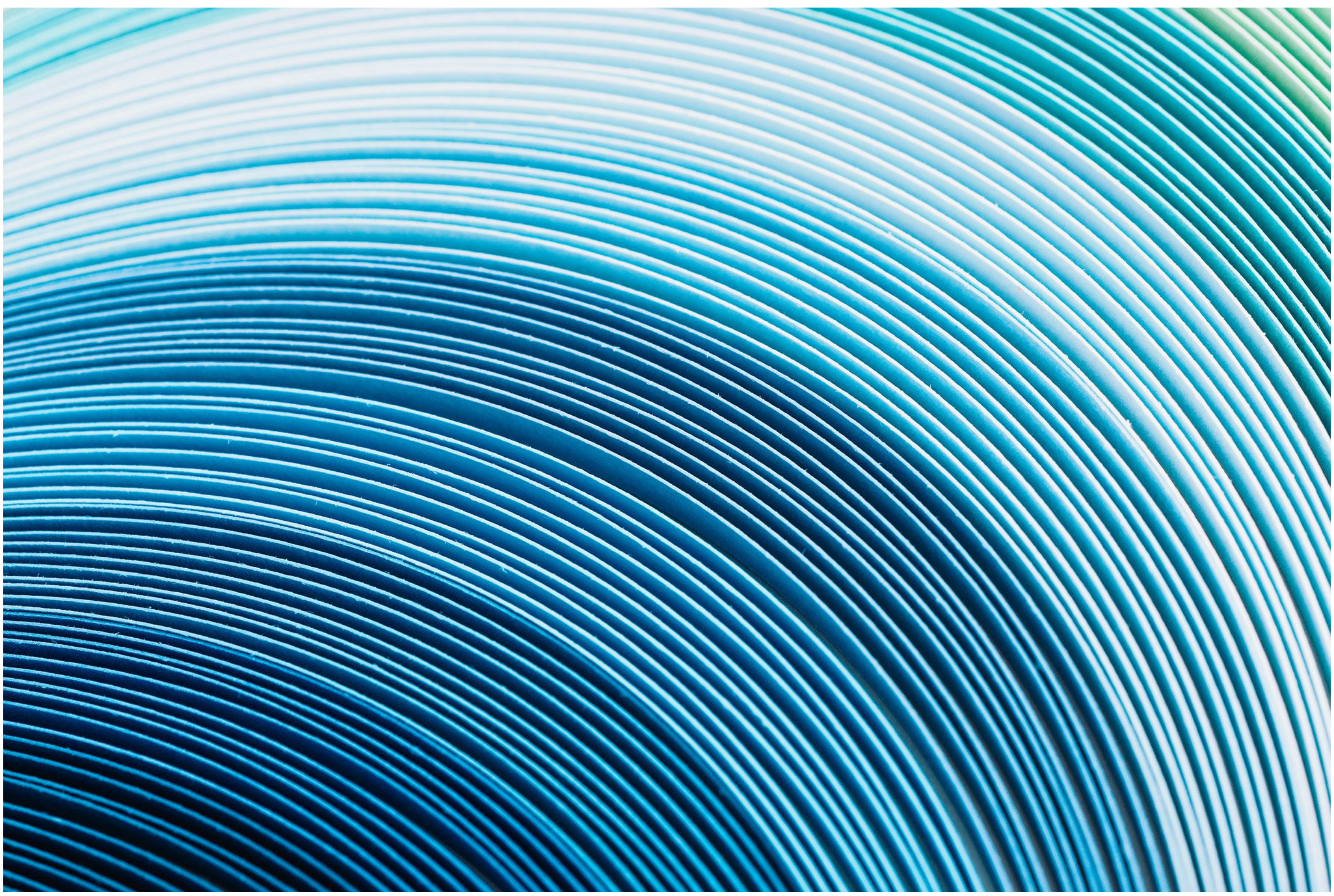
2021-22

Annual Comprehensive Financial Report

Fiscal Year Ended June 30, 2022

Safeguarding California's
Public Employees' Future



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

CalPERS

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ANNUAL COMPREHENSIVE FINANCIAL REPORT

Fiscal Year Ended June 30, 2022

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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2021-22 IN NUMBERS

"It's important to remember that despite these market conditions and their impact on our returns, we're focused on long-term performance and our members can be confident that their retirement is safe and secure."

Marcie Frost, CalPERS CEO

Where We Stand

$439.4 billion
Net position (PERF)

(6.1)%
Net time-weighted rate of return (PERF)

2 million+
members

2,892
Contracted employers

1.5 million
Total covered lives (health)

81.2%
Funded as of June 30, 2021 (PERF)

775,000+
Retirees & beneficiaries

72%
Estimated funded as of June 30, 2022 (PERF)

$29.1 billion
Annual pension benefit payments (PERF)

$58.7 billion
Invested in California Based Companies & Projects (June 30, 2021)

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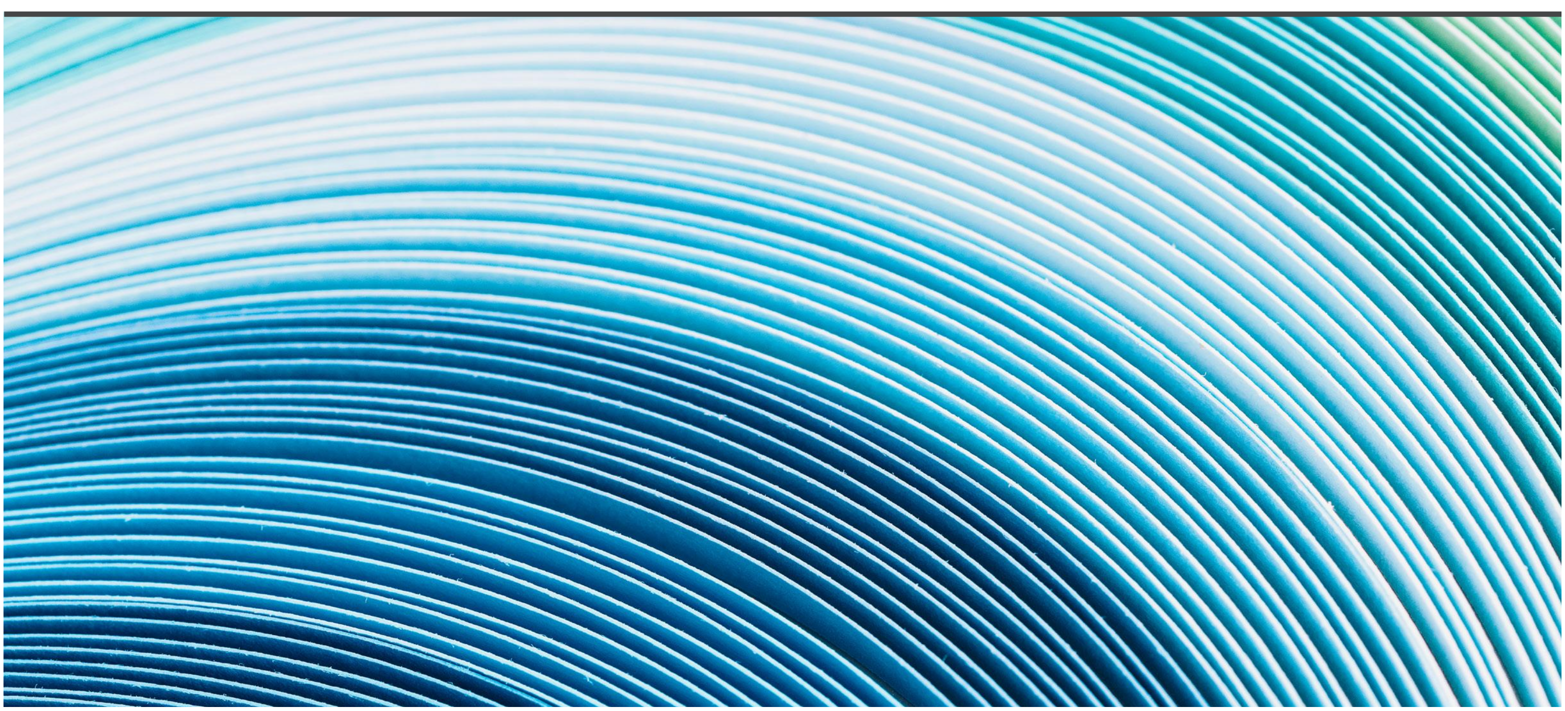
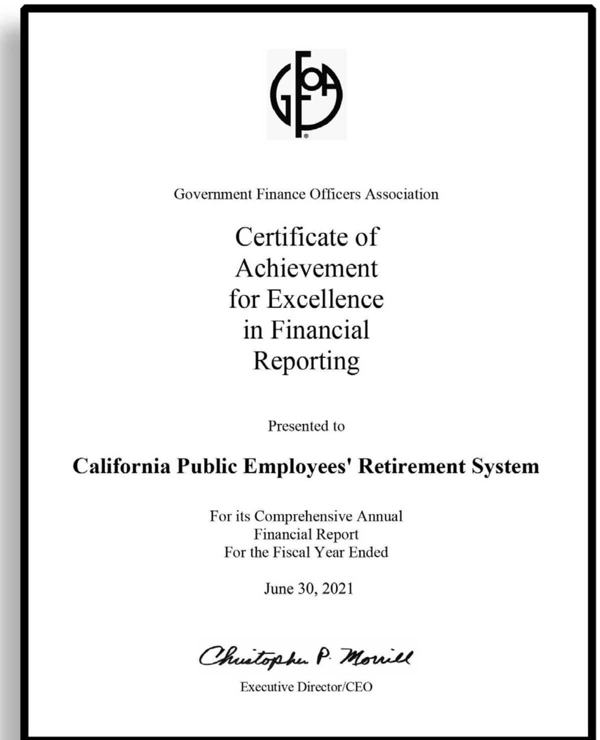
INTRODUCTORY SECTION



PROFESSIONAL AWARDS

CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING

The Government Finance Officers Association of the United States and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to CalPERS for our Annual Comprehensive Financial Report for the fiscal year ended June 30, 2021. This was the 26th year that CalPERS has achieved this prestigious award. To be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized Annual Comprehensive Financial Report that satisfies both generally accepted accounting principles and applicable legal requirements. We believe our current Annual Comprehensive Financial Report continues to meet the Certificate of Achievement Program's requirements.



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

California Public Employees' Retirement System

For its Comprehensive Annual Financial Report For the Fiscal Year Ended

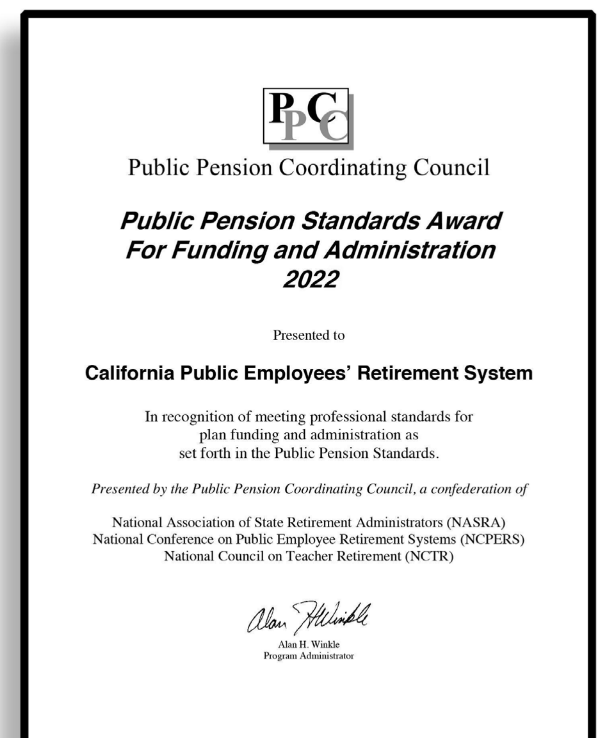
June 30, 2021

Christopher P. Morrill

Executive Director/CEO

PUBLIC PENSION STANDARDS AWARD

The Public Pension Coordinating Council awarded a Public Pension Standards Award for Funding and Administration to CalPERS for the fiscal year ended June 30, 2022. This is the 20th consecutive year that CalPERS has achieved this prestigious award. In order to be awarded a Public Pension Standards Award, a public pension program must meet professional standards for plan design and administration as set forth in the Public Pension Standards. A Public Pension Standards Award is valid for a period of one year.



PPCC

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2022

Presented to

California Public Employees' Retirement System

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

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

Alan H. Winkle

Alan H. Winkle
Program Administrator

CHIEF EXECUTIVE OFFICER'S LETTER OF TRANSMITTAL

Marcie Frost
Chief Executive Officer

November 18, 2022

Members of the CalPERS Board of Administration:
I am pleased to present the California Public Employees' Retirement System (CalPERS) Annual Comprehensive Financial Report for the fiscal year ended June 30, 2022.

This fiscal year was especially challenging, a period that began with strong economic growth followed by tremendous financial market volatility. The instability in the markets created our first investment loss since the 2009 global financial crisis while impacting our funded status and the trajectory of future employer contribution rates. We ended the fiscal year with $439 billion in net assets.

While we've done a lot of work in recent years to plan and prepare for difficult conditions, our fiscal year return of -6.1 percent was driven primarily by the downturn of the public markets that accounts for 79 percent of CalPERS' total fund. Our investment net returns in global public stocks ended the fiscal year at -13.1 percent, while fixed income returns fell by -14.5 percent. Our private market investments fared much better, with private equity and real assets sectors returning 21.3 percent and 24.1 percent, respectively, as of March 31, 2022.

To help guide the investment portfolio over the next four years, the CalPERS Board selected a new asset allocation mix in the first half of the fiscal year as part of our formal Asset Liability Management (ALM) process. At the same time, the Board retained the current 6.8 percent discount rate and approved adding 5 percent leverage to increase diversification. The discount rate has been at 6.8 percent since July 2021, when the previous fiscal year investment return automatically triggered a reduction under the Funding Risk Mitigation Policy. The ALM decision concludes a nearly yearlong comprehensive review of the pension system's investment portfolio and actuarial liabilities.

As part of our commitment to our members, the Board returned to in-person meetings on March 1 after a two-year hiatus and we welcomed back our team members to the office. Most team members transitioned to our new hybrid work model that provides the ability to collaborate and connect while in the office but is also balanced with the additional options for telework.

At this same time, we reopened our regional offices to our members. The regional offices adopted an appointment focused approach that allows the member to choose between an in-person or a virtual appointment, which increases our capacity to meet member demands across the state. In the first month we reopened, we had over 5,500 appointments, the highest level of activity we had seen in months. Approximately 60 percent of those appointments were virtual and 40 percent were in person.

This increase in member retirement appointments also aligns with the increase in retirements over the fiscal year. At the end of the fiscal year, we paid out $29.1 billion in pension benefits to more than 775,000 retirees and beneficiaries, a $1.7 billion or 6.2 percent increase from the previous year. This increase may be attributed to furloughs, pay increases, and general workplace and societal changes brought about by the COVID-19 pandemic.

Paying retirement benefits is vital for our retirees and beneficiaries, and investing in California helps us fulfill that commitment. The most recent CalPERS for California report, presented to the Board in November 2021, showed that in Fiscal Year 2019-20, CalPERS' California-based investments totaled more than $43 billion or 11 percent of the total fund and supported an estimated 168,000 jobs.

To help maintain our investment focus, we appointed a new chief investment officer, Nicole Musicco, in March. She brings experience in leading both private and public equity investment teams and 16 years with the Ontario Teachers' Pension Plan. Her goal is to build on our past success and maintain discipline to deliver consistent investment returns. Musicco is only the second woman to lead the investment operation and joins CalPERS at a time when the pension fund is increasing its investments in private markets.

In health care, the average overall premium increase will be 6.75 percent for calendar year 2023. The new premiums were approved by the Board in July 2022 and will take effect on January 1, 2023. Cost drivers for the overall 2023 premium increase include medical and pharmaceutical inflation pressures and buy-down adjustments to premiums made in 2022.

The Basic plan premiums include risk mitigation approved by the Board in November 2020. The risk mitigation strategy prices premiums based on the value of their benefits and network instead of the mix of healthy or unhealthy lives in a plan. The approach is expected to result in smoother and more predictable premium changes across the Basic portfolio in future years.

In long-term care, the program has been suspended since June 2020 due to uncertainty in the long-term care market. We agreed to a proposed settlement in the class action lawsuit that was approved preliminarily in July 2021 but was terminated in April 2022 due to a high number of opt-outs. A new trial is scheduled for May 2023.

We finished up our final year of the *2017-22 Strategic Plan*, and our new five-year Strategic Plan took effect on July 1, 2022. The new plan articulates CalPERS' promise to ensure that our pensions are sustainable, that we will provide exceptional and equitable health care with high-quality member experience, and that we keep our stakeholders well informed.

Looking Forward

It's clear that we are in the midst of historic economic uncertainty after an era of robust growth. The most significant changes have been in geopolitical stability and a decrease in globalization, which has triggered high inflation and volatility.

In the upcoming fiscal year, we'll concentrate on implementing the new asset allocation of investments that took effect July 1, 2022. The work ahead includes increasing investments in the private markets, which investment experts project will offer some of the highest long-term returns.

We will also continue to focus on the impact of climate change. We own shares in over 5,000 public companies around the world, and when they do well our fund does well too. Our philosophy is to engage the companies we invest in to effect change. We will continue to lead on climate change to protect our investment portfolio and the retirement security of our members.

The pandemic has shown us how important high-quality behavioral health care and telehealth care are to our members. We will continue our aggressive efforts to improve behavioral health prevention and treatment and increase access to both. We also introduced a health equity initiative aimed at ensuring care is equitable for all members, regardless of race, ethnicity, gender identity, or sexual orientation.

It's important to remember that despite these market conditions and their impact on our returns, we're focused on long-term performance and our members can be confident that their retirement is safe and secure.

Funding

The funded status of the Public Employees' Retirement Fund (PERF) is 81.2 percent as of June 30, 2021, while the estimate for June 30, 2022, is 72 percent using the 6.8 percent discount rate. The discount rate was lowered to 6.8 percent due to the Funding Risk Mitigation Policy that was triggered as of July 1, 2021. This lower discount rate increases the likelihood that we can reach our target over the longer term.

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

Management Responsibility for Financial Reporting

CalPERS' management prepared the financial statements in this ACFR for Fiscal Year 2021-22. Management is responsible for the integrity and fairness of the information presented, including data that, out of necessity, is based on estimates and judgments. The accounting policies used to prepare these financial statements conform to accounting principles generally accepted in the United States. Financial information presented throughout this annual report is consistent with these accounting principles.

CalPERS maintains a system of internal controls designed to provide reasonable assurance that assets are properly safeguarded, transactions are properly executed, and financial statements are reliable. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. In addition, our audit personnel provide a continuing review of the internal controls and operations of CalPERS, and the Chief of the Office of Audit Services regularly reports to the

CHIEF EXECUTIVE OFFICER'S LETTER OF TRANSMITTAL (CONTINUED)

CalPERS Board of Administration's Risk and Audit Committee. The Committee reviews the audit findings and recommendations for improvements in internal control and operational efficiency, and it reviews the actions of management to implement such recommendations.

Our independent external auditors, BDO, have conducted an audit of the Basic Financial Statements in accordance with auditing standards generally accepted in the United States and Government Auditing Standards, performing such tests and other procedures as they deem necessary to express opinions on the Basic Financial Statements in their report to the Board. The external auditors also have full and unrestricted access to the Board to discuss their audit and related findings as to the integrity of the financial reporting and the adequacy of internal control systems.

Accounting System and Reports

Management is responsible for establishing and maintaining an internal control structure designed to ensure that CalPERS' assets are protected from loss, theft or misuse, and that income is appropriately distributed. CalPERS is responsible to ensure the Basic Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States. The Basic Financial Statements are presented in accordance with the applicable requirements of the Governmental Accounting Standards Board (GASB).

GASB Statement No. 34, *Basic Financial Statements–and Management's Discussion and Analysis–for State and Local Governments* (GASB 34) requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of a Management's Discussion and Analysis (MD&A).

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

Marcie Frost
Chief Executive Officer

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ABOUT CalPERS

The California Public Employees' Retirement System (CalPERS or the System) is the nation's largest defined benefit public pension fund with a total fiduciary net position in the Public Employees' Retirement Fund (PERF) of nearly $439 billion as of June 30, 2022.

Headquartered in Sacramento, CalPERS provides retirement benefit services to nearly 2.2 million members and health benefit services to over 1.5 million covered lives for state, school, and public employers. The System also operates eight Regional Offices located in Fresno, Glendale, Orange, Sacramento, San Bernardino, San Diego, San Jose, and Walnut Creek.

Led by a 13-member Board of Administration consisting of member-elected, appointed, and ex officio members, CalPERS membership consists of 1,382,339 active and inactive members and 777,715 retirees, beneficiaries, and survivors.

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

Today CalPERS offers additional programs, including long-term care coverage, deferred compensation retirement savings plans, a pension prefunding plan, and a defined benefit other post-employment benefit plan.

VISION

A respected partner, providing a sustainable retirement system and health care program for those who serve California.

MISSION

Deliver retirement and health care benefits to members and their beneficiaries.

2017-22 STRATEGIC PLAN GOALS AND OBJECTIVES

<u>Fund Sustainability – Strengthen the Long-Term Sustainability of the Pension Fund</u>

- Fund the System through an integrated view of pension assets and liabilities.
- Mitigate the risk of significant investment loss.
- Deliver target risk-adjusted investment returns.
- Educate employers, members, and stakeholders on system risks and mitigation strategies.
- Integrate environmental, social, and governance (ESG) considerations into investment decision making.

<u>Health Care Affordability – Transform Health Care Purchasing and Delivery to Achieve Affordability</u>

- Restructure benefit design to promote high-value health care.
- Improve the health status of our employees, members, and their families, and the communities where they live.
- Reduce the overuse of ineffective or unnecessary medical care.

<u>Reduce Complexity – Reduce Complexity Across the Enterprise</u>

- Simplify programs to improve service and/or reduce cost.
- Streamline operations to gain efficiencies, improve productivity, and reduce costs.

<u>Risk Management – Cultivate a Risk-Intelligent Organization</u>

- Enhance compliance and risk functions throughout the enterprise.
- Continue to evolve cybersecurity program.

<u>Talent Management – Promote a High-Performing and Diverse Workforce</u>

- Recruit and empower a broad range of talents to meet organizational priorities.
- Cultivate leadership competencies and develop succession plans throughout the enterprise.

ABOUT CalPERS (CONTINUED)

PENSION BELIEFS

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

Pension Belief 1

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

Pension Belief 2

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

Pension Belief 3

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

Pension Belief 4

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

Pension Belief 5

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

Pension Belief 6

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

Pension Belief 7

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

Pension Belief 8

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

Pension Belief 9

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

Pension Belief 10

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

Pension Belief 11

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

ABOUT CalPERS (CONTINUED)

INVESTMENT BELIEFS

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

Investment Belief 1

Liabilities must influence the asset structure.

Investment Belief 2

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

Investment Belief 3

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

Investment Belief 4

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

Investment Belief 5

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

Investment Belief 6

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

Investment Belief 7

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

Investment Belief 8

Costs matter and need to be effectively managed.

Investment Belief 9

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

Investment Belief 10

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

HEALTH BELIEFS

In April 2018, the CalPERS Board of Administration adopted a set of six Health Themes and Beliefs that provide a basis for strategic management of the health benefits program to achieve long-term objectives.

Health Program Sustainability

The sustainability of the Health Program is the foremost consideration when reviewing proposed changes to benefits, coverage areas, and costs.

High Quality Care

Health benefit plan designs should improve member health outcomes, maximize quality, and reduce unwarranted care.

Affordability

Health premiums and out-of-pocket costs must be affordable and sustainable for members and employers.

Comprehensive Care

Health plans shall encourage healthy life choices and provide access to essential health care and evidence-based health services.

Competitive Plan Choice

CalPERS shall manage competition among health plans to help drive cost containment and give members access to options among health plans, benefits, and providers.

Quality Program Administration

CalPERS shall meet the needs of its many stakeholders with responsiveness, accuracy, and respectful service.

BOARD OF ADMINISTRATION[1]

Theresa Taylor, President
State Member Representative
Principal Compliance Representative
Franchise Tax Board
Term Ends: January 15, 2027

Rob Feckner, Vice President
School Member Representative
Glazing Specialist
Napa Valley Unified School District
Term Ends: January 15, 2023

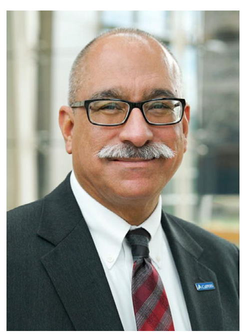
Fiona Ma
Ex Officio Member
California State Treasurer

Lisa Middleton
Governor Appointee
Local Government Elected Official
Elected Member
Palm Springs City Council

David Miller
All Member Representative
Senior Environmental Scientist
California Department of Toxic Substances Control
Term Ends: January 15, 2026

Eraina Ortega
Ex Officio Member
Director
California Department of Human Resources

Jose Luis Pacheco
All Member Representative
IT Professional
San Jose Evergreen Community College District
Term Ends: January 15, 2026



Ramón Rubalcava
Public Representative
Appointed Jointly by the Senate Rules Committee and the Speaker of the Assembly

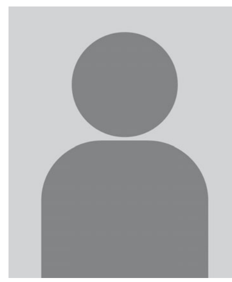
[1]As of June 30, 2022, unless otherwise noted.

BOARD OF ADMINISTRATION (CONTINUED)

Mullissa Willette
Public Agency Member Representative
Tax Exemption Investigator
County of Santa Clara
Term Ends: January 15, 2027

Gail Willis
Ex Officio Member
State Personnel Board Representative

Betty Yee
Ex Officio Member
California State Controller



Vacant
Governor Appointee, Insurance Industry Representative

Vacant
Retired Member Representative

ORGANIZATIONAL CHART – EXECUTIVE TEAM[1]

[1]As of June 30, 2022, unless otherwise noted.

CONSULTANT & PROFESSIONAL SERVICES

Individual or Firm[1]
34 Strong, Inc.
Advanced Systems Group, LLC
Agility Software Solutions, LLC
AgreeYa Solutions, Inc.
American Unit, Inc.
Anthem Blue Cross
Aon Consulting, Inc.
BDO USA, LLP
Belmonte Enterprises, LLC
Berman Tabacco
Blue Shield of California
BM Associates, Inc.
Buck Global, LLC
Capio Group
CogentTec, LLC
Cook Brown, LLP
Cooperative Personnel Services
Cornerstone Fitness, Inc.
Covid Clinic, Inc.
Delegata Corporation
Department of Finance
Department of Human Resources
Department of Justice
Dore Partnership, LLP
Downey Brand, LLP
Durie Tangri, LLP
Eaton Interpreting Services, Inc.
EFL Associates
Elite Tech Solutions
Elynview Corporation
Employment Development Department
Equanim Technologies
Fair Political Practices Commission
First Data Merchant Services Corporation
Funston Advisory Services, LLC
Gabriel, Roeder, Smith & Co.
Global Governance Advisors, LLC
Government Operations Agency
Health Care Cost Institute
Health Net of California
Health Services Advisory Group, Inc.
Integrity Voting Systems (IVS)
J&K Court Reporting, LLC
JLynn Consulting, Inc.
K & H Printers-Lithographers, Inc.
K&L Gates, LLP
KearnFord Application Systems Design
King & Spalding, LLP
Kong Consulting, Inc.
Korn Ferry (US)
Law Office of Chirag Shah
Long Term Care Group, Inc.
Mellon Bank

Individual or Firm[1]
Mercer Health and Benefits, LLC
Michael Scales Consulting, LLC
Milliman, Inc.
Mulkey Consulting, LLC
National Association Corporate Directors
Northeast Retirement Services
Office of State Publishing
Oliver Wyman Actuarial Consulting, Inc.
Olson Remcho, LLP
OptumRx
Orrick Herrington & Sutcliffe, LLP
Pasanna Consulting Group, LLC
Pension Benefit Information, LLC
Peraton State & Local, Inc.
QualApps, Inc.
Randle Communications, LLC
Recon Distribution, Inc.
Reed Smith, LLP
Regents of the University of CA, Davis
RS3 Consulting
RSC Insurance Brokerage, Inc.
Runyon Saltzman, Inc.
Sard Verbinnen & Co, LLC
Sharp Health Plan
Sophus Consulting
State Controller's Office
State Personnel Board
Steptoe & Johnson, LLP
T5 Consulting, Inc.
The Regents of the University of California
Toppan Merrill USA, Inc.
Trinity Technology Group, Inc.
UnitedHealthCare
Vantage Consulting Group, Inc.
Voya
Wavetec North America, Inc.
Wellington Gregory, LLP
West Advanced Technologies, Inc.
Western Health Advantage

(1) Additional information regarding investment professionals who provide services to the System can be found in the Financial Section: Other Supplementary Information. The Schedule of Commissions & Fees listed by broker, and Private Equity Management Fees – PERF listed by fund, can be found in the Investment Section on pages 110-117.

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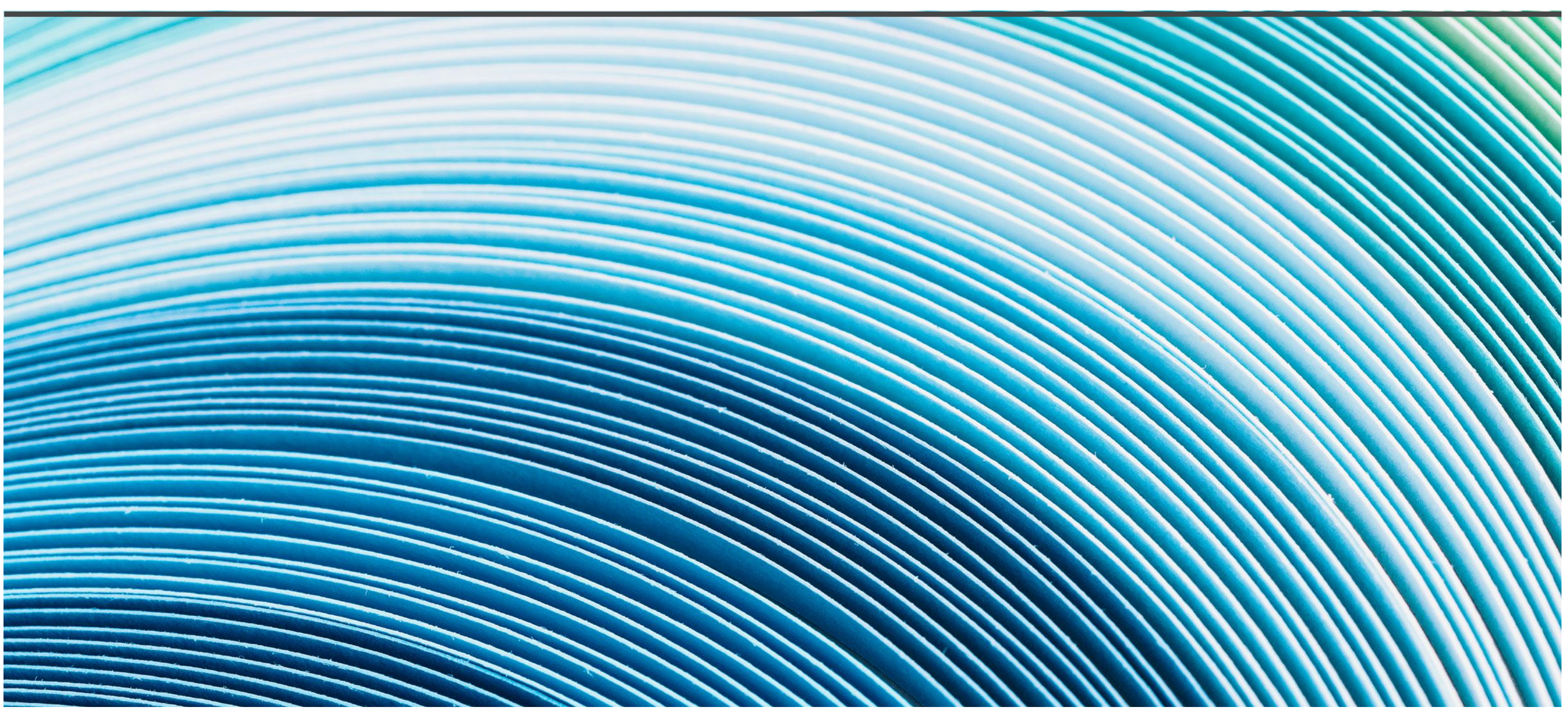
FINANCIAL SECTION

Independent Auditor's Report/MD&A



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One Bush Street, Suite 1800
San Francisco, CA 94104

Independent Auditor's Report

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

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the fiduciary activities and the proprietary activities of the California Public Employees' Retirement System (the System), a component unit of the State of California, as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the accompanying table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the fiduciary activities and the proprietary activities of the California Public Employees' Retirement System as of June 30, 2022, the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Matters

Prior-Year Comparative Information

The financial statements include summarized prior-year comparative information. Such information does not include all of the information required to constitute a presentation in accordance with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements as of and for the year ended June 30, 2021, from which such summarized information was derived.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the required supplementary information, as listed in the accompanying table of contents (collectively referred to as RSI) be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The Other Supplementary Information listed in the accompanying table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Other Supplementary Information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual comprehensive financial report. The other information comprises the Introductory, Investment, Actuarial, and Statistical sections listed in the accompanying table of contents but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon. In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with Government Auditing Standards, we have also issued our report dated November 18, 2022 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the System's internal control over financial reporting and compliance.

