit quality restrictions.

INVESTMENTS AT FAIR VALUE

GASB 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, 2020, CalPERS had no specific plans or intentions to sell investments at amounts different from NAV.

The following table presents a summary of CalPERS investments by type as of June 30, 2020, at fair value:

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

	Fair Value June 30, 2020	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	$104,785,260	$104,785,260	$0	$0
International Equity	80,575,711	80,575,711	—	—
Total Global Equity	**$185,360,971**	**$185,360,971**	**$0**	**$0**
Global Debt				
Asset-Backed	$30,188,725	$0	$29,106,225	$1,082,500
Bank Loans	356,614	—	356,614	—
International Debt	3,017,725	—	3,017,725	—
Municipal/Public Bonds	10,838	—	10,838	—
Sovereign Debt	7,609,571	—	7,609,571	—
U.S. Corporate	26,743,748	—	26,743,748	—
U.S. Treasuries, STRIPS and TIPS	21,673,873	—	21,673,873	—
Total Global Debt	**$89,601,094**	**$0**	**$88,518,594**	**$1,082,500**
Derivatives				
Futures	$9,790	$9,790	$0	$0
Rights & Warrants	9,617	—	9,617	—
Forward Contract Assets	365,988	—	365,988	—
Forward Contract (Liabilities)	(144,346)	—	(144,346)	—
Swap Assets	548,313	—	548,313	—
Swap (Liabilities)	(12,765)	—	(12,765)	—
Total Derivatives	**$776,597**	**$9,790**	**$766,807**	**$0**
Other				
Rule 144(a) Securities	$21,664,232	$0	$21,664,232	$0
Securitized Assets	464,184	—	—	464,184
Private Equity[2]	64,892	—	—	64,892
Total Other	**$22,193,308**	**$0**	**$21,664,232**	**$529,076**
Total Investments by Fair Value Level	**$297,931,970**	**$185,370,761**	**$110,949,633**	**$1,611,576**
Investments Measured at NAV				
Commingled/Pooled Funds	$20,748,187			
Real Assets	43,008,182			
Private Equity[2]	26,430,660			
Other Investments	1,269,829			
Total Investments Measured at NAV	**$91,456,858**			
Total Investments Measured at Fair Value	**$389,388,828**			

(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.

Global equity securities include both domestic and international securities, and are classified in Level 1. 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 that values these investments 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 compared to 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 Act of 1933, 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. Private Equity holdings, in which CalPERS invests directly, are valued at Level 3 of the fair market value hierarchy. 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	$20,748,187	$0
Real Assets	43,008,182	4,150,595
Private Equity	26,430,660	25,070,093
Other Investments	1,269,829	240,560
Total	**$91,456,858**	**$29,461,248**

A commingled fund/pooled investment vehicle is a fund with capital pooled from multiple investors that is deployed to a mutually agreed upon strategy. The fair value of commingled funds/pooled investment vehicles is measured at NAV, where fair value is measured by multiplying the pool's share price by the number of shares held. Typically, there are no redemption constraints for the commingled funds.

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 fund 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. This strategy is no longer actively managed but some residual balances exist at fiscal year end.
- Multi-Asset Class Program – management of portfolios which attempt to outperform the CalPERS assumed rate of return with less risk than the PERF.
- Venture Capital Funds – investments made to finance small, early-stage, emerging firms that are believed to have long-term growth potential.
- Opportunistic Strategies – objectives include:
    - The Low Liquidity Enhanced Return Policy goal is to earn a premium versus traditional limited duration assets by purchasing a broader universe of limited duration securities than those typically available to traditional money market portfolios. Trade finance extends duration, invests down the credit spectrum and is less liquid.

The other investment strategies are reported at NAV as they are externally managed fund-structure investments in nongovernmental entities that do not have readily determinable fair values. The redemption terms for these investments range from at will up to 90 days, with the exception of the Venture Capital Funds.

CalPERS invests in privately held real assets 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 a stated amount of capital and funds such capital at the partners' request; undrawn balances are included in the unfunded commitment disclosure.

Certain real asset investments are leveraged in that partnerships have been established to purchase properties through a combination of contributions from CalPERS and other investors and through the acquisition of debt. Real asset investments of approximately $40.8 billion are reported at NAV. CalPERS no longer holds recourse debt in real asset investment partnerships.

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, 2020:

Money-Weighted Rate of Return

Plan	Rate of Return
PERF A	
Agent	5.0%
PERF B	
Schools Cost-Sharing	5.0%
PERF C	
Public Agency Cost-Sharing	5.0%
LRF	6.2%
JRF	2.3%
JRF II	4.1%
CERBTF	4.0%

5. INVESTMENT RISK DISCLOSURES

INVESTMENT LEGAL DISCLOSURES

The Board of Administration's investment authority as well as other administrative duties and responsibilities are outlined in the California Constitution, Article 16, Section 17, the Public Employees Retirement Law, Article 6, Section 20190, and the California Public Employees' Pension Reform Act of 2013, Article 4 of Chapter 21 of Division 7 of Title 1, which, among other things, require diversification of investments so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so. As such, policies voted on by the Board allow for investments in government, domestic and international debt, domestic and international equities, mutual funds, private equity, real assets, and other investments, except for certain investments specifically prohibited by other statutes.

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, 2020, a portion of the System's investments, other than posted collateral for futures and over-the-counter instruments, is held in the System's name and is not exposed to custodial credit risk. Where CalPERS trusts invest in commingled funds, the assets within the fund are held in the name of the trustee of the fund and not in CalPERS' name. There are no general policies relating to custodial credit risk.

Concentration of Credit Risk

Other than U.S. Government Securities, which are not subject to the GASB 40 disclosure requirements, CalPERS utilizes its control framework that includes policies and policy-related procedures which are inclusive of issuer concentration and credit quality limits. 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 10 percent to positive 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, 2020:

CalPERS – Debt Securities Subject to Interest Rate Risk

(Dollars in Thousands)

Debt Security Type	Portfolio Weighted Average Effective Duration	Fair Value June 30, 2020	Percent of Debt Securities
U.S. Treasuries and Agencies:			
U.S. Treasury Bonds	19.00	$16,296,740	15.97%
U.S. Treasury Notes	8.08	5,321,092	5.21%
U.S. Treasury Strips	12.86	56,040	0.05%
Corporate	9.80	40,486,357	39.67%
Mortgages	1.60	29,794,061	29.19%
Asset-Backed	0.41	11,255,796	11.03%
Foreign Government	5.05	7,560,172	7.41%
Municipals	14.64	10,838	0.01%
No Effective Duration:			
Commingled Fund	N/A	$391,963	0.38%
Foreign Government	N/A	187,780	0.18%
Corporate	N/A	117,994	0.12%
Asset-Backed	N/A	25,612	0.03%
Mortgage	N/A	10,138	0.01%
Swaps	N/A	(9,451,129)	(9.26%)
Total		**$102,063,454**	**100.00%**

CalPERS invests in the State Treasury pool, State Street Bank Global Advisors' (SSGA) funds: (1) Short-Term Investment Fund (STIF) and (2) U.S. Government Short-Term Investment Fund (GSTIF), and other short-term investment funds. These investments are included as part of the short-term investments in the financial statements. As of June 30, 2020, the pooled money investment account with the State Treasury totaled approximately $3.4 billion. The SSGA STIF totaled approximately $3.2 billion, and the SSGA GSTIF totaled approximately $2.7 billion. 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, 2020, the weighted average maturity was 191 days for the State Treasury pool, 35 days for the SSGA STIF, and 33 days for the SSGA GSTIF. Both the SSGA STIF and the SSGA GSTIF are rated as P1. The State Treasury pool is not rated.

The LRF, JRF II, CERBTF, SCPF, DCF, HCF, LTCF, and CEPPTF invest in various SSGA funds, with weighted average maturities and credit ratings as of June 30, 2020:

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

SSGA Fund	Fair Value June 30, 2020	Credit Rating[1]	Weighted Average Maturity[2]
Bloomberg Barclays Long Liability Index	$6,891,192	Aa3	14.18
U.S. Aggregate Bond Index	526,071	Aa2	8.02
U.S. Bond Index	384,447	Aa2	7.91
U.S. Inflation Protected Bond Index	11,195	Aaa	8.16
U.S. Short-Term Govt/Credit Bond Index	42,645	Aa2	1.97
U.S. TIPS Index	1,042,341	Aaa	8.23
Total	**$8,897,891**		

(1) Credit rating reflects fair 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 years.

The following table presents the weighted average duration for securities lending collateral subject to interest rate risk as of June 30, 2020:

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

Security Type	Fair Value June 30, 2020	Percent of Securities Lending Collateral
No Effective Duration:		
Money Market Fund[1]	$136,527	12.1%
Short-Term Investment Fund[2]	989,154	87.9%
Total[3]	**$1,125,681**	**100.0%**

(1) Money Market Fund is invested in U.S. Treasury securities with a weighted average maturity of one day.
(2) Short-Term Investment Fund has a weighted average maturity of 11 days.
(3) This figure does not include $99,589 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 $1,225,270 for fiduciary funds.

As of June 30, 2020, 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, 2020, the collateral invested in CalPERS Internal Securities Lending had an aggregate weighted average maturity (to final maturity) of one day. eSecLending (eSec) has a weighted average maturity (to final maturity) of one day.

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 controls framework, which includes investment policies, establish both general and specific risk measures. We manage credit risk though our Total Fund Policy, and policy related procedures, which is inclusive, but not limited to sector, issuer concentration, and credit quality limits. Of the total fixed income portfolio of the rated securities, 97 percent are investment-grade securities.

Investment-grade securities have low default probabilities and are rated at a minimum of Baa3 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, 2020:

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

Moody's Quality Rating	Fair Value June 30, 2020	Fair Value as a Percent of Debt Security Investments
Aaa	$7,313,485	7.17%
Aa1	941,527	0.92%
Aa2	1,963,264	1.92%
Aa3	984,438	0.96%
A1	1,885,059	1.85%
A2	2,497,463	2.45%
A3	3,286,092	3.22%
B1	2,210,457	2.17%
B2	2,067,080	2.03%
B3	1,627,296	1.59%
Baa1	5,576,711	5.46%
Baa2	7,578,618	7.43%
Baa3	3,833,836	3.76%
Ba1	1,867,212	1.83%
Ba2	2,103,775	2.06%
Ba3	3,437,776	3.37%
Caa1	899,948	0.88%
Caa2	515,303	0.50%
Caa3	74,542	0.07%
Ca	26,015	0.03%
C	4,914	—%
NA[1]	22,782,822	22.32%
NR[2]	28,585,821	28.01%
Total	**$102,063,454**	**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.

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
NR[1,2]	$1,125,681	100.0%
Total[3]	**$1,125,681**	**100.0%**

(1) NR represents those securities that are not rated.
(2) This figure includes $136,527 invested in a money market fund and $989,154 invested in short-term investments.
(3) This figure does not include $99,589 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 $1,225,270 for fiduciary funds.

Foreign Currency Risk

Foreign currency risk is defined as any deposits or investments that are denominated in foreign currencies, which bear a potential risk of loss arising from changes in currency exchange rates. The System's asset allocation and investment policies allow for active and passive investments in international securities to reflect benchmarks that have both U.S. domestic and foreign currency. While there is not a formal policy related to foreign currency risk, the System manages and addresses the risk in asset class policies and policy related procedures, through metrics such as tracking error, and is required to report our total non-USD currency exposures to the Board as part of its Trust Level Review. The proportion of international stocks within the global equity portfolio is 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. Foreign currency risk disclosures are shown in the CalPERS – International Investment Securities table below.