BDO USA, LLP

San Francisco, CA
November 18, 2022

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, 2022. 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 Annual Comprehensive Financial Report. 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 final year of its *2017-22 Strategic Plan*. This plan is a blueprint that guided 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 had 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 *strategic planning framework* includes the annual Business Plan Initiatives. The 2021-22 Business Plan Initiatives allowed the organization to set priorities and guide in the allocation of resources. It aligns to the 2021-22 budget cycle to accomplish the goals and objectives of the strategic plan. CalPERS identified 26 initiatives to continue the work needed to support the overall strategic direction of the organization.

CalPERS successfully completed a reflective and collaborative process to develop the *2022-27 Strategic Plan* in alignment with the CalPERS mission and vision. The following five strategic goals will continue to guide the enterprise over the next five years:

- Member Experience: Ensure member satisfaction through accuracy, responsiveness, and respect
- Pension Sustainability: Strengthen the long-term sustainability of the pension fund
- Exceptional Health Care: Ensure our members have access to equitable, high-quality, affordable health care
- Stakeholder Engagement: Promote collaboration, support, and transparency
- Organizational Excellence: Cultivate a diverse, risk-intelligent, and innovative culture through our team and processes

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 result in optimum asset allocations to assure the competency of the assets, 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. CalPERS conducted the ALM process during calendar year 2021 for the next four-year cycle. During the first half of the year team members provided a series of webinars to stakeholders, as well as educational agenda items to the CalPERS Board. During the second half of the year staff presented results of the ALM analysis to the CalPERS Board for adoption of changes to asset allocations or actuarial assumptions. The effective date for the selected strategic asset allocation implementation is July 1, 2022.

- 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.

- In November 2020, the Board approved a portfolio rating strategy for Basic Health Maintenance Organization (HMO) and Preferred Provider Organization (PPO) plans that commenced in the 2022 plan year with a two-year phase-in period. Portfolio rating will enable CalPERS to manage population health risk within the portfolio of Basic health plans, improve quality and affordability of health care, promote efficient care management, and mitigate year-over-year premium volatility and large premium increases. Additionally, the Board approved to replace three PPO Basic and Medicare Supplemental plans (PERSCare, PERS Choice, and PERS Select) with two plans, PERS Platinum and PERS Gold, effective January 1, 2022. This change will benefit members by eliminating adverse selection and stabilizing the health plan portfolio.

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, 2022. 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 -7.5 percent and realized a time-weighted rate of return of -6.1 percent in Fiscal Year 2021-22. The investment results reflect challenging public equity and debt markets. However, strong performances from real assets and private equity diversified the portfolio to alleviate some losses and offset the negative returns from public equity and debt.

- In July 2021, the Board approved health plan premiums for calendar year 2022, at an overall average premium increase of 4.86 percent.

- In Fiscal Year 2020-21, the Board of Administration approved a rate increase for all Long-Term Care Program policyholders, to be implemented over two years. The first increase of 52 percent took effect beginning in November 2021. The second increase of 25 percent will take effect November 2022. Policyholders received an offer letter allowing them to modify their coverage and either maintain or reduce their current premium. The Long-Term Care Program remained closed to new enrollments in Fiscal Year 2021-22 due to continued uncertainty in the long-term care market.

- CalPERS agreed to a proposed settlement in the Long-Term Care Program class action lawsuit that was approved preliminarily in July 2021, but was terminated in April 2022 because of the high number of opt-outs. The parties are now back on course for a trial that is scheduled for May 2023.

- CalPERS as the State Social Security Administrator (SSSA) began collecting an Annual Maintenance Fee on July 1, 2019. The fee is charged to fund the State Social Security Administration (SSA) and its services. Due to adequate funding, the Annual Maintenance Fee was suspended in Fiscal Year 2021-22.

- 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. 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 long-term 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.

  In March 2022, most CalPERS team members returned to a hybrid in-office work schedule: at least three days a week in office, two days a week teleworking. Contact (call) center teams and desktop support have the option to work up to five days a week remotely. CalPERS closely follows federal, state, and county guidelines related to COVID-19 protocols and measures.

  As of March 2022, CalPERS Board of Administration meetings returned to in-person meetings. Members of the public are allowed to attend and to provide public comment in person or by phone. CalPERS has transitioned the regular slate of stakeholder meetings to a hybrid format, with approximately one-quarter of stakeholders choosing to participate in-person, and the other three-quarters preferring to participate remotely.

  CalPERS received $1.4 million from the Coronavirus Relief Fund per Section 11.90(c), Chapter 21, Statutes of 2021 in December 2021, to reimburse various funds for payroll costs incurred by departments for state employees redirected to COVID-19 contact tracing and vaccine coordination activities.

  The U.S. House of Representatives on March 10, 2021, passed the Senate-amended H.R. 1319, the American Rescue Plan (ARP). The ARP provides $1.9 trillion in additional relief to respond to the novel coronavirus (COVID-19). This follows the enactment of nearly $4 trillion in COVID relief in 2020. President Joe Biden called for Congress to enact the ARP to provide relief for individuals and businesses struggling due to COVID-19, as well as to achieve other priorities of the Biden Administration and Congress. ARP includes provisions on aid to state and local governments, hard-hit industries and communities, tax changes affecting individuals and businesses, and other provisions. Although CalPERS received funds from the state for reimbursement of employees of the trust who worked on contract tracing, CalPERS has assessed the applicability of directly applying for relief 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.

- The total pension administration cost in Fiscal Year 2020-21 (most recent available) was $202 per active member and annuitant.

BASIC FINANCIAL STATEMENTS

The June 30, 2022, financial statements separate the funds administered by CalPERS into two categories: fiduciary funds and proprietary funds. With the exception of the 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), Judges' Retirement Fund (JRF), Judges' Retirement Fund II (JRF II), Public Employees' Deferred Compensation Fund (DCF), Supplemental Contributions Program Fund (SCPF), California Employers' Pension Prefunding Trust Fund (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, 2022, along with comparative total information as of, and for, fiscal year ended June 30, 2021. 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, 2022, along with comparative total information as of, and for, fiscal year ended June 30, 2021. 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. The following is a description of information available in the Notes to the Basic Financial Statements:

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 Governmental Accounting Standards Board 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 supplementary 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 decreased by $38.0 billion or 8.0 percent from $477.3 billion as of June 30, 2021, to $439.4 billion as of June 30, 2022, mainly due to negative return on investments this year. Receivables increased $7.9 billion or 173.8 percent due to higher outstanding investment trades. Investment balances decreased by $41.2 billion from $485.2 billion as of June 30, 2021, to $444.0 billion as of June 30, 2022, due to unfavorable market conditions. Securities lending cash collateral increased $11.0 billion, and securities lending obligations increased $10.9 billion as a result of an overall increase in demand to borrow securities at year-end. Capital Assets, Net and Other Assets decreased $21.1 million or 8.1 percent primarily due to increased cumulative depreciation of buildings and equipment.

Total liabilities increased $15.2 billion or 88.3 percent primarily due to higher outstanding investment trades and securities lending obligations. Total net pension and OPEB liabilities decreased by $216.7 million or 21.1 percent. The net OPEB liability decrease was primarily due to favorable healthcare claims, experience and plan design changes, and changes in pension-related assumptions. The net pension liability decreased due to higher than projected investment returns in Fiscal Year 2020-21.

Additions to the PERF net position include member contributions, employer contributions, and investment income. Member contributions increased $402.7 million or 8.5 percent, primarily attributable to the cancellation this fiscal year of an effective 9.23 percent reduction in member compensation due to projected State revenue shortfalls in the prior year because of COVID. Employer contributions increased $2.7 billion or 13.3 percent this fiscal year, also due to the lifting of the prior fiscal year's COVID-19 related payroll reduction reduction. Employer contribution rates decreased between 2.0 percent and 15.8 percent for state, but increased 2.2 percent for schools, and 1.7 percent and 2.5 percent on average for public agency miscellaneous and safety plans, respectively.

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 losses were $36.2 billion in Fiscal Year 2021-22, compared to gains of $88.1 billion in Fiscal Year 2020-21, a decrease of $124.2 billion or 141.1 percent. The current year returns were driven by losses in public equity and public debt. The PERF recognized a MWRR of -7.5 percent for Fiscal Year 2021-22 compared with 22.4 percent for Fiscal Year 2020-21.

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 2021-22, retirement, death, and survivor benefits payments increased $1.7 billion or 6.2 percent, primarily due to cost-of-living increases in benefit payments, and an increase in the number of retirees and beneficiaries from 750,618 as of June 30, 2021, to 775,285 as of June 30, 2022. Administrative expenses for CalPERS personnel decreased $94.7 million or 24.1 percent primarily due to a decrease in pension and OPEB expenses as a result of lower net pension and net OPEB liabilities.

Fiduciary Net Position – PERF (Dollars in Thousands)

	PERF A Agent	PERF B Cost-Sharing Schools	PERF C Cost-Sharing Public Agencies	2022 PERF Total	2021 PERF Total	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	$532,310	$131,239	$62,775	$726,324	$1,072,757	($346,433)
Receivables	8,963,574	2,505,923	1,027,552	12,497,049	4,564,537	7,932,512
Investments	325,637,794	79,972,862	38,414,294	444,024,950	485,218,056	(41,193,106)
Securities Lending Collateral	10,482,900	2,584,527	1,236,243	14,303,670	3,350,881	10,952,789
Capital Assets, Net & Other Assets	174,857	43,110	20,621	238,588	259,711	(21,123)
Total Assets	**$345,791,435**	**$85,237,661**	**$40,761,485**	**$471,790,581**	**$494,465,942**	**($22,675,361)**
Deferred Outflows of Resources	$86,178	$21,247	$10,163	$117,588	$109,917	$7,671
Total Assets and Deferred Outflows of Resources	**$345,877,613**	**$85,258,908**	**$40,771,648**	**$471,908,169**	**$494,575,859**	**($22,667,690)**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement Benefits, Investment Settlement & Other	$12,652,540	$3,105,398	$1,472,124	$17,230,062	$12,798,619	$4,431,443
Net Pension & OPEB Liabilities	592,251	146,017	69,844	808,112	1,024,776	(216,664)
Securities Lending Obligations	10,477,624	2,583,226	1,235,620	14,296,470	3,351,059	10,945,411
Total Liabilities	**$23,722,415**	**$5,834,641**	**$2,777,588**	**$32,334,644**	**$17,174,454**	**$15,160,190**
Deferred Inflows of Resources	$157,202	$38,758	$18,539	$214,499	$78,656	$135,843
Total Liabilities and Deferred Inflows of Resources	**$23,879,617**	**$5,873,399**	**$2,796,127**	**$32,549,143**	**$17,253,110**	**$15,296,033**
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	**$321,997,996**	**$79,385,509**	**$37,975,521**	**$439,359,026**	**$477,322,749**	**($37,963,723)**

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

	PERF A Agent	PERF B Cost-Sharing Schools	PERF C Cost-Sharing Public Agencies	2022 PERF Total	2021 PERF Total	Increase/ (Decrease)
ADDITIONS						
Member Contributions	$3,638,294	$1,104,241	$417,129	$5,159,664	$4,757,000	$402,664
Employer Contributions	16,860,860	3,557,108	2,284,579	22,702,547	20,034,757	2,667,790
Net Investment Income (Loss)	(26,599,645)	(6,464,830)	(3,117,947)	(36,182,422)	88,059,909	(124,242,331)
Securities Lending & Other Income	74,714	18,388	8,759	101,861	113,411	(11,550)
Plan-to-Plan Resource Movement	8,332	3	—	8,335	348,384	(340,049)
Total Additions	**($6,017,445)**	**($1,785,090)**	**($407,480)**	**($8,210,015)**	**$113,313,461**	**($121,523,476)**
DEDUCTIONS						
Retirement, Death & Survivor Benefits	$21,609,247	$5,182,681	$2,326,426	$29,118,354	$27,415,194	$1,703,160
Refund of Contributions	190,272	116,077	23,206	329,555	287,556	41,999
Administrative Expenses	218,079	53,699	25,686	297,464	392,119	(94,655)
Plan-to-Plan Resource Movement	—	—	8,335	8,335	348,384	(340,049)
Total Deductions	**$22,017,598**	**$5,352,457**	**$2,383,653**	**$29,753,708**	**$28,443,253**	**$1,310,455**
INCREASE (DECREASE) IN NET POSITION	**($28,035,043)**	**($7,137,547)**	**($2,791,133)**	**($37,963,723)**	**$84,870,208**	**($122,833,931)**
NET POSITION						
Beginning of Year	**$350,033,039**	**$86,523,056**	**$40,766,654**	**$477,322,749**	**$392,452,541**	**$84,870,208**
End of Year	**$321,997,996**	**$79,385,509**	**$37,975,521**	**$439,359,026**	**$477,322,749**	**($37,963,723)**

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 2021-22 decreased by $19.4 million or 15.9 percent from the beginning balance of $122.0 million to $102.6 million mainly due to negative return on investments. Investments at fair value decreased by $19.5 million or 15.9 percent, due to unfavorable market conditions. The total liabilities decreased by $0.2 million or 11.1 percent, mainly due to the decreases in both net pension and OPEB liabilities in Fiscal Year 2021-22.

Additions to the LRF's net position decreased to negative $12.3 million as a result of net investment loss of $12.5 million in Fiscal Year 2021-22, which is 182.5 percent lower than income of $15.1 million in the prior year due to unfavorable market conditions. The LRF recognized a MWRR of -10.3 percent for Fiscal Year 2021-22 compared with 13.4 percent for Fiscal Year 2020-21. A slight increase in member contributions was offset by lower employer contributions, which decreased by 7.6 percent for the year.

Deductions from the LRF are primarily comprised of benefit payments and administrative expenses. Total deductions decreased by $0.1 million or 1.8 percent due to a slight decrease in benefit payments.

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 JRF's net position in Fiscal Year 2021-22 decreased by $12.8 million or 20.7 percent from the beginning balance of $61.6 million to $48.9 million mainly due to a decrease in the State General Fund contributions. Investments decreased by $13.1 million or 20.1 percent, primarily due to higher cash outflows for benefit payments than inflows from contributions. The total liabilities decreased by $0.9 million or 10.4 percent, mainly due to the decreases in both net pension and OPEB liabilities in Fiscal Year 2021-22.

Additions to the JRF come from employer, member, and state balancing contributions from the General Fund. The total additions decreased $31.2 million or 13.5 percent primarily due to a decrease in the State General Fund contributions compared to the prior year.

Deductions from the JRF are primarily comprised of benefit payments, refunds, and administrative expenses. Retirement, death, and survivor benefits decreased by $0.5 million or 0.2 percent, and administrative expenses for CalPERS personnel decreased by $0.1 million or 3.1 percent, primarily due to a decrease in the pension expense as a result of lower net pension liability.

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 2021-22 decreased by $263.6 million or 11.0 percent from the beginning net position of $2.4 billion to $2.1 billion. Receivables increased by $2.7 million or 37.2 percent primarily due to increased outstanding employers’ contributions owed to the fund as of fiscal year ended June 30, 2022. JRF II investments decreased by $266.7 million or 11.1 percent primarily due to a decrease in assets for investment in the JRF II, combined with a negative return on investments in Fiscal Year 2021-22. Total liabilities decreased by $0.9 million or 14.2 percent primarily due to a decrease in the net pension obligation.

Additions to the JRF II net position include member contributions, employer contributions, and investment income. Despite a slight decrease in the number of active members (1,625 as of June 30, 2021, and 1,624 as of June 30, 2022), member and employer contributions increased due to the restoration of pay following a furlough pay reduction for state employees in Fiscal Year 2020-21. Member contributions increased by $2.4 million or 7.1 percent, while employer contributions increased by $8.6 million or 10.3 percent. Net investment income decreased by $787.8 million or 170.0 percent from $463.5 million in Fiscal Year 2020-21 to a loss of $324.4 million in Fiscal Year 2021-22 due to unfavorable market conditions. The JRF II recognized a MWRR of negative 13.4 percent for Fiscal Year 2021-22 compared with 24.3 percent for Fiscal Year 2020-21.

Deductions from the JRF II are comprised of benefit payments, refunds, and administrative expenses. There was an increase in benefit payments of $4.8 million or 7.7 percent due to an increase in benefit recipients from 406 in Fiscal Year 2020-21 to 471 in Fiscal Year 2021-22. Administrative expenses increased by $0.1 million or 8.2 percent primarily as a result of the cancellation of a reduction in employee compensation due to projected state COVID-related revenue shortfalls, made during Fiscal Year 2020-21.

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

	LRF			JRF			JRF II		
	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES									
Cash & Cash Equivalents	$1,201	$1,201	$0	$3,440	$3,361	$79	$906	$724	$182
Receivables	54	56	(2)	1,837	1,893	(56)	9,985	7,279	2,706
Investments	103,396	122,900	(19,504)	52,096	65,189	(13,093)	2,129,716	2,396,459	(266,743)
Total Assets	**$104,651**	**$124,157**	**($19,506)**	**$57,373**	**$70,443**	**($13,070)**	**$2,140,607**	**$2,404,462**	**($263,855)**
Deferred Outflows of Resources	$175	$166	$9	$493	$457	$36	$623	$580	$43
Total Assets and Deferred Outflows of Resources	**$104,826**	**$124,323**	**($19,497)**	**$57,866**	**$70,900**	**($13,034)**	**$2,141,230**	**$2,405,042**	**($263,812)**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES									
Retirement Benefits, Investment Settlement & Other	$660	$632	$28	$4,664	$4,560	$104	$1,383	$1,095	$288
Net Pension & OPEB Liabilities	1,281	1,551	(270)	3,311	4,339	(1,028)	4,285	5,514	(1,229)
Total Liabilities	**$1,941**	**$2,183**	**($242)**	**$7,975**	**$8,899**	**($924)**	**$5,668**	**$6,609**	**($941)**
Deferred Inflows of Resources	$261	$92	$169	$1,005	$361	$644	$1,174	$404	$770
Total Liabilities and Deferred Inflows of Resources	**$2,202**	**$2,275**	**($73)**	**$8,980**	**$9,260**	**($280)**	**$6,842**	**$7,013**	**($171)**
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	**$102,624**	**$122,048**	**($19,424)**	**$48,886**	**$61,640**	**($12,754)**	**$2,134,388**	**$2,398,029**	**($263,641)**

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

	LRF			JRF			JRF II		
	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)
ADDITIONS									
Member Contributions	$23	$21	$2	$1,956	$2,146	($190)	$36,529	$34,094	$2,435
Employer Contributions	85	92	(7)	194,960	225,824	(30,864)	92,773	84,147	8,626
Net Investment Income (Loss)	(12,450)	15,098	(27,548)	194	163	31	(324,365)	463,478	(787,843)
Securities Lending & Other Income	1	—	1	2,305	2,462	(157)	3	—	3
Total Additions	**($12,341)**	**$15,211**	**($27,552)**	**$199,415**	**$230,595**	**($31,180)**	**($195,060)**	**$581,719**	**($776,779)**
DEDUCTIONS									
Retirement, Death & Survivor Benefits	$6,647	$6,761	($114)	$210,492	$210,951	($459)	$66,382	$61,613	$4,769
Refund of Contributions	—	—	—	—	—	—	357	381	(24)
Administrative Expenses	436	450	(14)	1,677	1,731	(54)	1,842	1,703	139
Total Deductions	**$7,083**	**$7,211**	**($128)**	**$212,169**	**$212,682**	**($513)**	**$68,581**	**$63,697**	**$4,884**
INCREASE (DECREASE) IN NET POSITION	**($19,424)**	**$8,000**	**($27,424)**	**($12,754)**	**$17,913**	**($30,667)**	**($263,641)**	**$518,022**	**($781,663)**
NET POSITION									
Beginning of Year	**$122,048**	**$114,048**	**$8,000**	**$61,640**	**$43,727**	**$17,913**	**$2,398,029**	**$1,880,007**	**$518,022**
End of Year	**$102,624**	**$122,048**	**($19,424)**	**$48,886**	**$61,640**	**($12,754)**	**$2,134,388**	**$2,398,029**	**($263,641)**

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. and global responses, and the economic uncertainty forecasted.

In March 2021, CalPERS investment staff updated the Board on current ALM risk concepts and provided examples of choices that balance the risks arising from the variability of three components: liabilities, contributions, and returns.

In November 2021, the CalPERS Board of Administration selected a new asset allocation mix that will guide the fund's investment portfolio for the next four years, while at the same time retaining the current 6.8 percent target it assumes those investments will earn over the long term. The Board also approved adding 5 percent leverage to increase diversification. As part of the ALM process, led by CalPERS' investment, actuarial, and financial offices, the Board examined different investment portfolios and their potential impact to the CalPERS fund. Each portfolio presented a different mix of assets and corresponding rate of expected return and risk volatility. Ultimately, the Board selected the portfolio with expected volatility of 12.1 percent and a return of 6.8 percent. The discount rate has been at 6.8 percent since July 2021, when a strong double-digit fiscal year investment return automatically triggered a reduction under the Funding Risk Mitigation Policy. The effective date for the new strategic asset allocation is July 1, 2022.

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 that 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 2022-23.

As of June 30, 2021, the funded ratio of the PERF was 81.2 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 ratio using a 6.8 percent discount rate. The discount rate was lowered from 7.0 percent due to the application of the

CalPERS Funding Risk Mitigation Policy triggered by the 21.3 percent investment return for Fiscal Year 2020-21. As of June 30, 2021, the funded ratio of the JRF II was 122.3 percent. CalPERS calculated the JRF II funded ratio value using a 6.0 percent discount rate. As of June 30, 2021, the funded ratio of the LRF was 129.3 percent. CalPERS calculated the LRF funded ratio value using a 4.5 percent discount rate. All funded ratios 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, 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 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 decreased from 7.15 percent to 6.90 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.

In March 2022, the CalPERS Board voted to lower the discount rates for the LRF and JRF II, which will impact employer rates beginning in Fiscal Year 2022-23. These funding rates are used in the June 30, 2021, actuarial valuation reports for the LRF and JRF II. The LRF funding discount rate was lowered from 5.00 percent to 4.50 percent and the JRF II was lowered from 6.50 percent to 6.00 percent. The JRF funding discount rate remained unchanged at 3.00 percent.

The following table displays the discount rates for the LRF, JRF, and JRF II for funding and financial reporting purposes as of June 30, 2022:

Fund	Funding Discount Rate	Financial Reporting Discount Rate
LRF	4.50%	4.85%
JRF	3.00%	3.69%
JRF II	6.00%	6.15%

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 administrator (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 decreased by $253.7 million or 11.6 percent from the beginning balance of $2.2 billion to $1.9 billion mainly due to negative return on investments. Investment balances decreased by $255.4 million or 11.8 percent from Fiscal Year 2020-21 to Fiscal Year 2021-22 due to unfavorable market conditions. There was a slight increase of $0.4 million or 2.4 percent in receivables due to more outstanding contributions at year-end. Total liabilities decreased by $1.8 million or 25.3 percent due to lower amounts of outstanding distributions combined with a decrease in the net pension obligation.

Member contributions to the fund increased $10.3 million or 8.1 percent compared with the prior year primarily due to an increase in members from 31,733 in Fiscal Year 2020-21 to 33,222 in Fiscal Year 2021-22.

However, the total additions decreased $745.1 million primarily due to investment losses of $276.4 million in Fiscal Year 2021-22 compared with $479.3 million in gains in Fiscal Year 2020-21, resulting in a 157.7 percent decrease in investment income.

Total deductions in the DCF decreased by $88.7 million or 42.2 percent. This was primarily due to a decrease of $88.7 million in participant withdrawals from the plan from $205.5 million in Fiscal Year 2020-21 to $116.9 million in Fiscal Year 2021-22. Administrative expenses for CalPERS personnel increased $9 thousand or 0.2 percent primarily as a result of the cancellation of a reduction in employee compensation due to projected state COVID-related revenue shortfalls made during Fiscal Year 2020-21.

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 $19.5 million or 14.9 percent from the beginning balance of $130.8 million to $111.3 million mainly due to negative return on investments. Total assets decreased by $19.5 million or 14.8 percent mainly due to a decrease in investments, and total liabilities decreased by $47 thousand or 4.2 percent due to a decrease in the net pension and OPEB obligation.

Total additions decreased $37.2 million primarily due to an investment loss in Fiscal Year 2021-22. Net investment income decreased by $37.1 million, from a gain of $22.7 million in Fiscal Year 2020-21 to a loss of $14.4 million in Fiscal Year 2021-22 due to unfavorable market conditions.

The primary deductions in the SCPF reflect withdrawals made by participants. Participant withdrawals decreased $0.3 million or 5.4 percent, from $5.5 million in Fiscal Year 2020-21 to $5.2 million in Fiscal Year 2021-22. Administrative expenses for CalPERS personnel decreased $14 thousand or 5.3 percent primarily due to a decrease in the pension expense as a result of lower net pension liability.

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

	DCF			SCPF		
	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	$1	$1	$0	$0	$1	($1)
Receivables	17,808	17,395	413	653	712	(59)
Investments	1,916,995	2,172,365	(255,370)	111,755	131,205	(19,450)
Total Assets	**$1,934,804**	**$2,189,761**	**($254,957)**	**$112,408**	**$131,918**	**($19,510)**
Deferred Outflows of Resources	$496	$462	$34	$43	$41	$2
Total Assets and Deferred Outflows of Resources	**$1,935,300**	**$2,190,223**	**($254,923)**	**$112,451**	**$131,959**	**($19,508)**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement Benefits, Investment Settlement & Other	$1,815	$2,654	($839)	$736	$727	$9
Net Pension & OPEB Liabilities	3,449	4,392	(943)	327	383	(56)
Total Liabilities	**$5,264**	**$7,046**	**($1,782)**	**$1,063**	**$1,110**	**($47)**
Deferred Inflows of Resources	$927	$336	$591	$60	$25	$35
Total Liabilities and Deferred Inflows of Resources	**$6,191**	**$7,382**	**($1,191)**	**$1,123**	**$1,135**	**($12)**
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	**$1,929,109**	**$2,182,841**	**($253,732)**	**$111,328**	**$130,824**	**($19,496)**

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

	DCF			SCPF		
	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)
ADDITIONS						
Member Contributions	$137,437	$127,135	$10,302	$243	$343	($100)
Net Investment Income (Loss)	(276,428)	479,324	(755,752)	(14,391)	22,713	(37,104)
Other Income	6,608	6,212	396	88	87	1
Total Additions	**($132,383)**	**$612,671**	**($745,054)**	**($14,060)**	**$23,143**	**($37,203)**
DEDUCTIONS						
Administrative Expenses	$4,475	$4,466	$9	$250	$264	($14)
Participant Withdrawals	116,874	205,540	(88,666)	5,186	5,484	(298)
Total Deductions	**$121,349**	**$210,006**	**($88,657)**	**$5,436**	**$5,748**	**($312)**
INCREASE (DECREASE) IN NET POSITION	**($253,732)**	**$402,665**	**($656,397)**	**($19,496)**	**$17,395**	**($36,891)**
NET POSITION						
Beginning of Year	**$2,182,841**	**$1,780,176**	**$402,665**	**$130,824**	**$113,429**	**$17,395**
End of Year	**$1,929,109**	**$2,182,841**	**($253,732)**	**$111,328**	**$130,824**	**($19,496)**

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. 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 $85.1 million at June 30, 2022, an increase of $27.0 million or 46.6 percent from the net position of $58.0 million at June 30, 2021.

Additions to the CEPPTF net position are primarily employer contributions and net investment income. Employer contributions were $36.5 million, a decrease of $9.3 million or 20.3 percent. Contributions are voluntarily determined by the employer's own funding schedule, and there are no long-term contracts for required contributions to the trust. The fund experienced net investment losses of $9.5 million, a decrease of $12.5 million or 418.7 percent primarily due to unfavorable market conditions. The CEPPTF recognized a MWRR of negative 13.9 percent for Fiscal Year 2021-22 compared with 14.4 percent for Fiscal Year 2020-21. Deductions from the CEPPTF are primarily administrative expenses. There were no employer withdrawals in Fiscal Year 2021-22.

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

	CEPPTF		
	2022	2021	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES			
Cash & Cash Equivalents	$0	$1	($1)
Receivables	1,117	138	979
Investments	84,038	57,977	26,061
Total Assets	**$85,155**	**$58,116**	**$27,039**
Deferred Outflows of Resources	$19	$19	$0
Total Assets and Deferred Outflows of Resources	**$85,174**	**$58,135**	**$27,039**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES			
Investment Settlement & Other	$13	$7	$6
Net Pension & OPEB Obligation	7	26	(19)
Total Liabilities	**$20**	**$33**	**($13)**
Deferred Inflows of Resources	$85	$74	$11
Total Liabilities and Deferred Inflows of Resources	**$105**	**$107**	**($2)**
TOTAL NET POSITION RESTRICTED FOR PENSION	**$85,069**	**$58,028**	**$27,041**

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

	CEPPTF		
	2022	2021	Increase/ (Decrease)
ADDITIONS			
Employer Contributions	$36,474	$45,764	($9,290)
Net Investment Income (Loss)	(9,544)	2,995	(12,539)
Other Income	154	53	101
Total Additions	**$27,084**	**$48,812**	**($21,728)**
DEDUCTIONS			
Administrative Expenses	$43	$16	$27
Employer Withdrawals	—	1,707	(1,707)
Total Deductions	**$43**	**$1,723**	**($1,680)**
INCREASE (DECREASE) IN NET POSITION	**$27,041**	**$47,089**	**($20,048)**
NET POSITION			
Beginning of Year	**$58,028**	**$10,939**	**$47,089**
End of Year	**$85,069**	**$58,028**	**$27,041**

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 as of June 30, 2022, decreased $306.3 million or 2.0 percent from the prior year mainly due to negative return on investments. Receivables increased $63.9 million or 119.6 percent primarily due to higher outstanding employer contributions pending at year-end. Investments at fair value decreased $370.5 million or 2.4 percent due to unfavorable market conditions.

Total liabilities decreased $2.3 million or 2.3 percent primarily due to a decrease in net state pension and OPEB liabilities. Total net pension and OPEB liabilities decreased by $3.3 million or 35.7 percent. Net OPEB liability decrease was primarily due to favorable healthcare claims, experience and plan design changes, and changes in pension-related assumptions. Net pension liability decreased due to higher than projected investment returns in Fiscal Year 2020-21.

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 $1.4 billion or 34.9 percent primarily due to higher contributions from existing participating employers. During Fiscal Year 2021-22, the fund experienced net investment losses of $2.3 billion, a decrease of $5.4 billion or 175.9 percent from a net investment income of $3.1 billion in Fiscal Year 2020-21. Additionally, the CERBTF recognized a MWRR of negative 14.0 percent in Fiscal Year 2021-22, compared with 25.6 percent in Fiscal Year 2020-21.

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 $94.8 million or 2.9 percent due to increased volume of reimbursement requests among existing participating employers. Employer withdrawals increased by $134.1 million due to a higher 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 $3.2 billion for Fiscal Year 2021-22 compared with $3.1 billion in Fiscal Year 2020-21. Administrative expenses for CalPERS personnel decreased $0.3 million or 6.7 percent primarily due to a decrease in pension and OPEB expenses as a result of lower net pension and net OPEB liabilities.

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

	CERBTF		
	2022	2021	Increase/(Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES			
Cash & Cash Equivalents	$1	$25	($24)
Receivables	117,403	53,468	63,935
Investments	15,314,595	15,685,090	(370,495)
Total Assets	**$15,431,999**	**$15,738,583**	**($306,584)**
Deferred Outflows of Resources	$1,028	$913	$115
Total Assets and Deferred Outflows of Resources	**$15,433,027**	**$15,739,496**	**($306,469)**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES			
Other Post-Employment Benefits, Investment Settlement & Other	$91,956	$90,942	$1,014
Net Pension & OPEB Liabilities	5,888	9,158	(3,270)
Total Liabilities	**$97,844**	**$100,100**	**($2,256)**
Deferred Inflows of Resources	$2,889	$839	$2,050
Total Liabilities and Deferred Inflows of Resources	**$100,733**	**$100,939**	**($206)**
TOTAL NET POSITION RESTRICTED FOR OPEB	**$15,332,294**	**$15,638,557**	**($306,263)**

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

	CERBTF		
	2022	2021	Increase/(Decrease)
ADDITIONS			
Employer Contributions	$5,503,086	$4,079,904	$1,423,182
Net Investment Income (Loss)	(2,346,058)	3,091,811	(5,437,869)
Other Income	14,097	11,704	2,393
Total Additions	**$3,171,125**	**$7,183,419**	**($4,012,294)**
DEDUCTIONS			
Administrative Expenses	$4,241	$4,544	($303)
Employer Withdrawals	135,440	1,318	134,122
OPEB Reimbursements	3,337,707	3,242,939	94,768
Total Deductions	**$3,477,388**	**$3,248,801**	**$228,587**
INCREASE (DECREASE) IN NET POSITION	**($306,263)**	**$3,934,618**	**($4,240,881)**
NET POSITION			
Beginning of Year	**$15,638,557**	**$11,703,939**	**$3,934,618**
End of Year	**$15,332,294**	**$15,638,557**	**($306,263)**

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 decreased by $0.3 million or 65.1 percent, primarily due to decrease in investment assets. Total assets decreased $1.8 million, or 7.9 percent, due to a decrease in investments and lower receivables. Total liabilities decreased by $1.5 million, or 6.8 percent, primarily due to fewer participants in the plan.

Additions to the fund include replacement benefits received from participating employers, investment income, and other income. Employer contributions increased $1.5 million or 4.2 percent. Other income increased $0.2 million or 100.0 percent due to determination made to charge a 1.5 percent administrative fee starting January 2022 from retirees.

Deductions from the RBF include benefit payments and administrative expenses. Benefit payments increased $1.5 million or 4.2 percent primarily due to more warrants processed in Fiscal Year 2021-22 compared to the prior year.

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, reconciling the submissions, and then submitting to the Internal Revenue Service. 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. Starting in 1987, the SSSA operated using the interest that was earned over time on the OASI. The OASI funds diminished, requiring additional funding to pay for the costs of administering the SSSA program. Starting July 1, 2019, CalPERS began charging participating agencies a fee to pay for these costs. For the Fiscal Year 2021-22, this Annual Maintenance Fee was suspended due to adequate funding from prior year assessments. CalPERS will continue to analyze current funding and expenses to determine future fee assessments.

The net position of the OASI decreased by $0.8 million or 20.1 percent primarily due to suspending the collection of fees from the participating agencies. Total assets decreased $0.9 million or 23.3 percent in Fiscal Year 2021-22 due to decreased investments and lower receivables. Total liabilities decreased in Fiscal Year 2021-22 by $0.5 million or 430.2 percent due to a decrease in both net pension and OPEB liabilities.

Additions to the fund include investment income and fees, which decreased by $2.3 million or 98.0 percent in Fiscal Year 2021-22 primarily due to the decision not to issue Annual Maintenance Fee invoices in Fiscal Year 2021-22 because the fees collected during the prior Fiscal Year 2020-21 exceeded the targeted amount to fund the current year's anticipated expenditures. Deductions from the OASI are primarily costs incurred to administer the fund. Administrative expenses for CalPERS personnel increased $0.3 million or 57.5 percent in Fiscal Year 2021-22 primarily due to the fact that expenses were lower in the prior year because of a reversal of a duplicate charge to the fund for the prior fiscal year and due to the addition of pro-rata charges to the fund in Fiscal Year 2021-22.

Fiduciary Net Position – Custodial Funds (Dollars in Thousands)

	RBF			OASI		
	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	$1	$1	$0	$1	$0	$1
Receivables	319	433	(114)	69	502	(433)
Investments	20,732	22,427	(1,695)	2,969	3,460	(491)
Total Assets	**$21,052**	**$22,861**	**($1,809)**	**$3,039**	**$3,962**	**($923)**
Deferred Outflows of Resources	$0	$0	$0	$18	$1	$17
Total Assets and Deferred Outflows of Resources	**$21,052**	**$22,861**	**($1,809)**	**$3,057**	**$3,963**	**($906)**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Due to Other Funds	$63	$57	$6	$92	$67	$25
Net Pension & OPEB Liabilities	—	—	—	(442)	39	(481)
Unearned Replacement Benefits	20,841	22,380	(1,539)	—	—	—
Total Liabilities	**$20,904**	**$22,437**	**($1,533)**	**($350)**	**$106**	**($456)**
Deferred Inflows of Resources	$0	$0	$0	$420	$118	$302
Total Liabilities and Deferred Inflows of Resources	**$20,904**	**$22,437**	**($1,533)**	**$70**	**$224**	**($154)**
TOTAL NET POSITION RESTRICTED FOR REPLACEMENT BENEFITS/PROGRAM ADMINISTRATION	**$148**	**$424**	**($276)**	**$2,987**	**$3,739**	**($752)**

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

	RBF			OASI		
	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)
ADDITIONS						
Replacement Benefits	$37,072	$35,594	$1,478	$0	$0	$0
Investment Income	74	85	(11)	12	11	1
Other Income	246	—	246	36	2,344	(2,308)
Total Additions	**$37,392**	**$35,679**	**$1,713**	**$48**	**$2,355**	**($2,307)**
DEDUCTIONS						
Replacement Benefit Payments	$37,071	$35,594	$1,477	$0	$0	$0
Administrative Expenses	597	605	(8)	800	508	292
Total Deductions	**$37,668**	**$36,199**	**$1,469**	**$800**	**$508**	**$292**
INCREASE (DECREASE) IN NET POSITION	**($276)**	**($520)**	**$244**	**($752)**	**$1,847**	**($2,599)**
NET POSITION						
Beginning of Year	**$424**	**$944**	**($520)**	**$3,739**	**$1,892**	**$1,847**
End of Year	**$148**	**$424**	**($276)**	**$2,987**	**$3,739**	**($752)**

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 up to December 31, 2021, and PERS Platinum and PERS Gold effective January 1, 2022), 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 was negative $75.3 million at June 30, 2022, a decrease of $394.9 million or 123.6 percent from the net position of $319.6 million at June 30, 2021.

Total assets decreased by $197.3 million or 14.8 percent primarily due to a decrease of $191.0 million or 36.8 percent in investments. Cash and cash equivalents decreased by $34.4 million or 22.7 percent primarily due to timing. Total liabilities increased by $183.6 million or 18.0 percent primarily due to an increase in estimated insurance claims combined with an increase in third-party administrator fees liability in Fiscal Year 2021-22.

Revenues include premiums collected from members and employers, federal subsidies, and investment income (non-operating revenue). Premiums collected increased by $197.7 million or 5.0 percent primarily due to an increase in premium rates. The fund experienced net investment losses of $39.2 million, a decrease of $40.2 million due to unfavorable market conditions in the fixed income market.

Expenses are comprised of claims, investment fees, and costs incurred to oversee the plans. Claim expenses increased by $449.0 million, or 12.4 percent primarily due to an increase in both medical and drug claims. Administrative expenses increased by $4.5 million or 1.5 percent primarily due to an increase in shared administrative expenses combined with an increase in third-party administrator fees.

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 was negative $56.4 million at June 30, 2022, a decrease of $0.5 million or 0.8 percent from the net position of negative $56.9 million at June 30, 2021.

Cash and cash equivalents increased by $27.7 million or 3.8 percent. Total receivables increased by $6.2 million or 21.5 percent primarily due to an increase in risk adjustment allocation due from the Health Care Fund. Total liabilities increased by $23.9 million or 2.9 percent primarily due to an increase in health premiums that need to be transferred to health carriers at the end of Fiscal Year 2021-22.

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 $2.2 million or 9.0 percent primarily due to an increase in the administrative fee rate from 0.24 percent in Fiscal Year 2020-21 to 0.25 percent in Fiscal Year 2021-22. Investment income decreased by $0.4 million or 20.0 percent due to a decrease in interest rates.

Expenses are comprised of costs incurred to administer the CRF. Administrative expenses decreased by $1.3 million or 4.5 percent primarily due to a decrease in pension and OPEB expenses as a result of lower net pension and OPEB liabilities, partially offset by an increase in shared administrative expenses.

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 participant-paid 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 suspended open enrollment in 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 $879.0 million from beginning net position of positive $479.7 million to negative $399.3 million, primarily due to a decrease in investment income in Fiscal Year 2021-22 and increase in the estimated liabilities for future claim benefits. Total assets decreased by $578.4 million or 10.6 percent primarily due to unfavorable market conditions in Fiscal Year 2021-22. Investments decreased by $589.5 million or 10.8 percent due to unfavorable market conditions. Total liabilities increased by $298.4 million or 6.0 percent primarily due to an increase in estimated liability for future policy benefits per updated cash flow projection and actuarial assumptions from June 30, 2021, actuarial valuation.

The LTCF revenues include premiums collected from participants and investment income. In Fiscal Year 2020-21, the Board of Administration approved a rate increase for all Long-Term Care Program policyholders to be implemented over two years. The first increase of 52 percent took effect beginning in November 2021, which resulted in an increase in premiums of $25.6 million, or 9.4 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 2021-22 decreased by $1.2 billion or 183.6 percent from the prior year due to unfavorable market conditions.

Total expenses are comprised of claims, changes in estimated liabilities for future policy benefits, change in the estimated settlement liability, administrative costs to the program, and investment expenses. In Fiscal Year 2021-22, total expenses increased by $2.4 billion or 136.6 percent. Administrative expenses decreased by $2.0 million or 7.9 percent primarily due to a decrease in pension expense as a result of lower net pension liability. The increase/(decrease) in estimated liabilities for future policy benefits line item was $3.2 billion, which was partially offset by reversed estimated settlement liability due to the settlement offer being terminated and not reasonably estimable. CalPERS agreed to a proposed settlement in the Long-Term Care Program class action lawsuit that was approved preliminarily in July 2021, but was terminated in April 2022. Please refer to Note 15 for additional information.

Net Position – Enterprise Funds (Dollars in Thousands)

	HCF			CRF			LTCF		
	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES									
Cash & Cash Equivalents	$116,807	$151,180	($34,373)	$756,132	$728,470	$27,662	$16,261	$5,591	$10,670
Receivables	692,586	664,543	28,043	34,857	28,690	6,167	838	417	421
Investments	327,465	518,418	(190,953)	—	—	—	4,886,776	5,476,314	(589,538)
Total Assets	**$1,136,858**	**$1,334,141**	**($197,283)**	**$790,989**	**$757,160**	**$33,829**	**$4,903,875**	**$5,482,322**	**($578,447)**
Deferred Outflows of Resources	$12,312	$11,477	$835	$8,362	$7,793	$569	$1,132	$1,006	$126
Total Assets and Deferred Outflows of Resources	**$1,149,170**	**$1,345,618**	**($196,448)**	**$799,351**	**$764,953**	**$34,398**	**$4,905,007**	**$5,483,328**	**($578,321)**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES									
Claims Payable, Unearned Premiums, Estimated Insurance Claims Due & Due to Carriers	$1,010,017	$878,906	$131,111	$475,408	$374,997	$100,411	$37,553	$34,542	$3,011
Due to Employers	—	—	—	238	241	(3)	—	—	—
Other Liabilities	107,487	31,393	76,094	307,483	367,980	(60,497)	6,434	6,596	(162)
Estimated Settlement Liability	—	—	—	—	—	—	—	2,900,000	(2,900,000)
Estimated Liability for Future Policy Benefits	—	—	—	—	—	—	5,250,421	2,051,292	3,199,129
Net Pension & OPEB Liabilities	84,048	107,619	(23,571)	56,582	72,631	(16,049)	6,537	10,086	(3,549)
Total Liabilities	**$1,201,552**	**$1,017,918**	**$183,634**	**$839,711**	**$815,849**	**$23,862**	**$5,300,945**	**$5,002,516**	**$298,429**
Deferred Inflows of Resources	$22,917	$8,138	$14,779	$16,019	$5,957	$10,062	$3,328	$1,102	$2,226
Total Liabilities and Deferred Inflows of Resources	**$1,224,469**	**$1,026,056**	**$198,413**	**$855,730**	**$821,806**	**$33,924**	**$5,304,273**	**$5,003,618**	**$300,655**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)	**($75,299)**	**$319,562**	**($394,861)**	**($56,379)**	**($56,853)**	**$474**	**($399,266)**	**$479,710**	**($878,976)**

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

	HCF			CRF			LTCF		
	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)	2022	2021	Increase/ (Decrease)
REVENUES									
Premiums	$4,137,604	$3,939,906	$197,698	$0	$0	$0	$297,388	$271,766	$25,622
Federal Government Subsidies	728	8,263	(7,535)	—	—	—	—	—	—
Non-Operating Revenues (Losses)	(39,207)	986	(40,193)	1,463	1,829	(366)	(531,313)	635,250	(1,166,563)
Administrative Fees & Other	101	—	101	26,135	23,981	2,154	271	890	(619)
Total Revenues	**$4,099,226**	**$3,949,155**	**$150,071**	**$27,598**	**$25,810**	**$1,788**	**($233,654)**	**$907,906**	**($1,141,560)**
EXPENSES									
Claims Expense	$4,063,516	$3,614,513	$449,003	$0	$0	$0	$319,122	$308,976	$10,146
Increase (Decrease) in Estimated Liabilities	112,696	35,438	77,258	—	—	—	3,199,129	(5,001,779)	8,200,908
Federal Government Subsidy Recapture	8,267	—	8,267	—	—	—	—	—	—
Increase (Decrease) in Estimated Settlement Liability	—	—	—	—	—	—	(2,899,100)	2,900,000	(5,799,100)
Non-Operating Expenses	135	145	(10)	—	—	—	2,408	2,231	177
Administrative Expenses	309,473	304,990	4,483	27,124	28,414	(1,290)	23,763	25,804	(2,041)
Total Expenses	**$4,494,087**	**$3,955,086**	**$539,001**	**$27,124**	**$28,414**	**($1,290)**	**$645,322**	**($1,764,768)**	**$2,410,090**
INCREASE (DECREASE) IN UNRESTRICTED NET POSITION	**($394,861)**	**($5,931)**	**($388,930)**	**$474**	**($2,604)**	**$3,078**	**($878,976)**	**$2,672,674**	**($3,551,650)**
UNRESTRICTED NET POSITION (DEFICIT)									
Beginning of Year	**$319,562**	**$325,493**	**($5,931)**	**($56,853)**	**($54,249)**	**($2,604)**	**$479,710**	**($2,192,964)**	**$2,672,674**
End of Year	**($75,299)**	**$319,562**	**($394,861)**	**($56,379)**	**($56,853)**	**$474**	**($399,266)**	**$479,710**	**($878,976)**

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).

FINANCIAL SECTION

Basic Financial Statements

STATEMENT OF FIDUCIARY NET POSITION – FIDUCIARY FUNDS

As of June 30, 2022, with Comparative Totals as of June 30, 2021 (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	**$532,310**	**$131,239**	**$62,775**	**$1,201**	**$3,440**	**$906**
Receivables						
Members	$380,984	$95,440	$35,851	$44	$1,054	$1,447
Employers	593,930	440,903	49,603	9	708	8,518
Investment Sales & Other	7,120,169	1,755,456	839,678	1	—	7
Interest & Dividends	789,889	194,745	93,151	—	75	13
Due from Other Funds	9,696	2,391	1,143	—	—	—
Other Program	68,906	16,988	8,126	—	—	—
Total Receivables	**$8,963,574**	**$2,505,923**	**$1,027,552**	**$54**	**$1,837**	**$9,985**
Investments, at Fair Value						
Short-Term Investments	$11,988,711	$2,944,288	$1,414,264	$724	$52,096	$3,110
Public Equity	139,649,518	34,296,301	16,473,941	34,418	—	1,299,385
Fixed Income	80,925,257	19,874,304	9,546,455	68,254	—	827,221
Real Assets	51,831,359	12,729,180	6,114,355	—	—	—
Private Equity/Debt	41,242,949	10,128,789	4,865,279	—	—	—
Total Investments	**$325,637,794**	**$79,972,862**	**$38,414,294**	**$103,396**	**$52,096**	**$2,129,716**
Securities Lending Collateral	$10,482,900	$2,584,527	$1,236,243	$0	$0	$0
Capital Assets, Net & Other Assets	174,857	43,110	20,621	—	—	—
TOTAL ASSETS	**$345,791,435**	**$85,237,661**	**$40,761,485**	**$104,651**	**$57,373**	**$2,140,607**
Deferred Outflows of Resources	$86,178	$21,247	$10,163	$175	$493	$623
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	**$345,877,613**	**$85,258,908**	**$40,771,648**	**$104,826**	**$57,866**	**$2,141,230**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement & Other Benefits	$1,842,468	$442,750	$198,743	$575	$0	$0
Investment Purchases & Other	10,698,991	2,637,804	1,261,726	—	—	—
Due to Members & Employers	9,534	—	—	14	49	7
Net Pension & OPEB Liabilities	592,251	146,017	69,844	1,281	3,311	4,285
Securities Lending Obligations	10,477,624	2,583,226	1,235,620	—	—	—
Due to Other Funds	—	—	—	60	210	299
Management & Third-Party Administrator Fees	778	191	92	8	—	163
Unearned Replacement Benefits	—	—	—	—	—	—
Other Program	100,769	24,653	11,563	3	4,405	914
TOTAL LIABILITIES	**$23,722,415**	**$5,834,641**	**$2,777,588**	**$1,941**	**$7,975**	**$5,668**
Deferred Inflows of Resources	$157,202	$38,758	$18,539	$261	$1,005	$1,174
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	**$23,879,617**	**$5,873,399**	**$2,796,127**	**$2,202**	**$8,980**	**$6,842**
NET POSITION – RESTRICTED FOR PENSION, OTHER POST-EMPLOYMENT, REPLACEMENT BENEFITS, AND PROGRAM ADMINISTRATION	**$321,997,996**	**$79,385,509**	**$37,975,521**	**$102,624**	**$48,886**	**$2,134,388**

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**	**2022**	**2021**
$1	**$0**	**$0**	**$1**	**$1**	**$1**	**$731,875**	**$1,078,072**
$4,310	$647	$0	$0	$16	$0	$519,793	$568,295
—	—	1,116	117,343	260	—	1,212,390	1,147,051
—	—	—	—	—	—	9,715,311	1,800,012
10	6	1	60	43	6	1,077,999	1,019,713
—	—	—	—	—	—	13,230	10,714
13,488	—	—	—	—	63	107,571	100,628
$17,808	**$653**	**$1,117**	**$117,403**	**$319**	**$69**	**$12,646,294**	**$4,646,413**
$149,668	$11,712	$9,205	$49,331	$20,732	$2,969	$16,646,810	$24,643,516
1,346,137	56,856	27,711	9,843,780	—	—	203,028,047	252,654,826
421,190	43,187	47,122	5,421,484	—	—	117,174,474	136,538,957
—	—	—	—	—	—	70,674,894	47,207,101
—	—	—	—	—	—	56,237,017	44,830,728
$1,916,995	**$111,755**	**$84,038**	**$15,314,595**	**$20,732**	**$2,969**	**$463,761,242**	**$505,875,128**
$0	$0	$0	$0	$0	$0	$14,303,670	$3,350,881
—	—	—	—	—	—	238,588	259,711
$1,934,804	**$112,408**	**$85,155**	**$15,431,999**	**$21,052**	**$3,039**	**$491,681,669**	**$515,210,205**
$496	$43	$19	$1,028	$0	$18	$120,483	$112,556
$1,935,300	**$112,451**	**$85,174**	**$15,433,027**	**$21,052**	**$3,057**	**$491,802,152**	**$515,322,761**
$0	$0	$0	$89,752	$0	$0	$2,574,288	$2,404,359
—	—	—	—	—	—	14,598,521	10,365,085
413	656	—	—	—	—	10,673	10,193
3,449	327	7	5,888	—	(442)	826,218	1,050,178
—	—	—	—	—	—	14,296,470	3,351,059
515	31	5	1,054	63	92	2,329	1,741
887	49	8	1,150	—	—	3,326	6,238
—	—	—	—	20,841	—	20,841	22,380
—	—	—	—	—	—	142,307	111,744
$5,264	**$1,063**	**$20**	**$97,844**	**$20,904**	**($350)**	**$32,474,973**	**$17,322,977**
$927	$60	$85	$2,889	$0	$420	$221,320	$80,905
$6,191	**$1,123**	**$105**	**$100,733**	**$20,904**	**$70**	**$32,696,293**	**$17,403,882**
$1,929,109	**$111,328**	**$85,069**	**$15,332,294**	**$148**	**$2,987**	**$459,105,859**	**$497,918,879**

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION – FIDUCIARY FUNDS

For the Fiscal Year Ended June 30, 2022, with Comparative Totals for the Fiscal Year Ended June 30, 2021 (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	$3,638,294	$1,104,241	$417,129	$23	$1,956	$36,529
Employers	16,860,860	3,557,108	2,284,579	85	2,799	91,887
Replacement Benefits	—	—	—	—	—	—
State of California General Fund	—	—	—	—	192,161	886
Employer Contributions Direct – OPEB	—	—	—	—	—	—
Employer Contributions Outside of Trust – OPEB	—	—	—	—	—	—
Total Retirement and OPEB Contribution	**$20,499,154**	**$4,661,349**	**$2,701,708**	**$108**	**$196,916**	**$129,302**
Investment Income						
Net Appreciation/(Depreciation) in Fair Value of Investments	($31,507,200)	($7,674,772)	($3,696,692)	($12,412)	$0	($323,611)
Interest & Amortization	2,060,675	508,053	243,014	1	202	27
Dividends	3,792,322	934,986	447,227	—	—	—
Other Investment Income	34,097	8,406	4,021	12	—	214
Less Investment Costs:						
Management & Performance Fees	(676,419)	(166,769)	(79,770)	(34)	—	(663)
Other	(303,120)	(74,734)	(35,747)	(17)	(8)	(332)
Net Investment Income	**($26,599,645)**	**($6,464,830)**	**($3,117,947)**	**($12,450)**	**$194**	**($324,365)**
Securities Lending Income	$99,728	$24,588	$11,761	$0	$0	$0
Securities Lending Expense	(31,512)	(7,769)	(3,716)	—	—	—
Net Securities Lending	**$68,216**	**$16,819**	**$8,045**	**$0**	**$0**	**$0**
Other Income	$6,498	$1,569	$714	$1	$2,305	$3
Plan-to-Plan Resource Movement	8,332	3	—	—	—	—
TOTAL ADDITIONS	**($6,017,445)**	**($1,785,090)**	**($407,480)**	**($12,341)**	**$199,415**	**($195,060)**
DEDUCTIONS						
Retirement, Death & Survivor Benefits	$21,609,247	$5,182,681	$2,326,426	$6,647	$210,492	$66,382
Replacement Benefit Payments	—	—	—	—	—	—
Refund of Contributions	190,272	116,077	23,206	—	—	357
Administrative Expenses	218,079	53,699	25,686	436	1,677	1,842
Plan-to-Plan Resource Movement	—	—	8,335	—	—	—
Participant & Employer Withdrawals	—	—	—	—	—	—
OPEB Reimbursements Direct	—	—	—	—	—	—
OPEB Reimbursements – Outside Trust	—	—	—	—	—	—
TOTAL DEDUCTIONS	**$22,017,598**	**$5,352,457**	**$2,383,653**	**$7,083**	**$212,169**	**$68,581**
INCREASE (DECREASE) IN NET POSITION	**($28,035,043)**	**($7,137,547)**	**($2,791,133)**	**($19,424)**	**($12,754)**	**($263,641)**
NET POSITION						
Beginning of Year	**$350,033,039**	**$86,523,056**	**$40,766,654**	**$122,048**	**$61,640**	**$2,398,029**
End of year	**$321,997,996**	**$79,385,509**	**$37,975,521**	**$102,624**	**$48,886**	**$2,134,388**

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	2022	2021
$137,437	$243	$0	$0	$0	$0	$5,335,852	$4,920,739
—	—	36,474	—	—	—	22,833,792	20,167,634
—	—	—	—	37,072	—	37,072	35,594
—	—	—	—	—	—	193,047	222,950
—	—	—	2,344,227	—	—	2,344,227	1,009,680
—	—	—	3,158,859	—	—	3,158,859	3,070,224
$137,437	**$243**	**$36,474**	**$5,503,086**	**$37,072**	**$0**	**$33,902,849**	**$29,426,821**
($276,599)	($14,367)	($9,532)	($2,339,519)	$0	$0	($45,854,704)	$85,521,951
951	23	2	151	74	12	2,813,185	2,770,301
—	—	—	—	—	—	5,174,535	4,672,358
(2)	(1)	7	46	—	—	46,800	187,482
(479)	(29)	(15)	(4,530)	—	—	(928,708)	(720,098)
(299)	(17)	(6)	(2,206)	—	—	(416,486)	(296,407)
($276,428)	**($14,391)**	**($9,544)**	**($2,346,058)**	**$74**	**$12**	**($39,165,378)**	**$92,135,587**
$0	$0	$0	$0	$0	$0	$136,077	$122,628
—	—	—	—	—	—	(42,997)	(16,872)
$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$93,080**	**$105,756**
$6,608	$88	$154	$14,097	$246	$36	$32,319	$30,517
—	—	—	—	—	—	8,335	348,384
($132,383)	**($14,060)**	**$27,084**	**$3,171,125**	**$37,392**	**$48**	**($5,128,795)**	**$122,047,065**
$0	$0	$0	$0	$0	$0	$29,401,875	$27,694,519
—	—	—	—	37,071	—	37,071	35,594
—	—	—	—	—	—	329,912	287,937
4,475	250	43	4,241	597	800	311,825	406,406
—	—	—	—	—	—	8,335	348,384
116,874	5,186	—	135,440	—	—	257,500	214,049
—	—	—	178,848	—	—	178,848	172,715
—	—	—	3,158,859	—	—	3,158,859	3,070,224
$121,349	**$5,436**	**$43**	**$3,477,388**	**$37,668**	**$800**	**$33,684,225**	**$32,229,828**
($253,732)	**($19,496)**	**$27,041**	**($306,263)**	**($276)**	**($752)**	**($38,813,020)**	**$89,817,237**
$2,182,841	**$130,824**	**$58,028**	**$15,638,557**	**$424**	**$3,739**	**$497,918,879**	**$408,101,642**
$1,929,109	**$111,328**	**$85,069**	**$15,332,294**	**$148**	**$2,987**	**$459,105,859**	**$497,918,879**

STATEMENT OF NET POSITION – PROPRIETARY FUNDS

As of June 30, 2022, with Comparative Totals as of June 30, 2021 (Dollars in Thousands)

	Proprietary Funds			Totals	
	HCF	CRF	LTCF	2022	2021
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES					
Current Assets					
Cash & Cash Equivalents	$1	$1	$16,087	$16,089	$5,442
Short-Term Investments	116,806	756,131	174	873,111	879,799
Receivables					
Members & Employers	$0	$20,984	$838	$21,822	$25,607
Health Carriers & Pharmacy Benefit Managers	401,142	1,592	—	402,734	304,997
Interest & Dividends	393	1,139	—	1,532	726
Due from Other Funds	291,040	11,142	—	302,182	362,309
Other Receivables	11	—	—	11	11
Total Receivables	**$692,586**	**$34,857**	**$838**	**$728,281**	**$693,650**
Subtotal Current Assets	**$809,393**	**$790,989**	**$17,099**	**$1,617,481**	**$1,578,891**
Noncurrent Assets					
Investments, at Fair Value					
Public Equity	$0	$0	$1,617,307	$1,617,307	$2,028,606
Fixed Income	327,465	—	3,269,469	3,596,934	3,966,126
Total Investments	**$327,465**	**$0**	**$4,886,776**	**$5,214,241**	**$5,994,732**
Subtotal Noncurrent Assets	**$327,465**	**$0**	**$4,886,776**	**$5,214,241**	**$5,994,732**
TOTAL ASSETS	**$1,136,858**	**$790,989**	**$4,903,875**	**$6,831,722**	**$7,573,623**
Deferred Outflows of Resources	$12,312	$8,362	$1,132	$21,806	$20,276
Total Assets and Deferred Outflows of Resources	**$1,149,170**	**$799,351**	**$4,905,007**	**$6,853,528**	**$7,593,899**
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES					
Current Liabilities					
Claims Payable	$244,647	$0	$23,659	$268,306	$267,060
Unearned Premiums	146,690	—	13,894	160,584	140,404
Due to Employers	—	238	—	238	241
Estimated Insurance Claims Due	618,680	—	—	618,680	505,984
Estimated Liability for Future Policy Benefits Short-Term	—	—	—	—	54,879
Due to Carriers	—	475,408	—	475,408	374,997
Due to Other Funds	16,528	294,442	2,114	313,084	371,283
Estimated Settlement Liability	—	—	—	—	2,900,000
Management & Third-Party Administrator Fees	90,959	—	1,907	92,866	28,465
Other	—	13,041	2,413	15,454	6,221
Total Current Liabilities	**$1,117,504**	**$783,129**	**$43,987**	**$1,944,620**	**$4,649,534**
Long-Term Liabilities					
Estimated Liability for Future Policy Benefits	$0	$0	$5,250,421	$5,250,421	$1,996,413
Net Pension & OPEB Liabilities	84,048	56,582	6,537	147,167	190,336
Total Long-Term Liabilities	**$84,048**	**$56,582**	**$5,256,958**	**$5,397,588**	**$2,186,749**
TOTAL LIABILITIES	**$1,201,552**	**$839,711**	**$5,300,945**	**$7,342,208**	**$6,836,283**
Deferred Inflows of Resources	$22,917	$16,019	$3,328	$42,264	$15,197
Total Liabilities and Deferred Inflows of Resources	**$1,224,469**	**$855,730**	**$5,304,273**	**$7,384,472**	**$6,851,480**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)	**($75,299)**	**($56,379)**	**($399,266)**	**($530,944)**	**$742,419**

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, 2022, with Comparative Totals for the Fiscal Year Ended June 30, 2021 (Dollars in Thousands)

	Proprietary Funds			Totals	
	HCF	CRF	LTCF	2022	2021
Operating Revenues					
Premiums	$4,137,604	$0	$297,388	$4,434,992	$4,211,672
Federal Government Subsidies	728	—	—	728	8,263
Administrative Fees Earned	—	26,002	—	26,002	23,921
Other	101	133	271	505	950
Total Operating Revenues	**$4,138,433**	**$26,135**	**$297,659**	**$4,462,227**	**$4,244,806**
Operating Expenses					
Claims Expense	$4,063,516	$0	$319,122	$4,382,638	$3,923,489
Increase (Decrease) in Estimated Liabilities	112,696	—	3,199,129	3,311,825	(4,966,341)
Federal Government Subsidy Recapture	8,267	—	—	8,267	—
Increase (Decrease) in Estimated Settlement Liability	—	—	(2,899,100)	(2,899,100)	2,900,000
Administrative Expenses	309,473	27,124	23,763	360,360	359,208
Total Operating Expenses	**$4,493,952**	**$27,124**	**$642,914**	**$5,163,990**	**$2,216,356**
OPERATING INCOME (LOSS)	**($355,519)**	**($989)**	**($345,255)**	**($701,763)**	**$2,028,450**
Non-Operating Revenues					
Net Appreciation/(Depreciation) in Fair Value of Investments	($40,814)	$0	($531,876)	($572,690)	$632,804
Interest, Dividends & Other Investment Income	1,607	1,463	563	3,633	5,261
Total Non-Operating Revenues/Losses	**($39,207)**	**$1,463**	**($531,313)**	**($569,057)**	**$638,065**
Non-Operating Expenses					
Management Fees	$63	$0	$1,614	$1,677	$1,549
Other Investment Expenses	72	—	794	866	827
Total Non-Operating Expenses	**$135**	**$0**	**$2,408**	**$2,543**	**$2,376**
NON-OPERATING INCOME (LOSS)	**($39,342)**	**$1,463**	**($533,721)**	**($571,600)**	**$635,689**
CHANGE IN UNRESTRICTED NET POSITION	**($394,861)**	**$474**	**($878,976)**	**($1,273,363)**	**$2,664,139**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)					
Beginning of Year	**$319,562**	**($56,853)**	**$479,710**	**$742,419**	**($1,921,720)**
End of Year	**($75,299)**	**($56,379)**	**($399,266)**	**($530,944)**	**$742,419**

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

STATEMENT OF CASH FLOWS – PROPRIETARY FUNDS

For the Fiscal Year Ended June 30, 2022, with Comparative Totals for the Fiscal Year Ended June 30, 2021 (Dollars in Thousands)

	Proprietary Funds			Totals	
	HCF	**CRF**	**LTCF**	**2022**	**2021**
Cash Flows From Operating Activities					
Premiums Collected	$4,137,797	$0	$299,664	$4,437,461	$4,069,442
Federal Government Subsidies	728	—	—	728	8,263
Federal Government Subsidy Recapture	(8,267)	—	—	(8,267)	—
Administrative Fees Collected	—	26,135	—	26,135	23,981
Claims Paid	(4,062,841)	—	(318,550)	(4,381,391)	(3,952,953)
Administrative Expenses Paid	(253,368)	(32,984)	(25,330)	(311,682)	(358,971)
Other (Payments) Receipts, Net	101	33,721	(950)	32,872	(1,022)
Net Cash Provided by (Used for) Operating Activities	**($185,850)**	**$26,872**	**($45,166)**	**($204,144)**	**($211,260)**
Cash Flows From Investing Activities					
Net Sales of Investments	$150,139	$0	$57,662	$207,801	$68,581
Net Change in Short-Term Investments	34,373	(27,662)	(23)	6,688	126,348
Interest & Dividends Received	1,474	790	99	2,363	7,427
Other Investment (Payments) Receipts, Net	(136)	—	(1,925)	(2,061)	(2,482)
Net Cash Provided by (Used for) Investing Activities	**$185,850**	**($26,872)**	**$55,813**	**$214,791**	**$199,874**
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	**$0**	**$0**	**$10,647**	**$10,647**	**($11,386)**
Cash & Cash Equivalents, Beginning of Year	**$1**	**$1**	**$5,440**	**$5,442**	**$16,828**
Cash & Cash Equivalents, End of Year	**$1**	**$1**	**$16,087**	**$16,089**	**$5,442**
Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used for) Operating Activities					
Operating Income (Loss)	($355,519)	($989)	($345,255)	($701,763)	$2,028,450
Changes in Assets and Liabilities:					
Receivables:					
Members & Employers	—	4,206	(421)	3,785	(7,667)
Health Carriers & Pharmacy Benefit Managers	(98,400)	663	—	(97,737)	(115,165)
Due from Other Funds	70,490	(10,363)	—	60,127	(35,271)
Claims Payable	675	—	571	1,246	(29,464)
Unearned Premiums	17,740	—	2,440	20,180	5,045
Due to Employers	—	(3)	—	(3)	49
Estimated Insurance Claims Due	112,696	—	—	112,696	35,438
Net Pension & OPEB Liabilities	(9,627)	(6,556)	(1,450)	(17,633)	(2,286)
Estimated Liability for Future Policy Benefits Short-Term	—	—	(54,879)	(54,879)	(55,112)
Estimated Liability for Future Policy Benefits Long-Term	—	—	3,254,008	3,254,008	(4,946,667)
Estimated Settlement Liability	—	—	(2,900,000)	(2,900,000)	2,900,000
Due to Carriers	—	100,411	—	100,411	(23,600)
Due to Other Funds	11,640	(69,794)	(45)	(58,199)	36,015
Management & Third-Party Administrator Fees	64,455	—	(72)	64,383	1,779
Other	—	9,297	(63)	9,234	(2,804)
Net Cash Provided by (Used for) Operating Activities	**($185,850)**	**$26,872**	**($45,166)**	**($204,144)**	**($211,260)**
Noncash Investing Activities					
Noncash Increase/(Decrease) in Fair Value of Investments	**($72,980)**	**$0**	**($667,359)**	**($740,339)**	**$600,229**

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

Notes to the Basic Financial Statements

1. DESCRIPTION OF CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

ORGANIZATION

The California Public Employees' Retirement System (CalPERS or the System) was established by legislation in 1931 for the purpose of providing a secure retirement to employees of the State of California. 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

The following is a summary description 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, 2022, the PERF had the following participating employers:

Employers for PERF

PERF Employers	2022
PERF A	
State	1
Public Agencies[1]	307
Total	**308**
PERF B	
School Districts and Charter Schools	1,335
PERF C	
Public Agencies[1]	1,294
Total Employers	**2,937**

(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 2022-23.