CalPERS – International Investment Securities[1] – Fair Value at June 30, 2020 (U.S. Dollars in Thousands)

Currency	Cash	Equity	Debt Securities	Real Assets	Private Equity	Forward Contracts	Total
Australian Dollar	(10,158)	3,325,877	—	816,758	—	25,084	$4,157,561
Brazilian Real	312	993,394	41,797	532,313	—	3,849	1,571,665
British Pound	38,806	6,012,419	200,716	1,036,071	125,197	60,525	7,473,734
Canadian Dollar	1,225,740	5,397,813	—	308,106	113,742	(32,440)	7,012,961
Chilean Peso	75	148,247	—	75	—	6,436	154,833
Chinese Yuan Renminbi	1,876	914,613	—	969,817	—	(410)	1,885,896
Colombian Peso	109	39,176	—	—	—	(1,403)	37,882
Czech Koruna	150	26,722	—	—	—	638	27,510
Danish Krone	215	1,210,907	—	29,591	—	1,058	1,241,771
Egyptian Pound	68	39,022	—	—	—	(92)	38,998
Euro Currency	(49,045)	15,078,520	3,275,458	1,895,351	3,764,494	151,201	24,115,979
Guatemala Quetzal	—	—	—	118,656	—	—	118,656
Hong Kong Dollar	1,974	6,363,583	—	—	—	495	6,366,052
Hungarian Forint	93	84,263	—	—	—	47	84,403
Indian Rupee	110	2,858,169	—	698	—	48	2,859,025
Indonesian Rupiah	84	491,177	—	—	—	(270)	490,991
Israeli Shekel	201	389,668	—	—	—	(10)	389,859
Japanese Yen	12,751	16,591,202	1,219,761	65,913	1,205	4,917	17,895,749
Kuwaiti Dinar	(140)	98,804	—	—	—	—	98,664
Malaysian Ringgit	107	613,767	—	—	—	—	613,874
Mexican Peso	100	259,194	—	19,532	—	(516)	278,310
New Taiwan Dollar	16	4,313,803	—	—	—	(1,679)	4,312,140
New Zealand Dollar	175	299,344	—	—	—	(1,147)	298,372
Norwegian Krone	90	416,618	—	4,693	—	(2,117)	419,284
Pakistan Rupee	99	12,896	—	—	—	—	12,995
Peruvian Nuevo Sol	25	—	—	—	—	25	50
Philippine Peso	173	241,717	—	—	—	205	242,095
Polish Zloty	276	110,937	—	—	—	340	111,553
Qatari Riyal	159	285,969	—	—	—	(8)	286,120
Russian Ruble	—	—	—	105,305	—	2,505	107,810
Saudi Riyal	420	942,848	—	—	—	(2)	943,266
Singapore Dollar	1,197	955,760	—	8,013	—	626	965,596
South African Rand	146	706,940	—	—	—	5,086	712,172
South Korean Won	1,261	2,293,959	—	10,238	—	303	2,305,761
Swedish Krona	359	1,421,518	132,160	32,185	—	1,693	1,587,915
Swiss Franc	345	6,515,465	—	—	—	403	6,516,213
Thailand Baht	739	805,522	—	—	—	(256)	806,005
Turkish Lira	85	130,260	—	—	—	(2,283)	128,062
Uae Dirham	10,704	192,220	—	—	—	(10)	202,914
Total	**$1,239,697**	**$80,582,313**	**$4,869,892**	**$5,953,315**	**$4,004,638**	**$222,841**	**$96,872,696**

(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. Applicable derivative instrument amounts are reflected under Equity and Forward Contracts columns.

6. SECURITIES LENDING

The State Constitution and Board policy permits 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 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 a minimum of 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, 2020, the fair value of the securities on loan was approximately $28.9 billion. The securities on loan remain on CalPERS' Statement of Fiduciary Net Position in their respective investment categories. At June 30, 2020, cash collateral received totaling $1.2 billion is reported as securities lending obligation, and the fair value of reinvested cash collateral totaling $1.2 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, eSecLending and CalPERS manage the collateral.

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, because 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 the standard International Swaps and Derivatives Association and Credit Support Annex agreements with all counterparties.

At June 30, 2020, the aggregate fair value of investment derivatives in an asset position subject to counterparty credit risk was approximately $914.3 million. The aggregate amount of cash collateral held by CalPERS on behalf of over-the-counter derivatives was approximately $597.6 million.

CalPERS – Derivative Instruments Summary[1,2] (Dollars in Thousands)

Investment	Net Appreciation/ (Depreciation) in Fair Value for the Fiscal Year Ended June 30, 2020	Fair value at June 30, 2020		
Derivatives (by Type)	**Amount**	**Classification**	**Amount**	**Notional**
Credit Default Swaps Bought	($559)	Debt Securities	$0	$0
Credit Default Swaps Written	(721)	Debt Securities	—	—
Currency Swaps	(288)	Debt Securities	—	—
Fixed Income Futures Long	1,437,951	Equity Securities	(41,071)	1,418,699,230
Fixed Income Futures Short	(195,556)	Equity Securities	4,587	(118,566,255)
Fixed Income Options Bought	1,468	Equity Securities	—	—
Fixed Income Options Written	(12,460)	Equity Securities	—	—
Foreign Currency Options Bought	(899)	Equity Securities	—	—
Foreign Currency Options Written	217	Equity Securities	—	—
Futures Options Written	(9)	Equity Securities	—	—
FX Forwards	293,627	Investment Sales/ Purchases	221,642	20,000,731
Index Futures Long	1,655,488	Equity Securities	46,809	9,602,637
Index Futures Short	85,702	Equity Securities	(535)	(53,407)
Index Options Written	1,058	Debt Securities	—	—
Pay Fixed Interest Rate Swaps	(6,818)	Debt Securities	(5,790)	29,700
Receive Fixed Interest Rate Swaps	14,356	Debt Securities	292	1,500
Rights[3]	2,548	Equity Securities	9,533	24,896
Total Return Swaps Bond	1	Debt Securities	—	338,366
Total Return Swaps Equity	1,665,684	Debt Securities	541,046	(9,445,136)
Warrants[3]	(116)	Equity Securities	84	3,125
Total	**$4,940,674**		**$776,597**	

(1) The information presented in this table is derived from CalPERS' June 30, 2020, accounting records and in some instances may reflect trades on a one-day lag basis.
(2) Derivative instruments subject to foreign currency risk include FX Forwards, and a portion of the Rights and Index Futures amounts listed. These amounts are reflected in the International Investment Securities table under Forward Contracts and Equity columns.
(3) Rights and Warrants are Notional units.

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

		Investment Maturities (in years)			
Investment Type	**Fair Value June 30, 2020**	**Under 1**	**1–5**	**6–10**	**10+**
Pay Fixed Interest Rate Swaps	($5,790)	$0	$0	$0	($5,790)
Receive Fixed Interest Rate Swaps	292	—	—	120	172
Total Return Swaps Equity	541,046	541,046	—	—	—
Total	**$535,548**	**$541,046**	**$0**	**$120**	**($5,618)**

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

Investment Type	Reference Rate	Fair Value at June 30, 2020	Notional
Interest Rate Swaps	Receive Fixed 1.931%, Pay Variable - 3 month LIBOR	$120	$1,000
Interest Rate Swaps	Receive Fixed 2.201%, Pay Variable - 3 month LIBOR	172	500
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.643%	(5,790)	29,700
Subtotal – Interest Rate Swaps		**($5,498)**	**$31,200**
Total Return Bond Swaps	Receive Fixed 3.90%, Pay Fixed 0%	$0	$3,691
Total Return Bond Swaps	Receive Fixed 4.10%, Pay Fixed 0%	—	146,440
Total Return Bond Swaps	Receive Fixed 5.10%, Pay Fixed 0%	—	19,424
Total Return Bond Swaps	Receive Fixed 5.50%, Pay Fixed 0%	—	3,933
Total Return Bond Swaps	Receive Fixed 5.80%, Pay Fixed 0%	—	4,950
Total Return Bond Swaps	Receive Variable 1-month spread, Pay Fixed 0%	—	36,230
Total Return Bond Swaps	Receive Variable 3-month spread, Pay Fixed 0%	—	123,698
Subtotal – Total Return Bond Swaps		**$0**	**$338,366**
TOTAL		**($5,498)**	**$369,566**

CalPERS – Derivative Instruments Subject to Counterparty Credit Risk

Counterparty	Percentage of Net Exposure	Moody's Ratings
BNP Paribas, S.A.	51.24%	Aa3
Goldman Sachs International	23.26%	A1
Morgan Stanley Capital Services, Inc.	5.30%	A3
Standard Chartered Bank	3.38%	A1
Bank of America	3.19%	A2
Societe Generale	2.42%	A1
UBS AG	2.40%	Aa3
JP Morgan Chase Bank, N.A.	1.98%	Aa2
State Street Bank and Trust Company	1.90%	Aa3
Citibank N.A.	1.54%	Aa3
Natwest Markets Plc	1.27%	Baa2
Bank of New York	0.58%	A1
Bank of America, N.A.	0.46%	Aa2
Wells Fargo Bank, N.A.	0.44%	A2
Barclays Bank Plc Wholesale	0.28%	A1
HSBC Bank USA	0.24%	Aa3
Royal Bank of Canada	0.05%	A2
Credit Suisse International	0.04%	A1
Citigroup Global Markets Ltd.	0.03%	NR
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, 2020, 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	$102,289,672	$71,606,596	$30,683,076	70.0%
PERF C				
Public Agencies Cost-Sharing	43,702,931	32,822,501	10,880,430	75.1%
LRF				
State of California	94,510	114,048	(19,538)	120.7%
JRF				
State of California	3,235,471	43,727	3,191,744	1.4%
JRF II				
State of California	1,892,581	1,880,007	12,574	99.3%

The total pension liability for each defined benefit plan was determined by actuarial valuations as of June 30, 2019, which were rolled forward to June 30, 2020, 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, 2.5% thereafter	Contract COLA up to 2.5% until PPPA floor on purchasing power applies, 2.5% 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%	2.45%	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.

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 and forecasted information for all 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	50.00%	4.80%	5.98%
Fixed Income	28.00%	1.00%	2.62%
Inflation Assets	0.00%	0.77%	1.81%
Private Equity	8.00%	6.30%	7.23%
Real Assets	13.00%	3.75%	4.93%
Liquidity	1.00%	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	22.00%	4.80%	5.98%
Fixed Income	49.00%	1.10%	2.62%
TIPS	16.00%	0.25%	1.46%
Commodities	5.00%	1.50%	2.87%
REITs	8.00%	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	52.00%	4.80%	5.98%
Fixed Income	32.00%	1.10%	2.62%
TIPS	5.00%	0.25%	1.46%
Commodities	3.00%	1.50%	2.87%
REITs	8.00%	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, 2020, 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, 2020, was 2.45 percent, which differs from the discount rate used as of June 30, 2019, of 3.13 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	$102,289,672	$71,606,596	$30,683,076	70.0%
PERF C				
Public Agencies Cost-Sharing	43,702,931	32,822,501	10,880,430	75.1%
LRF				
State of California	94,510	114,048	(19,538)	120.7%
JRF				
State of California	3,235,471	43,727	3,191,744	1.4%
JRF II				
State of California	1,892,581	1,880,007	12,574	99.3%

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	$115,719,113	$71,606,596	$44,112,517	61.9%
PERF C				
Public Agencies Cost-Sharing	49,586,334	32,822,501	16,763,833	66.2%
LRF				
State of California	105,865	114,048	(8,183)	107.7%
JRF				
State of California	3,593,078	43,727	3,549,351	1.2%
JRF II				
State of California	2,123,622	1,880,007	243,615	88.5%

Sensitivity Analysis (Dollars in Thousands)

Discount Rate +1%

Plan	Total Pension Liability (+1%)	Plan Fiduciary Net Position	Net Pension Liability/ (Asset) (+1%)	Plan Fiduciary Net Position as a Percentage of Total Pension Liability
PERF B				
Schools Cost-Sharing	$91,143,910	$71,606,596	$19,537,314	78.6%
PERF C				
Public Agencies Cost-Sharing	38,860,756	32,822,501	6,038,255	84.5%
LRF				
State of California	85,298	114,048	(28,750)	133.7%
JRF				
State of California	2,932,817	43,727	2,889,090	1.5%
JRF II				
State of California	1,704,682	1,880,007	(175,325)	110.3%

9. CALIFORNIA EMPLOYERS' PENSION PREFUNDING TRUST FUND

The CEPPTF was established by Chapter 665 of the 2018 Statutes and initially funded in 2019. At June 30, 2020, 15 employers had elected to participate in the fund. Of the 15 participating employers, nine employers have contributed assets in the CEPPTF as of June 30, 2020. The purpose of the fund is to receive contributions from participating employers and establish separate employer prefunding accounts to pay for future contributions to their defined benefit pension plans. Contributions are voluntarily determined by the employer's own funding schedule, and there are no long-term contracts for contributions to the trust. As such, contributions to the CEPPTF are elective and not required. The CEPPTF is an investment trust fund as defined in GASB Statement No. 84, *Fiduciary Activities*, with pooled administrative and investment functions.

Participating employers may receive disbursements from the fund not to exceed the actual contributions made to their pension plans during the fiscal year. 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 (IRC), 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 IRC, other laws and accounting standards, and the Board's fiduciary duties that all of the employer's obligations for the payment of defined benefit pension plan benefits and reasonable administrative costs have been satisfied.

The CEPPTF costs include direct administrative and investment costs as well as indirect costs that are allocated through the Board-approved annual budget and cost-allocation process. CalPERS contracts with a third-party service provider, Northeast Retirement Services (NRS), to perform recordkeeping for individual CEPPTF employer accounts.

The total Fiscal Year 2019-20 employer contributions from participating employers were $10.5 million and there were no disbursements.