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, 2022, 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	414,633	67,227	492,589	231,798	1,206,247
PERF B Schools Cost-Sharing	213,234	32,339	341,697	234,230	821,500
PERF C Public Agency Cost-Sharing	42,009	5,843	50,657	29,640	128,149
Total PERF	**669,876**	**105,409**	**884,943**	**495,668**	**2,155,896**
LRF	91	103	2	2	198
JRF	1,160	605	99	1	1,865
JRF II	416	55	1,624	—	2,095
Total	**671,543**	**106,172**	**886,668**	**495,671**	**2,160,054**

(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, 2022, were as follows:

Required Contribution Rates

	Employee Contribution Rates		Employer - Required Contribution Rates
	Classic	**PEPRA**	
PERF A – Agent			
State:			
Miscellaneous – First Tier	5% - 11%	6% - 11%	29.22%
Miscellaneous – Second Tier	3.75%	3.75%	29.22%
Industrial – First Tier	5% - 11%	6% - 11%	17.34%
Industrial – Second Tier	3.75%	3.75%	17.34%
Safety	11% - 11.50%	11% - 11.50%	19.47%
Peace Officers and Firefighters	8% - 13%	12% - 13%	32.84%
California Highway Patrol	12.50%	12.50%	62.78%
Public Agency:			
Miscellaneous	5% - 8%	5.75% - 8.75%	varies[1]
Safety	7% - 9%	10% - 15.50%	varies[1]
PERF B – Schools Cost-Sharing			
Classified School	7%	7%	22.91%
PERF C – Public Agency Cost-Sharing			
Public Agency:			
Miscellaneous	2% - 7.96%	4.50% - 8%	varies[1]
Safety	6.95% - 14.25%	10% - 16.50%	varies[1]
LRF	4% or 8%	N/A	29.38%
JRF	8%	N/A	8%[2]
JRF II	8%	16%	24.24%

(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) The employee and state contribution rates for the JRF are set by statute and are equal to 8% of payroll each. The JRF is currently funded using a pay-as-you-go approach, and statutory contributions made by the employees and the State are not adequate to meet current benefit payments. In Fiscal Year 2021-22, an additional State contribution of $210,757,479 was required to satisfy the pay-as-you-go cost.

DEFINED CONTRIBUTION PLANS

CalPERS currently administers a defined contribution plan and a deferred compensation plan for certain members. The following is a further description of each of these funds:

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) 457(b), 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, 2022, membership in the defined contribution plans consisted of the following:

Members in DCF and SCPF

Plan	Employers	Members
DCF	829	33,222
SCPF	1	6,280

PENSION PREFUNDING PLAN

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 72 participating employers. Of the 72 participating employers, 51 employers have contributed assets in the CEPPTF as of June 30, 2022. The CEPPTF is more fully described in Note 9 to the financial statements.

DEFINED BENEFIT OTHER POST-EMPLOYMENT BENEFIT PLAN

The California Employers' Retiree Benefit Trust Fund (CERBTF) – The Annuitants' Health Care Coverage Fund, also known as the 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 survivor health care and other post-employment benefits (OPEB). Currently, the CERBTF has 598 participating employers. Of the 598 participating employers, 582 employers have contributed assets in the CERBTF as of June 30, 2022. The CERBTF is more fully described in Note 10 to the financial statements.

OTHER ADMINISTRATIVE ACTIVITIES

CalPERS administers other activities as follows:

Replacement Benefit Fund (RBF) – The RBF was established by Chapter 798 of the 1990 Statutes, providing replacement benefits to participants 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 premiums 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 Annual Comprehensive Financial Report.

MEASUREMENT FOCUS, BASIS OF ACCOUNTING & BASIS OF PRESENTATION

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

The accounts of CalPERS are organized and operated on the basis of funds. The Board has a fiduciary responsibility for the investments within both the fiduciary and proprietary funds. CalPERS has the following fund types as of June 30, 2022:

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 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, 2022:

Target Asset Allocation

Asset Class	PERF A	PERF B	PERF C	LRF	JRF	JRF II
Public Equity	50%	50%	50%	22%	—	52%
Private Equity	8%	8%	8%	—	—	—
Fixed Income	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
Public Equity	59%	40%	22%
Fixed Income	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
Public Equity	40%	14%
Fixed Income	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 three to five years for furniture and equipment, and 40 years for buildings, and determined on an asset-by-asset basis for intangible assets, using the straight-line method of depreciation.

INVESTMENT COSTS

Investment costs 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 costs 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 costs 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 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 4.75 percent, morbidity rates, lapse rates, mortality, and plan expenses.

Due to uncertainties inherent in the estimations and assumptions described in this section, it is reasonably possible that changes in these estimates and assumptions in the near term may be material to the financial statements.

CalPERS participates in commercial insurance programs and is self-insured for fiduciary liability. During the fiscal year, insurance settlements did not exceed insurance coverage.

RECLASSIFICATIONS

Certain reclassifications have been made to the comparative totals as of, and for, the fiscal year ended June 30, 2021, to conform to the presentation as, of and for, the fiscal year ended June 30, 2022.

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, 2021, from which the summarized information was derived.

TERMINATION OF PENSION PLANS

Public agency participation in the System may be terminated either due to a transfer of a public agency's plan to another qualified system as permitted by law, a public agency terminating its plan, or an involuntary termination by the Board. In the event that a public agency elects to transfer its plan, the assets of the plan and the related liability for benefits accrued are transferred to the other system. In the event that a public agency elects to terminate its plan or if there is an involuntary termination of a plan by the Board, 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.

EMPLOYER SHARE OF POST-EMPLOYMENT BENEFITS

As of June 30, 2022, CalPERS has adjusted its proportionate share of the state's net pension and OPEB liabilities totaling approximately $372 million and $601 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 Annual Comprehensive Financial Report 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 $291 million as of June 30, 2022. 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 $0.7 billion at June 30, 2022, 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. The cash balances reported in the Statement of Cash Flows for proprietary fund types include cash in general operating accounts with the State Treasury and cash and money market funds (short-term investments) held at the Bank of New York Mellon in checking and demand deposit accounts, respectively.

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, 2022, 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, 2022, at fair value:

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

	Fair Value June 30, 2022	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				
Public Equity				
Domestic Equity	$110,228,435	$110,228,435	$0	$0
International Equity	73,332,422	73,332,422	—	—
Total Public Equity	**$183,560,857**	**$183,560,857**	**$0**	**$0**
Global Debt				
Asset-Backed²	$32,448,231	$0	$31,319,896	$1,128,335
Bank Loans	274,759	—	274,759	—
International Debt	2,518,759	—	2,518,759	—
Municipal/Public Bonds	52,029	—	52,029	—
Sovereign Debt	2,883,530	—	2,883,530	—
U.S. Corporate	23,269,470	—	23,269,470	—
U.S. Treasuries, STRIPS and TIPS	26,545,217	—	26,545,217	—
Total Global Debt	**$87,991,995**	**$0**	**$86,863,660**	**$1,128,335**
Derivatives				
Futures	($60,414)	($60,414)	$0	$0
Rights & Warrants	553	—	553	—
Forward Contract Assets	1,275,860	—	1,275,860	—
Forward Contract (Liabilities)	(532,629)	—	(532,629)	—
Swap Assets	135,760	—	135,760	—
Swap (Liabilities)	(41,437)	—	(41,437)	—
Total Derivatives	**$777,693**	**($60,414)**	**$838,107**	**$0**
Other				
Rule 144(a) Securities	$28,329,053	$0	$28,329,053	$0
Securitized Assets	409,038	—	—	409,038
Private Equity³	1,993,615	—	—	1,993,615
Total Other	**$30,731,706**	**$0**	**$28,329,053**	**$2,402,653**
Total Investments by Fair Value Level	**$303,062,251**	**$183,500,443**	**$116,030,820**	**$3,530,988**
Investments Measured at NAV				
Commingled/Pooled Funds	$24,659,532			
Real Assets	70,674,894			
Private Equity³	47,952,320			
Private Debt	6,291,082			
Other Investments	621,109			
Total Investments Measured at NAV	**$150,198,937**			
Total Investments Measured at Fair Value	**$453,261,188**			

(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) Asset-backed holdings categorized at level 3 represent the fair value of assets based off unobservable inputs using the best available information and may or may not include own data by the government entity.

(3) 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 and investments recorded at sales price. Real assets are valued at NAV.

Public equity includes 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.

Fixed Income consists 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	$24,659,532	$0
Real Assets	70,674,894	2,551,318
Private Equity	47,952,320	31,911,908
Private Debt/Other Investments	6,912,191	14,150,399
Total	**$150,198,937**	**$48,613,625**

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 that 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:
  - Invests outside the mandate of traditional asset classes. Strategies may include middle market direct lending, specialty lending, public market dislocation, liquidity financing, structured products and whole loans, real estate financing, bank loans and CLO.

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 typically range from at-will up to 90 days, with the exception of the Multi-Asset Class Strategies, Absolute Return Strategies, Opportunistic Strategies, and 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 $70.7 billion are reported at NAV.

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, 2022:

Money-Weighted Rate of Return

Plan	Rate of Return
PERF A	
Agent	(7.5%)
PERF B	
Schools Cost-Sharing	(7.5%)
PERF C	
Public Agency Cost-Sharing	(7.5%)
LRF	(10.3%)
JRF	0.3%
JRF II	(13.4%)
CERBTF	(14.0%)
CEPPTF	(13.9%)

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, 2022, 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 that 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. Generally, this risk is managed within the portfolios using the effective duration or option-adjusted methodology. CalPERS investment policy and policy-related procedures require the option-adjusted duration of the fixed income segment to either stay within negative 10 percent to positive 10 percent or negative 0.50 to positive 0.50 of the relevant benchmark depending on the fixed income segment. Generally, 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, commercial mortgage-backed securities, securities backed by residential and commercial mortgage loans, high yield and investment grade corporate securities, sovereign credit, and U.S. Treasuries. 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, 2022:

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

Debt Security Type	Portfolio Weighted Average Effective Duration	Fair Value June 30, 2022	Percent of Debt Securities
Corporate	8.71	$40,962,103	37.12%
U.S. Treasuries and Agencies:			
U.S. Treasury Bonds	17.30	21,395,633	19.39%
U.S. Treasury Notes	8.36	5,085,715	4.61%
U.S. Treasury Strips	10.67	63,869	0.06%
Mortgages	5.20	32,016,464	29.01%
Asset-Backed	1.49	13,410,316	12.15%
Foreign Government	11.38	2,971,346	2.70%
Municipals	13.19	52,029	0.05%
No Effective Duration:			
Commingled Fund	N/A	$397,011	0.36%
Asset-Backed	N/A	333,102	0.30%
Mortgages	N/A	32,943	0.03%
Corporate	N/A	70,159	0.06%
Swaps	N/A	(6,444,674)	(5.84%)
Total		**$110,346,016**	**100.00%**

CalPERS invests in the State Treasury pool, State Street Bank Global Advisors' (SSGA) fund: Short-Term Investment Fund (STIF), 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, 2022, the pooled money investment account with the State Treasury totaled approximately $3.5 billion. The SSGA STIF totaled approximately $4.5 billion, and the SSGA GSTIF totaled approximately $0.6 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, 2022, the weighted average maturity was 311 days for the State Treasury pool, 11 days for the SSGA STIF, and 16 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, 2022:

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

SSGA Fund	Fair Value June 30, 2022	Credit Rating[1]	Weighted Average Maturity[2]
Bloomberg Barclays Long Liability Index	$8,128,468	Aa3	14.79
1-10 Year U.S. TIPS Index	13,590	Aaa	4.81
U.S. Aggregate Bond Index	373,786	Aa2	8.65
U.S. Bond Index	404,763	Aa2	8.72
U.S. Short-Term Government/ Credit Bond Index	38,621	Aa2	2.02
U.S. TIPS Index Non Lending	1,145,662	Aaa	7.40
U.S. TIPS Index Security Lending	123,036	Aaa	7.40
Total	**$10,227,926**		

(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, 2022:

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

Security Type	Fair Value June 30, 2022	Percent of Securities Lending Collateral
No Effective Duration:		
Money Market Fund[1]	$13,247,788	92.90%
Short-Term Investment Fund[2]	1,007,284	7.10%
Total[3]	**$14,255,072**	**100.00%**

(1) Money Market Fund is invested in high quality, short-term securities with a considered weighted average maturity (to final maturity) of one day.
(2) Short-Term Investment Fund has a considered weighted average maturity (to final maturity) of one day.
(3) This figure does not include $48,598 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 $14,303,670 for fiduciary funds.

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 policy and policy-related procedures, establish both general and specific risk measures. We manage credit risk through our 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, 68 percent are investment-grade securities.

Investment-grade securities have low default probabilities and are rated at a minimum of Baa3 or BBB- by independent agencies (Moody's or Standard & Poor's, respectively). 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, 2022:

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

Moody's Quality Rating	Fair Value June 30, 2022	Fair Value as a Percent of Debt Security Investments
Aaa	$8,445,157	7.65%
Aa1	142,601	0.13%
Aa2	1,533,145	1.39%
Aa3	887,961	0.80%
A1	2,677,294	2.43%
A2	2,649,472	2.40%
A3	2,337,891	2.12%
Baa1	5,719,651	5.18%
Baa2	6,379,579	5.78%
Baa3	3,942,321	3.57%
Ba1	1,758,618	1.59%
Ba2	2,787,975	2.53%
Ba3	3,427,448	3.11%
B1	3,075,285	2.79%
B2	2,756,886	2.50%
B3	2,062,754	1.87%
Caa1	513,487	0.47%
Caa2	161,689	0.15%
Caa3	1,016	—%
Ca	449	—%
C	2,651	—%
NA[1]	31,083,165	28.17%
NR[2]	27,999,521	25.37%
Total	**$110,346,016**	**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 by credit agencies.

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]	$14,255,072	100.00%
Total[3]	**$14,255,072**	**100.00%**

(1) NR represents those securities that are not rated.
(2) This figure includes $1,007,284 invested in a money market fund and $13,247,788 invested in short-term investments.
(3) This figure does not include $48,598 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 $14,303,670 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 total non-USD currency exposures to the Board as part of its Trust Level Review. The proportion of international stocks within the public equity portfolio is roughly equal to their market capitalization weight in the public equity benchmark. For fixed income, 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.

CalPERS – International Investment Securities[1] – Fair Value at June 30, 2022 (U.S. Dollars in Thousands)

Currency	Cash	Equity	Real Assets	Private Equity	Forward Contracts	Total
Argentina Peso	$0	$0	$32,600	$0	$0	$32,600
Australian Dollar	6,102	2,552,760	1,177,146	—	23,073	3,759,081
Bahamian Dollar	—	—	10,500	—	—	10,500
Brazilian Real	1,344	704,201	545,206	—	(8,788)	1,241,963
British Pound	5,242	5,342,291	2,202,851	241,583	111,024	7,902,991
Canadian Dollar	192,028	4,634,923	81,515	163,455	(6,839)	5,065,082
Chilean Peso	5	—	43,563	—	(7,248)	36,320
Chinese Yuan Renminbi	4,436	813,083	1,173,536	—	(713)	1,990,342
Colombian Peso	—	—	—	—	(3,702)	(3,702)
Czech Koruna	2	—	—	—	3,719	3,721
Danish Krone	355	1,458,309	23,537	—	37,498	1,519,699
Egyptian Pound	—	—	—	—	(2,651)	(2,651)
Uae Emirati	—	—	7,200	—	(9)	7,191
Euro Currency	493,420	11,469,289	2,074,391	6,676,599	386,257	21,099,956
Guatemalan Quetzal	—	—	102,062	—	—	102,062
Hong Kong Dollar	665	7,863,709	4,791	—	201	7,869,366
Hungarian Forint	—	—	—	—	(11,891)	(11,891)
Indian Rupee	8,419	3,536,409	27,824	—	(4,177)	3,568,475
Indonesian Rupiah	333	445,290	—	—	299	445,922
Israeli Shekel	224	431,538	(24,500)	—	3,162	410,424
Japanese Yen	837,400	14,481,648	70,207	—	133,023	15,522,278
Kuwaiti Dinar	—	—	—	—	(2)	(2)
Malaysian Ringgit	236	515,824	22,262	—	—	538,322
Moroccan Dirham	—	—	—	—	—	—
New Taiwan Dollar	888	4,680,583	—	—	19,848	4,701,319
New Zealand Dollar	191	180,376	30,609	—	(9,191)	201,985
Pakistan Rupee	—	—	—	—	—	—
Peruvian Nuevo Sol	32	—	—	—	667	699
Philippine Peso	147	175,469	—	—	(4,101)	171,515
Polish Zloty	5	—	—	—	(21,153)	(21,148)
Qatari Riyal	129	421,371	—	—	—	421,500
Russian Ruble	459	—	87,578	—	35,374	123,411
Saudi Riyal	489	1,656,476	—	—	(5)	1,656,960
Singapore Dollar	1,190	1,000,356	132,796	—	1,189	1,135,531
South African Rand	270	499,542	—	—	(6,814)	492,998
South Korean Won	578	2,002,769	11,018	—	17,391	2,031,756
Swedish Krona	39,936	1,213,034	52,684	—	18,360	1,324,014
Swiss Franc	401	6,011,745	—	—	9,526	6,021,672
Thailand Baht	156	621,768	—	—	1,437	623,361
Turkish Lira	—	—	—	—	130	130
West African CAF franc	—	—	3,500	—	—	3,500
Total	**$1,595,623**	**$73,332,193**	**$7,898,097**	**$7,081,637**	**$714,594**	**$90,622,144**

(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) as securities lending agent 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 non-cash 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, 2022, the fair value of the securities on loan was approximately $36.5 billion. The securities on loan remain on CalPERS' Statement of Fiduciary Net Position in their respective investment categories. At June 30, 2022, cash collateral received totaling $14.3 billion is reported as securities lending obligation, and the fair value of reinvested cash collateral totaling $14.3 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.

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, 2022, the aggregate fair value of investment derivatives in an asset position subject to counterparty credit risk was approximately $1.4 billion. The aggregate amount of cash collateral held by CalPERS on behalf of over-the-counter derivatives was approximately $570.2 million.

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

Investment	Net Appreciation/ (Depreciation) in Fair Value for the Fiscal Year Ended June 30, 2022	Fair value at June 30, 2022		
Derivatives (by Type)	Amount	Classification	Amount	Notional
Fixed Income Futures Long	($2,511,864)	Investment Revenue	$106,656	$1,485,510,153
Fixed Income Futures Short	228,418	Investment Revenue	(138,628)	(191,123,906)
FX Forwards	1,042,457	Investment Revenue	743,230	30,254,429
Index Futures Long	(618,476)	Investment Revenue	(29,010)	4,106,651
Index Futures Short	1,268	Investment Revenue	568	(113,345)
Rights[3]	11,899	Investment Revenue	504	604
Total Return Swaps Bond	(108,224)	Investment Revenue	—	705,909
Total Return Swaps Equity	(219,248)	Investment Revenue	94,323	(6,444,669)
Warrants[3]	500	Investment Revenue	50	2,841
Total	**($2,173,270)**		**$777,693**	

(1) The information presented in this table is derived from CalPERS' June 30, 2022, 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, 2022	Under 1	1–5	6–10	10+
Total Return Swaps Equity	$94,323	$94,358	($35)	$0	$0
Total	**$94,323**	**$94,358**	**($35)**	**$0**	**$0**

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

Investment Type	Reference Rate	Fair Value at June 30, 2022	Notional
Total Return Bond Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0%	—	$89,739
Total Return Bond Swaps	Receive Variable 1-day, ON Fed Funds Rate, Pay Fixed 0%	—	616,170
Subtotal – Total Return Bond Swaps		**$0**	**$705,909**
TOTAL		**$0**	**$705,909**

CalPERS – Derivative Instruments Subject to Counterparty Credit Risk

Counterparty	Percentage of Net Exposure	Moody's Ratings
Goldman Sachs International	23.60%	A1
UBS AG	15.12%	Aa3
JP Morgan Chase Bank, N.A.	12.52%	Aa2
Citibank, N.A.	11.74%	Aa3
Societe Generale	6.09%	A1
Natwest Markets Plc	6.00%	A2
Morgan Stanley Capital Services, Inc.	4.02%	A1
Standard Chartered Bank	3.79%	A1
BNP Paribas, S.A.	3.09%	Aa3
Credit Suisse International	2.87%	A1
Wells Fargo Bank, N.A.	2.52%	A1
HSBC Bank USA	2.08%	Aa3
Bank of America, N.A.	2.01%	Aa2
State Street Bank and Trust Company	1.59%	Aa3
Deutsche Bank AG	1.47%	A2
Barclays Bank Plc Wholesale	0.58%	A1
Bank of New York	0.52%	A1
Commonwealth Bank of Australia Syndney	0.31%	Aa3
Bank of America International Ltd.	0.08%	A2
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, 2022, are reported in the Net Pension Liability/(Asset) table. 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	$113,794,594	$79,385,509	$34,409,085	69.8%
PERF C				
Public Agencies Cost-Sharing	49,526,338	37,975,521	11,550,817	76.7%
LRF				
State of California	89,659	102,624	(12,965)	114.5%
JRF				
State of California	2,528,973	48,886	2,480,087	1.9%
JRF II				
State of California	2,105,851	2,134,388	(28,537)	101.4%

The total pension liability for each defined benefit plan was determined by actuarial valuations as of June 30, 2021, which were rolled forward to June 30, 2022, 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	2.30%	2.30%	2.30%	2.30%	2.30%
Salary Increases	Varies by Entry Age and Service	Varies by Entry Age and Service	2.80%	2.80%	2.80%
Mortality Rate Table[1]	Derived using CalPERS membership data for all funds				
The above actuarial assumptions were based upon the following experience study periods:	2000-2019	2000-2019	2000-2019	2000-2019	2000-2019
Post-Retirement Benefit Increase	2.00% until PPPA[2] floor on purchasing power applies, 2.30% thereafter	Contract COLA up to 2.30% until PPPA[2] floor on purchasing power applies, 2.30% thereafter	2.30%	2.80%	2.30%
Long-term rate of return assumption on plan investments used in discounting liabilities:	6.90%	6.90%	4.85%	3.69%	6.15%

(1) The mortality table was developed based on CalPERS-specific data. The rates incorporate Generational Mortality to capture ongoing morality improvement using 80% of Scale MP 2020 published by the Society of Actuaries. For more details, please refer to the 2021 experience study report that can be found on the CalPERS website.
(2) Purchasing Power Protection Allowance (PPPA) is a benefit designed to restore the original purchasing power of CalPERS retirees to a predetermined limit.

In determining the long-term expected rate of return, CalPERS took into account long-term market return expectations as well as the expected pension fund cash flows. Projected returns for all asset classes are estimated and, combined with risk estimates, are used to project compound (geometric) returns over the long term. The discount rate used to discount liabilities was informed by the long-term projected portfolio return.

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

Asset Class	Assumed Asset Allocation	Real Return[1, 2]
Global Equity - Cap-weighted	30.00%	4.54%
Global Equity Non-Cap-weighted	12.00%	3.84%
Private Equity	13.00%	7.28%
Treasury	5.00%	0.27%
Mortgage-backed Securities	5.00%	0.50%
Investment Grade Corporates	10.00%	1.56%
High Yield	5.00%	2.27%
Emerging Market Debt	5.00%	2.48%
Private Debt	5.00%	3.57%
Real Assets	15.00%	3.21%
Leverage	(5.00%)	(0.59%)

(1) An expected price inflation of 2.30% used for this period.
(2) Figures are based on the 2021-22 Asset Liability Management study.

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

Asset Class[1]	Assumed Asset Allocation	Real Return[2,3]
Public Equity	18.00%	4.50%
Fixed Income	45.00%	1.40%
TIPS	20.00%	0.50%
Commodities	3.00%	1.10%
REITs	14.00%	3.70%

(1) In the Basic Financial Statements, Commodities and REITs are included in Public Equity; TIPS are included in Fixed Income.
(2) An expected inflation of 2.30% used for this period.
(3) Figures are based on the 2021-22 Asset Liability Management study.

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

Asset Class[1]	Assumed Asset Allocation	Real Return[2,3]
Public Equity	51.00%	4.50%
Fixed Income	21.00%	1.40%
TIPS	5.00%	0.50%
Commodities	3.00%	1.10%
REITs	20.00%	3.70%

(1) In the Basic Financial Statements, Commodities and REITs are included in Public Equity; TIPS are included in Fixed Income.
(2) An expected inflation of 2.30% used for this period.
(3) Figures are based on the 2021-22 Asset Liability Management study.

DISCOUNT RATE

PERF B, PERF C, LRF, and JRF II

The discount rates used to measure the total pension liability as of June 30, 2022, for the PERF B, PERF C, LRF, and JRF II were 6.90 percent, 6.90 percent, 4.85 percent, and 6.15 percent, respectively. These discount rates are equal to the long-term expected rate of return of the respective plan assets and are net of investment expense but not reduced 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, 2022, was 3.69 percent, which differs from the discount rate used as of June 30, 2021, of 1.92 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	$113,794,594	$79,385,509	$34,409,085	69.8%
PERF C				
Public Agencies Cost-Sharing	49,526,338	37,975,521	11,550,817	76.7%
LRF				
State of California	89,659	102,624	(12,965)	114.5%
JRF				
State of California	2,528,973	48,886	2,480,087	1.9%
JRF II				
State of California	2,105,851	2,134,388	(28,537)	101.4%

Sensitivity Analysis (Dollars in Thousands)

Discount Rate -1.00%

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	$129,091,175	$79,385,509	$49,705,666	61.5%
PERF C				
Public Agencies Cost-Sharing	56,327,657	37,975,521	18,352,136	67.4%
LRF				
State of California	100,672	102,624	(1,952)	101.9%
JRF				
State of California	2,768,156	48,886	2,719,270	1.8%
JRF II				
State of California	2,350,075	2,134,388	215,687	90.8%

Sensitivity Analysis (Dollars in Thousands)

Discount Rate +1.00%

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	$101,152,532	$79,385,509	$21,767,023	78.5%
PERF C				
Public Agencies Cost-Sharing	43,951,778	37,975,521	5,976,257	86.4%
LRF				
State of California	80,792	102,624	(21,832)	127.0%
JRF				
State of California	2,528,973	48,886	2,480,087	1.9%
JRF II				
State of California	1,902,980	2,134,388	(231,408)	112.2%

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, 2022, 72 employers had elected to participate in the fund. Of the 72 participating employers, 51 employers have contributed assets in the CEPPTF as of June 30, 2022. The CEPPTF is an Internal Revenue Code (IRC) Section 115 Trust Fund with the purpose 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 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 2021-22 employer contributions from participating employers were $36.5 million. There were no disbursements from the CEPPTF this fiscal year.

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, 2022, 598 employers had elected to participate in the fund. Of the 598 participating employers, 582 employers have contributed assets in the CERBTF as of June 30, 2022. The CERBTF is an Internal Revenue Code (IRC) Section 115 Trust Fund with the purpose 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, 2022, there were 509,711 active plan members, 325,855 inactive plan members currently receiving benefit payments, and 13,973 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 2021-22 actual OPEB employer contributions from participating employers representing 615 OPEB plans were $5.5 billion. In compliance with GASB 74, this amount includes the $2.34 billion in contributions made to the CERBTF, plus an additional $3.16 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 -14.0 percent for Fiscal Year 2021-22.

11. REPLACEMENT BENEFIT FUND (RBF)

The RBF was established as a custodial fund by Chapter 798 of the 1990 Statutes. Regulations implementing the Replacement Benefits Plan (RBP) were effective in 2001. The RBP provides benefits to participants 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 participants 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, 2022, there were 1,674 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, reconciling the submissions, and then submitting to the Internal Revenue Service. 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. Starting in 1987, the SSSA operated using the interest that was earned over time on the OASI. The OASI funds diminished, requiring additional funding to pay for the costs of administering the SSSA program. Starting July 1, 2019, CalPERS began charging participating agencies a fee to pay for these costs. For the Fiscal Year 2021-22, this Annual Maintenance Fee was suspended due to adequate funding from prior year assessments. CalPERS will continue to analyze current funding and expenses to determine future fee assessments.

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 up to December 31, 2021. Effective January 1, 2022, PERS Platinum replaced PERSCare and PERS Choice while PERS Gold replaced PERS Select health plans for the existing self-funded PPO plans with no changes to provider networks and the same benefit designs as PERSCare and PERS Select, respectively. Effective January 1, 2014, flex-funded plans, Anthem Blue Cross, Blue Shield of California, Health Net, Sharp, and UnitedHealthcare were added. Western Health Advantage was added effective January 1, 2018. 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 for allowable health claims while, effective January 1, 2019, the flex-funded plans retain no risk of loss when capitated and fee-for-service expenses are higher than agreed with the contractor. Members are not subject to a supplemental assessment in the event of deficiencies. Health insurance premiums 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 2021-22 the Board approved aggregate increases in member premiums to continue to provide health plan benefits.

Public agencies participating in the health plans are required to make monthly payments based on premiums established annually by CalPERS. Employers' share 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, 2022, 100 percent of the HCF's investments in fixed income 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, 2022, 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 $618.7 million is carried at its face amount, and no interest discount is assumed. The IBNR portion of $524 million represents an estimate for claims that have been incurred prior to June 30, 2022, but have not been reported to the HCF. The total of the estimated claims liabilities at the end of the Fiscal Year 2021-22 is $863.3 million. The year-end amount also includes $244.6 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, 2022, and June 30, 2021.

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

Year Ended June 30	2022	2021
Total Estimated Claims at Beginning of Fiscal Year	**$749,956**	**$738,158**
Total Incurred Claims and Claim Adjustment Expenses	4,176,212	3,649,951
Total Payments	(4,062,841)	(3,638,153)
Total Estimated Claims at End of Fiscal Year	**$863,327**	**$749,956**

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 premiums 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
- Active plan members

Amounts charged to employers toward the CRF administrative expenses are 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, 2022, was 0.25 percent. Administrative rates are reviewed annually and are adjusted, if needed, to cover budgeted administrative expenses.

As of June 30, 2022, there were 1,151 public agencies and schools participating in health insurance coverage under PEMHCA.

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

The LTCF began offering long-term care benefits in 1995 through the CalPERS Long-Term Care (LTC) Program. The LTC Program provides LTC coverage to enrolled participants under the Public Employees' Retirement Law (PERL), Chapter 15. Administered by a third-party administrator, Long Term Care Group, Inc. (LTCG), the self-insured LTC Program is a voluntary program, funded solely by participant-paid premiums and investment income.

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 through fiscal year 2020

As of June 30, 2022, there are 105,370 active participants in the LTC 1, LTC 2, LTC 3, and LTC 4 policy series, of which 6,438 are receiving benefits.

In June 2020, CalPERS suspended open enrollment on the LTC Program due to current uncertainty in the long-term care market until further notice. Currently, the LTC Program is not 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 4.75 percent, morbidity, lapse rates, mortality, and plan expenses. In Fiscal Year 2021-22, the actual investment returns were approximately $788.9 million lower than expected investment income due to unfavorable market conditions. Economic assumptions are evaluated periodically in accordance with Board policy. The last time the assumptions were updated was during the June 30, 2021 valuation. The estimated liability for future policy benefits for the June 30, 2022, Annual Comprehensive Financial Report was rolled forward from the June 30, 2021, actuarial valuation using standard actuarial techniques. The increase in the estimated liability for future policy benefit as of June 30, 2022, compared to June 30, 2021, is partially due to reversal of the settlement liability accrued in the prior year. The estimated liability for future policy benefit as of June 30, 2022 also reflects the updated cashflow projection and actuarial assumptions from the June 30, 2021, actuarial valuation.

The following schedule represents changes in the aggregate estimated claims liabilities and liabilities for future policy benefits for the fiscal years ended June 30, 2022, and June 30, 2021.

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

Year Ended June 30	2022	2021
Total Estimated Future Policy Liabilities at Beginning of Fiscal Year	**$2,051,292**	**$7,053,071**
Increase (Decrease) in Liability and Change in Estimate	618,579	(1,786,979)
Claim Payments	(318,550)	(314,800)
Change in Estimated Settlement Liability	2,899,100	(2,900,000)
Total Estimated Future Policy Liabilities at End of Fiscal Year	**$5,250,421**	**$2,051,292**

Total LTCF investments as of June 30, 2022, were approximately $4.9 billion. On June 30, 2022, the LTCF's investment portfolio consisted of approximately 60 percent, 15 percent, 11 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 2021-22, the annual premium was $297.4 million and the total benefits paid out were $319.1 million. Since the program's inception in 1995 through June 30, 2022, the total benefits paid were approximately $3.8 billion. In Fall 2021, LTC Program implemented the Board approved 52 percent premium rate increase for all four LTC policy series and offered premium increase mitigation options. The Board also approved a 25 percent premium rate increase for all four LTC policy series, which will be implemented in Fiscal Year 2022-23.

CalPERS agreed to a proposed settlement in the Long-Term Care Program class action lawsuit that was approved preliminarily in July 2021, but was terminated in April 2022 because of the high number of opt-outs. The parties are now back on course for a trial that is scheduled for May 2023.

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.

Wedding, et al. v. CalPERS (previously identified as *Sanchez, et al. v. CalPERS*) was filed in 2013. This class action challenges the propriety of CalPERS' decision to increase premiums by 85 percent on certain categories of its Long-Term Care (LTC) policyholders. Plaintiffs allege that the increase breached the relevant insurance contracts and seek to recover all allegedly excess premiums paid by effected policyholders since the increase was effectuated in 2014 and 2015, as well as interest and attorneys' fees. CalPERS denies that it breached the relevant insurance contracts and denies that plaintiffs are entitled to any relief on any cause of action.

In January 2016, the court granted plaintiffs' Motion for Class Certification over CalPERS' objection. The claims certified for class treatment were (1) the breach of contract claim; and (2) the breach of fiduciary duty claim, on the "duty of care" only. However, the court later granted CalPERS' motion for summary adjudication of the breach of fiduciary duty claim, leaving only the breach of contract claim certified for class treatment.

The only other defendants in the case—the actuarial firm that originally helped CalPERS establish the LTC program (Towers-Watson)—entered into a settlement agreement with plaintiffs that was approved by the court in January 2018.

In early June 2019, the first part of the case regarding the proper interpretation of the insurance contracts (the "Evidence of Coverage") at issue was tried to the court, sitting without a jury. The court held in favor of plaintiffs on the interpretation of the "Inflation-Protection" clauses in the Evidence of Coverage, and in favor of CalPERS on the premium adjustments permitted by the "Guaranteed Renewable" clauses. The court held in favor of CalPERS on its Cross-Claim that CalPERS can subject insureds with Inflation-Protection benefits to future rate increases, insofar as any such rate increases are driven by cost factors other than the inherent escalation of daily/monthly limits on Inflation-Protection benefits over time, and as long as these increases are spread over the entire risk pool and not selectively imposed to a greater-than-average degree on the Inflation-Protection insureds. The second part of the case was set for trial by jury on the issue of whether the subject 85 percent premium increase had, in fact, breached the contracts given the court's interpretation of them in the first part of the trial.

After several continuances to the trial date, the parties settled the case in July 2021. However, the Settlement was terminated in April 2022 because more than 30% of the Settlement Class opted out of the Settlement in order to retain their CalPERS LTC policies. The court has set a May 15, 2023 trial date.

Heinz, et al. v. CalPERS, Anthem et al. is a putative class action lawsuit filed against CalPERS and one of its insurance programs, Anthem, 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 first 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 the lawsuit. Plaintiff subsequently appealed the Superior Court's decision.

On April 19, 2021, the Court of Appeal issued its decision. The Court affirmed the trial court's order denying the Petition for Writ of Administrative Mandamus, but reversed the judgment dismissing the remaining causes of action, finding that the non-contractual causes of action were outside the scope of the issues raised in the administrative proceedings, were thus not barred by claim preclusion, and required further analysis of the equitable estoppel issue relevant to the statute of limitations tolling and Government Code claims presentation timing requirements.

Following remand, Plaintiff filed a Second Amended Complaint. Defendants demurred to the Second Amended Complaint on multiple grounds and moved to strike the class allegations. On April 27, 2022, the trial court sustained the demurrer with prejudice as to Plaintiff's causes of action for breach of fiduciary duty, statutory violations, and traditional writ and sustained the demurrer without prejudice as to Plaintiff's misrepresentation claim. The Court overruled the demurrer as to Plaintiff's remaining claim for violation of California's Unfair Competition Law and did not rule on the motion to strike.

On May 27, 2022, Plaintiff filed a Third Amended Complaint. Defendants plan to demur to the Third Amended Complaint and to again move to strike the class allegations. The case was recently assigned to a new judge who has set a hearing date on the demurrer/motion to strike of February 8, 2023 and has scheduled a status conference for September 27, 2022.

Liu et. al. v. CalPERS is a consolidated petition for writ of mandate and class action filed on September 19, 2019 in Los Angeles Superior Court. The Petitioners are two retirees of the Southern California Association of Governments ("SCAG"). The retirees allege that while employed by SCAG, they received payments that meet the regulatory definition of "Bonus," but that CalPERS determined that the payments could not be considered special compensation. The complaint further alleges a class of other retirees, from SCAG and other agencies as well, who have similarly had their bonuses rejected by CalPERS as an item of special compensation.

The dispute began on February 28, 2019 when one of the retirees filed an administrative appeal of CalPERS' determination. CalPERS had determined that the retiree had not received special compensation because the bonus SCAG paid to her was not for superior performance and was not available to others in the retiree's group or class. The Administrative Law Judge issued a proposed decision on May 9, 2019 affirming CalPERS' determination. CalPERS adopted the ALJ's proposed decision on June 19, 2019.

On September 19, 2019, the retiree petitioned for a writ of mandate under Code of Civil Procedure section 1094.5. After briefing and a hearing on the writ petition, the trial court entered on December 14, 2020 an order that the writ should be granted. The trial court found that the retiree's work performance was superior because she had received a performance rating of 3.45 on a five-point scale. The trial court also found that the retiree's bonus was available to others in the retiree's group or class, assuming one narrowly construed "group or class" to include only those employees already at the top of their pay schedules.

Subsequently, however, the trial court ruled that it could not issue the writ (which would permit an appeal) until the class claims were also adjudicated. The parties have since been conducting discovery on the propriety and scope of the alleged class claims. At the conclusion of the class discovery, the retirees will move for certification of a class. No deadline for the filing of the class certification motion has been set.

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, 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. 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 long-term 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.

In March 2022, most CalPERS team members returned to a hybrid in-office work schedule: at least three days a week in office, two days a week teleworking. Contact (call) center teams and desktop support have the option to work up to five days a week remotely. CalPERS closely follows federal, state, and county guidelines related to COVID-19 protocols and measures.

As of March 2022, CalPERS Board of Administration meetings returned to in-person meetings. Members of the public are allowed to attend and to provide public comment in person or by phone. CalPERS has transitioned the regular slate of stakeholder meetings to a hybrid format, with approximately one-quarter of stakeholders choosing to participate in-person, and the other three-quarters preferring to participate remotely.

CalPERS received $1.4 million from the Coronavirus Relief Fund per Section 11.90(c), Chapter 21, Statutes of 2021 in December 2021, to reimburse various funds for payroll costs incurred by departments for state employees redirected to COVID-19 contact tracing and vaccine coordination activities.

The U.S. House of Representatives on March 10, 2021, passed the Senate-amended H.R. 1319, the American Rescue Plan (ARP). The ARP provides $1.9 trillion in additional relief to respond to the novel coronavirus (COVID-19). This follows the enactment of nearly $4 trillion in COVID relief in 2020. President Joe Biden called for Congress to enact the ARP to provide relief for individuals and businesses struggling due to COVID-19, as well as to achieve other priorities of the Biden Administration and Congress. ARP includes provisions on aid to state and local governments, hard-hit industries and communities, tax changes affecting individuals and businesses, and other provisions. Although CalPERS received funds from the state for reimbursement of employees of the trust who worked on contract tracing, CalPERS has assessed the applicability of directly applying for relief 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 objectives of GASB Statement No. 99 *Omnibus 2022* are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees.

The primary objective of GASB Statement No. 100, *Accounting Changes and Error Corrections*, is to enhance accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. This Statement requires disclosure in notes to financial statements of descriptive information about accounting changes and error corrections, such as their nature. In addition, information about the quantitative effects on beginning balances of each accounting change and error correction should be disclosed by reporting unit in a tabular format to reconcile beginning balances as previously reported to beginning balances as restated. Furthermore, this Statement addresses how information that is affected by a change in accounting principle or error correction should be presented in required supplementary information (RSI) and supplementary information (SI). For periods that are earlier than those included in the basic financial statements, information presented in RSI or SI should be restated for error corrections, if practicable, but not for changes in accounting principles.

The objective of GASB Statement No. 101, *Compensated Absences*, is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. That objective is achieved by aligning the recognition and measurement guidance under a unified model and by amending certain previously required disclosures. This Statement requires that liabilities for compensated absences be recognized for (1) leave that has not been used and (2) leave that has been used but not yet paid in cash or settled through noncash means.

Implementation of all three pronouncements will occur in Fiscal Year 2022-23. CalPERS' staff have been and will continue to monitor and analyze if these statements will have a material impact on the future financial statements.

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FINANCIAL SECTION

Required Supplementary Information

Required Supplementary Information

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

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

	2022	2021	2020	2019	2018	2017
Discount Rate Assumption	**6.90%**	**7.15%**	**7.15%**	**7.15%**	**7.15%**	**7.15%**
Total Pension Liability:						
Service Cost	$2,485,322	$2,347,398	$2,302,877	$2,226,797	$2,172,696	$2,031,914
Interest	7,435,819	7,216,728	6,904,699	6,563,541	6,165,715	5,719,835
Changes of Assumptions	3,423,109	—	—	—	450,064	4,649,299
Differences Between Expected and Actual Experience	(1,108,386)	(63,915)	452,461	1,398,796	1,852,902	531,862
Benefit Payments, Including Refunds of Member Contributions	(5,298,758)	(4,932,395)	(4,671,357)	(4,347,426)	(4,053,119)	(3,724,910)
Net Change in Total Pension Liability	**$6,937,106**	**$4,567,816**	**$4,988,680**	**$5,841,708**	**$6,588,258**	**$9,208,000**
Total Pension Liability – Beginning	$106,857,488	$102,289,672	$97,300,992	$91,459,284	$84,871,026	$75,663,026
Total Pension Liability – Ending (a)	**$113,794,594**	**$106,857,488**	**$102,289,672**	**$97,300,992**	**$91,459,284**	**$84,871,026**
Plan Fiduciary Net Position:						
Contributions – Employer	$3,557,108	$2,972,220	$2,866,144	$2,527,726	$2,070,832	$1,783,736
Contributions – Member	1,104,241	1,019,154	1,047,983	1,014,070	952,979	897,438
Contributions – Nonemployer	—	—	904,000	—	—	—
Total Net Investment Income	(6,446,442)	15,928,499	3,398,535	4,212,090	5,095,064	6,211,781
Benefit Payments, Including Refunds of Member Contributions	(5,298,758)	(4,932,395)	(4,671,357)	(4,347,426)	(4,053,119)	(3,724,910)
Net Plan-to-Plan Resource Movement	3	—	164	304	2	(134)
Administrative Expenses	(53,699)	(71,018)	(95,614)	(46,159)	(92,448)	(82,489)
Net Change in Plan Fiduciary Net Position	**($7,137,547)**	**$14,916,460**	**$3,449,855**	**$3,360,605**	**$3,973,310**	**$5,085,422**
Plan Fiduciary Net Position – Beginning	$86,523,056	$71,606,596	$68,156,741	$64,796,136	$60,998,387	$55,912,965
Adjustments[2]	—	—	—	—	(175,561)	—
Total Adjusted Plan Fiduciary Net Position – Beginning	86,523,056	71,606,596	68,156,741	64,796,136	60,822,826	55,912,965
Plan Fiduciary Net Position – Ending (b)	79,385,509	86,523,056	71,606,596	68,156,741	64,796,136	60,998,387
Net Pension Liability (a) - (b)	**$34,409,085**	**$20,334,432**	**$30,683,076**	**$29,144,251**	**$26,663,148**	**$23,872,639**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	**69.8%**	**81.0%**	**70.0%**	**70.0%**	**70.8%**	**71.9%**
Covered Payroll	$14,767,213	$14,885,212	$14,447,159	$13,819,881	$13,252,995	$12,643,354
Net Pension Liability as a Percentage of Covered Payroll	**233.0%**	**136.6%**	**212.4%**	**210.9%**	**201.2%**	**188.8%**

(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 post-employment benefit obligations.

NOTES TO SCHEDULE

Change of Assumptions and Methods
In November 2021, the CalPERS Board of Administration adopted new investment portfolios as well as several changes to actuarial assumptions. For PERF B, these changes were implemented in the June 30, 2021 actuarial valuation for funding purposes. Included in these changes were assumptions for inflation, the discount rate, and administrative expenses, as well as demographic assumptions including changes to mortality rates. The inflation assumption was reduced from 2.50 percent to 2.30 percent, the administrative expense assumption was reduced from 0.15 percent to 0.10 percent, and the discount rate was reduced from 7.00 percent to 6.80 percent. As a result, for financial reporting purposes, the discount rate for the PERF C was lowered from 7.15 percent to 6.90 percent in Fiscal Year 2021-22.

In Fiscal Year 2020-21 there were no changes to actuarial assumptions or methods.

The CalPERS Board of Administration adopted a new amortization policy effective with the June 30, 2019, actuarial valuation. The policy shortened 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 Unfunded Accrued Liability (UAL) bases attributable to assumption changes, investment gains/losses, and non-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,

2016	2015	2014
7.65%	**7.65%**	**7.50%**
$1,716,677	$1,624,993	$1,576,667
5,441,918	5,152,519	4,820,116
—	(1,217,974)	—
400,103	1,119,011	—
(3,546,836)	(3,334,081)	(3,139,923)
$4,011,862	**$3,344,468**	**$3,256,860**
$71,651,164	$68,306,696	$65,049,836
$75,663,026	**$71,651,164**	**$68,306,696**
$1,434,632	$1,323,090	$1,203,071
851,133	773,580	744,437
—	—	—
297,514	1,272,365	8,625,601
(3,546,836)	(3,334,081)	(3,139,923)
10	(71,460)	—
(34,554)	(64,124)	(72,167)
($998,101)	**($100,630)**	**$7,361,019**
$56,911,066	$57,011,696	$49,650,677
—	—	—
56,911,066	57,011,696	49,650,677
55,912,965	56,911,066	57,011,696
$19,750,061	**$14,740,098**	**$11,295,000**
73.9%	**79.4%**	**83.5%**
$11,747,602	$10,964,872	$10,120,248
168.1%	**134.4%**	**111.6%**

valuation. This new system has refined and improved calculation methodology.

In December 2017, the CalPERS Board of Administration 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 7.00 percent, which was 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.

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

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

	2022	2021	2020	2019	2018	2017
Discount Rate Assumption	**6.90%**	**7.15%**	**7.15%**	**7.15%**	**7.15%**	**7.15%**
Total Pension Liability:						
Service Cost	$1,039,473	$947,349	$912,529	$878,707	$844,273	$820,583
Interest	3,239,025	3,123,532	2,954,008	2,798,484	2,629,157	2,506,761
Changes of Benefit Terms	4,481	1,390	900	1,283	668	2,119
Changes of Assumptions	1,606,551	—	—	—	(248,318)	2,122,413
Differences Between Expected and Actual Experience	(188,502)	615,793	453,273	705,149	313,467	(18,554)
Benefit Payments, Including Refunds of Member Contributions[2]	(2,349,632)	(2,216,053)	(2,044,232)	(1,902,025)	(1,755,740)	(1,630,602)
Net Change in Total Pension Liability	**$3,351,396**	**$2,472,011**	**$2,276,478**	**$2,481,598**	**$1,783,507**	**$3,802,720**
Total Pension Liability – Beginning	$46,174,942	$43,702,931	$41,426,453	$38,944,855	$37,161,348	$33,358,628
Adjustment to Beginning Amount	—	—	—	—	—	—
Total Adjusted Pension Liability – Beginning	**$46,174,942**	**$43,702,931**	**$41,426,453**	**$38,944,855**	**$37,161,348**	**$33,358,628**
Total Pension Liability – Ending (a)	**$49,526,338**	**$46,174,942**	**$43,702,931**	**$41,426,453**	**$38,944,855**	**$37,161,348**
Plan Fiduciary Net Position:						
Contributions – Employer[2]	$2,284,579	$1,921,032	$1,594,811	$1,333,559	$1,182,686	$980,359
Contributions – Member[2]	417,129	395,130	381,786	357,159	334,140	317,024
Total Net Investment Income[2]	(3,109,188)	7,523,678	1,565,953	1,935,939	2,308,558	2,774,321
Benefit Payments, Including Refunds of Member Contributions[2]	(2,349,632)	(2,210,327)	(2,044,232)	(1,902,025)	(1,755,740)	(1,630,602)
Net Plan-to-Plan Resource Movement[2]	(8,335)	348,384	188,629	167,308	116,550	134,513
Administrative Expenses	(25,686)	(33,744)	(43,860)	(21,115)	(41,980)	(37,052)
Net Change in Plan Fiduciary Net Position	**($2,791,133)**	**$7,944,153**	**$1,643,087**	**$1,870,825**	**$2,144,214**	**$2,538,563**
Plan Fiduciary Net Position – Beginning	$40,766,654	$32,822,501	$31,179,414	$29,308,589	$27,244,095	$24,705,532
Adjustments[3]	—	—	—	—	(79,720)	—
Total Adjusted Plan Fiduciary Net Position – Beginning	40,766,654	32,822,501	31,179,414	29,308,589	27,164,375	24,705,532
Plan Fiduciary Net Position – Ending (b)	37,975,521	40,766,654	32,822,501	31,179,414	29,308,589	27,244,095
Net Pension Liability (a) - (b)	**$11,550,817**	**$5,408,288**	**$10,880,430**	**$10,247,039**	**$9,636,266**	**$9,917,253**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	**76.7%**	**88.3%**	**75.1%**	**75.3%**	**75.3%**	**73.3%**
Covered Payroll	$4,428,659	$4,371,563	$4,155,772	$3,949,226	$3,793,609	$3,631,919
Net Pension Liability as a Percentage of Covered Payroll	**260.8%**	**123.7%**	**261.8%**	**259.5%**	**254.0%**	**273.1%**

(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) May not agree to the Basic Financial Statements in 2021 and 2020 as a result of adjustments made in both years.
(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
In November 2021, the CalPERS Board of Administration adopted new investment portfolios as well as several changes to actuarial assumptions. For PERF C, these changes were implemented in the June 30, 2021, actuarial valuations for funding purposes. Included in these changes were assumptions for inflation, the discount rate, and administrative expenses, as well as demographic assumptions including changes to mortality rates. The inflation assumption was reduced from 2.50 percent to 2.30 percent, the administrative expense assumption was reduced from 0.15 percent to 0.10 percent, and the discount rate was reduced from 7.00 percent to 6.80 percent. As a result, for financial reporting purposes, the discount rate for the PERF C was lowered from 7.15 percent to 6.90 percent in Fiscal Year 2021-22.

In Fiscal Year 2020-21, no changes were made to the actuarial assumptions in relation to financial reporting.

The CalPERS Board of Administration adopted a new amortization policy effective with the June 30, 2019, actuarial valuation. The 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.

2016	2015	2014
7.65%	**7.65%**	**7.50%**
$712,307	$698,416	$713,731
2,399,259	2,285,565	2,169,786
1,478	—	—
—	(543,686)	—
(6,333)	(5,678)	—
(1,519,301)	(1,423,756)	(1,335,871)
$1,587,410	**$1,010,861**	**$1,547,646**
$31,800,055	$30,789,194	$29,241,548
(28,837)	—	—
$31,771,218	**$30,789,194**	**$29,241,548**
$33,358,628	**$31,800,055**	**$30,789,194**
$882,991	$859,456	$747,694
300,135	278,529	291,772
127,043	548,097	3,770,935
(1,519,301)	(1,423,756)	(1,335,871)
22,621	(267,581)	—
(15,263)	(27,967)	(31,550)
($201,774)	**($33,222)**	**$3,442,980**
$24,907,306	$24,940,528	$21,497,548
—	—	—
24,907,306	24,940,528	21,497,548
24,705,532	24,907,306	24,940,528
$8,653,096	**$6,892,749**	**$5,848,666**
74.1%	**78.3%**	**81.0%**
$3,472,950	$3,356,312	$3,248,018
249.2%	**205.4%**	**180.1%**

In addition, the policy does not utilize a five-year ramp-up and ramp-down on UAL bases attributable to assumption changes, investment gains/losses, and non-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 was 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 – Nine-Year Review[1] (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017
Discount Rate Assumption	**4.85%**	**5.25%**	**5.25%**	**5.25%**	**5.25%**	**5.25%**
Total Pension Liability:						
Service Cost	$108	$101	$100	$268	$542	$639
Interest	4,299	4,749	4,885	4,871	4,987	5,291
Changes of Assumptions	1,024	—	—	—	(2,529)	7,857
Differences Between Expected and Actual Experience	(992)	(732)	2,320	(427)	(2,061)	(5,998)
Benefit Payments, Including Refunds of Member Contributions	(6,647)	(6,761)	(6,939)	(7,349)	(6,918)	(7,249)
Net Change in Total Pension Liability	**($2,208)**	**($2,643)**	**$366**	**($2,637)**	**($5,979)**	**$540**
Total Pension Liability – Beginning	$91,867	$94,510	$94,144	$96,781	$102,760	$102,220
Adjustment to Beginning Amount	—	—	—	—	—	—
Total Adjusted Pension Liability – Beginning	**$91,867**	**$94,510**	**$94,144**	**$96,781**	**$102,760**	**$102,220**
Total Pension Liability – Ending (a)	**$89,659**	**$91,867**	**$94,510**	**$94,144**	**$96,781**	**$102,760**
Plan Fiduciary Net Position:						
Contributions – Employer	$85	$92	$98	$250	$467	$516
Contributions – Member	23	21	22	91	82	94
Total Net Investment Income	(12,449)	15,098	7,013	7,860	5,486	5,048
Benefit Payments, Including Refunds of Member Contributions	(6,647)	(6,761)	(6,939)	(7,349)	(6,918)	(7,249)
Administrative Expenses	(436)	(450)	(550)	(324)	(671)	(575)
Net Change in Plan Fiduciary Net Position	**($19,424)**	**$8,000**	**($356)**	**$528**	**($1,554)**	**($2,166)**
Plan Fiduciary Net Position – Beginning	$122,048	$114,048	$114,404	$113,876	$116,884	$119,050
Adjustments[2]	—	—	—	—	(1,454)	—
Total Adjusted Plan Fiduciary Net Position – Beginning	122,048	114,048	114,404	113,876	115,430	119,050
Plan Fiduciary Net Position – Ending (b)	102,624	122,048	114,048	114,404	113,876	116,884
Net Pension Asset (a) - (b)	**($12,965)**	**($30,181)**	**($19,538)**	**($20,260)**	**($17,095)**	**($14,124)**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	**114.5%**	**132.9%**	**120.7%**	**121.5%**	**117.7%**	**113.7%**
Covered Payroll	$290	$267	$278	$655	$1,242	$1,360
Net Pension Asset as a Percentage of Covered Payroll	**(4,470.7%)**	**(11,303.7%)**	**(7,028.1%)**	**(3,093.1%)**	**(1,376.4%)**	**(1,038.5%)**

(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 April 2022, the CalPERS Board of Administration adopted new investment portfolios as well as several changes to actuarial assumptions. For the Legislators' Retirement Fund (LRF), these changes were implemented in the June 30, 2021, actuarial valuation for funding purposes. Included in these changes were assumptions for inflation, the discount rate, and administrative expenses, as well as demographic assumptions including changes to mortality rates. The inflation assumption was reduced from 2.50 percent to 2.30 percent, the administrative expense assumption was increased from 0.25 percent to 0.35 percent, and the discount rate was reduced from 5.00 percent to 4.50 percent. As a result, for financial reporting purposes, the discount rate for the LRF was lowered from 5.25 percent to 4.85 percent in Fiscal Year 2021-22.

In Fiscal Year 2020-21, there were no changes to the actuarial assumptions in relation to financial reporting. The CalPERS Board of Administration adopted a new amortization policy effective with the June 30, 2019, actuarial valuation. The new policy shortened 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 policy does not utilize a five-year ramp-up and ramp-down on UAL bases attributable to assumption changes, investment gains/losses, and non-investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019.

2016	2015	2014
6.00%	**6.00%**	**5.75%**
$608	$769	$732
5,978	6,427	6,465
—	(2,655)	—
(3,530)	(4,246)	—
(7,407)	(9,086)	(7,482)
($4,351)	**($8,791)**	**($285)**
$106,730	$115,521	$115,806
(159)	—	—
$106,571	**$115,521**	**$115,806**
$102,220	**$106,730**	**$115,521**
$549	$590	$565
97	105	113
4,545	(94)	15,372
(7,407)	(9,086)	(7,482)
(203)	(400)	(362)
($2,419)	**($8,885)**	**$8,206**
$121,469	$130,354	$122,148
—	—	—
121,469	130,354	122,148
119,050	121,469	130,354
($16,830)	**($14,739)**	**($14,833)**
116.5%	**113.8%**	**112.8%**
$1,313	$1,545	$1,470
(1,281.8%)	**(954.0%)**	**(1,009.0%)**

In Fiscal Year 2018-19, CalPERS implemented a new actuarial valuation software system for the June 30, 2018, valuation. This system 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 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 – Nine-Year Review[1] (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017
Discount Rate Assumption	**3.69%**	**1.92%**	**2.45%**	**3.13%**	**3.62%**	**3.56%**
Total Pension Liability:						
Service Cost	$10,345	$17,861	$17,026	$20,073	$19,131	$22,733
Interest	93,559	64,480	79,719	99,428	109,395	115,067
Changes of Assumptions	(598,096)	179,421	218,683	153,651	(20,879)	(107,670)
Differences Between Expected and Actual Experience	(92,633)	40,007	(41,794)	86,873	(121,259)	(366,200)
Benefit Payments, Including Refunds of Member Contributions	(210,491)	(210,951)	(213,233)	(221,954)	(207,823)	(200,440)
Net Change in Total Pension Liability	**($797,316)**	**$90,818**	**$60,401**	**$138,071**	**($221,435)**	**($536,510)**
Total Pension Liability – Beginning	$3,326,289	$3,235,471	$3,175,070	$3,036,999	$3,258,434	$3,794,944
Adjustment to Beginning Amount	—	—	—	—	—	—
Total Adjusted Pension Liability – Beginning	**$3,326,289**	**$3,235,471**	**$3,175,070**	**$3,036,999**	**$3,258,434**	**$3,794,944**
Total Pension Liability – Ending (a)	**$2,528,973**	**$3,326,289**	**$3,235,471**	**$3,175,070**	**$3,036,999**	**$3,258,434**
Plan Fiduciary Net Position:						
Contributions – Employer and General Fund[2]	$194,960	$225,824	$243,131	$195,903	$199,241	$204,475
Contributions – Member	1,956	2,146	2,843	2,679	3,062	3,398
Total Net Investment Income	2,499	2,625	3,087	3,942	3,378	2,819
Benefit Payments, Including Refunds of Member Contributions	(210,492)	(210,951)	(213,233)	(221,954)	(207,823)	(200,440)
Administrative Expenses	(1,677)	(1,731)	(2,270)	(10,032)	(2,106)	(1,771)
Net Change in Plan Fiduciary Net Position	**($12,754)**	**$17,913**	**$33,558**	**($29,462)**	**($4,248)**	**$8,481**
Plan Fiduciary Net Position – Beginning	$61,640	$43,727	$10,169	$39,631	$48,275	$39,794
Adjustments[3]	—	—	—	—	(4,396)	—
Total Adjusted Plan Fiduciary Net Position – Beginning	61,640	43,727	10,169	39,631	43,879	39,794
Plan Fiduciary Net Position – Ending (b)	48,886	61,640	43,727	10,169	39,631	48,275
Net Pension Liability (a) - (b)	**$2,480,087**	**$3,264,649**	**$3,191,744**	**$3,164,901**	**$2,997,368**	**$3,210,159**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	**1.9%**	**1.9%**	**1.4%**	**0.3%**	**1.3%**	**1.5%**
Covered Payroll	$20,916	$20,808	$22,875	$31,945	$35,507	$39,413
Net Pension Liability as a Percentage of Covered Payroll	**11,857.4%**	**15,689.4%**	**13,953.0%**	**9,907.3%**	**8,441.6%**	**8,144.9%**

(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 2021-22, the discount rate used to measure the total pension liability was 3.69 percent. The state funds the Judges' Retirement Fund (JRF) benefit obligations using the pay-as-you-go method. Member contributions plus state contributions are designed to cover only benefit payments and expenses each year. Under the pay-as-you-go method, the pension plan’s fiduciary net position was not projected to be sufficient to make projected future benefit payments of current active and inactive employees. Therefore, a discount rate of 3.69 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, 2022, was applied to all periods of projected benefit payments to measure the total pension liability. In November 2021 and April 2022, the CalPERS Board of Administration adopted several changes to actuarial assumptions. For the JRF, these changes were implemented in the June 30, 2021, actuarial valuation for funding purposes. Included in these changes were assumptions for inflation, mortality rates, and retirement rates. In addition, individual salary and overall payroll increase assumptions were increased from 2.75 percent to 2.8 percent. Retirement benefits are fully adjusted for increases in salaries for the active judges of the same court from which the member retired. Therefore, the Cost-of-Living Adjustment is increased to 2.8 percent.

In Fiscal Year 2020-21, the discount rate used to measure the total pension liability was 1.92 percent. There were no other changes to assumptions or methods in relation to financing reporting.

In Fiscal Year 2019-20, the discount rate used to measure the total pension liability was 2.45 percent. There were no

2016	2015	2014
2.85%	**3.82%**	**4.25%**
$29,314	$25,372	$27,581
107,515	127,074	140,256
384,306	167,036	—
(59,421)	57,568	—
(199,349)	(201,868)	(193,935)
$262,365	**$175,182**	**($26,098)**
$3,532,394	$3,357,212	$3,383,310
185	—	—
$3,532,579	**$3,357,212**	**$3,383,310**
$3,794,944	**$3,532,394**	**$3,357,212**
$192,287	$180,910	$191,148
3,559	3,877	4,724
2,762	2,286	2,583
(199,349)	(201,868)	(193,935)
(642)	(1,227)	(1,141)
($1,383)	**($16,022)**	**$3,379**
$41,177	$57,199	$53,820
—	—	—
41,177	57,199	53,820
39,794	41,177	57,199
$3,755,150	**$3,491,217**	**$3,300,013**
1.0%	**1.2%**	**1.7%**
$34,301	$41,378	$54,649
10,947.6%	**8,437.4%**	**6,038.6%**

other changes to assumptions or methods in relation to financing reporting.

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 there were 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 a 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 – Nine-Year Review[1] (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017
Discount Rate Assumption	**6.15%**	**6.65%**	**6.65%**	**6.65%**	**6.65%**	**6.65%**
Total Pension Liability:						
Service Cost	$115,808	$116,782	$114,486	$103,791	$95,843	$97,678
Interest	120,585	126,948	115,517	103,889	91,419	85,654
Changes of Assumptions	(59,394)	—	—	—	(41,763)	69,233
Differences Between Expected and Actual Experience	(67,751)	(10,975)	(2,797)	30,291	(26,876)	(26,382)
Benefit Payments, Including Refunds of Member Contributions	(66,739)	(61,994)	(34,547)	(36,204)	(31,795)	(22,406)
Net Change in Total Pension Liability	**$42,509**	**$170,761**	**$192,659**	**$201,767**	**$86,828**	**$203,777**
Total Pension Liability – Beginning	$2,063,342	$1,892,581	$1,699,922	$1,498,155	$1,411,327	$1,207,550
Adjustment to Beginning Amount	—	—	—	—	—	—
Total Adjusted Pension Liability – Beginning	**$2,063,342**	**$1,892,581**	**$1,699,922**	**$1,498,155**	**$1,411,327**	**$1,207,550**
Total Pension Liability – Ending (a)	**$2,105,851**	**$2,063,342**	**$1,892,581**	**$1,699,922**	**$1,498,155**	**$1,411,327**
Plan Fiduciary Net Position:						
Contributions – Employer and General Fund[2]	$92,773	$84,147	$91,147	$84,099	$79,699	$67,102
Contributions – Member	36,529	34,094	35,796	31,376	27,513	25,076
Total Net Investment Income	(324,362)	463,478	80,074	106,781	101,820	115,057
Benefit Payments, Including Refunds of Member Contributions	(66,739)	(61,994)	(34,547)	(36,204)	(31,795)	(22,406)
Administrative Expenses	(1,842)	(1,703)	(2,552)	(1,477)	(2,370)	(1,683)
Net Change in Plan Fiduciary Net Position	**($263,641)**	**$518,022**	**$169,918**	**$184,575**	**$174,867**	**$183,146**
Plan Fiduciary Net Position – Beginning	$2,398,029	$1,880,007	$1,710,089	$1,525,514	$1,356,099	$1,172,953
Adjustments[3]	—	—	—	—	(5,452)	—
Total Adjusted Plan Fiduciary Net Position – Beginning	2,398,029	1,880,007	1,710,089	1,525,514	1,350,647	1,172,953
Plan Fiduciary Net Position – Ending (b)	2,134,388	2,398,029	1,880,007	1,710,089	1,525,514	1,356,099
Net Pension Liability/(Asset) (a) - (b)	**($28,537)**	**($334,687)**	**$12,574**	**($10,167)**	**($27,359)**	**$55,228**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	**101.4%**	**116.2%**	**99.3%**	**100.6%**	**101.8%**	**96.1%**
Covered Payroll	$360,771	$361,108	$352,700	$318,827	$299,396	$291,097
Net Pension Liability/(Asset) as a Percentage of Covered Payroll	**(7.9%)**	**(92.7%)**	**3.6%**	**(3.2%)**	**(9.1%)**	**19.0%**

(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) 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 April 2022, the CalPERS Board of Administration adopted new investment portfolios as well as several changes to actuarial assumptions. For the Judges' Retirement Fund II (JRF II), these changes were implemented in the June 30, 2021, actuarial valuation for funding purposes. Included in these changes were assumptions for inflation and the discount rate, as well as demographic assumptions including changes to mortality rates. The inflation assumption was reduced from 2.50 percent to 2.30 percent and the discount rate was reduced from 6.50 percent to 6.00 percent. As a result, for financial reporting purposes, the discount rate for the JRF II was lowered from 6.65 percent to 6.15 percent in Fiscal Year 2021-22.

In Fiscal Year 2020-21, no changes have occurred to the actuarial assumptions in relation to financing reporting.