The CEPPTF 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 CEPPTF has separate, Board-approved asset allocation policies in place for the two investment options offered by the fund. Each strategy seeks to offer employers investment alternatives dependent upon expected levels of return and volatility.

10. OTHER POST-EMPLOYMENT BENEFIT TRUST FUND

The CERBTF (also known as Annuitants' Health Care Coverage Fund) was established by Chapter 331 of the 1988 Statutes and initially funded in 2007. At June 30, 2020, 572 employers had elected to participate in the fund. Of the 572 participating employers, 557 employers have contributed assets in the CERBTF as of June 30, 2020. 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 IRC, 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 IRC, 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, 2020, there were 497,011 active plan members, 308,931 inactive plan members currently receiving benefit payments, and 11,511 inactive plan members entitled to but not yet receiving benefit payments.

The CERBTF costs include direct administrative and investment costs as well as indirect costs that are allocated through the Board-approved annual budget and cost-allocation process. CalPERS contracts with a third-party service provider, NRS, to perform recordkeeping for individual CERBTF employer accounts.

The total Fiscal Year 2019-20 actual OPEB employer contributions from participating employers representing 589 OPEB plans were $4.6 billion. In compliance with GASB 74, this amount includes the $1.6 billion in contributions made to the CERBTF, plus an additional $3.0 billion in retiree health care premiums paid by employers directly to health care 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 4.0 percent for Fiscal Year 2019-20.

11. REPLACEMENT BENEFIT FUND (RBF)

The RBF was established as a custodial fund by Chapter 798 of the 1990 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) and 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, 2020, there were 1,496 participants 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.

12. OLD AGE AND SURVIVORS' INSURANCE REVOLVING FUND (OASI)

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

The Board of Administration serves as the State Social Security Administrator (SSSA). Between 1955 and 1986 the SSSA was responsible for collecting Social Security and Medicare taxes from public employers. Effective January 1, 1987, with the enactment of the Omnibus Budget Reconciliation Act of 1986, the responsibility of collecting taxes moved from CalPERS to the Internal Revenue Service and the OASI has been operating since 1987 using the interest that was earned on the OASI. The OASI funds diminished requiring additional funding to pay for the costs of administering the SSSA program. On July 1, 2019, CalPERS began charging participating agencies a specified fee to pay for these costs. In Fiscal Year 2020-21 CalPERS will continue assessing fees to cover costs, and continue administering the program.

13. 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 were added. 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, effective January 1, 2019, the flex-funded plans retain no risk of loss when capitated and fee-for-service expenses come higher than agreed with the contractor. 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 2019-20 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.

At June 30, 2020, 100 percent of the HCF's investments in global debt securities are in the SSGA U.S. Aggregate Bond Index Fund with further details in Note 4.

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, 2020, 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 $470.5 million is carried at its face amount, and no interest discount is assumed. The IBNR portion of $401.4 million represents an estimate for claims that have been incurred prior to June 30, 2020, but have not been reported to the HCF. The total of the estimated claims liabilities at the end of the Fiscal Year 2019-20 is $738.1 million. The year-end amount also includes $267.6 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, 2020, and June 30, 2019.

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

Year Ended June 30	2020	2019
Total Estimated Claims at Beginning of Fiscal Year	**$740,437**	**$764,066**
Total Incurred Claims and Claim Adjustment Expenses	3,490,974	3,562,627
Total Payments	(3,493,253)	(3,586,256)
Total Estimated Claims at End of Fiscal Year	**$738,158**	**$740,437**

14. 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.

Amounts charged to employers 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, 2020, was 0.27 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, 2020, there were 1,155 public agencies and schools participating in health insurance coverage under PEMHCA.

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

The LTCF began offering self-insured Long-Term Care (LTC) plans in 1995 through the LTC program. The LTC program provides LTC coverage to enrolled participants under the

Public Employees' Retirement Law (PERL), Chapter 15. Administered by Long-Term Care Group, Inc., 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, 2020, there are 116,832 active participants in the LTC 1, LTC 2, LTC 3, and LTC 4 policy series, of which 6,980 are receiving benefits.

CalPERS has temporarily suspended open enrollment on the CalPERS Long-Term Care Program due to current uncertainty in the long-term care market. Therefore, effective June 17, 2020, and until further notice, the CalPERS Long-Term Care Program will not be accepting new applications for coverage.

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 4.00 percent, morbidity, lapse rates, mortality, and plan expenses. In Fiscal Year 2019-20, the actual investment returns were approximately $36.3 million higher than expected investment income. Economic assumptions are evaluated periodically in accordance with Board policy. An evaluation of assumptions for the June 30, 2020, 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 for the June 30, 2020, CAFR was rolled forward from the June 30, 2019, actuarial valuation using standard actuarial techniques, and all assumptions remained the same as what was used in the June 30, 2019, valuation. Due to the discount rate assumption update, morbidity assumptions update, and lapse assumption update implemented in the 2019 actuarial valuation, the estimated liability for future policy benefits as of June 30, 2020, increased significantly compared to the liability as of June 30, 2019.

The following schedule represents changes in the aggregate estimated claims liabilities and liabilities for future policy benefits for the fiscal years ended June 30, 2020, and June 30, 2019.

Changes in the Aggregate Estimated Claims Liabilities of the LTCF (Dollars in Thousands)

Year Ended June 30	2020	2019
Total Estimated Future Policy Liabilities at Beginning of Fiscal Year	**$4,628,993**	**$4,548,101**
Increase in Liability and Change in Estimate	2,759,847	401,256
Claim Payments	(335,769)	(320,364)
Total Estimated Future Policy Liabilities at End of Fiscal Year	**$7,053,071**	**$4,628,993**

Total LTCF investments as of June 30, 2020, were approximately $4.9 billion. At June 30, 2020, the Fund's investment portfolio consisted of approximately 60 percent, 16 percent, 10 percent, 8 percent, and 6 percent of the respective SSGA Funds: Bloomberg Barclays Long Liability Index, MSCI ACWI Investable Market Index, Global Real Estate, S&P GSCI Commodity Index, and U.S. TIPS Index, respectively with further details in Note 4.

For Fiscal Year 2019-20, the annual premium was $278.5 million and the total benefits paid out were $337.3 million. Since the program's inception in 1995 through June 30, 2020, the total benefits paid were approximately $3.2 billion. Based on updated actuarial assumptions, the program is considering asset allocation changes, benefit design changes including benefit reduction options, and/or future premium increase mitigation options. The CalPERS Chief Health Director will be presenting to the board options for adoption in November 2020.

16. 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 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 implemented the court's Order on a prospective basis shortly after the July 28, 2017 Order was issued. Then, on September 19, 2017, Defendants filed a Notice of Appeal from Post-Remittitur Order Entered July 28, 2017. The appeal was 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 were 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 26, 2018, an unpublished Decision was issued, denying the appeal: "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. On October 26, 2018, the court denied the State's Petition for Review. Since then, JRS and JRS II have been working with SCO and the Department of Finance (DOF) to administer payment of the damages that were awarded in the case. In Fiscal Year 2019-20, JRS paid $25,140 in damages, bringing their total payout to $19,118,499. CalPERS' Financial Reporting and Accounting Services Division (FRAS) requested a general fund transfer pursuant to Chapter 23 of the budget bill, which has earmarked $41 million to cover the *Mallano* damages payable by JRS. In Fiscal Year 2019-20, JRS II paid damages totaling $809,085 from the JRS II Fund. All damages have currently been distributed and the court has declared the case closed.

Sanchez, Elma, et al. v. CalPERS (presently identified by the court as the *Wedding* case) is a class action lawsuit originally brought 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 assert damages in the amount of approximately $2.5 billion.

The operative Complaint originally alleged 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.

CalPERS and the Board Defendants denied that CalPERS breached the contract by imposing the premium increase and that the policies were intentionally or negligently underpriced and asserted 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 asserted 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.

After a two-day court trial in early June 2019 on contract interpretation issues, the court issued a "Draft Proposed Statement of Decision." In this ruling, the court held in favor of Plaintiffs on the interpretation of the "Inflation-Protection" clause in the policy contract, finding that CalPERS could not increase premiums as a result of rising liabilities from the Inflation Protection benefit's automatic five percent annual increase in the maximum allowable monthly benefit. In other words, the court tentatively ruled that CalPERS cannot increase premiums on policies with the inflation protection benefit unless such an increase is driven by cost factors other than the cost of the escalation of daily/monthly limits on Inflation-Protection benefits over time. The court's ruling also urged the parties to attempt to settle the case by petitioning other branches of State government for a monetary infusion. The court said, "[T]his case can only settle if CalPERS and the State find a way to make peace with the class and its counsel. While the Long-Term Care plan was indisputably authorized by the Legislature in 1995 on the theory that it would be self-sustaining and not a drag on the General Fund or public employers, there is a very serious risk that a money judgment for a rather large amount of money will be issued in due course in this case. The [CalPERS long-term care] plan currently has some substantial reserves (needed in the actuaries' view to pay foreseeable future claims) which could pay a money judgment in the near term but doing so would then set the plan up for insolvency some time in the near future…An inability of this CalPERS plan to pay just claims will create an obvious default by an arm of the State in the fulfillment of its contract obligations. This, in turn, could seriously impair the credit rating of the State. If this case is not settled in the near term, a very large money judgment against CalPERS appears to be the most likely outcome. For this reason, the best path forward, in this experienced jurist's view, is for the parties to try to strike a deal which requires a one-time appropriation by the Legislature to resolve the pending suit while also providing a judicially-approved road map so that the plan is self-sustaining thereafter." To provide time for this discussion to occur, the court initially continued the jury trial date to the end of October 2019, and recently continued it again until March 29, 2021. On March 11, 2020, Plaintiffs filed a Motion for Leave to File a Third Amended Complaint. Two of the proposed amendments were to add language to the caption stating that CalPERS is "an agency of the State of California" and to add language to the paragraph concerning CalPERS in the "Parties" section stating that CalPERS is "a state agency within the Executive Branch of the State of California" and "[a]t all times mentioned herein, CalPERS was a state agency acting by and on behalf of the State of California." The purpose for these amendments is to strengthen Plaintiffs' assertions that the State of California itself will have to respond to any judgment against the Long-Term Care (LTC) Plan. The motion was granted by the court.

The parties have engaged in several mediation sessions, with no resolution. On July 1, 2020, the court granted Plaintiffs leave to file a Third Amended Complaint, which would relabel the Defendant as, "California Public Employees' Retirement System, an agency of the State of California." Plaintiffs filed their Third Amended Complaint on August 26, 2020. On July 27, 2020, the court issued its final Statement of Decision regarding contract interpretation issues and statute of limitations defense.

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 were stayed in their entirety pending the outcome of the writ. On January 25, 2019, the court denied Plaintiff's Petition for Writ of Administrative Mandamus finding that there was no evidence that CalPERS and Anthem improperly reduced the "allowable amount" for "out-of-network" non-emergency medical services. As a result of this ruling, CalPERS demurred to the remaining causes of action. The court sustained CalPERS' demurrer and entered judgment in favor of CalPERS, ending Plaintiff's lawsuit. On August 19, 2019, Plaintiff filed a Notice of Appeal indicating his intention to appeal the Superior Court's decision. The parties are in the process of briefing the appeal and a decision is not expected until March 2021, at the earliest.

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. On February 5, 2020, the Court of Appeal upheld the decision of the Superior Court to dismiss the action as to CalPERS. Since all relevant appeal periods have passed, this case is now closed.

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.

Economic Conditions

During the calendar year 2020, World Health Organization announced a global health emergency from a new strain of coronavirus (COVID-19) that has resulted in a global pandemic outbreak. This pandemic has adversely affected global economic activity and greatly contributed to uncertainty and instability in the global financial markets. CalPERS investment portfolio was exposed to the volatility of the financial markets during the last half of Fiscal Year 2019-20 but was also well positioned to take advantage of new investment opportunities that were present during this time. While negative market conditions could have an impact on CalPERS' ability to earn the actuarial assumed rate of return and negatively impact the receipt of contributions and premiums due from public agencies and participants, CalPERS cannot predict the impact of the COVID-19 pandemic. Although CalPERS cannot estimate the length or gravity of the impact of the COVID-19 outbreak at this time, management continues to closely monitor the situation, to assess further possible adverse implications that may occur to operations, investments, public agencies and participants, and to take actions to mitigate resulting consequences.

On March 27, 2020, President Trump signed into law the "Coronavirus Aid, Relief, and Economic Security (CARES) Act." The CARES Act, among other things, includes several relief provisions available to tax-qualified retirement plans and their participants. CalPERS has assessed the applicability of such funds and has not acted to take part in applying for and receiving any such relief funds. Management is continuing to monitor applicability of any new funding or programs that may become available.