The CalPERS Board of Administration adopted a new amortization policy effective with the June 30, 2019, actuarial valuation. The new policy shortened 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 policy does not utilize a five-year ramp-up and ramp-down on UAL bases attributable to assumption changes, investment gains/losses, and non-investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019. In Fiscal

2016	2015	2014
7.15%	**7.15%**	**7.00%**
$86,635	$81,679	$78,670
78,412	70,389	61,044
—	(14,883)	—
(4,546)	(17,319)	—
(21,704)	(14,040)	(8,950)
$138,797	**$105,826**	**$130,764**
$1,073,788	$967,962	$837,198
(5,035)	—	—
$1,068,753	**$967,962**	**$837,198**
$1,207,550	**$1,073,788**	**$967,962**
$65,839	$65,629	$57,027
24,598	22,242	20,413
20,810	(2,401)	150,168
(21,704)	(14,040)	(8,950)
(732)	(1,127)	(785)
$88,811	**$70,303**	**$217,873**
$1,084,142	$1,013,839	$795,966
—	—	—
1,084,142	1,013,839	795,966
1,172,953	1,084,142	1,013,839
$34,597	**($10,354)**	**($45,877)**
97.1%	**101.0%**	**104.7%**
$280,879	$259,133	$249,248
12.3%	**(4.0%)**	**(18.4%)**

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 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 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

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

	2022	2021	2020	2019	2018	2017
PERF B:						
Actuarially Determined Contribution	$3,511,338	$2,969,799	$2,759,835	$2,501,770	$2,048,531	$1,767,813
Contributions in Relation to the Actuarially Determined Contribution	3,511,338	2,969,799	3,663,835	2,501,770	2,048,531	1,767,813
Contribution Excess	**$0**	**$0**	**$904,000**	**$0**	**$0**	**$0**
Covered Payroll	$14,767,213	$14,885,212	$14,447,159	$13,819,881	$13,252,995	$12,643,354
Contributions as a Percentage of Covered Payroll	23.8%	20.0%	25.4%	18.1%	15.5%	14.0%
PERF C:						
Actuarially Determined Contribution	$2,284,579	$1,921,032	$1,597,137	$1,333,559	$1,182,686	$858,954
Contributions in Relation to the Actuarially Determined Contribution[2]	3,154,849	2,504,112	1,971,737	1,586,007	1,418,316	956,558
Contribution Excess	**$870,270**	**$583,080**	**$374,600**	**$252,448**	**$235,630**	**$97,604**
Covered Payroll	$4,428,659	$4,371,563	$4,155,772	$3,949,226	$3,793,609	$3,631,919
Contributions as a Percentage of Covered Payroll	71.2%	57.3%	47.4%	40.2%	37.4%	26.3%
LRF:						
Actuarially Determined Contribution[3]	$85	$78	$98	$250	$20	$0
Contributions in Relation to the Actuarially Determined Contribution[4]	85	78	98	250	467	516
Contribution Excess	**$0**	**$0**	**$0**	**$0**	**$447**	**$516**
Covered Payroll	$290	$267	$278	$655	$1,242	$1,360
Contributions as a Percentage of Covered Payroll	29.3%	29.2%	35.3%	38.2%	37.6%	37.9%
JRF:						
Actuarially Determined Contribution[5]	$352,881	$366,446	$414,849	$415,110	$438,156	$448,636
Contributions in Relation to the Actuarially Determined Contribution[6]	194,960	225,824	243,131	195,903	199,241	204,475
Contribution Deficiency	**$157,921**	**$140,622**	**$171,718**	**$219,207**	**$238,915**	**$244,161**
Covered Payroll	$20,916	$20,808	$22,875	$31,945	$35,507	$39,413
Contributions as a Percentage of Covered Payroll	932.1%	1,085.3%	1,062.9%	613.3%	561.1%	518.8%
JRF II:						
Actuarially Determined Contribution	$91,887	$84,147	$91,147	$84,099	$79,699	$67,102
Contributions in Relation to the Actuarially Determined Contribution	92,773	84,147	91,147	84,099	79,699	67,102
Contribution Excess	**$886**	**$0**	**$0**	**$0**	**$0**	**$0**
Covered Payroll	$360,771	$361,108	$352,700	$318,827	$299,396	$291,097
Contributions as a Percentage of Covered Payroll	25.7%	23.3%	25.8%	26.4%	26.6%	23.1%

(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) Does not agree to Basic Financial Statements due to an adjustment in 2021.
(4) 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.
(5) The actuarially determined contributions 2016 and beyond are based on a 10-year amortization period, while the 2015 and 2014 actuarially determined contributions are based on a two-year amortization period.
(6) Contributions to the JRF are made on the pay-as-you-go basis.

2016	2015	2014
$1,421,289	$1,303,162	$1,201,125
1,421,289	1,303,162	1,201,125
$0	**$0**	**$0**
$11,747,602	$10,964,872	$10,120,248
12.1%	11.9%	11.8%
$789,103	$691,602	$732,142
881,767	691,602	732,142
$92,664	**$0**	**$0**
$3,472,950	$3,356,312	$3,248,018
25.4%	20.6%	22.5%
$141	$260	$33
549	590	565
$408	**$330**	**$532**
$1,313	$1,545	$1,470
41.8%	38.2%	38.4%
$463,073	$1,884,555	$1,569,630
192,287	180,910	191,148
$270,786	**$1,703,645**	**$1,378,482**
$34,301	$41,378	$49,287
560.6%	437.2%	387.8%
$65,839	$63,193	$55,538
65,839	63,193	55,538
$0	**$0**	**$0**
$280,879	$259,133	$249,248
23.4%	24.4%	22.3%

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

	2021-22	2020-21	2019-20	2018-19
PERF B				
Actuarial Cost Method	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
Amortization Method	Level Percentage of Payroll (pre-2019 bases), Level Dollar (2019 and later bases), and Direct Rate Smoothing	Level Percentage of Payroll (pre-2019 bases), Level Dollar (2019 and later bases), and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing
Remaining Amortization Periods¹	9-28 years	10-29 years	11-30 years	12-30 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value
Inflation	2.50%	2.50%	2.63%	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
Investment Rate of Return	7.00%	7.00%	7.25%	7.38%
PERF C				
Actuarial Cost Method	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
Amortization Method	Level Percentage of Payroll (pre-2019 bases), Level Dollar	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing
Remaining Amortization Periods¹	Differs by employer rate plan but no more than 29 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
Inflation	2.50%	2.50%	2.63%	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
Investment Rate of Return	7.00%	7.00%	7.25%	7.38%
LRF				
Actuarial Cost Method	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 Dollar and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing
Remaining Amortization Periods¹	N/A	N/A	N/A	30 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value
Inflation	2.50%	2.50%	2.50%	2.50%
Salary Increases	2.75%	2.75%	2.75%	2.75%
Investment Rate of Return	5.00%	5.00%	5.00%	5.00%
JRF				
Actuarial Cost Method	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
Remaining Amortization Periods	10 years	10 years	10 years	10 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value
Inflation	2.50%	2.50%	2.50%	2.50%
Salary Increases	2.75%	2.75%	2.75%	2.75%
Investment Rate of Return	3.00%	3.00%	3.00%	3.00%
JRF II				
Actuarial Cost Method	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
Amortization Method	Level Dollar	Level Dollar	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing
Remaining Amortization Periods¹	20 years	5 years	5-30 years	2-30 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value
Inflation	2.50%	2.50%	2.50%	2.50%
Salary Increases	2.75%	2.75%	2.75%	2.75%
Investment Rate of Return	6.50%	6.50%	6.50%	6.50%

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

	2017-18	2016-17	2015-16	2014-15	2013-14
PERF B					
	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
	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
	13-30 years	14-30 years	15-30 years	16-30 years	17-30 years
	Fair Value	Fair Value	Fair Value	Smoothing of Fair Value	Smoothing of Fair Value
	2.75%	2.75%	2.75%	2.75%	2.75%
	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
	7.50%	7.50%	7.50%	7.50%	7.50%
PERF C					
	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
	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
	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
	Fair Value	Fair Value	Fair Value	Smoothing of Fair Value	Smoothing of Fair Value
	2.75%	2.75%	2.75%	2.75%	2.75%
	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
	7.50%	7.50%	7.50%	7.50%	7.50%
LRF					
	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
	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
	30 years	63 years	29-30 years	30 years	30 years
	Fair Value	Fair Value	Fair Value	Smoothing of Fair Value	Smoothing of Fair Value
	2.75%	2.75%	2.75%	2.75%	2.75%
	3.00%	3.00%	3.00%	3.00%	3.00%
	5.00%	5.75%	5.75%	5.75%	5.75%
JRF					
	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
	Level Dollar	Level Dollar	Level Dollar	Level Dollar	Level Dollar
	10 years	10 years	10 years	2 years	2 years
	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
	2.75%	2.75%	2.75%	2.75%	2.75%
	3.00%	3.00%	3.00%	3.00%	3.00%
	3.25%	4.25%	4.25%	4.25%	4.25%
JRF II					
	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
	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
	20-30 years	30 years	30 years	16-30 years	17-30 years
	Fair Value	Fair Value	Fair Value	Smoothing of Fair Value	Smoothing of Fair Value
	2.75%	2.75%	2.75%	2.75%	2.75%
	3.00%	3.00%	3.00%	3.00%	3.00%
	6.50%	7.00%	7.00%	7.00%	7.00%

SCHEDULE OF INVESTMENT RETURNS

Annual Money-Weighted Rate of Return, Net of Investment Expense – Nine-Year Review[1]

Plan	2022 Rate of Return	2021 Rate of Return	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	(7.5%)	22.4%	5.0%	6.5%	8.4%	11.2%	0.5%	2.2%	17.7%
PERF B									
Schools Cost-Sharing	(7.5%)	22.4%	5.0%	6.5%	8.4%	11.2%	0.5%	2.2%	17.7%
PERF C									
Public Agency Cost-Sharing	(7.5%)	22.4%	5.0%	6.5%	8.4%	11.2%	0.5%	2.2%	17.7%
LRF	(10.3%)	13.4%	6.2%	7.0%	4.8%	4.3%	3.8%	(0.1%)	12.9%
JRF	0.3%	0.3%	2.3%	3.2%	1.9%	1.0%	0.5%	0.2%	0.1%
JRF II	(13.4%)	24.3%	4.1%	6.9%	7.4%	9.6%	1.9%	(0.2%)	18.3%
CERBTF[2]	(14.0%)	25.6%	4.0%	6.5%	7.3%	10.0%	1.6%	—%	—%
CEPPTF[3]	(13.9%)	14.4%	—%	—%	—%	—%	—%	—%	—%

(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.
(3) Information in this schedule is not available prior to 2021.

PUBLIC EMPLOYEES' HEALTH CARE FUND

Schedule of Claims Development Information (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
1) Net Earned Required Premium and Investment Revenues	$4,099,125	$3,949,155	$3,772,501	$3,751,406	$3,985,393	$3,829,095	$3,801,266	$3,642,206	$2,808,384	$1,948,531
2) Unallocated Expenses	$309,473	$304,990	$331,235	$299,053	$304,408	$312,924	$355,779	$371,916	$192,987	$105,154
3) Estimated Incurred Claims and Expenses, End of Policy Year	$4,227,754	$3,750,063	$3,569,208	$3,666,596	$3,576,081	$3,391,183	$3,424,147	$3,432,102	$2,748,821	$1,921,957
4) Paid (Cumulative) as of:										
End of Policy Year	$3,608,399	$3,267,719	$3,111,826	$3,244,896	$3,039,289	$3,061,085	$3,000,726	$3,378,857	$2,122,865	$1,640,709
One Year Later	—	3,714,863	3,475,051	3,620,210	3,380,649	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587
Two Years Later	—	—	3,482,349	3,627,419	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587
Three Years Later	—	—	—	3,627,419	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587
Four Years Later	—	—	—	—	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587
Five Years Later	—	—	—	—	—	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587
Six Years Later	—	—	—	—	—	—	3,406,016	3,802,277	2,678,906	1,796,587
Seven Years Later	—	—	—	—	—	—	—	3,802,277	2,678,906	1,796,587
Eight Years Later	—	—	—	—	—	—	—	—	2,678,906	1,796,587
Nine Years Later	—	—	—	—	—	—	—	—	—	1,796,587
5) Re-Estimated Incurred Claims Expenses:										
End of Policy Year	$4,227,754	$3,750,063	$3,569,208	$3,666,596	$3,576,081	$3,391,183	$3,424,147	$3,432,102	$2,748,821	$1,921,957
One Year Later	—	3,714,863	3,475,051	3,620,210	3,380,649	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587
Two Years Later	—	—	3,482,349	3,627,419	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587
Three Years Later	—	—	—	3,627,419	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587
Four Years Later	—	—	—	—	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587
Five Years Later	—	—	—	—	—	3,395,673	3,406,016	3,802,277	2,678,906	1,796,587
Six Years Later	—	—	—	—	—	—	3,406,016	3,802,277	2,678,906	1,796,587
Seven Years Later	—	—	—	—	—	—	—	3,802,277	2,678,906	1,796,587
Eight Years Later	—	—	—	—	—	—	—	—	2,678,906	1,796,587
Nine Years Later	—	—	—	—	—	—	—	—	—	1,796,587
6) Increase (Decrease) in Estimated Incurred Claims and Expenses From End of Policy Year	$—	($35,200)	($86,859)	($39,177)	($189,319)	$4,490	($18,131)	$370,175	($69,915)	($125,370)

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.

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FINANCIAL SECTION

Other Supplementary Information

ADMINISTRATIVE EXPENSES – ALL FUNDS (DOLLARS IN THOUSANDS)

	2022
PERSONAL SERVICES	
Salaries & Wages	$214,294
Employee Benefits	108,847
Accrued Pension & OPEB Expense	(109,103)
Total Personal Services	**$214,038**
CONSULTANT & PROFESSIONAL SERVICES	
State of California Agencies	$5,018
External Consultants	27,461
Retiree Benefit Trust Management Fees	90
Pension Prefunding Trust Management Fees	18
Deferred Compensation Management/Custody Fees	3,467
Health Plan Administrator Fees	269,422
Long-Term Care Administrator Fees	19,065
Total Consultant & Professional Services	**$324,541**
OPERATING EXPENSES & EQUIPMENT	
General Expense	$4,915
Software	5,534
Printing	382
Building	20,086
Postage	3,207
Communications	1,229
Data Processing Services	16,956
Travel	221
Training	501
Medical Examiners	1,511
Facilities Operation	3,085
Central Administrative Services	25,341
Administrative Hearings	1,353
Consolidated Data Center	262
CSUS Foundation - Students	211
Equipment	6,950
Total Operating Expenses & Equipment	**$91,744**
OTHER EXPENSES & ADJUSTMENTS	
Depreciation Expense	$17,198
Increase in Paid Absence Obligation	15,333
Amortization	6,169
Miscellaneous	3,162
Total Other Expenses & Adjustments	**$41,862**
TOTAL ADMINISTRATIVE EXPENSES — ALL FUNDS	**$672,185**

The total pension administration cost in Fiscal Year 2020-21 (most recent available) was $202 per active member and annuitant.

INVESTMENT EXPENSES – ALL FUNDS

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

	Fees
Equity Managers	
Arrowstreet Capital, LP	$18,265
Baillie Gifford Overseas, Ltd.	923
Hamilton Lane Advisors, LLC	1,073
Legato Capital Management Investments, LLC	2,655
Wellington Management Company, LLP	3,984
Total Equity Managers	**$26,900**
Fixed Income Managers	
Columbia Management Investment Advisers	$5,148
Nomura Corporate Research & Asset Mgt.	6,869
Total Fixed Income Managers	**$12,017**
Private Equity Managers[3, 4]	
57 Stars Global Opportunities Fund 2 (CalPERS), LLC	$1,019
57 Stars Global Opportunities Fund, LLC	263
Advent Global Technology II Limited Partnership	1,052
Advent International GPE IX Limited Partnership	8,039
Advent International GPE V-D, LP	65
Advent International GPE VI-A, LP	706
Advent International GPE VII-C, LP	2,339
Advent International GPE VIII-B Limited Partnership	5,535
Advent Latin America Private Equity Fund V-H, LP	579
AlpInvest Secondaries Fund (onshore) VII, LP	4,382
Apollo Investment Fund IX, LP	3,448
Apollo Investment Fund VIII, LP	1,198
Apollo Special Opportunities Managed Account, LP	638
Ares Corporate Opportunities Fund V, LP	1,886
Ares Corporate Opportunities Fund VI, LP	2,296
Arsenal Capital Partners Growth, LP	500
Arsenal Capital Partners VI, LP	750
ASF VIII B, LP	3,000
Asia Alternatives Capital Partners II, LP	46
BDC III C, LP	785
BDC IV D, LP	3,199
BE VI 'H', LP	4,908
Berkshire Fund X, LP	2,548
Beyond SPV I, LP	132
Birch Hill Equity Partners (US) IV, LP	355
Blackstone Capital Partners VI, LP	800
Blackstone Capital Partners VII, LP	3,899
Blackstone Capital Partners VIII, LP	8,250
Blackstone Core Equity Partners II, LP	2,436
Blackstone Tactical Opportunities Fund - C, LP	1,447
Blackstone Tactical Opportunities Fund (KG Co-Invest), LP	336
Blackstone Tactical Opportunities Fund II - C, LP	2,183
Blackstone Tactical Opportunities Fund III - C, LP	2,736
Blackstone Tactical Opportunities Fund III - C (Surge), LP	729
Bridgepoint Europe IV 'B', LP	124
Bridgepoint Europe IV 'D', LP	470
Bridgepoint Europe V	3,281
BRV Lotus Fund III, LP	6,263

	Fees
Butterfly Fund III, LP	$1,989
California Asia Investors, LP	100
California Emerging Ventures IV, LLC	259
California Mezzanine Investment Fund, LP	124
Capital Link Fund I, LLC	382
Capital Link Fund II, LLC	380
Carlyle Asia Partners III, LP	339
Carlyle Asia Partners V, LP	3,132
Carlyle Europe Partners III, LP	(29)
Carlyle Europe Partners V, S.C.Sp	3,628
Carlyle Japan Partners II, LP	(51)
Carlyle Partners V, LP	(77)
Carlyle Partners VI, LP	2,006
Carlyle Partners VII, LP	5,503
Carlyle Partners VIII, LP	2,334
Carlyle Strategic Partners II, LP	22
Carlyle Strategic Partners IV, LP	1,053
Carlyle U.S. Equity Opportunities II, LP	1,178
CDH Fund V, LP	1,756
Centerbridge Capital Partners III, LP	130
Cerberus CAL II Partners, LP	2,022
Cerberus CAL III Partners, LP	3,594
Cerberus CP Partners, LP	578
Cerberus Institutional Partners V, LP	134
Clayton, Dubilier & Rice Fund XI, LP	3,732
Clearlake Capital Partners III, LP	119
Clearlake Capital Partners IV, LP	163
Clearlake Capital Partners V, LP	269
Clearlake Opportunities Partners (P), LP	733
CVC Capital Partners Asia V, LP	2,700
CVC Capital Partners Strategic Opportunities Compounding Capital, LP	7,471
CVC Capital Partners VI, LP	4,172
CVC Capital Partners VII (A), LP	6,492
CVC Capital Partners VIII (A), LP	9,152
Dragoneer Opportunities Fund VI, LP	175
EMAlternatives Investments, LP	200
EQT IX (No.2) USD SCSp	11,718
Essex Woodlands Health Ventures Fund VIII, LP	127
EW Healthcare Partners Acquisition Fund, LP	228
First Reserve Fund XIII, LP	(2,059)
Francisco Partners Agility II, LP	504
Francisco Partners III, LP	310
Francisco Partners VI, LP	1,122
GCM Grosvenor DEM II, LP	801
GCM Grosvenor DEM III, LP	2,125
GCM Grosvenor DEM, LP	386
Genstar X Opportunities Fund I, LP	149
GPE IX Forescout Co-Investment, LP	66
GPE IX TKE Co-Investment, LP	12
Green Equity Investors V, LP	(1)
Green Equity Investors VIII, LP	(6,467)
GSO Capital Opportunities Fund II, LP	194

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

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

	Fees
GSO Capital Solutions Fund II, LP	$602
GSO Energy Partners-C II, LP	929
GSO Energy Partners-C, LP	585
H&F ARROW 1, LP	25
Hellman & Friedman Capital Partners IX, LP	2,006
Hellman & Friedman Capital Partners VII	109
Hellman & Friedman Capital Partners VIII, LP	2,975
Hellman & Friedman Capital Partners X, LP	7,418
HIG Europe Middle Market LBO Fund, LP	4,800
Insight Partners XI, LP	6,301
Insight Partners XII Buyout Annex Fund, LP	395
Insight Partners XII, LP	8,925
Insight Venture Partners Growth-Buyout Coinvestment Fund (B), LP	2,558
Insight Venture Partners IX, LP	1,483
Insight Venture Partners X, LP	3,867
Jade Equity Investors, LP	954
K5 Private Investors, LP	5,806
Karakoram Fund C, LP	132
Khosla Ventures III, LP	1,537
Khosla Ventures Seed, LP	525
KKR 2006 Fund, LP	433
KKR Asian Fund II, LP	2,286
KKR Asian Fund IV SCSp	3,107
KKR Asian Fund, LP	166
KKR European Fund II, LP	5
KKR European Fund III, LP	130
KKR European Fund V (USD) SCSp	3,011
KKR North America Fund XIII SCSp	3,644
KM Corporate Partners Fund II, LP	75
Lightspeed Venture Partners Select V, LP	500
Lightspeed Venture Partners XIV-A (Inception), LP	225
Lightspeed Venture Partners XIV-B (Ignite), LP	275
Lime Rock Partners V, LP	14
Lindsay Goldberg IV, LP	796
Lindsay Goldberg V, LP	4,193
Lion Capital Fund II, LP	(42)
LongRange Capital Fund I, LP	7,479
Madison Dearborn Capital Partners VIII, LP	5,861
New Mountain Partners VI, LP	5,781
Nordic Bear SCSp	476
Oaktree Latigo Investment Fund, LP	3,750
Oaktree Opportunities Fund VIIIb, LP	1,010
OHA Black Bear Fund, LP	1,944
Onex Partners IV, LP	1,481
Onex Partners V (B), LP	8,249
PAG Asia I, LP	311
PAG Asia III, LP	6,650
Palladium Equity Partners V, LP	956
Patria Brazilian Private Equity Fund V, LP	2,578
Permira Growth Opportunities I, LP 1	2,003
Permira Growth Opportunities II SCSp	1,484

	Fees
Permira V, LP	$2,118
Permira VI, LP 1	3,866
Permira VII, LP 1	7,973
Permira VIII-2 SCSp	1,828
PSG V, LP	1,242
Riverstone Global Energy and Power Fund V, LP	1,776
Riverstone Global Energy and Power Fund VI, LP	3,131
Riverstone/Carlyle Global Energy and Power Fund IV, LP	172
Riverstone/Carlyle Renewable & Alternative Energy Fund II, LP	88
Riverwood Capital Partners (Parallel - A), LP	158
SAIF Partners III, LP	292
SAIF Partners IV, LP	831
Samson Brunello 1, LP	11
Samson Hockey 1, LP	61
Sankaty Managed Account (CalPERS), LP	1,732
Sierra Partners, LP	16
Silver Lake Partners IV, LP	1,889
Silver Lake Partners V, LP	2,379
Silver Lake Partners VI, LP	6,890
Siris Partners III, LP	204
Siris Partners IV, LP	1,168
SL SPV-1, LP	381
SL SPV-2, LP	272
Springblue A, LP	1,150
Springblue B, LP	397
TA XIV-A, LP	1,003
Tailwind Capital Partners II, LP	478
Tailwind Capital Partners III, LP	863
TCV X, LP	3,500
TCV XI, LP	3,102
The Central Valley Fund II SBIC, LP	118
The Rise Fund (A), LP	695
Tiger Global Private Investment Partners XV, LP	720
TowerBrook Investors IV (Onshore), LP	2,568
Towerbrook Investors V (Onshore), LP	5,472
Towerbrook Structured Opportunities Fund (Onshore), LP	1,655
Towerbrook Structured Opportunities Fund II (Onshore), LP	1,907
TPG Asia VII (A), LP	4,198
TPG Growth IV, LP	652
TPG Growth V, LP	2,975
TPG Healthcare Partners, LP	1,275
TPG Partners VIII, LP	6,375
Trident IX, LP	4,321
Trident VI	1,273
Trident VII, LP	2,583
Trident VIII, LP	3,778
Triton Fund IV, LP	944
Triton Fund V, LP	3,768
Valor Equity Partners IV, LP	1,179
VIP IV, LP	5,538
Vista Equity Partners Fund VII-Z, LP	5,950
WCAS XIII, LP	6,152

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

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

	Fees
WCAS XIV, LP	$1,080
Wellspring Capital Partners V, LP	271
Welsh, Carson, Anderson & Stowe XII, LP	2,230
Whitney Global Partners, LP	14
Wigmore Street (BDC III), LP	1
Wigmore Street BDC IV Co-Investment No.1, LP	12
Wigmore Street Co-investment No.1, LP	1
Wigmore Street VI Co-Investment No.1, LP	174
Total Private Equity Managers	**$395,314**
Private Debt Managers	
Antares Credit Opportunities CA, LLC - Series 1	($265)
Ares Capital Europe V (D) Levered	3,917
Ares European Credit Investments VII (CP), LP	77
Ares Senior Direct Lending Fund (Delaware) II, LP	2,246
Blackstone Real Estate Debt Strategies IV-C, LP	9,295
Oaktree Gilead Investment Fund, LP - Series A	2,009
OHA CA Customized Credit Fund, LP - OHA Senior Private Lending Fund (CA 3)	94
OHA CA Customized Credit Fund, LP - OHA Senior Private Lending Fund (CA 5)	94
PIMCO DISCO Onshore Fund III, LP	568
Sixth Street Fundamental Strategies Partners (A), LP	635
Sixth Street TAO Partners (B), LP (f.k.a.TSSP Adjacent Opportunities Partners (B), LP)	3,510
West Street Co-Investment Partners (C), LP	147
West Street Strategic Solutions Fund I, LP	3,759
Total Private Debt Managers	**26,086**
Real Asset Managers	
Alinda Infrastructure Fund II, LP	$75
ARA China Long Term Hold	7,219
Archmore International Infrastructure Fund II (B), LP	353
Archmore International Infrastructure Fund II (C), LP	750
Blackstone BioMed Life Science Real Estate, LP	4,963
Blackstone Property Partners Europe, LP	8,562
CalEast Solstice - Base	(9,325)
CalEast Solstice - DT Land	(324)
CalEast Solstice - DT Other	(1,852)
CalEast Solstice, LLC	35,220
CalWest CalPERS GIP	80
Canyon Catalyst Fund II, LLC	1,247
CCF II Industrial	543
CCF III Industrial	1,104
CCF III, LLC	1,069
CCP 2020	1,277
CIM Fund III, LP	4,005
CIM Infrastructure Fund, LP	2,798
DigitalBridge Partners II, LP	6,506
DW Life Sciences Partners, LLC	276
FSP - Base	26,868
FSP - DT 2012 and Beyond	2,035
GIP Aquarius Fund, SCSp	1,750
Global Infrastructure Partners II, LP (GIP II)	1,995

	Fees
Global Infrastructure Partners IV-A/B, LP	$5,778
Golden Reef Infrastructure Trust	7,138
Gotham Office Realty Partnership	1,142
GRI - Base	18,593
GRI - DT 2012 and Beyond	133
Harbert Gulf Pacific Power, LLC (HGPP)	5,818
Harbert Infrastructure Fund VI, LP	1,000
Harbert Power Fund V, LP (HPF V)	574
HC Green Development Fund, LP	405
HC LTH, LLC	5,134
IIF Hedged, LP	3,364
IMI - Base	22,802
IMP - Base	31,976
IMP - DT 2012 and Beyond	1,388
IMP - ICMI	3,678
IMP Abaca	545
IMP Fairmont Residential Owner, LLC	386
Institutional Logistics Partners, LLC	8,022
KC 2011, LLC	1,712
Land Management Company Resmark	1,413
Lincoln Timber, LP	3,044
North Haven Infrastructure Partners II, LP	1,417
ORA Multifamily Investments I, LLC	147
ORA Residential Investments I, LP	15,608
Pacific Multifamily Investors, LLC	8,108
PMI Tactical	816
Sacramento Venture Hines Base	447
Sacramento Venture Hines DT	434
Stockbridge Hollywood Park Co-Investors, LP	321
Stockbridge Real Estate Fund II -B, LP	34
Stonepeak Infrastructure Fund IV, LP	5,112
Strategic Property Fund Asia SCSp	1,428
Sylvanus, LLC	1,938
TechCore 2019	8,867
TechCore, LLC	2,385
Tower Bridge Infrastructure Partners, LP	5,748
Total Real Asset Managers	**$274,049**
Other Investment Management Fees	
Brookside Capital Partners Fund, LP	$1
Federated Redwood Trade Finance Fund, LP	26
State Street Global Advisors Trust	7,427
Total Other Investment Management Fees	**$7,454**
Total Management Fees	**$741,820**

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

Performance Fees[5] (Dollars in Thousands)

	Fees
Equity Managers	
Baillie Gifford Overseas, Ltd.	$12,426
Total Equity Managers	**$12,426**
Real Asset Managers	
Blackstone BioMed Life Science Real Estate, LP	$19,961
Blackstone Property Partners Europe, LP	19,916
Canyon Catalyst Fund II, LLC	7,367
Canyon Johnson Urban Fund III	(2)
CCF II Industrial	2,548
CCF III Industrial	7,562
CCF III, LLC	16
CIM Infrastructure Fund, LP	(11,948)
DigitalBridge Partners II, LP	24
FSP - Base	17,733
FSP - DT 2012 and Beyond	(3,272)
GIP Aquarius Fund, SCSp	11,284
Global Infrastructure Partners II, LP (GIP II)	11,316
Gotham Office Realty Partnership	123
GRI - Base	12,124
Harbert Gulf Pacific Power, LLC (HGPP)	9,641
Harbert Infrastructure Fund VI, LP	244
Harbert Power Fund V, LP (HPF V)	761
IMI - Base	29,947
IMP - DT 2012 and Beyond	330
IMP - ICMI	2,963
IMP Abaca	547
IMP DT 2020	1,866
IMP Fairmont Residential Owner, LLC	369
Institutional Logistics Partners, LLC	11,687
Land Management Company Resmark	2,269
ORA Multifamily Investments I, LLC	359
ORA Residential Investments I, LP	(7,733)
Pacific Multifamily Investors, LLC	2,704
PMI Tactical	6,017
Stonepeak Infrastructure Fund IV, LP	2,323
TechCore 2019	2,217
TechCore, LLC	13,217
Whitney Ranch Resmark	1,624
Total Real Asset Managers	**$176,104**
Other Investment Managers	
Brookside Capital Partners Fund, LP	$35
Total Other Investment Managers	**$35**
Total Performance Fees	**$188,565**
Total Management and Performance Fees	**$930,385**

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

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

	Fees
Advisory Fees	
Goldman Sachs Asset Management, LP	$91
Legato Capital Management Investments, LLC	1,750
Principal Life Insurance Company	816
TOBAM SAS	53
Total Advisory Fees	**$2,710**
Appraisal Fees	
Situs AMC Holdings Corporation	$9,071
Total Appraisal Fees	**$9,071**
Auditor Fees	
Conrad, LLP	$130
KPM & Associates, LLP	75
Total Auditor Fees	**$205**
Company Expense	
Federated Redwood Trade Finance Fund, LP	$137
Legato Capital Management Investments, LLC	122
LEIA GEM Investment, LLC	7
PIMCO DISCO Fund III Onshore Feeder, LP	(187)
Strategic Investment Group, LLC	19
Total Company Expense	**$98**
Fund Administration Fees	
State Street Bank and Trust Company	$3,644
Total Fund Administration Fees	**$3,644**
Investment Consultant Fees	
Bard Consulting, LLC	($26)
Callan, LLC	1,312
D2 Alternative Investments Limited	18
Eigen 10 Advisors, LLC	45
HHS Technology Group, LLC	216
Lenox Park Solutions, Inc.	125
Loop Capital Financial Consulting	43
Mercer Investments, LLC	383
MSys International Inc.	199
Nxtis, Inc.	241
Pacific Community Ventures, Inc.	130
Performance Technology Partners, LLC	(8)
PJT Partners, LP	11
Propoint Technology, Inc.	2,273
Pyramid Technical Consultants, Inc.	321
RCLCO Fund Advisors, LLC	205
Real Estate Fiduciary Services, LLC	(14)
SPS Consulting Services, LLC	242
SRI InfoTech, Inc.	239
Steer Davies & Gleave Limited	197
Technology Crest Corporation	190
The Spaulding Group	90
Trinity Technology Group, Inc.	52

	Fees
Wellington Management Company, LLP	$31
Total Investment Consultant Fees	**$6,515**
Legal Fees	
Berman Tabacco	$31
Cox, Castle & Nicholson, LLP	71
DLA Piper, LLP	851
Downey Brand, LLP	17
Foster Pepper, PLLC	240
Hogan Lovells, US LLP	235
K & L Gates, LLP	355
Katten Muchin Rosenman, LLP	10
Lowenstein Sandler, LLP	167
Morgan, Lewis & Bockius, LLP	290
Norton Rose Fulbright US, LLP	357
Nossaman, LLP	4
Orrick Herrington & Sutcliffe, LLP	9
Pillsbury Winthrop Shaw Pittman, LLP	443
Reed Smith, LLP	—
Seward & Kissel, LLP	1
Tabacco Lavallee Heffelfinger Seaver	32
Wellington Gregory, LLP	7
Total Legal Fees	**$3,120**
Master Custodian Fees	
State Street Bank and Trust Company	$10,065
Total Master Custodian Fees	**$10,065**
Tax Advisory Fees	
Ernst & Young, LLP	$625
Total Tax Advisory Fees	**$625**
Technology Expenses	
A.M. Best Company, Inc.	$4
Ablegov, Inc	—
Acadiasoft, Inc.	29
Acuity Technical Solutions, LLC	29
Altus Group US, Inc.	340
Axioma, Inc.	367
Barra, LLC	2,340
BCA Research	274
Black Knight Technologies, LLC	9
BlackRock Financial Management, Inc.	12,576
Bloomberg Index Services Limited	239
Bloomberg LP dba Bloomberg SEF, LLC	3,549
Broadridge Investor Communications	(2)
Cambridge Associates, LLC	18
Carahsoft Technology Corp.	703
CB Information Services, Inc.	61
CDP North America, Inc.	15
CEM Benchmarking, Inc.	75
Charles River Systems, Inc.	2,611
Clarity Solutions Group, LLC	90