17. 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 effective date for GASB 87 has been delayed to reporting periods beginning after December 31, 2020 due to the COVID-19 virus. CalPERS has determined GASB 87 will not have a material impact on the future financial statements.

Required Supplementary Information

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

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

	2020	2019	2018	2017	2016	2015	2014
Discount Rate Assumption	**7.15 %**	**7.15 %**	**7.15%**	**7.15%**	**7.65%**	**7.65%**	**7.50%**
Total Pension Liability:							
Service Cost	$2,302,877	$2,226,797	$2,172,696	$2,031,914	$1,716,677	$1,624,993	$1,576,667
Interest	6,904,699	6,563,541	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	452,461	1,398,796	1,852,902	531,862	400,103	1,119,011	—
Benefit Payments, Including Refunds of Member Contributions	(4,671,357)	(4,347,426)	(4,053,119)	(3,724,910)	(3,546,836)	(3,334,081)	(3,139,923)
Net Change in Total Pension Liability	**$4,988,680**	**$5,841,708**	**$6,588,258**	**$9,208,000**	**$4,011,862**	**$3,344,468**	**$3,256,860**
Total Pension Liability – Beginning	$97,300,992	$91,459,284	$84,871,026	$75,663,026	$71,651,164	$68,306,696	$65,049,836
Total Pension Liability – Ending (a)	**$102,289,672**	**$97,300,992**	**$91,459,284**	**$84,871,026**	**$75,663,026**	**$71,651,164**	**$68,306,696**
Plan Fiduciary Net Position:							
Contributions – Employer	$2,866,144	$2,527,726	$2,070,832	$1,783,736	$1,434,632	$1,323,090	$1,203,071
Contributions – Member	1,047,983	1,014,070	952,979	897,438	851,133	773,580	744,437
Contributions – Nonemployer	904,000	—	—	—	—	—	—
Total Net Investment Income	3,398,535	4,212,090	5,095,064	6,211,781	297,514	1,272,365	8,625,601
Benefit Payments, Including Refunds of Member Contributions	(4,671,357)	(4,347,426)	(4,053,119)	(3,724,910)	(3,546,836)	(3,334,081)	(3,139,923)
Net Plan-to-Plan Resource Movement	164	304	2	(134)	10	(71,460)	—
Administrative Expenses	(95,614)	(46,159)	(92,448)	(82,489)	(34,554)	(64,124)	(72,167)
Net Change in Plan Fiduciary Net Position	**$3,449,855**	**$3,360,605**	**$3,973,310**	**$5,085,422**	**($998,101)**	**($100,630)**	**$7,361,019**
Plan Fiduciary Net Position – Beginning	$68,156,741	$64,796,136	$60,998,387	$55,912,965	$56,911,066	$57,011,696	$49,650,677
Adjustments[2]	—	—	(175,561)	—	—	—	—
Total Adjusted Plan Fiduciary Net Position – Beginning	68,156,741	64,796,136	60,822,826	55,912,965	56,911,066	57,011,696	49,650,677
Plan Fiduciary Net Position – Ending (b)	71,606,596	68,156,741	64,796,136	60,998,387	55,912,965	56,911,066	57,011,696
Net Pension Liability (a) - (b)	**$30,683,076**	**$29,144,251**	**$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 Liability	**70.0%**	**70.0%**	**70.8%**	**71.9%**	**73.9%**	**79.4%**	**83.5%**
Covered Payroll	$14,447,159	$13,819,881	$13,252,995	$12,643,354	$11,747,602	$10,964,872	$10,120,248
Net Pension Liability as a Percentage of Covered Payroll	**212.4%**	**210.9%**	**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.
(2) Cumulative effect of CalPERS employer proportionate share of postemployment benefit obligations.

NOTES TO SCHEDULE

Change of Assumptions and Methods

The CalPERS Board of Administration adopted a new amortization policy effective with the June 30, 2019, actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a five-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains/losses. The new policy also does not utilize a five-year ramp-down on investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019. In Fiscal Year 2019-20, no changes have occurred to the actuarial assumptions in relation to financial reporting.

In Fiscal Year 2018-19, CalPERS implemented a new actuarial valuation software system for the June 30, 2018, valuation. This new system has refined and improved calculation methodology.

In December 2017, the CalPERS Board of Administration (the Board) adopted a new inflation assumption. The assumption was reduced from 2.75 percent to 2.50 percent. The assumptions for individual salary increases and overall payroll growth were reduced from 3.00 percent to 2.75 percent. These changes were implemented in two steps commencing in the June 30, 2018, funding valuation. For financial reporting purposes, these assumption changes were 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 Board approved lowering the funding discount rate used in the PERF B from 7.50 percent to

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

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.

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

	2020	2019	2018	2017	2016	2015	2014
Discount Rate Assumption	**7.15 %**	**7.15 %**	**7.15%**	**7.15%**	**7.65%**	**7.65%**	**7.50%**
Total Pension Liability:							
Service Cost	$912,529	$878,707	$844,273	$820,583	$712,307	$698,416	$713,731
Interest	2,954,008	2,798,484	2,629,157	2,506,761	2,399,259	2,285,565	2,169,786
Changes of Benefit Terms	900	1,283	668	2,119	1,478	—	—
Changes of Assumptions	—	—	(248,318)	2,122,413	—	(543,686)	—
Differences Between Expected and Actual Experience	453,273	705,149	313,467	(18,554)	(6,333)	(5,678)	—
Benefit Payments, Including Refunds of Member Contributions[2]	(2,044,232)	(1,902,025)	(1,755,740)	(1,630,602)	(1,519,301)	(1,423,756)	(1,335,871)
Net Change in Total Pension Liability	**$2,276,478**	**$2,481,598**	**$1,783,507**	**$3,802,720**	**$1,587,410**	**$1,010,861**	**$1,547,646**
Total Pension Liability – Beginning	$41,426,453	$38,944,855	$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	**$41,426,453**	**$38,944,855**	**$37,161,348**	**$33,358,628**	**$31,771,218**	**$30,789,194**	**$29,241,548**
Total Pension Liability – Ending (a)	**$43,702,931**	**$41,426,453**	**$38,944,855**	**$37,161,348**	**$33,358,628**	**$31,800,055**	**$30,789,194**
Plan Fiduciary Net Position:							
Contributions – Employer[2]	$1,594,811	$1,333,559	$1,182,686	$980,359	$882,991	$859,456	$747,694
Contributions – Member[2]	381,786	357,159	334,140	317,024	300,135	278,529	291,772
Total Net Investment Income[2]	1,565,953	1,935,939	2,308,558	2,774,321	127,043	548,097	3,770,935
Benefit Payments, Including Refunds of Member Contributions[2]	(2,044,232)	(1,902,025)	(1,755,740)	(1,630,602)	(1,519,301)	(1,423,756)	(1,335,871)
Net Plan-to-Plan Resource Movement[2]	188,629	167,308	116,550	134,513	22,621	(267,581)	—
Administrative Expenses	(43,860)	(21,115)	(41,980)	(37,052)	(15,263)	(27,967)	(31,550)
Net Change in Plan Fiduciary Net Position	**$1,643,087**	**$1,870,825**	**$2,144,214**	**$2,538,563**	**($201,774)**	**($33,222)**	**$3,442,980**
Plan Fiduciary Net Position – Beginning	$31,179,414	$29,308,589	$27,244,095	$24,705,532	$24,907,306	$24,940,528	$21,497,548
Adjustments[3]	—	—	(79,720)	—	—	—	—
Total Adjusted Plan Fiduciary Net Position – Beginning	31,179,414	29,308,589	27,164,375	24,705,532	24,907,306	24,940,528	21,497,548
Plan Fiduciary Net Position – Ending (b)	32,822,501	31,179,414	29,308,589	27,244,095	24,705,532	24,907,306	24,940,528
Net Pension Liability (a) - (b)	**$10,880,430**	**$10,247,039**	**$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 Liability	**75.1%**	**75.3%**	**75.3%**	**73.3%**	**74.1%**	**78.3%**	**81.0%**
Covered Payroll	$4,155,772	$3,949,226	$3,793,609	$3,631,919	$3,472,950	$3,356,312	$3,248,018
Net Pension Liability as a Percentage of Covered Payroll	**261.8%**	**259.5%**	**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.
(2) Does not agree to the Basic Financial Statements in 2020 as a result of an adjustment made in December 2019.
(3) Cumulative effect of CalPERS employer proportionate share of postemployment benefit obligations.

NOTES TO SCHEDULE

Changes in Benefit Terms

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

Change of Assumptions and Methods

The CalPERS Board of Administration adopted a new amortization policy effective with the June 30, 2019, actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to

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

20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a five-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains/losses. The new policy also does not utilize a five-year ramp-down on investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019. In Fiscal Year 2019-20, no changes have occurred to the actuarial assumptions in relation to financial reporting.

In Fiscal Year 2018-19, CalPERS implemented a new actuarial valuation software system for the June 30, 2018, valuation. This new system has refined and improved calculation methodology.

In December 2017, the 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 was reduced from 2.75 percent to 2.50 percent. The assumptions for individual salary increases and overall payroll growth were 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. 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 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.

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

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

	2020	2019	2018	2017	2016	2015	2014
Discount Rate Assumption	**5.25 %**	**5.25 %**	**5.25%**	**5.25%**	**6.00%**	**6.00%**	**5.75%**
Total Pension Liability:							
Service Cost	$100	$268	$542	$639	$608	$769	$732
Interest	4,885	4,871	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	2,320	(427)	(2,061)	(5,998)	(3,530)	(4,246)	—
Benefit Payments, Including Refunds of Member Contributions	(6,939)	(7,349)	(6,918)	(7,249)	(7,407)	(9,086)	(7,482)
Net Change in Total Pension Liability	**$366**	**($2,637)**	**($5,979)**	**$540**	**($4,351)**	**($8,791)**	**($285)**
Total Pension Liability – Beginning	$94,144	$96,781	$102,760	$102,220	$106,730	$115,521	$115,806
Adjustment to Beginning Amount	—	—	—	—	(159)	—	—
Total Adjusted Pension Liability – Beginning	**$94,144**	**$96,781**	**$102,760**	**$102,220**	**$106,571**	**$115,521**	**$115,806**
Total Pension Liability – Ending (a)	**$94,510**	**$94,144**	**$96,781**	**$102,760**	**$102,220**	**$106,730**	**$115,521**
Plan Fiduciary Net Position:							
Contributions – Employer	$98	$250	$467	$516	$549	$590	$565
Contributions – Member	22	91	82	94	97	105	113
Total Net Investment Income	7,013	7,860	5,486	5,048	4,545	(94)	15,372
Benefit Payments, Including Refunds of Member Contributions	(6,939)	(7,349)	(6,918)	(7,249)	(7,407)	(9,086)	(7,482)
Administrative Expenses	(550)	(324)	(671)	(575)	(203)	(400)	(362)
Net Change in Plan Fiduciary Net Position	**($356)**	**$528**	**($1,554)**	**($2,166)**	**($2,419)**	**($8,885)**	**$8,206**
Plan Fiduciary Net Position – Beginning	$114,404	$113,876	$116,884	$119,050	$121,469	$130,354	$122,148
Adjustments[2]	—	—	(1,454)	—	—	—	—
Total Adjusted Plan Fiduciary Net Position – Beginning	114,404	113,876	115,430	119,050	121,469	130,354	122,148
Plan Fiduciary Net Position – Ending (b)	114,048	114,404	113,876	116,884	119,050	121,469	130,354
Net Pension Asset (a) - (b)	**($19,538)**	**($20,260)**	**($17,095)**	**($14,124)**	**($16,830)**	**($14,739)**	**($14,833)**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	**120.7%**	**121.5%**	**117.7%**	**113.7%**	**116.5%**	**113.8%**	**112.8%**
Covered Payroll	$278	$655	$1,242	$1,360	$1,313	$1,545	$1,470
Net Pension Asset as a Percentage of Covered Payroll	**(7,028.1%)**	**(3,093.1%)**	**(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.
(2) Cumulative effect of CalPERS employer proportionate share of postemployment benefit obligations.

NOTES TO SCHEDULE

Change of Assumptions and Methods

In Fiscal Year 2019-20, no changes have occurred to the actuarial assumptions in relation to financial reporting.

The CalPERS Board of Administration adopted a new amortization policy effective with June 30, 2019, actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a five-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains/losses. The new policy also does not utilize a five-year ramp-down on investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019. In Fiscal Year 2019-20, there were no changes to the actuarial assumptions in relation to financial reporting.

In Fiscal Year 2018-19, CalPERS implemented a new actuarial valuation software system for the June 30, 2018, valuation. This new system refined and improved calculation methodology. Due to the closed nature of the Legislators' Retirement System and term limits met by a majority of the June 30, 2018, active members during Fiscal Year 2018-19, the projected payroll for Fiscal Year 2019-20 has been adjusted to reflect expected active members. The assumed payroll growth rate assumption of 2.75 percent was used to project Fiscal Year 2019-20 payroll for expected remaining actives.