INVESTMENT EXPENSES – ALL FUNDS (CONTINUED)

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

	Fees
Convergence, Inc.	$25
Copyright Clearance Center, Inc	52
Cornerstone Macro, LLC	140
CoStar Realty Information, Inc.	186
Creditsights	100
DTCC ITP, LLC	109
eFront Financial Solutions, Inc.	1,573
Empirical Research Partners, LLC	505
Equilar, Inc.	33
Eurasia Group	134
Euromoney Trading Limited	20
eVestment Alliance	40
Factset Research Systems, Inc.	2,808
Fitch Solutions, Inc.	541
Fixed Income Clearing Corporation	16
Frank Russell Company	36
FTSE	805
Gartner, Inc.	337
Gavekal USA, Inc.	46
Glass Lewis & Co., LLC	423
Global Investor Collaboration Services, LLC	6
Green Street Topco, LLC	165
Haver Analytics, Inc.	133
ICE Benchmark Administration Limited	16
Ice Data Derivatives UK, Limited	20
IHS Global, Inc	21
Insight Public Sector, Inc.	3
Institutional Shareholder Services, Inc.	142
Intercontinental Exchange Holdings, Inc.	—
Intex Solutions, Inc.	251
Investment Property Databank	74
IPC, Systems, Inc.	245
J.P. Morgan Securities, LLC	6
Kyriba Corporation	30
London Stock Exchange PLC	48
Markit Group Limited	20
Markit Indices GmbH	32
Markit North America, Inc.	56
Microsoft Services	3
Moody's Analytics, Inc.	796
Mountain View Risk & Analytics	13
Mrb Research Partners, Inc.	100
MRI Software, LLC	185
MSCI, Inc.	2,297
MUFG Capital Analytics, LLC	5,829
Mythics, Inc.	1
NYSE Market, Inc.	12
Option Research & Technology Services, LLC	(42)
Options Price Reporting Authority	1
Ortec Finance BV	170
Oxford Economics USA, Inc.	157
PGM Global, Inc	4
PremiaLab HK Limited	8
Preqin Limited	$57
Radianz Americas, Inc.	(20)
Real Capital Analytics, Inc.	105
Refinitiv US, LLC	165
RIMES Technologies Corporation	317
RiskVal Financial Solutions, LLC	62
Ryedale Europe Limited	730
S & P Global Market Intelligence, LLC	1,273
S&P Dow Jones Indices, LLC	64
SWIFT	6
Solutions Simplified	131
State Street Bank and Trust Company	3,067
StepStone Group, LP	266
STOXX Ltd.	17
The Burgiss Group, LLC	186
The Depository Trust & Clearing Corp	(4)
The Mathworks, Inc.	83
The Statestore, Inc.	6
The Yield Book, Inc.	321
Tradeweb, LLC	164
Trend Macrolytics, LLC	17
TRGRP, Inc.	194
TriOptima AB	31
TSX, Inc.	41
Wellington Management Company, LLP	59
Wood Mackenzie, Inc.	239
Workato Inc.	60
Yardeni Research, Inc.	19
Total Technology Expenses	**$49,714**
Internal Investment Personnel and Administrative Expenses	
Internal Investment Personnel and Administrative Expenses	$104,148
Total Internal Investment Personnel and Administrative Expenses	**$104,148**
Miscellaneous Investment Expense Fees	
Miscellaneous Investment Expense Fees	($356)
Transaction Fees	227,793
Total Miscellaneous Investment Expense Fees	**$227,437**
Total Other Investment Fees and Expenses	**$417,352**
Total Investment Expenses - All Funds	**$1,347,737**

(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, review 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)

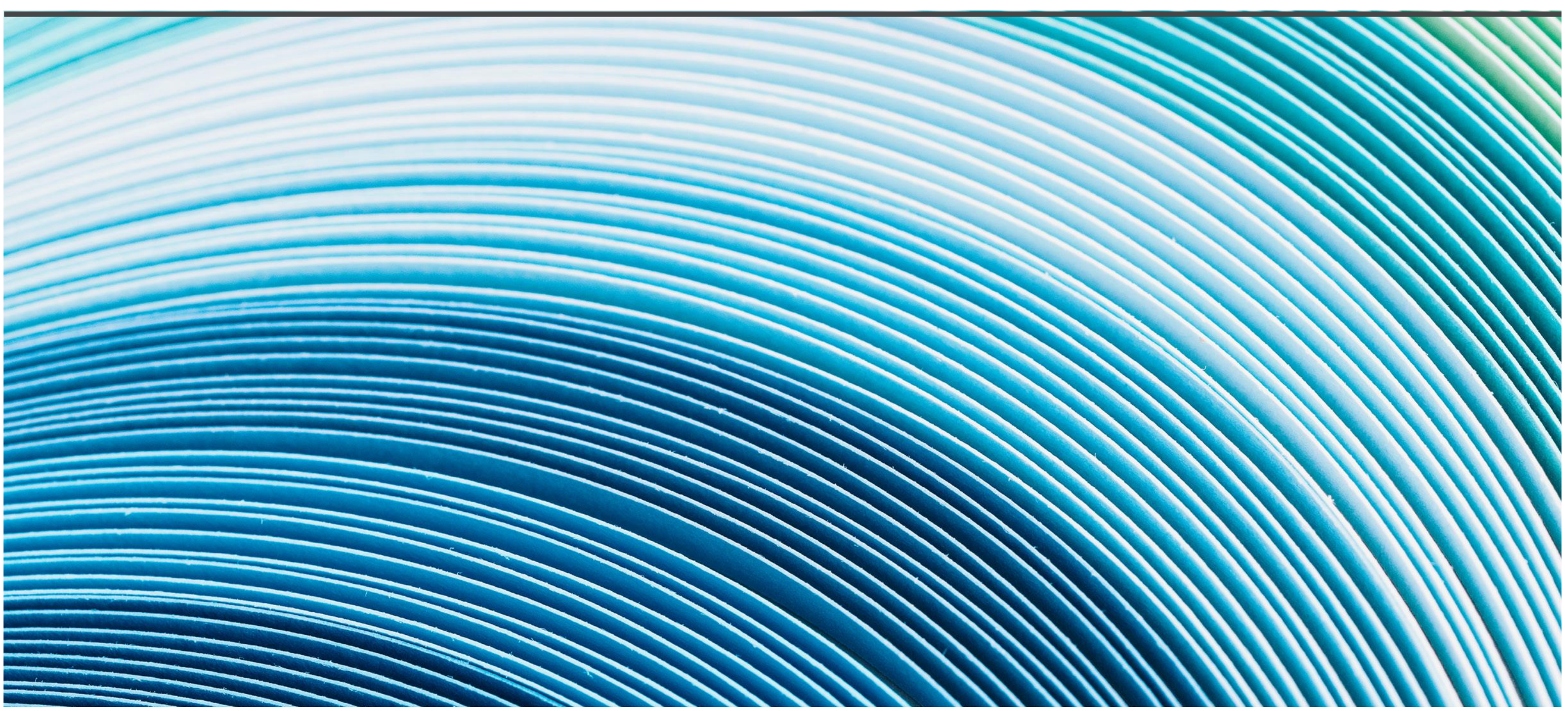
Individual or Firm	Fees	Nature of Services
34 Strong, Inc.	$73	Talent Management and Employee Development
Advanced Systems Group, LLC	40	Production Equipment Maintenance Services
Agility Software Solutions, LLC	101	Application Development, Information Technology Service Management, Infrastructure, and Personal Productivity Services
AgreeYa Solutions, Inc.	137	Information Technology, Consulting and Support Services
American Unit, Inc.	173	Information Technology, Consulting and Support Services
Anthem Blue Cross	130,179	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Aon Consulting, Inc.	70	Consulting for Salary Surveys, Executive Compensation Recommendations and Advice for the Compensation Program
BDO USA, LLP	2,650	Auditor Services
Belmonte Enterprises, LLC	228	Application Development
Berman Tabacco	80	Succession and Workforce Planning
Blue Shield of California	49,383	Medical Claims Administration, Account management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
BM Associates, Inc.	307	Network Architecture Services
Buck Global, LLC	400	Actuarial Services
Capio Group	927	Application Development
CogentTec, LLC	247	Consulting Services for myCalPERS Support
Cook Brown, LLP	53	Legal Services
Cooperative Personnel Services	21	Organizational and Leadership Development
Cornerstone Fitness, Inc.	195	Employee Training and Development
Covid Clinic, Inc.	755	On-Site Mobile COVID-19 Testing
Delegata Corporation	171	Application Development
Department of Finance	37	Auditing and Evaluation
Department of Human Resources	83	Legal Services, Selection Services Online System Costs, Administrative Fees
Department of Justice	203	Legal and Paralegal Services, External Investigative Services
Dore Partnership, LLP	745	Executive Search and Advisory
Downey Brand, LLP	129	Legal Counsel
Durie Tangri, LLP	558	Legal Services
Eaton Interpreting Services, Inc.	31	Interpreting Services
EFL Associates	91	Executive Search and Advisory
Elite Tech Solutions	198	Actuarial Valuation Systems Support
Elynview Corporation	191	Data Base Administration, Systems Analysis, Design, Implementation, Maintenance and Support
Employment Development Department	408	Print and Mailing of 1099R
Equanim Technologies	286	Business Process Re-engineering, Project Management Services, Technical Writing
Fair Political Practices Commission	299	Assessment Services
First Data Merchant Services Corporation	131	Banking Services
Funston Advisory Services, LLC	72	Board Governance Services
Gabriel, Roeder, Smith & Co.	258	Professional Actuarial Consulting
Global Governance Advisors, LLC	257	Board Compensation Consultant
Government Operations Agency	354	Operations and Strategic Business Planning
Health Care Cost Institute	100	Health and Long-Term Care Benefits Research
Health Net of California	13,305	Medical Claims administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Health Services Advisory Group, Inc.	645	Health Care Survey Services
Integrity Voting Systems (IVS)	(120)	Board Election Services
J&K Court Reporting, LLC	52	Legal Services
JLynn Consulting, Inc.	444	Information Services
K & H Printers-Lithographers, Inc.	3,495	Board Election Services
K&L Gates, LLP	395	Legal Services
KearnFord Application Systems Design	261	Business Transformation/Transition, Information Services, Release Management/Quality Assurance/ Configuration Management
King & Spalding, LLP	48	Legal Services
Kong Consulting, Inc.	561	Systems Analysis, Design, Implementation, Maintenance and Support

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

Individual or Firm	Fees	Nature of Services
Korn Ferry (US)	$40	Executive Search and Advisory
Law Office of Chirag Shah	320	Advice and Representation to the Board on Procedural and Substantive Legal Issues
Long Term Care Group, Inc.	18,578	Billing, Banking, Claims Administration, Care Advisory, Enrollment, Customer and Specialist, Reporting, Data Feed Services, IT Services, Marketing Consultant, Third-Party Member Record Keeper
Mellon Bank	347	Banking Services
Mercer Health and Benefits, LLC	398	Health Care and Actuarial Consulting
Michael Scales Consulting, LLC	213	Application Development
Milliman, Inc.	3,396	Project Management Services
Mulkey Consulting, LLC	224	Health Care Training Academy
National Association Corporate Directors	65	Board Evaluations
Northeast Retirement Services	108	Third-Party Member Record Keeper
Office of State Publishing	137	Print Services, 1099R Production
Oliver Wyman Actuarial Consulting, Inc.	275	Long Term Care Program Valuation and Actuarial Services
Olson Remcho, LLP	97	Election Services
OptumRx	16,460	Pharmacy Claims Administration, Account Management, Eligibility, Retail and Other Reporting Services
Orrick Herrington & Sutcliffe, LLP	576	Legal Services
Pasanna Consulting Group, LLC	1,480	Application Development, Data Base Administration, IT Architecture, Systems Analysis, Design, Implementation, Maintenance and Support
Pension Benefit Information, LLC	182	Death Audit Service
Peraton State & Local, Inc.	186	Information Technology, Consulting and Support Services
QualApps, Inc.	603	Application Development, IT Architecture
Randle Communications, LLC	300	Media Training, Writing, Editorial, Marketing, and Crisis Communication Services
Recon Distribution, Inc.	69	Exhibition Management
Reed Smith, LLP	92	Legal Services
Regents of the University of CA, Davis	125	Health Services Study and Research
RS3 Consulting	258	Information Services, Application Development
RSC Insurance Brokerage, Inc.	375	Actuarial Consulting Services
Runyon Saltzman, Inc.	34	Writing, Editorial and Marketing Services
Sard Verbinnen & Co, LLC	300	Communication Consulting Services
Sharp Health Plan	8,314	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Sophus Consulting	174	Legal Services
State Controller's Office	5,912	Account Management, Information Technology, Other Post Employment Benefits, General Administrative Services, and Premium Remittance Services
State Personnel Board	113	Compliance Review, Audit, Processing of Appeals and Complaints
Steptoe & Johnson, LLP	283	Legal Services
T5 Consulting, Inc.	628	Application Development, Information Services, IT Architecture
The Regents of the University of California	180	Organizational and Leadership Development
Toppan Merrill USA, Inc.	293	Printing of Open Enrollment Materials and Dissemination
Trinity Technology Group, Inc.	237	Application Development, Business Intelligence and Reporting, Information Services
UnitedHealthCare	43,598	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Vantage Consulting Group, Inc.	146	Application Development
Voya	3,467	Third-Party Member Record Keeper
Wavetec North America, Inc.	46	Implementing Cloud-Based Queue Management System
Wellington Gregory, LLP	36	Legal Service on Tax and Employee Benefits Law Issues
West Advanced Technologies, Inc.	337	Information Technology, Systems Analysis, Design, Implementation, Consulting and Support Services
Western Health Advantage	5,599	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Various	233	
Total Consultant and Professional Services Expenses	**$324,541**	

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

INVESTMENT SECTION



CHIEF INVESTMENT OFFICER'S LETTER

November 18, 2022

On behalf of the CalPERS Investment Office, I would like to report that for the one-year period ending on June 30, 2022, the CalPERS Public Employees' Retirement Fund (PERF) earned a time-weighted net rate of return of -6.1 percent this fiscal year, with the ending fair value of investments at $444 billion.

Volatile global financial markets, geopolitical instability, domestic interest rate hikes, and inflation all had an impact on public market returns. Investments in global public stocks returned -13.1 percent, while fixed income investments returned -14.5 percent. Public market investments make up roughly 79 percent of the CalPERS fund. This is a unique moment in the financial markets, with a deviation seen from some investing fundamentals. For instance, our traditional diversification strategies were less effective than expected, as we saw both public equity and fixed income assets fall in tandem.

Despite not reaching our 6.8 percent expected rate of return in this challenging year, we were able to outperform our total fund benchmark by 90 basis points and provide strong returns from our private market asset classes. Investments in private equity and real assets sectors returned 21.3 percent and 24.1 percent, respectively. These are bright spots that we can build on as we increase our exposure to private market assets, which are projected to outperform public markets over the long term. CalPERS claims compliance with the Global Investment Performance Standards (GIPS)[1].

As the new Chief Investment Officer of CalPERS since February 2022, I am committed to meeting our expected rate of return and building a resilient investment portfolio. During my first 90 days, I refreshed the Investment Office Governance framework, set new strategic initiatives that align with the Investment Office's Strategic Objectives, and introduced innovation as a focus surrounding our four pillars of portfolio, processes, people and performance. We are committed to successfully implementing the CalPERS Board approved Strategic Asset Allocation and look forward to enhancing our organizational structure and internal capabilities to meet our expected rate of return.

While these actions will help build the long-term success of the fund, we also completed the Asset Liability Management (ALM) process and made important strategic changes to our asset allocation in November 2021. The ALM process is nearly a yearlong comprehensive review of the fund's investment portfolios and actuarial liabilities. After the Board examined the different investment portfolios and their potential impact to the fund, they ultimately selected an asset allocation with an expected volatility of 12.1 percent, held the expected 6.8 percent discount rate, and added 5 percent leverage to increase diversification. The reduction in the discount rate was triggered automatically in July 2021 through the Funding Risk Mitigation Policy. This new asset allocation will set a course for our investment portfolio over the next four years.

To continue to improve our investment returns, our team was very active in engaging companies we invest in. Significant progress was made to enhance the analysis of executive compensation, increase accountability, and improve board diversity. We voted against 48 percent of executive compensation proposals for poor pay-for-performance alignment, and 78 percent of companies have added at least one diverse director to their boards since July 2017. Additionally, for the first time in 2022, we considered specific climate-related criteria to help inform director votes at all CA100+ companies. This is a new policy to hold directors accountable on climate change just as we do with diversity and executive compensation. As a result, CalPERS voted against 95 directors at 26 CA100+ companies.

On the environmental, social, and governance (ESG) front, we made great strides with the establishment of the new ESG Data Convergence Project (EDCP) in 2021. The EDCP is focused on establishing a common set of ESG metrics to track underlying ESG performance across private equity portfolios. Over time, the EDCP seeks to build a critical mass of standardized, longitudinal ESG data to enable participants to track the evolution of these metrics across their underlying portfolio companies. The board's leadership and prioritization of ESG provided the foundation for this project. With this support, we sought to engage ESG within private equity in a way that could be impactful not only for CalPERS, but for the broader private equity industry.

While this fiscal year brought a unique set of challenges and opportunities, we will continue to build on our long-term investment strategy with a focus on innovation, governance, execution and accountability. Our vision in the Investment Office is to work as one team with a mission to generate returns that pay pension benefits to our members over their lifetime.

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

Nicole Musicco
Chief Investment Officer

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[1] GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein. Asset Owner reports are made available to the CalPERS Board and public at the first Investment Committee meeting following fiscal year end. https://www.calpers.ca.gov/page/about/board/board-meetings

INVESTMENT PERFORMANCE – PUBLIC EMPLOYEES' RETIREMENT FUND (PERF)

Summary of Investments – PERF – As of June 30, 2022 (Dollars in Thousands)

Category	Book Value	Fair Value	% of Investments at Fair Value
Short-Term Investments	$16,405,507	$16,347,263	4%
Public Equity	158,964,774	190,419,760	43%
Fixed Income	123,877,711	110,346,016	25%
Real Assets	45,696,994	70,674,894	16%
Private Equity	46,280,066	49,945,935	11%
Private Debt	5,954,078	6,291,082	1%
TOTAL INVESTMENT VALUE	**$397,179,130**	**$444,024,950**	**100%**

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

Category	1-Year Return	3-Year Return	5-Year Return	10-Year Return	Benchmark/Peer Universe	1-Year Return	3-Year Return	5-Year Return	10-Year Return
Total Fund	**(6.1%)**	**6.0%**	**6.7%**	**7.7%**	Total Fund Policy Benchmark[1]	(7.0%)	5.7%	6.6%	7.6%
					Trust Universe Comparison Service (TUCS) Public Fund Median	(10.7%)	4.6%	5.7%	7.1%
					Wilshire Large Fund Universe Median	(4.7%)	7.5%	7.5%	8.5%
Public Equity[4]	(13.1%)	6.0%	7.1%	9.4%	CalPERS Custom Public Equity Benchmark[2]	(13.2%)	5.8%	7.1%	9.2%
Private Equity[5]	21.3%	18.3%	15.7%	13.5%	Custom FTSE All World, All Cap Equity +150bps, Quarter Lag	8.3%	15.8%	13.9%	13.8%
Income[4]	(14.5%)	(1.3%)	1.1%	2.3%	CalPERS Custom Global Fixed Income Benchmark[3]	(14.5%)	(1.6%)	0.8%	1.6%
Real Assets[5]	24.1%	10.0%	8.3%	9.2%	MSCI/PREA U.S. ACOE Quarterly Property Fund Index (Unfrozen)	27.1%	10.2%	8.8%	9.5%
Total Fund									
Opportunistic	8.4%	—%	—%	—%	Absolute 7.0%	7.0%	—%	—%	—%
Low Liquidity Enhanced Return	(1.2%)	1.3%	2.1%	—%	LIBOR 1 Month Rate	0.3%	0.5%	0.8%	—%
Financing & Liquidity									
Trust level Financing Liquidity[6]	0.3%	0.7%	1.2%	0.8%	30-Day Treasury Bill	0.1%	0.5%	1.0%	0.8%

(1) The Asset Allocation Policy Index return equals the return for each asset class benchmark, weighted at the historical target asset allocations.
(2) The current benchmark is 70% Custom FTSE Global Benchmark and 30% MSCI ACWI Select Factor Weighted Index.
(3) The current benchmark is 36% Custom Bloomberg Long Government, 53% Custom Bloomberg Long Spread, and 11% Custom Bloomberg High Yield.
(4) Public Equity and Income includes exposure from derivatives and repo borrowing used for trust level leverage and liquidity.
(5) Private assets reflect valuations as of March 31, 2022, and are cash adjusted through June 30, 2022.
(6) Liquidity reflects net asset value of the Liquidity Segment. Trust Level Financing reflects derivatives financing and repo borrowing in trust level Synthetic Cap Weighted and Synthetic Treasury portfolios.

PUBLIC EMPLOYEES' RETIREMENT FUND (CONTINUED)

Asset Allocation – PERF

Asset Class	Current Allocation	Current Policy Target Weight (as of 6/30/2022)	Prior Policy Target Weight (as of 6/30/2021)
Public Equity[1]	**44.4%**	**50.0%**	**50.0%**
Private Equity	**12.0%**	**8.0%**	**8.0%**
Income[1]	**26.7%**	**28.0%**	**28.0%**
Real Assets	**15.8%**	**13.0%**	**13.0%**
Total Fund[2]	**4.2%**	**—%**	**—%**
Opportunistic	1.4%	—%	—%
Low Liquidity Enhanced Return	2.6%	—%	—%
Other	0.2%	—%	—%
Financing & Liquidity[3]	**(3.3%)**	**1.0%**	**1.0%**
Trust Level Financing	(5.6%)	—%	—%
Liquidity	2.3%	1.0%	1.0%
TOTAL FUND[2]	**100.0%**	**100.0%**	**100.0%**

(1) Public Equity and Income includes exposure from derivatives and repo borrowing used for trust level leverage and liquidity.
(2) Subtotal and totals may not sum due to rounding.
(3) Trust Level Financing reflects derivatives financing and repo borrowing in Trust Level Synthetic Cap Weighted and Synthetic Treasury portfolios. Liquidity reflects net asset value of the Liquidity Segment.

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

California Investments	Fair Value	Cost
Public Equity[1]	$23,021,694	$16,641,457
Global Fixed Income[2]	6,977,637	7,847,436
Real Assets[3]	19,153,568	11,213,220
Private Equity[3]	3,742,801	2,187,122
Private Debt[3]	853,499	841,952
TOTAL CALIFORNIA INVESTMENTS	**$53,749,199**	**$38,731,187**

(1) Includes listed public equities corporate bonds.
(2) Fixed Income also includes a portion of MBS & ABS, which have significant geographical exposure to CA, and MHLP.
(3) Real Assets, Private Equity, and Private Debt are as of March 31, 2022.

PUBLIC EMPLOYEES' RETIREMENT FUND (CONTINUED)

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

Rank	Security Name	Shares	Fair Value
1	Microsoft Corporation	17,545,546	$4,506,223
2	Apple Incorporated	30,277,460	4,139,534
3	Johnson & Johnson	11,499,419	2,041,262
4	Amazon.com Incorporated	18,859,881	2,003,108
5	PepsiCo Incorporated	9,454,693	1,575,719
6	Alphabet Incorporated Class A	683,968	1,490,544
7	Berkshire Hathaway Incorporated Class B	5,405,195	1,475,726
8	Alphabet Incorporated Class C	646,223	1,413,581
9	Verizon Communications Incorporated	27,594,655	1,400,429
10	Roche Holding AG Genusscheine	4,102,151	1,364,956

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

Rank	Bond	Interest Rate	Maturity Date	Par Value	Fair Value
1	United States Treasury	2.250%	2/15/2052	$1,357,300	$1,117,015
2	United States Treasury	2.875%	5/15/2052	1,068,400	1,008,970
3	United States Treasury	2.875%	5/15/2032	988,000	977,039
4	United States Treasury	2.250%	5/15/2041	1,131,610	943,833
5	United States Treasury	3.250%	5/15/2042	894,800	873,409
6	United States Treasury	2.375%	2/15/2042	948,600	804,235
7	United States Treasury	1.875%	2/15/2041	1,008,400	790,806
8	United States Treasury	0.875%	11/15/2030	912,000	769,928
9	United States Treasury	1.875%	2/15/2051	969,400	727,201
10	United States Treasury	2.000%	11/15/2041	892,400	708,621

A complete list of portfolio holdings is available upon request.

Schedule of Commissions & Fees (Dollars in Thousands)

Broker	Number of Shares Traded	Base Commission & Fees Amount
ABN Amro Clearing Bank N.V.	3,698,263	$30
Banque Saudi Fransi	1,130,474	24
Barclays Capital	16,190,479	45
Barclays Capital Inc./LE	23,804,983	151
Bernstein Autonomous, LLP	25,219,291	52
BMO Capital Markets	7,125,105	90
BNP Paribas Securities Services	4,318,505	17
Bank of America Securities, Inc.	31,455,403	1,197
Bradesco S.A CTVM	14,004,030	26
Broadcort Capital Corporation	25,041,605	205
BTIG, LLC	18,703,747	181
Capital Institutional Services, Inc.	8,927,783	89
Citigroup Global Market Korea Secs., Ltd.	222,547	14
Citigroup Global Markets Europe AG	4,196,773	38
Citigroup Global Markets India	8,133,428	50
Citigroup Global Markets Taiwan	19,526,000	23
Citigroup Global Markets, Inc.	542,183,070	2,381
Citigroup Global Markets, Inc. Salomon Brothers	81,409	127
Citigroup Global Markets, Ltd.	16,018,301	93
CLSA (UK), Ltd.	740,376	21
CLSA Australia Pty., Ltd.	46,396,464	27
CLSA Singapore Pte., Ltd.	275,620,136	331
Cowen and Company, LLC	4,189,379	64
Cowen Execution Services, LLC	8,497,182	155
Credit Lyonnais Securities (Asia)	740,018,930	230
Credit Suisse First Boston	81,935,020	94
Credit Suisse First Boston (Europe)	28,782	8
Credit Suisse First Boston SA CTVM	13,264,464	17
Credit Suisse International	22,593,033	162
Credit Suisse Securities (Europe), Ltd.	21,416,683	72
Credit Suisse Securities (USA), LLC	1,082,544,560	759
Credit Suisse Securities India Pte., Ltd.	16,909,145	89
Daiwa Securities SB Capital Markets	2,234,800	14
Davy Stockbrokers	408,431	18
Exane S.A.	9,299,789	53
Financial Brokerage Group	647,791	12
Goldman Sachs and Company, LLC	590,861,603	722
Goldman Sachs Do Brasil Corretora	12,052,918	24
Goldman Sachs International	34,598,867	415
Guzman and Company	19,101,808	111
HSBC Bank Middle East	5,000,000	34
HSBC Bank, PLC	748,346,457	202
HSBC Brokerage (USA), Inc.	4,958,649	69
HSBC Securities (USA), Inc.	996,946,721	770
HSBC Securities India Holdings	12,159,730	61
Hyundai Securities Co., Ltd.	2,575,998	13
ICICI Brokerage Services, Ltd.	3,308,920	9
Instinet	17,477,274	131
Instinet Australia Clearing Services Private, Ltd.	12,770,681	31
Instinet Europe, Ltd.	199,259	26
Instinet Pacific, Ltd.	310,846,140	168

Broker	Number of Shares Traded	Base Commission & Fees Amount
Instinet U.K., Ltd.	106,339,867	$561
Instinet, LLC	2,428,499	25
ITG Australia, Ltd.	34,417,899	76
ITG Canada	851,100	11
Jefferies Hong Kong, Ltd.	65,317,740	17
Jefferies International, Ltd.	41,139,951	51
Jefferies, LLC	52,722,607	267
Joh Berenberg Gossler and Company, KG	5,921,224	31
Jones Trading Institutional Services, LLC	14,297,297	146
JP Morgan India Private, Ltd.	17,426,657	27
JP Morgan Securities Asia Pacific, Ltd.	146,383,876	68
JP Morgan Securities Australia, Ltd.	558,481	16
JP Morgan Securities, Inc.	5,865,541	16
JP Morgan Securities, LLC	41,689,498	171
JP Morgan Securities, Ltd.	43,864,816	708
JP Morgan Securities, PLC	126,567,622	524
Liquidnet, Inc.	26,160,964	102
Loop Capital Markets	4,705,152	47
Macquarie Bank, Ltd.	15,598,532	69
Macquarie Capital (Europe), Ltd.	41,699,863	236
Macquarie Capital Securities	1,443,867,813	778
Macquarie Securities (India) Private, Inc.	44,698,334	62
Macquarie Securities (Korea), Ltd.	1,344,039	84
Merrill Lynch International	177,592,307	522
Morgan Stanley and Company International	1,029,195	15
Morgan Stanley and Company International, PLC	18,969,761	41
Morgan Stanley and Company, Inc.	391,106,170	606
Morgan Stanley DW, Inc.	696,941	35
Morgan Stanley India Company Pte., Ltd.	4,765,976	21
Penserra Securities, LLC	13,786,550	107
Pershing Securities, Ltd.	2,355,392	13
Pershing, LLC	14,081,755	123
Piper, Jaffray and Company	29,837,413	166
RBC Capital Markets, LLC	4,418,213	60
RBC Dominion Securities, Inc.	13,867,066	110
Rosenblatt Securities, Inc.	11,090,274	111
Royal Bank of Canada Europe, Ltd.	136,397,482	513
Sanford C Bernstein and Company, LLC	5,985,753	62
SG Americas Securities, LLC	16,440,268	41
SG Asia Securities (India) Pvt, Ltd.	57,237,773	137
SG Securities (London), Ltd.	189,195,448	185
SG Securities Hong Kong, Ltd.	14,553,000	20
Societe Generale	31,195,509	276
UBS Ag	75,393,016	497
UBS Ag London Branch	2,335,050	37
UBS Securities Asia, Ltd.	75,017,595	79
UBS Securities Canada, Inc.	3,807,584	25
UBS Securities India Pvt., Ltd.	5,893,889	23
UBS Securities, LLC	38,689,999	165
UBS Switzerland AG	1,661,388	8
Virtu Americas, LLC	21,868,914	111

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

Broker	Number of Shares Traded	Base Commission & Fees Amount
Virtu ITG Europe, Ltd.	25,072,505	$174
Various[1]	92,039,112	146
TOTAL	**9,628,179,856**	**$18,267**

(1) Commissions and fees paid to brokers that totaled less than $8,000 for the year are reported under the "Various" line item.