In December 2017, the Board adopted new mortality assumptions. 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 was reduced from 2.75 percent to 2.50 percent. The assumptions for individual salary increases and overall payroll growth were 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 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.

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

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

	2020	2019	2018	2017	2016	2015	2014
Discount Rate Assumption	**2.45 %**	**3.13 %**	**3.62%**	**3.56%**	**2.85%**	**3.82%**	**4.25%**
Total Pension Liability:							
Service Cost	$17,026	$20,073	$19,131	$22,733	$29,314	$25,372	$27,581
Interest	79,719	99,428	109,395	115,067	107,515	127,074	140,256
Changes of Assumptions	218,683	153,651	(20,879)	(107,670)	384,306	167,036	—
Differences Between Expected and Actual Experience	(41,794)	86,873	(121,259)	(366,200)	(59,421)	57,568	—
Benefit Payments, Including Refunds of Member Contributions	(213,233)	(221,954)	(207,823)	(200,440)	(199,349)	(201,868)	(193,935)
Net Change in Total Pension Liability	**$60,401**	**$138,071**	**($221,435)**	**($536,510)**	**$262,365**	**$175,182**	**($26,098)**
Total Pension Liability – Beginning	$3,175,070	$3,036,999	$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	**$3,175,070**	**$3,036,999**	**$3,258,434**	**$3,794,944**	**$3,532,579**	**$3,357,212**	**$3,383,310**
Total Pension Liability – Ending (a)	**$3,235,471**	**$3,175,070**	**$3,036,999**	**$3,258,434**	**$3,794,944**	**$3,532,394**	**$3,357,212**
Plan Fiduciary Net Position:							
Contributions – Employer and General Fund[2]	$243,131	$195,903	$199,241	$204,475	$192,287	$180,910	$191,148
Contributions – Member	2,843	2,679	3,062	3,398	3,559	3,877	4,724
Total Net Investment Income	3,087	3,942	3,378	2,819	2,762	2,286	2,583
Benefit Payments, Including Refunds of Member Contributions	(213,233)	(221,954)	(207,823)	(200,440)	(199,349)	(201,868)	(193,935)
Administrative Expenses	(2,270)	(10,032)	(2,106)	(1,771)	(642)	(1,227)	(1,141)
Net Change in Plan Fiduciary Net Position	**$33,558**	**($29,462)**	**($4,248)**	**$8,481**	**($1,383)**	**($16,022)**	**$3,379**
Plan Fiduciary Net Position – Beginning	$10,169	$39,631	$48,275	$39,794	$41,177	$57,199	$53,820
Adjustments[3]	—	—	(4,396)	—	—	—	—
Total Adjusted Plan Fiduciary Net Position – Beginning	10,169	39,631	43,879	39,794	41,177	57,199	53,820
Plan Fiduciary Net Position – Ending (b)	43,727	10,169	39,631	48,275	39,794	41,177	57,199
Net Pension Liability (a) - (b)	**$3,191,744**	**$3,164,901**	**$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 Liability	**1.4%**	**0.3%**	**1.3%**	**1.5%**	**1.0%**	**1.2%**	**1.7%**
Covered Payroll	$22,875	$31,945	$35,507	$39,413	$34,301	$41,378	$54,649
Net Pension Liability as a Percentage of Covered Payroll	**13,953.0%**	**9,907.3%**	**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.
(2) Includes State of California General Fund.
(3) Cumulative effect of CalPERS employer proportionate share of postemployment benefit obligations.

NOTES TO SCHEDULE

Change of Assumptions and Methods

In Fiscal Year 2019-20, the discount rate used to measure the total pension liability was 2.45 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 2.45 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, 2020, was applied to all periods of projected benefit payments to measure the total pension liability. There were no other changes to assumptions or methods.

In Fiscal Year 2018-19, the discount rate used to measure the total pension liability was 3.13 percent. CalPERS implemented a new actuarial valuation software system for the June 30, 2018 valuation. This new system refined and improved calculation methodology.

In Fiscal Year 2017-18, the discount rate used to measure the total pension liability was 3.62 percent. In December 2017, the Board adopted new mortality assumptions. 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 was reduced from 2.75 percent to 2.50 percent. The assumptions for individual salary increases and overall payroll growth were 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. Assumption changes were made in the JRF June 30, 2016, valuation including 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.

In Fiscal Year 2015-16, the discount rate used to measure the total pension liability was 2.85 percent.

In Fiscal Year 2014-15, the discount rate used to measure the total pension liability was 3.82 percent. Changes to actuarial methods were made in the June 30, 2014, valuation including 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 nonmember spouse for Qualified Domestic Relations Order changed to full service for the member in order to determine both eligibility and the benefit multiplier.

In Fiscal Year 2013-14, the discount rate used to measure the total pension liability was 4.25 percent. Changes to actuarial assumptions were made in the June 30, 2013, valuation. In February 2014, the Board adopted new mortality assumptions. The new mortality table was developed from the February 2014 Experience Study and includes 20 years of projected ongoing mortality improvement using the Scale BB table published by the Society of Actuaries.

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

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

	2020	2019	2018	2017	2016	2015	2014
Discount Rate Assumption	**6.65 %**	**6.65 %**	**6.65%**	**6.65%**	**7.15%**	**7.15%**	**7.00%**
Total Pension Liability:							
Service Cost	$114,486	$103,791	$95,843	$97,678	$86,635	$81,679	$78,670
Interest	115,517	103,889	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	(2,797)	30,291	(26,876)	(26,382)	(4,546)	(17,319)	—
Benefit Payments, Including Refunds of Member Contributions	(34,547)	(36,204)	(31,795)	(22,406)	(21,704)	(14,040)	(8,950)
Net Change in Total Pension Liability	**$192,659**	**$201,767**	**$86,828**	**$203,777**	**$138,797**	**$105,826**	**$130,764**
Total Pension Liability – Beginning	$1,699,922	$1,498,155	$1,411,327	$1,207,550	$1,073,788	$967,962	$837,198
Adjustment to Beginning Amount	—	—	—	—	(5,035)	—	—
Total Adjusted Pension Liability – Beginning	**$1,699,922**	**$1,498,155**	**$1,411,327**	**$1,207,550**	**$1,068,753**	**$967,962**	**$837,198**
Total Pension Liability – Ending (a)	**$1,892,581**	**$1,699,922**	**$1,498,155**	**$1,411,327**	**$1,207,550**	**$1,073,788**	**$967,962**
Plan Fiduciary Net Position:							
Contributions – Employer	$91,147	$84,099	$79,699	$67,102	$65,839	$65,629	$57,027
Contributions – Member	35,796	31,376	27,513	25,076	24,598	22,242	20,413
Total Net Investment Income	80,074	106,781	101,820	115,057	20,810	(2,401)	150,168
Benefit Payments, Including Refunds of Member Contributions	(34,547)	(36,204)	(31,795)	(22,406)	(21,704)	(14,040)	(8,950)
Administrative Expenses	(2,552)	(1,477)	(2,370)	(1,683)	(732)	(1,127)	(785)
Net Change in Plan Fiduciary Net Position	**$169,918**	**$184,575**	**$174,867**	**$183,146**	**$88,811**	**$70,303**	**$217,873**
Plan Fiduciary Net Position – Beginning	$1,710,089	$1,525,514	$1,356,099	$1,172,953	$1,084,142	$1,013,839	$795,966
Adjustments[2]	—	—	(5,452)	—	—	—	—
Total Adjusted Plan Fiduciary Net Position – Beginning	1,710,089	1,525,514	1,350,647	1,172,953	1,084,142	1,013,839	795,966
Plan Fiduciary Net Position – Ending (b)	1,880,007	1,710,089	1,525,514	1,356,099	1,172,953	1,084,142	1,013,839
Net Pension Liability/(Asset) (a) - (b)	**$12,574**	**($10,167)**	**($27,359)**	**$55,228**	**$34,597**	**($10,354)**	**($45,877)**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	**99.3%**	**100.6 %**	**101.8 %**	**96.1%**	**97.1%**	**101.0 %**	**104.7 %**
Covered Payroll	$352,700	$318,827	$299,396	$291,097	$280,879	$259,133	$249,248
Net Pension Liability/(Asset) as a Percentage of Covered Payroll	**3.6%**	**(3.2)%**	**(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.
(2) Cumulative effect of CalPERS employer proportionate share of postemployment benefit obligations.

NOTES TO SCHEDULE

Change of Assumptions and Methods

The CalPERS Board of Administration adopted a new amortization policy effective with the June 30, 2019, actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a five-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains/losses. The new policy also does not utilize a five-year ramp-down on investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019. In Fiscal Year 2019-20, no changes have occurred to the actuarial assumptions in relation to financial reporting.

CalPERS implemented a new actuarial valuation software system for the June 30, 2018, valuation. This new system has refined and improved calculation methodology.

In December 2017, the Board adopted new mortality assumptions. 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 was reduced from 2.75 percent to 2.50 percent. The assumptions for individual salary increases and overall payroll growth were 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 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

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

	2020	2019	2018	2017	2016	2015	2014
PERF B:							
Actuarially Determined Contribution	$2,759,835	$2,501,770	$2,048,531	$1,767,813	$1,421,289	$1,303,162	$1,201,125
Contributions in Relation to the Actuarially Determined Contribution	3,663,835	2,501,770	2,048,531	1,767,813	1,421,289	1,303,162	1,201,125
Contribution Excess	**$904,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Covered Payroll	$14,447,159	$13,819,881	$13,252,995	$12,643,354	$11,747,602	$10,964,872	$10,120,248
Contributions as a Percentage of Covered Payroll	25.4%	18.1%	15.5%	14.0%	12.1%	11.9%	11.8%
PERF C:							
Actuarially Determined Contribution	$1,597,137	$1,333,559	$1,182,686	$858,954	$789,103	$691,602	$732,142
Contributions in Relation to the Actuarially Determined Contribution[2]	1,971,737	1,586,007	1,418,316	956,558	881,767	691,602	732,142
Contribution Excess	**$374,600**	**$252,448**	**$235,630**	**$97,604**	**$92,664**	**$0**	**$0**
Covered Payroll	$4,155,772	$3,949,226	$3,793,609	$3,631,919	$3,472,950	$3,356,312	$3,248,018
Contributions as a Percentage of Covered Payroll	47.4%	40.2%	37.4%	26.3%	25.4%	20.6%	22.5%
LRF:							
Actuarially Determined Contribution	$98	$250	$20	$0	$141	$260	$33
Contributions in Relation to the Actuarially Determined Contribution[3]	98	250	467	516	549	590	565
Contribution Excess	**$0**	**$0**	**($447)**	**($516)**	**($408)**	**($330)**	**($532)**
Covered Payroll	$278	$655	$1,242	$1,360	$1,313	$1,545	$1,470
Contributions as a Percentage of Covered Payroll	35.3%	38.2%	37.6%	37.9%	41.8%	38.2%	38.4%
JRF:							
Actuarially Determined Contribution[4]	$414,849	$415,110	$438,156	$448,636	$463,073	$1,884,555	$1,569,630
Contributions in Relation to the Actuarially Determined Contribution[5]	243,131	195,903	199,241	204,475	192,287	180,910	191,148
Contribution Deficiency	**$171,718**	**$219,207**	**$238,915**	**$244,161**	**$270,786**	**$1,703,645**	**$1,378,482**
Covered Payroll	$22,875	$31,945	$35,507	$39,413	$34,301	$41,378	$49,287
Contributions as a Percentage of Covered Payroll	1,062.9%	613.3%	561.1%	518.8%	560.6%	437.2%	387.8%
JRF II:							
Actuarially Determined Contribution	$91,147	$84,099	$79,699	$67,102	$65,839	$63,193	$55,538
Contributions in Relation to the Actuarially Determined Contribution	91,147	84,099	79,699	67,102	65,839	63,193	55,538
Contribution Excess	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Covered Payroll	$352,700	$318,827	$299,396	$291,097	$280,879	$259,133	$249,248
Contributions as a Percentage of Covered Payroll	25.8%	26.4%	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) Additional discretionary contribution payments are not available prior to 2016.

(3) 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.

(4) 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.

(5) 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 – Seven-Year Review

	2019-20	2018-19	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	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 and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll	Level Percentage of Payroll
Remaining Amortization Periods[1]	11-30 years	12-30 years	13-30 years	14-30 years	15-30 years	16-30 years	17-30 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value	Smoothing of Fair Value	Smoothing of Fair Value
Inflation	2.63%	2.75%	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	Varies, Based on Entry Age and Service	Varies, Based on Entry Age and Service
Investment Rate of Return	7.25%	7.38%	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	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 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	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	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value	Smoothing of Fair Value	Smoothing of Fair Value
Inflation	2.63%	2.75%	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	Varies, Based on Entry Age and Service	Varies, Based on Entry Age and Service
Investment Rate of Return	7.25%	7.38%	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	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 and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll	Level Percentage of Payroll
Remaining Amortization Periods[1]	N/A	30 years	30 years	63 years	29-30 years	30 years	30 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value	Smoothing of Fair Value	Smoothing of Fair Value
Inflation	2.50%	2.50%	2.75%	2.75%	2.75%	2.75%	2.75%
Salary Increases	2.75%	2.75%	3.00%	3.00%	3.00%	3.00%	3.00%
Investment Rate of Return	5.00%	5.00%	5.00%	5.75%	5.75%	5.75%	5.75%

Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions – Seven-Year Review (CONTINUED)

	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14
JRF							
Actuarial Cost Method	Individual Entry Age Normal	Individual Entry Age Normal	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	Level Dollar	Level Dollar
Remaining Amortization Periods	10 years	10 years	10 years	10 years	10 years	2 years	2 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
Inflation	2.50%	2.50%	2.75%	2.75%	2.75%	2.75%	2.75%
Salary Increases	2.75%	2.75%	3.00%	3.00%	3.00%	3.00%	3.00%
Investment Rate of Return	3.00%	3.00%	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	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 and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll	Level Percentage of Payroll
Remaining Amortization Periods[1]	5-30 years	2-30 years	20-30 years	30 years	30 years	16-30 years	17-30 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value	Smoothing of Fair Value	Smoothing of Fair Value
Inflation	2.50%	2.50%	2.75%	2.75%	2.75%	2.75%	2.75%
Salary Increases	2.75%	2.75%	3.00%	3.00%	3.00%	3.00%	3.00%
Investment Rate of Return	6.50%	6.50%	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 – Seven-Year Review[1]

Plan	2020 Rate of Return	2019 Rate of Return	2018 Rate of Return	2017 Rate of Return	2016 Rate of Return	2015 Rate of Return	2014 Rate of Return
PERF A							
Agent	5.0%	6.5%	8.4%	11.2%	0.5%	2.2%	17.7%
PERF B							
Schools Cost-Sharing	5.0%	6.5%	8.4%	11.2%	0.5%	2.2%	17.7%
PERF C							
Public Agency Cost-Sharing	5.0%	6.5%	8.4%	11.2%	0.5%	2.2%	17.7%
LRF	6.2%	7.0%	4.8%	4.3%	3.8%	(0.1%)	12.9%
JRF	2.3%	3.2%	1.9%	1.0%	0.5%	0.2%	0.1%
JRF II	4.1%	6.9%	7.4%	9.6%	1.9%	(0.2%)	18.3%
CERBTF[2]	4.0%	6.5%	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) Information in this schedule is not available prior to 2016.

PUBLIC EMPLOYEES' HEALTH CARE FUND

Schedule of Claims Development Information (Dollars in Thousands)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
1) Net Earned Required Premium and Investment Revenues	$3,772,501	$3,751,406	$3,985,393	$3,829,095	$3,801,266	$3,642,206	$2,808,384	$1,948,531	$1,912,355	$1,775,005
2) Unallocated Expenses	$331,235	$299,053	$304,408	$312,924	$355,779	$371,916	$192,987	$105,154	$96,043	$88,392
3) Estimated Incurred Claims and Expenses, End of Policy Year	$3,569,208	$3,666,596	$3,576,081	$3,391,183	$3,424,147	$3,432,102	$2,748,821	$1,921,957	$1,816,245	$1,792,599
4) Paid (Cumulative) as of:										
End of Policy Year	$3,111,826	$3,244,896	$3,039,289	$3,061,085	$3,000,726	$3,378,857	$2,122,865	$1,640,709	$1,635,839	$1,550,306
One Year Later	—	3,620,210	3,380,649	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615
Two Years Later	—	—	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615
Three Years Later	—	—	—	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615
Four Years Later	—	—	—	—	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615
Five Years Later	—	—	—	—	—	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615
Six Years Later	—	—	—	—	—	—	2,678,906	1,796,587	1,788,135	1,698,615
Seven Years Later	—	—	—	—	—	—	—	1,796,587	1,788,135	1,698,615
Eight Years Later	—	—	—	—	—	—	—	—	1,788,135	1,698,615
Nine Years Later	—	—	—	—	—	—	—	—	—	1,698,615
5) Re-Estimated Incurred Claims Expenses:										
End of Policy Year	$0	$3,666,596	$3,576,081	$3,391,183	$3,424,147	$3,432,102	$2,748,821	$1,921,957	$1,816,245	$1,792,599
One Year Later	—	3,620,210	3,380,649	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615
Two Years Later	—	—	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615
Three Years Later	—	—	—	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615
Four Years Later	—	—	—	—	3,406,016	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615
Five Years Later	—	—	—	—	—	3,802,277	2,678,906	1,796,587	1,788,135	1,698,615
Six Years Later	—	—	—	—	—	—	2,678,906	1,796,587	1,788,135	1,698,615
Seven Years Later	—	—	—	—	—	—	—	1,796,587	1,788,135	1,698,615
Eight Years Later	—	—	—	—	—	—	—	—	1,788,135	1,698,615
Nine Years Later	—	—	—	—	—	—	—	—	—	1,698,615
6) Increase (Decrease) in Estimated Incurred Claims and Expenses From End of Policy Year	$0	($46,386)	($195,432)	$4,490	($18,131)	$370,175	($69,915)	($125,370)	($28,110)	($93,984)

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 EXPENSES – ALL FUNDS (DOLLARS IN THOUSANDS)

	2020
PERSONAL SERVICES	
Salaries & Wages	$196,933
Employee Benefits	106,996
Accrued Pension & OPEB Expense	110,285
Total Personal Services	**$414,214**
CONSULTANT & PROFESSIONAL SERVICES	
State of California Agencies	$6,363
External Consultants	26,876
Retiree Benefit Trust Management Fees	90
Pension Prefunding Trust Management Fees	15
Deferred Compensation Management/Custody Fees	3,516
Health Plan Administrator Fees	277,804
Long-Term Care Administrator Fees	20,490
Total Consultant & Professional Services	**$335,154**
OPERATING EXPENSES & EQUIPMENT	
General Expense	$5,378
Software	1,661
Printing	1,973
Building	24,384
Postage	2,890
Communications	1,504
Data Processing Services	18,726
Travel	1,585
Training	665
Medical Examiners	1,172
Facilities Operation	3,276
Central Administrative Services	20,234
Administrative Hearings	1,396
Consolidated Data Center	441
CSUS Foundation - Students	157
Equipment	2,806
Total Operating Expenses & Equipment	**$88,248**
OTHER EXPENSES & ADJUSTMENTS	
Depreciation Expense	$17,580
Increase in Paid Absence Obligation	4,368
Amortization	71,578
Miscellaneous	7,504
Total Other Expenses & Adjustments	**$101,030**
TOTAL ADMINISTRATIVE EXPENSES — ALL FUNDS	**$938,646**

INVESTMENT EXPENSES – ALL FUNDS

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

	Fees
Equity Managers	
Allianz Global Investors U.S., LLC	$323
Arrowstreet Capital, LP	15,834
Baillie Gifford Overseas, Ltd.	857
Cartica Corporate Governance Fund, LP	2,869
Epoch Investment Partners, Inc.	230
FIS CalBear Fund, LLC	793
Hamilton Lane Advisors, LLC	753
Hermes European Equities Limited	510
J.P. Morgan Investment Management, Inc.	3
Lazard Asset Management, LLC	(729)
LEIA GEM Investment, LLC	1,422
Legato Capital Management Investments, LLC	3,873
Progress Investment Management Company	1,834
State Street Global Advisors	5,824
Strategic Investment Management, LP	1,583
Wellington Management Company, LLP	3,876
Total Equity Managers	**$39,855**
Fixed Income Managers	
AllianceBernstein, LP	$53
Baring International Investment Limited	21
Columbia Management Investment Advisers	1,825
Investec Asset Management North America	41
Neuberger Berman Investment Advisers, LLC	46
Nomura	2,402
Pacific Investment Management Co., LLC	167
Total Fixed Income Managers	**$4,555**
Private Equity Funds[3,4]	
57 Stars Global Opportunities Fund 2 (CalPERS), LLC	$766
57 Stars Global Opportunities Fund, LLC	600
Aberdare Ventures IV, LP	92
Advent International GPE IX Limited Partnership	6,819
Advent International GPE V-D, LP	76
Advent International GPE VI-A, LP	1,052
Advent International GPE VII-C, LP	3,513
Advent International GPE VIII-B Limited Partnership	6,023
Advent Latin America Private Equity Fund IV-D, LP	481
Advent Latin America Private Equity Fund V-H, LP	748
Advent Latin American Private Equity Fund III-D, LP	122
Affinity Asia Pacific Fund III, LP	452
Aisling Capital III, LP	(91)
Apollo Investment Fund IX, LP	4,866
Apollo Investment Fund VI, LP	(10)
Apollo Investment Fund VII, LP	885
Apollo Investment Fund VIII, LP	1,747
Apollo Special Opportunities Managed Account, LP	(367)
Ares Corporate Opportunities Fund III, LP	580
Ares Corporate Opportunities Fund V, LP	5,914
Asia Alternatives Capital Partners II, LP	96

	Fees
Asia Alternatives Capital Partners, LP	$6
Baring Vostok Private Equity Fund IV, LP	220
BDC III C, LP	2,068
Bridgepoint Europe VI 'H', LP	4,729
Birch Hill Equity Partners (US) IV, LP	942
Blackstone Capital Partners VI, LP	1,222
Blackstone Capital Partners VII, LP	6,250
Blackstone Tactical Opportunities Fund - C, LP	3,328
Blackstone Tactical Opportunities Fund (KG Co-Invest), LP	453
Blackstone Tactical Opportunities Fund (T4U Co-Invest), LP	209
Blackstone Tactical Opportunities Fund II - C, LP	2,697
Blackstone Tactical Opportunities Fund III-C (Surge), LP	264
Blackstone Tactical Opportunities Fund III - C, LP	914
Bridgepoint Europe II 'A', LP	(3)
Bridgepoint Europe II 'C', LP	(1)
Bridgepoint Europe IV 'B', LP	(1,833)
Bridgepoint Europe IV 'D', LP	(6,952)
Bridgepoint Europe V	4,091
California Asia Investors, LP	180
California Emerging Ventures IV, LLC	275
California Mezzanine Investment Fund, LP	409
CalPERS Clean Energy & Technology Fund, LLC	270
Capital Link Fund I, LLC	477
Capital Link Fund II, LLC	380
Carlyle Asia Growth Partners IV, LP	297
Carlyle Asia Partners III, LP	383
Carlyle Asia Partners V, LP	3,250
Carlyle Europe Partners III, LP	76
Carlyle Europe Partners V, S.C.Sp	3,722
Carlyle Europe Technology Partners II, LP	47
Carlyle Global Financial Services Partners, LP	143
Carlyle Japan Partners II, LP	33
Carlyle Partners IV, LP	(1)
Carlyle Partners V, LP	—
Carlyle Partners VI, LP	2,842
Carlyle Partners VII, LP	5,756
Carlyle Strategic Partners IV, LP	1,926
Carlyle U.S. Equity Opportunities II, LP	2,271
Carlyle/Riverstone Global Energy and Power Fund III, LP	181
CDH Fund V, LP	2,571
Centerbridge Capital Partners III, LP	1,281
Cerberus CAL II Partners, LP	2,031
Cerberus CAL III Partners, LP	1,804
Cerberus CP Partners, LP	1,386
Cerberus Institutional Partners V, LP	580
Clarus Lifesciences II, LP	—
Clayton, Dubilier & Rice Fund X, LP	1,684
Clearlake Capital Partners III, LP	356
Clearlake Capital Partners IV, LP	622
Clearlake Capital Partners V, LP	423
Clearlake Opportunities Partners (P), LP	582

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

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

	Fees
Craton Equity Investors I, LP	$11
CVC Capital Partners Asia V, LP	214
CVC Capital Partners Strategic Opportunities Compounding Capital, LP	6,924
CVC Capital Partners VI, LP	4,580
CVC Capital Partners VII (A), LP	7,097
CVC European Equity Partners V (B), LP	5
EMAlternatives Investments, LP	200
Essex Woodlands Health Ventures Fund VIII, LP	1,600
First Reserve Fund XII, LP	98
First Reserve Fund XIII, LP	2,481
Francisco Partners III, LP	422
GCM Grosvenor DEM II, LP	887
GCM Grosvenor DEM III, LP	2,806
GCM Grosvenor DEM, LP	662
Green Equity Investors V, LP	(20)
GSO Capital Opportunities Fund II, LP	608
GSO Capital Solutions Fund II, LP	1,489
GSO Energy Partners-C II, LP	1,483
GSO Energy Partners-C, LP	2,212
Hellman & Friedman Capital Partners IX, LP	2,745
Hellman & Friedman Capital Partners VII, LP	523
Hellman & Friedman Capital Partners VIII, LP	3,238
Insight Partners XI, LP	2,275
Insight Venture Partners Growth-Buyout Coinvestment Fund (B), LP	3,154
Insight Venture Partners IX, LP	1,673
Insight Venture Partners X, LP	4,084
Ithaca, LP	—
Khosla Ventures III, LP	1,248
Khosla Ventures Seed, LP	883
KKR 2006 Fund, LP	218
KKR Asian Fund II, LP	1,452
KKR Asian Fund, LP	86
KKR European Fund II, LP	8
KKR European Fund III, LP	880
KKR European Fund V (USD) SCSp	2,044
KKR Millennium Fund, LP	13
KM Corporate Partners Fund II, LP	536
KPS Special Situations Fund III, LP	1
Lime Rock Partners V, LP	156
Lindsay Goldberg IV, LP	4,861
Lion Capital Fund II, LP	106
Madison Dearborn Capital Partners VIII, LP	500
MHR Institutional Partners III, LP	1,320
Newbridge Asia IV, LP	129
Oak Hill Capital Partners II, LP	14
Oak Hill Capital Partners III, LP	464
Oaktree Opportunities Fund VIIIb, LP	1,308
Onex Partners IV, LP	2,018
Onex Partners V (B), LP	8,255
PAG Asia I, LP	460

	Fees
PAG Asia III, LP	$6,650
Palladium Equity Partners V, LP	1,347
Patria Brazilian Private Equity Fund V, LP	2,881
Permira Growth Opportunities I, LP 1	2,500
Permira IV, LP 2	—
Permira V, LP	2,399
Permira VI, LP 1	5,212
Permira VII, LP 1	4,448
RFG Private Equity Limited Partnership No. 1A, 1B and 1C	1
Riverstone Global Energy and Power Fund V, LP	2,360
Riverstone Global Energy and Power Fund VI, LP	7,500
Riverstone/Carlyle Global Energy and Power Fund IV, LP	566
Riverstone/Carlyle Renewable & Alternative Energy Fund II, LP	772
Riverwood Capital Partners (Parallel - A), LP	322
Sacramento Private Equity Partners, LP	250
SAIF Partners III, LP	784
SAIF Partners IV, LP	1,207
Sankaty Managed Account (CalPERS), LP	1,828
Silver Lake Partners III, LP	253
Silver Lake Partners IV, LP	1,848
Silver Lake Partners V, LP	4,774
Siris Partners III, LP	738
Siris Partners IV, LP	1,459
SL SPV-1, LP	381
SL SPV-2, LP	280
Tailwind Capital Partners (PP), LP	109
Tailwind Capital Partners II, LP	590
Tailwind Capital Partners III, LP	579
TCV X, LP	1,897
The Central Valley Fund II SBIC, LP	191
The Rise Fund (A), LP	1,184
Thomas H. Lee Equity Fund VI, LP	69
TowerBrook Investors III, LP	235
TowerBrook Investors IV (Onshore), LP	2,845
Towerbrook Investors V (Onshore), LP	2,537
Towerbrook Structured Opportunities Fund (Onshore), LP	1,565
Towerbrook Structured Opportunities Fund II (Onshore), LP	491
TPG Asia VII (A), LP	4,127
TPG Growth IV, LP	1,309
TPG Healthcare Partners, LP	1,592
TPG Partners VI, LP	(74)
TPG Partners VIII, LP	7,771
Trident VI	3,274
Trident VII, LP	3,007
Triton Fund IV, LP	866
Triton Fund V, LP	2,791
T-VI Co-Invest-A, LP	(132)
Valor Equity Partners IV, LP	1,447
VantagePoint Venture Partners 2006 (Q), LP	550
Vicente Capital Partners Growth Equity Fund, LP	139
Vista Equity Partners Fund VII-Z, LP	5,864

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

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

	Fees
WCAS XIII, LP	$5,003
Welsh, Carson, Anderson & Stowe XI, LP	287
Welsh, Carson, Anderson & Stowe XII, LP	3,589
Wigmore Street (BDC III), LP	1
Wigmore Street Co-investment No.1, LP	1
Wigmore Street VI Co-Investment No.1, LP	71
WLR Recovery Fund IV, LP	—
Yucaipa Corporate Initiatives Fund II, LP	80
Total Private Equity Funds	**$272,231**
Real Asset Funds	
Alinda Infrastructure Fund II, LP	$542
ARA China Long Term Hold	6,796
Archmore International Infrastructure Fund II (B), LP	436
Archmore International Infrastructure Fund II (C), LP	927
Blackstone Property Partners Europe, LP	1,531
CalEast Solstice - Base	12,719
CalEast Solstice - DT Land	4,637
CalEast Solstice - DT Other	894
CalWest CalPERS GIP	60
Canyon Catalyst Fund II, LLC	2,471
CCF III, LLC	66
CCP 2020	177
CIM Fund III, LP	4,040
CIM Infrastructure Fund, LP	2,732
CIM Urban Real Estate Fund, LP	4,010
FSP - Base	26,686
FSP - DT 2012 and Beyond	130
Global Infrastructure Partners II, LP (GIP II)	2,736
Global Infrastructure Partners IV-A/B, LP	8,279
Golden Reef Infrastructure Trust	3,290
Gotham Office Realty Partnership	116
GRI - Base	17,377
GRI - DT 2012 and Beyond	94
Harbert Gulf Pacific Power, LLC (HGPP)	5,040
Harbert Power Fund V, LP (HPF V)	1,064
HC Green Development Fund, LP	482
HC LTH, LLC	4,311
HC NOP Holdings, LP	25
HCB LTH	877
HCC Interests, LP	155
HCR LTH, LLC	1,006
IHP Investment Fund III, LP	2,062
IMI - Base	24,578
IMP - Base	26,247
IMP - DT 2012 and Beyond	1,585
IMP - ICMI	3,483
IMP Abaca	631
Institutional Logistics Partners, LLC	4,970
KC 2011, LLC	1,594

	Fees
Land Management Company Resmark	$610
Land Management Company, LLC	3,223
Lincoln Timber, LP	2,537
North Haven Infrastructure Partners II, LP	1,878
ORA Multifamily Investments I, LLC	380
ORA Residential Investments I, LP	557
Pacific Multifamily Investors, LLC	6,600
PMI Tactical	161
Sacramento Venture - Base	216
Sacramento Venture - DT	211
Sacramento Venture Hines Base	222
Sacramento Venture Hines DT	216
SF Mission Street Partners, LLC	2
Stockbridge Hollywood Park Co-Investors, LP	312
Stockbridge Real Estate Fund II -B, LP	76
Strategic Property Fund Asia SCSP	1,866
Sylvanus, LLC	1,938
TechCore, LLC	9,106
Tower Bridge Infrastructure Partners, LP	5,137
Whitney Ranch Resmark	46
Whitney Ranch Venture, LLC	1,050
Total Real Asset Funds	**$215,200**
Other Investment Management Fees	
AQR	$3,196
Brookside Capital Partners Fund, LP	6
FIAM Fidelity Investments	614
LongTail Alpha, LLC	5,840
OZ Eureka Fund, LP	216
Standard Life	179
Universa Investments, LP	14,219
VCM Dynamic Multi-Asset	2,005
Total Other Investment Management Fees	**$26,275**
Total Management Fees	**$558,116**

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

Performance Fees[5] (Dollars in Thousands)

	Fees
Equity Managers	
Baillie Gifford Overseas, Ltd.	$9,407
J.P. Morgan Investment Management, Inc.	1,429
Total Equity Managers	**$10,836**
Fixed Income Managers	
Baring International Investment Limited	$373
Pacific Investment Management Co., LLC	2,466
Total Fixed Income Managers	**$2,839**
Real Asset Funds	
AGI Resmark Housing Fund, LLC	($121)
Blackstone Property Partners Europe, LP	7,583
CalEast Canada Limited Partnership	4
CalEast Solstice, LLC	322
Canyon Catalyst Fund II, LLC	2,890
Canyon Johnson Urban Fund, III	(61)
CIM Infrastructure Fund, LP	(17,896)
FSP - Base	17,613
FSP - DT 2012 and Beyond	4,441
Global Infrastructure Partners II, LP (GIP II)	(6,516)
Golden Reef Infrastructure Trust	(255)
GRI - Base	17,377
Harbert Gulf Pacific Power, LLC (HGPP)	10,598
Harbert Power Fund V, LP (HPF V)	265
HC Green Development Fund, LP	1,736
HCB Interests II, LP	(4,219)
IHP Investment Fund III, LP	(663)
IMI - Base	8,069
IMP - Base	37,547
IMP - DT 2012 and Beyond	5,763
IMP - ICMI	4,668
IMP Abaca	750
Institutional Logistics Partners, LLC	4,889
Ivy Investment Vehicle LDC (SWPM)	(1,626)
KC 2011, LLC	21,549
LaSalle Japan Logistics Fund II, LP	1
ORA Multifamily Investments I, LLC	6,701
ORA Residential Investments I, LP	(633)
Pacific Multifamily Investors, LLC	3,375
Sacramento Venture - Base	(142)
TechCore, LLC	5,907
Total Real Asset Funds	**$129,916**

	Fees
Other Investment Managers	
Brookside Capital Partners Fund, LP	$38
OZ Domestic Partners II, LP	(8)
Total Other Investment Managers	**$30**
Total Performance Fees	**$143,621**
Total Management and Performance Fees	**$701,737**

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

Other Investment Expenses[1,5] (Dollars in Thousands)

	Fees
Advisory Fees	
Alliance Bernstein, LP	$411
AXA Rosenberg Investment Management, LLC	213
FIS Group, Inc.	584
Goldman Sachs Asset Management, LP	302
Lazard Asset Management, LLC	500
Legato Capital Management Investments, LLC	1,750
LEIA GEM Investment, LLC	583
Principal Life Insurance Company	996
Progress Investment Management Company	583
QS Investors, LLC	133
Quantitative Management Associates, LLC	367
Strategic Investment Group, LLC	584
Total Advisory Fees	**$7,006**
Appraisal Fees	
RERC, LLC	$11,153
Total Appraisal Fees	**$11,153**
Auditor Fees	
Cohn Reznick, LLP	$60
Conrad, LLP	30
KPM & Associates, LLP	38
RSM US, LLP	—
Total Auditor Fees	**$128**
Company Expense	
FIS Group, Inc.	$65
Leading Edge Investment Advisors, LLC	129
Legato Capital Management, LLC	338
LongTail Alpha, LLC	334
Progress Investments, LLC	174
Strategic Investment Group, LLC	75
Universa Investments, LP	175
Total Company Expense	**$1,290**
Fund Administration Fees	
State Street Bank and Trust Company	$4,053
Total Fund Administration Fees	**$4,053**
Investment Consultant Fees	
AON Risk Insurance Services West, Inc.	$40
Bard Consulting, LLC	650
BDO USA, LLP	26
Callan, LLC	460
Crosswater Advisors, LLC	234
D2 Alternative Investments Limited	(199)
Duff & Phelps, LLC	455
Ernst & Young, LLP	40
Funston Advisory Services, LLC	355
Greenhill & Co., LLC	2

	Fees
Hamilton Lane Advisors, LLC	$590
JLynn Consulting, Inc.	235
Mckinsey & Company, Inc. Washington, DC	999
Meketa Investment Group, Inc.	(20)
Mercer Alternatives Limited	150
Mercer Investments, LLC	204
Mosaic Investment Advisors, Inc.	200
MSys International, Inc.	180
Pacific Community Ventures, Inc.	179
Propoint Technology, Inc.	2,621
Pyramid Technical Consultants, Inc.	241
RCLCO Fund Advisors, LLC	192
Ryedale, Inc.	(6)
SPS Consulting Services, LLC	227
SRI InfoTech, Inc.	292
Steer Davies Gleave Limited	(127)
Technology Crest Corporation	196
The Spaulding Group	84
Trinity Technology Group, Inc.	3
Wellington Management Company, LLP	219
Wilcox Miller & Nelson	40
Total Investment Consultant Fees	**$8,762**
Legal Fees	
Arguedas, Cassman, Headley & Goldman, LLP	$5
Berman Tabacco	(22)
Cox, Castle & Nicholson, LLP	239
DLA Piper, LLP	314
Durie Tangri, LLP	288
Foster Pepper, PLLC	41
Hogan Lovells, US LLP	127
K & L Gates, LLP	112
Katten Muchin Rosenman, LLP	14
Morgan, Lewis & Bockius, LLP	466
Nixon Peabody, LLP	30
Pennington, LLP	15
Pillsbury Winthrop Shaw Pittman, LLP	1,357
Reed Smith, LLP	(5)
Stoel Rives, LLP	1
Vasquez Benisek Lindgren	(5)
Wilson Sonsini Goodrich & Rosati	96
Total Legal Fees	**$3,073**
Master Custodian Fees	
State Street Bank and Trust Company	$10,623
Total Master Custodian Fees	**$10,623**
Tax Advisory Fees	
Ernst & Young, LLP	$737
Total Tax Advisory Fees	**$737**

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

Other Investment Expenses[1,5] (Dollars in Thousands) (continued)

	Fees
Technology Expenses	
13D Research, Inc.	$70
A.M. Best Company, Inc.	3
Abel Noser Solutions, LLC	48
Acadiasoft, Inc.	11
Axioma, Inc.	349
Babelfish Analytics, Inc.	35
Barclays Capital, Inc.	(43)
Barra, LLC	2,430
BCA Research	267
BDO USA, LLP	24
BlackRock Financial Management, Inc.	9,061
Bloomberg Index Services Limited	167
Bloomberg, LP	2,935
Broadridge Investor Communications	18
Cambridge Associates, LLC	21
Carahsoft Technology Corp.	851
CEM Benchmarking, Inc.	155
Charles River Systems, Inc.	2,915
Clarity Solutions Group, LLC	60
Convergence, Inc.	25
Cornerstone Macro, LLC	132
CoStar Realty Information, Inc.	180
Credit Market Analysis Limited	(21)
Creditsights	150
Dow Jones & Company, Inc.	2
DTCC ITP, LLC	182
eFront Financial Solutions, Inc.	1,596
eMBS, Inc.	9
Empirical Research Partners, LLC	435
Equilar, Inc.	35
Etrali North America, LLC	81
Eurasia Group	138
Euromoney Trading Limited	20
eVestment Alliance	37
Factset Research Systems, Inc.	2,500
Fan Asset Management, LLC	208
Fitch Solutions, Inc.	292
Frank Russell Company	34
FTSE	805
Fundamental Intelligence, LTD	8
Gartner, Inc.	229
Gavekal Capital Management Limited	45
Glass Lewis & Co., LLC	498
Global Financial Data	30
Global Investor Collaboration Services, LLC	5
Green Street Advisors	145
Haver Analytics, Inc.	132
ICE Benchmark Administration Limited	32
IHS Global, Inc.	21
Insight Public Sector, Inc.	79
Institutional Shareholder Services, Inc.	228
Intex Solutions, Inc.	$266
Investment Property Databank	88
IPC, Systems, Inc.	301
Kyriba Corporation	75
London Stock Exchange PLC	36
Markit Indices Limited	29
Markit North America, Inc.	92
Microsoft Services	26
Moody's Analytics, Inc.	438
Mountainview Analytics, LLC	10
MRB Partners, Inc.	50
MRI Software, LLC	317
MSCI, INC	1,838
MUFG Capital Analytics, LLC	7,034
Noel L Scherf	(6)
NYSE Market, Inc.	21
Option Research & Technology Services, LLC	56
Options Price Reporting Authority	4
Preqin Limited	42
Quantal International, Inc.	45
Radianz Americas, Inc.	188
Real Capital Analytics, Inc.	96
Refinitiv US, LLC	229
RIMES Technologies Corporation	405
Ryedale Europe Limited	730
S & P Global Market Intelligence, LLC	1,525
S&P Dow Jones Indices, LLC	70
S&P Trucost Limited	18
SASB Foundation	4
SpiderRock EXS, LLC	(13)
State Street Bank and Trust Company	4,076
StepStone Group, LP	222
Stone & Kanto, LLC	9
STOXX Limited	29
Sustainalytics U.S., Inc.	43
The Burgiss Group, LLC	129
The Depository Trust & Clearing Corp.	11
The Mathworks, Inc.	65
The Statestore, Inc.	2
The Yield Book, Inc.	228
Tradeweb, LLC	181
Trend Macrolytics, LLC	27
TRGRP, Inc.	273
TriOptima AB	30
TSX, Inc.	35
Viola Risk Advisors, LLC	10
Wellington Management Company, LLP	187
William O'Neil & Company	30
Wood Mackenzie, Inc.	220
Yardeni Research, Inc.	19
Total Technology Expenses	**$47,509**

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

Other Investment Expenses[1,6] (Dollars in Thousands) (continued)

	Fees
Internal Investment Personnel and Administrative Expenses	
Internal Investment Personnel and Administrative Expenses	$88,965
Total Internal Investment Personnel and Administrative Expenses	**$88,965**
Miscellaneous Investment Expense Fees	
Miscellaneous Investment Expense Fees	$332
Transaction Fees	96,751
Total Miscellaneous Investment Expense Fees	**$97,083**
Total Other Investment Fees and Expenses	**$280,382**
Total Investment Expenses - All Funds	**$982,119**

(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.
(4) Investments listed reflect only those investments with management fees, rebates, offsets, and/or carried interest incurred within the fiscal reporting period.
(5) Negative performance fees are due to the reversal of accruals caused by the fluctuation in fair values.
(6) Negative expenses are due to market fluctuations, adjusting entries, and reimbursements.

CONSULTANT AND PROFESSIONAL SERVICES EXPENSES[1] – ALL FUNDS (DOLLARS IN THOUSANDS)

Individual or Firm	Fees	Nature of Services
AgreeYa Solutions, Inc.	$337	Information, Technology Consulting and Support Services
Anthem Blue Cross	122,767	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Aon Consulting, Inc.	25	Consulting for Salary Surveys, Executive Compensation Recommendations and Advice for the Compensation Program
ATV Video Center, Inc.	170	Video and Multimedia Production Services
Baker & Hostetler, LLP	29	Medical Consulting Services
BDO USA, LLP	2,650	Auditor Services
Belmonte Enterprises, LLC	619	Application Development
Berman Tabacco	777	Succession and Workforce Planning
Blue Shield of California	57,435	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Buck Global, LLC	1,807	Actuarial Services
Capio Group	983	Application Development
Claims Eval, Inc.	28	Health Appeals Review Services
Cook Brown, LLP	78	Legal Services
Cornerstone Fitness, Inc.	36	Employee Training and Development
Delegata Corporation	184	Application Development
Department of Justice	563	Conduct & Provide External Investigative Services
Domain Experts Corporation	72	Recruiting and Placement
DSS Research	179	Medical Consulting Services
Durie Tangri, LLP	763	Legal Services
Eaton Interpreting Services, Inc.	165	Interpreting Services
Elynview Corporation	338	Data Base Administration, Systems Analysis, Design, Implementation, Maintenance and Support
Enterprise Networking Solutions, Inc.	250	IT Architecture, Systems Analysis, Design, Implementation, Maintenance and Support
Equanim Technologies	447	Business Process Re-engineering, Project Management Services, Technical Writing
Faegre Drinker Biddle & Reath, LLP	(477)	Legal Services
Fair Political Practices Commission	58	Assessment Services
FB3 Consulting, LLC	260	Information Services, Advanced Analytics Solutions Development
First Data Merchant Services Corporation	89	Banking Services
Gartner, Inc.	433	Management Support Services
Government Operations Agency	354	Operations and Strategic Business Planning
H&B Joint Venture	199	Business Transformation/Transition, Release Management/Quality Assurance/Configuration Management
Health Actuaries	72	Actuarial Consulting Services
Health Net of California	16,637	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
inContact, Inc.	182	Information Technology Services, New Solution for the Contact Center
Innovative Software Technologies, Inc.	415	Specialized IT Support Services for Actuarial Systems/Business
Integrity Voting Systems (IVS)	709	Board Election Services
J & K Court Reporting, LLC	54	Legal Services
JLynn Consulting, Inc.	412	Application Development, Information Services
K&L Gates, LLP	348	Legal Services
KearnFord Application Systems Design	316	Business Transformation/Transition, Information Services, Release Management/Quality Assurance/Configuration Management
Kiefer Consulting, Inc.	123	Application Development, IT Architecture
King & Spalding, LLP	(39)	Legal Services

CONSULTANT AND PROFESSIONAL SERVICES EXPENSES[1] – ALL FUNDS (DOLLARS IN THOUSANDS) (CONTINUED)

Individual or Firm	Fees	Nature of Services
Kong Consulting, Inc.	$500	Systems Analysis, Design, Implementation, Maintenance and Support
Korn Ferry (US)	410	Search Firm Services
Level Access, Inc.	182	Accessibility Training Services
Long Term Care Group, Inc.	20,054	Third-Party Member Record Keeper, Billing, Banking, Claims Administration, Care Advisory, Enrollment, Customer and Specialist, Reporting, Data Feed Services, Information Technology Services, Marketing Consultant
Matrix Software Services	160	Data Base Administration, Systems Analysis, Design, Implementation, Maintenance and Support
Mellon Bank	335	Banking Services
Mercer	475	Health Care and Actuarial Consulting
Michael Scales Consulting, LLC	221	Application Development
Milliman, Inc.	2,602	Project Management Services
National Association Corporate Directors	182	Board Evaluations
Northeast Retirement Services	105	Third-Party Member Record Keeper
Olson Remcho, LLP	32	Election Services
OnCore Consulting, LLC	478	Application Development, IT Architecture
OptumRx	22,826	Pharmacy Claims Administration, Account Management, Eligibility, Retail and Other Reporting Services
Orrick Herrington & Sutcliffe, LLP	386	Legal Services
Pasanna Consulting Group, LLC	1,387	Application Development, Data Base Administration, IT Architecture, Systems Analysis, Design, Implementation, Maintenance and Support
Perspecta State and Local, Inc.	218	Data Base Administration, Systems Analysis, Design, Implementation, Maintenance and Support
Princeton Solutions Group, Inc.	86	Business Transformation/Transition, Project Management Services, Release Management/Quality Assurance/Configuration Management
QualApps, Inc.	796	Application Development, IT Architecture
RVK, Inc.	25	Market Analysis
Randle Communications	391	Media Training, Writing, Editorial, Marketing, and Crisis Communication Services
Recon Distribution, Inc.	182	Exhibition Management
Reed Smith, LLP	739	Legal Services
Ridgeway Partners, LLC	44	Search Firms Services
RS3 Consulting	185	Information Services, Application Development
RSC Insurance Brokerage, Inc.	385	Actuarial Consulting Services
Runyon Saltzman, Inc.	74	Writing, Editorial and Marketing Services
Saba Software, Inc.	108	Employee Training and Development
Shah & Associates, A Professional Law Company	118	Legal Services
Sharp Health Plan	7,359	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Slalom, LLC	480	Information Technology Services, Applications Migration
Sophus Consulting	300	Legal Services
State Controller's Office	7,497	Account Management, Information Technology, Other Post Employment Benefits, General Administrative Services, and Premium Remittance Services
State Personnel Board	100	Compliance Review, Audit, and Processing of Appeals and Complaints
State Treasurer's Office	28	Money Wiring Services
Steptoe & Johnson, LLP	110	Legal Services
SymSoft Solutions, LLC	62	Information Services, Application Development
T5 Consulting	765	Application Development, Information Services
Take 1 Productions	45	Video and Multimedia Production Services
The Berwyn Group	27	Identifying Deceased Individuals, Providing Death Certificates to CalPERS
The RAND Corporation	30	Reference Based Pricing Drug Program

CONSULTANT AND PROFESSIONAL SERVICES EXPENSES[1] – ALL FUNDS (DOLLARS IN THOUSANDS) (CONTINUED)

Individual or Firm	Fees	Nature of Services
The Regents of the University of California	$272	Organizational and Leadership Development
The Taylor Feldman Group, LLC	38	Management Support Services
Toppan Merrill, LLC	64	Printing of Open Enrollment Materials and Dissemination
Trinity Technology Group, Inc.	931	Application Development, Business Intelligence and Reporting, Information Services, IT Architecture
UnitedHealthcare	43,609	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Unleashing Leaders, Inc.	45	Organizational and Leadership Development
Van Dermyden Maddux Law Corporation	(51)	Legal Services
Vantage Consulting Group, Inc.	445	Application Development, IT Architecture
Voya	3,516	Third-Party Member Record Keeper
Western Health Advantage	4,674	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Worktank Enterprises, LLC	68	Video and Multimedia Production Services, Web Event Services
Various	207	
Total Consultant and Professional Services Expenses	**$335,154**	

(1) Negative Consultant and Professional Expenses are due to adjusting entries as a result of reversal of accruals which are estimates.