Private Equity and Debt Management Fees & Profit Sharing – PERF[1,5,6] (Dollars in Thousands)

Fund Name	Gross Management Fees	Net Offsets, Waivers, and Rebates[2, 3]	Net Management Fees	Profit Sharing Paid[4,5]
57 Stars Global Opportunities Fund 2 (CalPERS), LLC	$1,125	($106)	$1,019	$0
57 Stars Global Opportunities Fund, LLC	263	—	263	—
Advent Global Technology II Limited Partnership	1,052	—	1,052	—
Advent International GPE IX Limited Partnership	8,248	(209)	8,039	—
Advent International GPE V-D, LP	65	—	65	—
Advent International GPE VI-A, LP	707	(1)	706	—
Advent International GPE VII-C, LP	2,345	(6)	2,339	24,993
Advent International GPE VIII-B Limited Partnership	5,722	(187)	5,535	33,806
Advent Latin America Private Equity Fund V-H, LP	579	—	579	—
Advent Latin American Private Equity Fund III-D, LP	—	—	—	—
Aisling Capital III, LP	—	—	—	24
AlpInvest Secondaries Fund (onshore) VII, LP	4,382	—	4,382	—
Apollo Investment Fund IX, LP	6,325	(2,877)	3,448	11,525
Apollo Investment Fund VII, LP	—	—	—	2,758
Apollo Investment Fund VIII, LP	1,557	(359)	1,198	23,007
Apollo Special Opportunities Managed Account, LP	638	—	638	(26,916)
Ares Corporate Opportunities Fund V, LP	1,922	(36)	1,886	—
Ares Corporate Opportunities Fund VI, LP	3,250	(954)	2,296	—
Ares Special Situations Fund, LP	—	—	—	13
Arsenal Capital Partners Growth, LP	500	—	500	—
Arsenal Capital Partners VI, LP	750	—	750	—
ASF VIII B, LP	3,000	—	3,000	—
Asia Alternatives Capital Partners II, LP	46	—	46	995
Asia Alternatives Capital Partners, LP	—	—	—	146
BDC III C, LP	785	—	785	—
BDC IV D, LP	3,199	—	3,199	—
BE VI 'H', LP	5,662	(754)	4,908	—
Berkshire Fund X, LP	6,971	(4,423)	2,548	—
Beyond SPV I, LP	132	—	132	—
Birch Hill Equity Partners (US) III, LP	—	—	—	2,206
Birch Hill Equity Partners (US) IV, LP	355	—	355	14,019
Blackstone Capital Partners IV, LP	—	—	—	4
Blackstone Capital Partners V, LP	—	—	—	3,593
Blackstone Capital Partners VI, LP	996	(196)	800	17,896
Blackstone Capital Partners VII, LP	3,899	—	3,899	20,787
Blackstone Capital Partners VIII, LP	8,250	—	8,250	1,937
Blackstone Core Equity Partners II, LP	2,436	—	2,436	—
Blackstone Tactical Opportunities Fund - C, LP	1,447	—	1,447	3,123
Blackstone Tactical Opportunities Fund (KG Co-Invest), LP	336	—	336	1,117
Blackstone Tactical Opportunities Fund (T4U Co-Invest), LP	—	—	—	138
Blackstone Tactical Opportunities Fund II - C, LP	2,217	(34)	2,183	10,298
Blackstone Tactical Opportunities Fund III - C (Surge), LP	729	—	729	601
Blackstone Tactical Opportunities Fund III - C, LP	2,738	(2)	2,736	4,683
Bridgepoint Europe IV 'B', LP	124	—	124	421
Bridgepoint Europe IV 'D', LP	470	—	470	1,596
Bridgepoint Europe V	3,281	—	3,281	—
BRV Lotus Fund III, LP	6,263	—	6,263	—
Butterfly Fund III, LP	1,989	—	1,989	—
California Asia Investors, LP	100	—	100	1,982
California Emerging Ventures III, LLC	—	—	—	—
California Emerging Ventures IV, LLC	259	—	259	2,465

Private Equity and Debt Management Fees & Profit Sharing – PERF[1,5,6] (Dollars in Thousands) (continued)

Fund Name	Gross Management Fees	Net Offsets, Waivers, and Rebates[2, 3]	Net Management Fees	Profit Sharing Paid[4, 5]
California Mezzanine Investment Fund, LP	$124	$0	$124	$0
Capital Link Fund I, LLC	382	—	382	210
Capital Link Fund II, LLC	380	—	380	4,007
Carlyle Asia Partners III, LP	339	—	339	10,839
Carlyle Asia Partners V, LP	3,246	(114)	3,132	—
Carlyle Europe Partners II, LP	—	—	—	242
Carlyle Europe Partners III, LP	—	(29)	(29)	7,224
Carlyle Europe Partners V, S.C.Sp	4,032	(404)	3,628	—
Carlyle Japan Partners II, LP	(53)	2	(51)	—
Carlyle Partners V, LP	—	(77)	(77)	9,675
Carlyle Partners VI, LP	2,574	(568)	2,006	65,708
Carlyle Partners VII, LP	6,386	(883)	5,503	—
Carlyle Partners VIII, LP	2,334	—	2,334	—
Carlyle Strategic Partners II, LP	22	—	22	—
Carlyle Strategic Partners IV, LP	1,184	(131)	1,053	—
Carlyle U.S. Equity Opportunities II, LP	1,685	(507)	1,178	6,530
CDH Fund V, LP	1,756	—	1,756	—
Centerbridge Capital Partners III, LP	1,011	(881)	130	9,529
Cerberus CAL II Partners, LP	2,090	(68)	2,022	—
Cerberus CAL III Partners, LP	3,750	(156)	3,594	—
Cerberus CP Partners, LP	1,165	(587)	578	—
Cerberus Institutional Partners V, LP	229	(95)	134	—
Clayton, Dubilier & Rice Fund X, LP	44	(44)	—	21,443
Clayton, Dubilier & Rice Fund XI, LP	5,625	(1,893)	3,732	—
Clearlake Capital Partners III, LP	202	(83)	119	4,496
Clearlake Capital Partners IV, LP	590	(427)	163	4,255
Clearlake Capital Partners V, LP	1,313	(1,044)	269	5,216
Clearlake Opportunities Partners (P), LP	776	(43)	733	—
Coller International Partners V-A, LP	—	—	—	462
CVC Capital Partners Asia V, LP	3,000	(300)	2,700	—
CVC Capital Partners Strategic Opportunities Compounding Capital, LP	7,471	—	7,471	—
CVC Capital Partners VI, LP	4,362	(190)	4,172	61,644
CVC Capital Partners VII (A), LP	6,053	439	6,492	—
CVC Capital Partners VIII (A), LP	10,767	(1,615)	9,152	—
CVC European Equity Partners V (B), LP	—	—	—	958
Dragoneer Opportunities Fund VI, LP	175	—	175	—
EMAlternatives Investments, LP	200	—	200	—
EQT IX (No.2) USD SCSp	11,718	—	11,718	—
Essex Woodlands Health Ventures Fund VIII, LP	127	—	127	—
EW Healthcare Partners Acquisition Fund, LP	228	—	228	—
First Reserve Fund XIII, LP	(1,993)	(66)	(2,059)	—
Francisco Partners Agility II, LP	563	(59)	504	—
Francisco Partners III, LP	310	—	310	13,057
Francisco Partners VI, LP	3,750	(2,628)	1,122	—
GCM Grosvenor DEM II, LP	801	—	801	—
GCM Grosvenor DEM III, LP	2,125	—	2,125	—
GCM Grosvenor DEM, LP	386	—	386	—
Genstar Capital Partners X, LP	1,113	(1,113)	—	—
Genstar X Opportunities Fund I, LP	149	—	149	—
Golden State Investment Fund, LLC	—	—	—	6,549
GPE IX Forescout Co-Investment, LP	66	—	66	—
GPE IX TKE Co-Investment, LP	12	—	12	—

Private Equity and Debt Management Fees & Profit Sharing – PERF[1,5,6] (Dollars in Thousands) (continued)

Fund Name	Gross Management Fees	Net Offsets, Waivers, and Rebates[2, 3]	Net Management Fees	Profit Sharing Paid[4, 5]
Green Equity Investors CF, LP	$0	$0	$0	$18,096
Green Equity Investors V, LP	—	(1)	(1)	—
Green Equity Investors VIII, LP	3,445	(9,912)	(6,467)	—
GSO Capital Opportunities Fund II, LP	194	—	194	3,192
GSO Capital Solutions Fund II, LP	602	—	602	—
GSO Energy Partners-C II, LP	929	—	929	—
GSO Energy Partners-C, LP	585	—	585	—
H&F ARROW 1, LP	25	—	25	—
HIG Europe Middle Market LBO Fund, LP	4,800	—	4,800	—
Hellman & Friedman Capital Partners IX, LP	7,492	(5,486)	2,006	—
Hellman & Friedman Capital Partners VII	109	—	109	24,758
Hellman & Friedman Capital Partners VIII, LP	2,979	(4)	2,975	19,112
Hellman & Friedman Capital Partners X, LP	13,641	(6,223)	7,418	—
Insight Partners XI, LP	6,310	(9)	6,301	136
Insight Partners XII Buyout Annex Fund, LP	395	—	395	—
Insight Partners XII, LP	8,925	—	8,925	—
Insight Venture Partners Growth-Buyout Coinvestment Fund (B), LP	2,839	(281)	2,558	16,486
Insight Venture Partners IX, LP	1,524	(41)	1,483	4,369
Insight Venture Partners VI, LP	—	—	—	133
Insight Venture Partners X, LP	3,867	—	3,867	16,038
Ithaca, LP	—	—	—	—
Jade Equity Investors, LP	1,679	(725)	954	152
K5 Private Investors, LP	5,822	(16)	5,806	—
Karakoram Fund C, LP	132	—	132	—
Khosla Ventures III, LP	1,537	—	1,537	—
Khosla Ventures Seed, LP	525	—	525	—
KKR 2006 Fund, LP	433	—	433	3,920
KKR Asian Fund II, LP	2,286	—	2,286	—
KKR Asian Fund IV SCSp	3,915	(808)	3,107	—
KKR Asian Fund, LP	166	—	166	—
KKR European Fund II, LP	5	—	5	—
KKR European Fund III, LP	130	—	130	—
KKR European Fund V (USD) SCSp	2,694	317	3,011	—
KKR North America Fund XIII SCSp	3,644	—	3,644	—
KM Corporate Partners Fund II, LP	75	—	75	—
Lightspeed Venture Partners Select V, LP	500	—	500	—
Lightspeed Venture Partners XIV-A (Inception), LP	225	—	225	—
Lightspeed Venture Partners XIV-B (Ignite), LP	275	—	275	—
Lime Rock Partners V, LP	15	(1)	14	—
Lindsay Goldberg IV, LP	986	(190)	796	19,409
Lindsay Goldberg V, LP	4,375	(182)	4,193	—
Lion Capital Fund II, LP	(42)	—	(42)	—
LongRange Capital Fund I, LP	7,479	—	7,479	—
Madison Dearborn Capital Partners IV, LP	—	—	—	288
Madison Dearborn Capital Partners V, LP	—	—	—	1,922
Madison Dearborn Capital Partners VIII, LP	5,861	—	5,861	—
New Mountain Partners III, LP	1,007	(1,007)	—	56,014
New Mountain Partners VI, LP	7,341	(1,560)	5,781	—
Nordic Bear SCSp	476	—	476	—
Oak Hill Capital Partners III, LP	—	—	—	11,293
Oaktree Latigo Investment Fund, LP	4,175	(425)	3,750	—

Private Equity and Debt Management Fees & Profit Sharing – PERF[1,5,6] (Dollars in Thousands) (continued)

Fund Name	Gross Management Fees	Net Offsets, Waivers, and Rebates[2, 3]	Net Management Fees	Profit Sharing Paid[4, 5]
Oaktree Opportunities Fund VIIIb, LP	$1,144	($134)	$1,010	$0
OHA Black Bear Fund, LP	1,962	(18)	1,944	—
Onex Partners IV, LP	1,585	(104)	1,481	—
Onex Partners V (B), LP	8,257	(8)	8,249	—
PAG Asia I, LP	311	—	311	1,040
PAG Asia III, LP	6,650	—	6,650	—
Palladium Equity Partners III, LP	—	—	—	145
Palladium Equity Partners V, LP	1,130	(174)	956	—
Patria Brazilian Private Equity Fund V, LP	2,578	—	2,578	—
Permira Growth Opportunities I, LP 1	2,003	—	2,003	4,874
Permira Growth Opportunities II SCSp	1,484	—	1,484	—
Permira V, LP	2,156	(38)	2,118	23,494
Permira VI, LP 1	4,409	(543)	3,866	—
Permira VII, LP 1	8,213	(240)	7,973	—
Permira VIII-2 SCSp	1,828	—	1,828	—
Polish Enterprise Fund VI, LP	—	—	—	889
PSG V, LP	1,242	—	1,242	—
Riverstone Global Energy and Power Fund V, LP	1,832	(56)	1,776	(1,639)
Riverstone Global Energy and Power Fund VI, LP	3,188	(57)	3,131	—
Riverstone/Carlyle Global Energy and Power Fund IV, LP	181	(9)	172	—
Riverstone/Carlyle Renewable & Alternative Energy Fund II, LP	97	(9)	88	—
Riverwood Capital Partners (Parallel - A), LP	158	—	158	—
Sacramento Private Equity Partners, LP	—	—	—	2,593
SAIF Partners III, LP	292	—	292	—
SAIF Partners IV, LP	831	—	831	—
Samson Brunello 1, LP	11	—	11	—
Samson Hockey 1, LP	61	—	61	1,052
Sankaty Managed Account (CalPERS), LP	1,732	—	1,732	—
Sierra Partners, LP	16	—	16	—
Silver Lake Partners II, LP	—	—	—	7
Silver Lake Partners III, LP	—	—	—	1,115
Silver Lake Partners IV, LP	2,007	(118)	1,889	12,140
Silver Lake Partners V, LP	2,916	(537)	2,379	5,814
Silver Lake Partners VI, LP	10,780	(3,890)	6,890	—
Siris Partners III, LP	433	(229)	204	—
Siris Partners IV, LP	1,313	(145)	1,168	—
SL SPV-1, LP	381	—	381	—
SL SPV-2, LP	272	—	272	1,055
Springblue A, LP	1,150	—	1,150	—
Springblue B, LP	397	—	397	—
Summit Partners Growth Equity Fund X-A, LP	3,539	(3,539)	—	—
Summit Partners Growth Equity Fund XI-A, LP	946	(946)	—	—
TA XIV-A, LP	1,003	—	1,003	—
Tailwind Capital Partners (PP), LP	—	—	—	113
Tailwind Capital Partners II, LP	775	(297)	478	—
Tailwind Capital Partners III, LP	1,875	(1,012)	863	—
TCV X, LP	3,500	—	3,500	—
TCV XI, LP	3,300	(198)	3,102	—
The Central Valley Fund II SBIC, LP	134	(16)	118	(7,294)
The Rise Fund (A), LP	695	—	695	2,644
Thoma Bravo Fund XIV, LP	5,258	(5,258)	—	—

Private Equity and Debt Management Fees & Profit Sharing – PERF[1,5,6] (Dollars in Thousands) (continued)

Fund Name	Gross Management Fees	Net Offsets, Waivers, and Rebates[2, 3]	Net Management Fees	Profit Sharing Paid[4, 5]
Thomas H. Lee Equity Fund VI, LP	$0	$0	$0	$52
Tiger Global Private Investment Partners XV, LP	720	—	720	—
TowerBrook Investors IV (Onshore), LP	2,589	(21)	2,568	18,608
Towerbrook Investors V (Onshore), LP	5,709	(237)	5,472	—
Towerbrook Structured Opportunities Fund (Onshore), LP	1,662	(7)	1,655	—
Towerbrook Structured Opportunities Fund II (Onshore), LP	2,861	(954)	1,907	—
TPG Asia V, LP	—	—	—	1,258
TPG Asia VII (A), LP	4,202	(4)	4,198	6,578
TPG Biotechnology Partners III, LP	82	(82)	—	3,332
TPG Growth IV, LP	693	(41)	652	—
TPG Growth V, LP	2,975	—	2,975	—
TPG Healthcare Partners, LP	1,275	—	1,275	2,150
TPG Partners VI, LP	—	—	—	3,493
TPG Partners VIII, LP	6,375	—	6,375	3,899
Trident IX, LP	4,321	—	4,321	—
Trident VI	1,678	(405)	1,273	3,969
Trident VII, LP	2,862	(279)	2,583	—
Trident VIII, LP	3,785	(7)	3,778	—
Triton Fund IV, LP	944	—	944	—
Triton Fund V, LP	4,946	(1,178)	3,768	—
Valor Equity Partners IV, LP	1,221	(42)	1,179	—
VIP IV, LP	5,923	(385)	5,538	—
Vista Equity Partners Fund VII-Z, LP	6,000	(50)	5,950	397
W Capital Partners II, LP	—	—	—	1,113
WCAS XIII, LP	5,686	466	6,152	3,546
WCAS XIV, LP	1,080	—	1,080	—
Wellspring Capital Partners V, LP	271	—	271	(539)
Welsh, Carson, Anderson & Stowe XI, LP	—	—	—	3,528
Welsh, Carson, Anderson & Stowe XII, LP	2,231	(1)	2,230	12,619
Whitney Global Partners, LP	14	—	14	—
Wigmore Street (BDC III), LP	1	—	1	—
Wigmore Street BDC IV Co-Investment No.1, LP	12	—	12	—
Wigmore Street Co-investment No.1, LP	1	—	1	—
Wigmore Street VI Co-Investment No.1, LP	174	—	174	—
Yucaipa American Alliance Fund II, LP	122	(122)	—	1,571
Private Equity Total	**$466,500**	**($71,186)**	**$395,314**	**$698,195**

Private Debt Fund Name	Gross Management Fees	Net Offsets, Waivers, and Rebates[2, 3]	Net Management Fees	Profit Sharing Paid[4, 5]
Antares Credit Opportunities CA, LLC - Series 1	$2,093	($2,358)	($265)	$0
Antares Credit Opportunities CA, LLC - Series 2	917	(917)	—	—
Antares Credit Opportunities CA, LLC - Series 3	187	(187)	—	—
Antares Credit Opportunities CA, LLC - Series 4	31	(31)	—	—
Ares Capital Europe V (D) Levered	3,917	—	3,917	—
Ares European Credit Investments VII (CP), LP	77	—	77	—
Ares Senior Direct Lending Fund (Delaware) II, LP	2,246	—	2,246	—
Blackstone Real Estate Debt Strategies IV-C, LP	9,295	—	9,295	3,715
Oaktree Gilead Investment Fund, LP - Series A	2,018	(9)	2,009	—
OHA CA Customized Credit Fund, LP - OHA Senior Private Lending Fund (CA 3)	94	—	94	—
OHA CA Customized Credit Fund, LP - OHA Senior Private Lending Fund (CA 5)	94	—	94	—
PIMCO DISCO Onshore Fund III, LP	568	—	568	—
Sixth Street Fundamental Strategies Partners (A), LP	635	—	635	—

Private Equity and Debt Management Fees & Profit Sharing – PERF[1,5,6] (Dollars in Thousands) (continued)

Private Debt Fund Name	Gross Management Fees	Net Offsets, Waivers, and Rebates[2, 3]	Net Management Fees	Profit Sharing Paid[4, 5]
Sixth Street TAO Partners (B), LP (f.k.a.TSSP Adjacent Opportunities Partners (B), LP)	$3,510	$0	$3,510	$0
West Street Co-Investment Partners (C), LP	147	—	147	—
West Street Strategic Solutions Fund I, LP	3,759	—	3,759	—
Private Debt Total	**$29,588**	**($3,502)**	**$26,086**	**$3,715**
TOTAL	**$496,088**	**($74,688)**	**$421,400**	**$701,910**

(1) Amounts less than $500 are indicated by a dash.
(2) Amounts include management fee waivers that may be paid in a subsequent period.
(3) Positive amounts are reflective of timing differences between when a waiver is used compared with when the fee is called.
(4) Profit sharing represents the investment manager's share of the gain realized during the fiscal year, net of any return of realized profit distributed in earlier years.
(5) Negative amounts are reflective of decreased investment value resulting in the return of realized profit.
(6) Investments listed include only those investments with management fees, rebates, offsets, and/or profit sharing incurred within the reporting period.

INVESTMENT PERFORMANCE – LEGISLATORS' RETIREMENT FUND (LRF)

LRF Portfolio Comparisons (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return	Benchmark	1-Year Return	3-Year Return	5-Year Return
Total Fund	**(10.7%)**	**2.5%**	**3.9%**	Total Fund Policy Benchmark	(10.8%)	2.4%	3.8%
Public Equity	(16.2%)	6.4%	7.2%	MSCI All Country World Index IMI (Net)	(16.5%)	6.0%	6.9%
Fixed Income	(14.8%)	(1.9%)	0.8%	Bloomberg Long Liability Index	(14.7%)	(1.9%)	0.8%
TIPS	(5.1%)	3.0%	3.2%	Bloomberg U.S. TIPS Index, Series L	(5.1%)	3.0%	3.2%
REITs	(12.9%)	(0.2%)	2.9%	FTSE EPRA/NAREIT Developed Index	(13.4%)	(1.1%)	2.2%
Commodities	44.5%	14.6%	12.0%	S&P GSCI Total Return Daily	45.0%	14.7%	11.7%

LRF Asset Allocation

Asset Class	Current Allocation	Policy Target Weight
Public Equity	21.7%	22.0%
Fixed Income	49.7%	49.0%
TIPS	16.0%	16.0%
REITs	7.9%	8.0%
Commodities	4.7%	5.0%
Total Fund	**100.0%**	**100.0%**

INVESTMENT PERFORMANCE – JUDGES' RETIREMENT FUND II (JRF II)

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

Category	1-Year Return	3-Year Return	5-Year Return	Benchmark	1-Year Return	3-Year Return	5-Year Return
Total Fund	**(13.3%)**	**4.1%**	**5.3%**	Total Fund Policy Benchmark	(13.4%)	3.8%	5.0%
Public Equity	(16.2%)	6.4%	7.2%	MSCI All Country World Index IMI (Net)	(16.5%)	6.0%	6.9%
Fixed Income	(14.8%)	(1.9%)	0.9%	Bloomberg Long Liability Index	(14.7%)	(1.9%)	0.8%
TIPS	(5.1%)	3.0%	3.2%	Bloomberg U.S. TIPS Index, Series L	(5.1%)	3.0%	3.2%
REITs	(12.9%)	(0.2%)	2.9%	FTSE EPRA/NAREIT Developed Index	(13.4%)	(1.1%)	2.2%
Commodities	44.5%	14.6%	11.7%	S&P GSCI Total Return Daily	45.0%	14.7%	11.7%

JRF II Asset Allocation

Asset Class	Current Allocation	Policy Target Weight
Public Equity	51.5%	52.0%
Fixed Income	32.7%	32.0%
TIPS	5.0%	5.0%
REITs	7.9%	8.0%
Commodities	2.8%	3.0%
Total Fund[1]	**100.0%**	**100.0%**

(1) Total may not sum due to rounding.

INVESTMENT PERFORMANCE – CALIFORNIA EMPLOYERS' PENSION PREFUNDING TRUST FUND (CEPPTF)

CEPPTF Strategy 1 Portfolio Comparisons[1] (Time-Weighted Rates of Return)

Category	1-Year Return	Index	1-Year Return
Total Fund	**(12.5%)**	CEPPT Strategy 1 Policy Index	(12.6%)
Public Equity	(16.3%)	MSCI All Country World Index IMI (Net)	(16.5%)
Fixed Income	(10.3%)	Bloomberg U.S. Aggregate Bond Index	(10.3%)
TIPS	(5.1%)	Bloomberg U.S. TIPS Index, Series L	(5.1%)
REITs	(12.9%)	FTSE EPRA/NAREIT Developed Index	(13.4%)

(1) CEPPTF Strategy 1 had an inception date of October 1, 2019.

CEPPTF Strategy 2 Portfolio Comparisons[1] (Time-Weighted Rates of Return)

Category	1-Year Return	Index	1-Year Return
Total Fund	**(11.0%)**	CEPPT Strategy 2 Policy Index	(11.0%)
Public Equity	(16.2%)	MSCI All Country World Index IMI (Net)	(16.5%)
Fixed Income	(10.3%)	Bloomberg U.S. Aggregate Bond Index	(10.3%)
TIPS	(5.1%)	Bloomberg U.S. TIPS Index, Series L	(5.1%)
REITs	(12.9%)	FTSE EPRA/NAREIT Developed Index	(13.4%)

(1) CEPPTF Strategy 2 had an inception date of January 1, 2020.

CEPPTF Asset Allocation[1]

	Strategy 1		Strategy 2	
Asset Class	Current Allocation	Policy Target Weight	Current Allocation	Policy Target Weight
Public Equity	39.8%	40.0%	13.8%	14.0%
Fixed Income	47.3%	47.0%	73.1%	73.0%
TIPS	5.0%	5.0%	5.0%	5.0%
REITs	7.9%	8.0%	7.9%	8.0%
Liquidity	—%	—%	0.2%	—%
Total Fund	**100.0%**	**100.0%**	**100.0%**	**100.0%**

(1) CEPPTF Strategy 1 had an inception date of October 1, 2019, and CEPPTF Strategy 2 had an inception date of January 1, 2020.

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

CERBTF Strategy 1 Portfolio Comparisons (Inception date was June 1, 2007) (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return	Benchmark	1-Year Return	3-Year Return	5-Year Return
Total Fund	**(13.4%)**	**4.6%**	**5.6%**	CERBT Strategy 1 Policy Index	(13.6%)	4.3%	5.3%
Public Equity	(16.2%)	6.3%	7.0%	MSCI All Country World Index IMI (Net)	(16.5%)	6.0%	6.7%
Fixed Income	(14.8%)	(1.8%)	0.9%	Bloomberg Long Liability Index	(14.7%)	(1.9%)	0.8%
TIPS	(5.1%)	3.0%	3.2%	Bloomberg U.S. TIPS Index, Series L	(5.1%)	3.0%	3.2%
REITs	(12.9%)	(0.2%)	2.9%	FTSE EPRA/NAREIT Developed Index	(13.4%)	(1.1%)	2.0%
Commodities	44.5%	14.7%	11.7%	S&P GSCI Total Return Daily	45.0%	14.7%	11.7%

CERBTF Strategy 2 Portfolio Comparisons (Inception date was October 1, 2011) (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return	Benchmark	1-Year Return	3-Year Return	5-Year Return
Total Fund	**(12.6%)**	**3.3%**	**4.6%**	CERBT Strategy 2 Policy Index	(12.7%)	3.2%	4.4%
Public Equity	(16.2%)	6.3%	7.0%	MSCI All Country World Index IMI (Net)	(16.5%)	6.0%	6.7%
Fixed Income	(14.8%)	(1.9%)	0.9%	Bloomberg Long Liability Index	(14.7%)	(1.9%)	0.8%
TIPS	(5.1%)	3.0%	3.2%	Bloomberg U.S. TIPS Index, Series L	(5.1%)	3.0%	3.2%
REITs	(12.9%)	(0.2%)	2.8%	FTSE EPRA/NAREIT Developed Index	(13.4%)	(1.1%)	2.0%
Commodities	44.5%	14.7%	11.8%	S&P GSCI Total Return Daily	45.0%	14.7%	11.7%

CERBTF Strategy 3 Portfolio Comparisons (Inception date was January 1, 2012) (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return	Benchmark	1-Year Return	3-Year Return	5-Year Return
Total Fund	**(10.8%)**	**2.5%**	**3.9%**	CERBT Strategy 3 Policy Index	(10.8%)	2.4%	3.7%
Public Equity	(16.2%)	6.3%	7.0%	MSCI All Country World Index IMI (Net)	(16.5%)	6.0%	6.7%
Fixed Income	(14.8%)	(1.9%)	0.9%	Bloomberg Long Liability Index	(14.7%)	(1.9%)	0.8%
TIPS	(5.1%)	3.0%	3.2%	Bloomberg U.S. TIPS Index, Series L	(5.1%)	3.0%	3.2%
REITs	(12.9%)	(0.2%)	2.9%	FTSE EPRA/NAREIT Developed Index	(13.4%)	(1.1%)	2.0%
Commodities	44.5%	14.6%	12.0%	S&P GSCI Total Return Daily	45.0%	14.7%	11.7%

CERBTF Asset Allocation

	Strategy 1		Strategy 2		Strategy 3	
Asset Class	Current Allocation	Policy Target Weight	Current Allocation	Policy Target Weight	Current Allocation	Policy Target Weight
Public Equity	58.5%	59.0%	39.4%	40.0%	21.6%	22.0%
Fixed Income	25.6%	25.0%	43.6%	43.0%	49.6%	49.0%
TIPS	5.0%	5.0%	5.0%	5.0%	15.9%	16.0%
REITs	7.9%	8.0%	7.9%	8.0%	7.9%	8.0%
Commodities	2.8%	3.0%	3.8%	4.0%	4.7%	5.0%
Liquidity	0.2%	—	0.3%	—	0.3%	—
Total Fund	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

INVESTMENT PERFORMANCE – HEALTH CARE FUND (HCF)

HCF Portfolio Comparisons (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return	Benchmark	1-Year Return	3-Year Return	5-Year Return
Total Fund	**(10.3%)**	**(0.9%)**	**0.9%**	Bloomberg U.S. Aggregate Bond Index	(10.3%)	(0.9%)	0.9%

HCF Asset Allocation

Asset Class	Current Allocation	Policy Target Weight
Fixed Income	100.0%	100.0%
Total Fund	**100.0%**	**100.0%**

INVESTMENT PERFORMANCE – LONG-TERM CARE FUND (LTCF)

LTCF Portfolio Comparisons (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return	5-Year Return	Benchmark	1-Year Return	3-Year Return	5-Year Return
Total Fund	**(9.8%)**	**2.2%**	**3.5%**	Total Fund Policy Benchmark	(9.9%)	2.1%	3.4%
Public Equity	(16.2%)	6.3%	7.0%	MSCI All Country World Index IMI (Net)	(16.5%)	6.0%	6.7%
Fixed Income	(14.8%)	(1.9%)	0.8%	Bloomberg Long Liability Index	(14.7%)	(1.9%)	0.8%
TIPS	(5.1%)	3.0%	3.2%	Bloomberg U.S. TIPS Index, Series L	(5.1%)	3.0%	3.2%
REITs	(12.9%)	(0.3%)	2.8%	FTSE EPRA/NAREIT Developed Index	(13.4%)	(1.1%)	2.0%
Commodities	44.5%	14.6%	11.6%	S&P GSCI Total Return Daily	45.0%	14.7%	11.7%

LTCF Asset Allocation

Asset Class	Current Allocation	Policy Target Weight
Public Equity	14.3%	15.0%
Fixed Income	60.9%	60.0%
TIPS	6.0%	6.0%
REITs	10.6%	11.0%
Commodities	8.2%	8.0%
Total Fund	**100.0%**	**100.0%**

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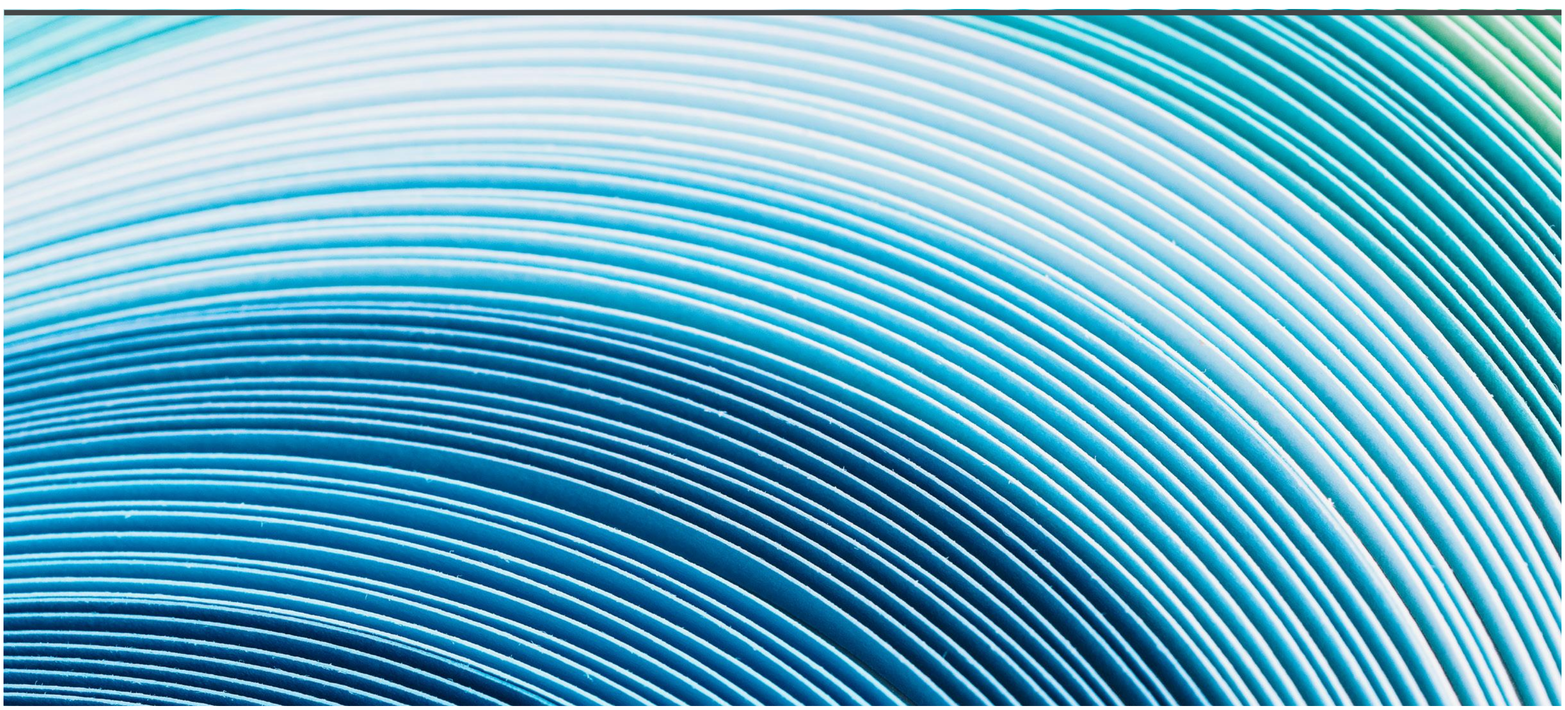
ACTUARIAL SECTION



ACTUARIAL CERTIFICATIONS

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

July 2022

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

As authorized, the CalPERS actuarial staff performs annual actuarial valuations of the CalPERS state, schools, and public agency defined benefit pension plans; the latest such valuations are as of June 30, 2021.

The funding objective for each of these plans is to accumulate assets equal to 100 percent of the accrued liability as measured by the Entry Age Actuarial Cost Method. Unfunded actuarial liabilities or surplus assets (excess assets) are amortized pursuant to Board policy.

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

Further, we have provided information for the completion of Exhibits A through I in the Actuarial Section of the Annual Comprehensive Financial Report (ACFR).

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

LEGISLATORS' RETIREMENT SYSTEM

February 2022

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the actuarial funded condition of the Legislators' Retirement System. This valuation is based on the member and financial data as of June 30, 2021 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. In our opinion, this valuation has been performed in accordance with generally accepted actuarial principles, and in accordance with the standards of practice prescribed by the Actuarial Standards Board. The assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the Legislators' Retirement Law.

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

Further, we have provided information for the completion of Exhibits A, B, H, and I in the Actuarial Section of the Annual Comprehensive Financial Report (ACFR).

Alex Grunder, ASA, MAAA
Associate Pension Actuary, CalPERS

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

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

ACTUARIAL CERTIFICATIONS

JUDGES' RETIREMENT SYSTEM

February 2022

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the actuarial funded condition of the Judges' Retirement System. This valuation is based on the member and financial data as of June 30, 2021, provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. In our opinion, this valuation has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the Judges' Retirement Law.

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

Further, we have provided information for the completion of Exhibits A, B, H, and I in the Actuarial Section of the Annual Comprehensive Financial Report (ACFR).

Stuart Bennett, ASA, MAAA
Senior Pension Actuary, CalPERS

Tony Cuny, ASA, MAAA
Associate Pension Actuary, CalPERS

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

JUDGES' RETIREMENT SYSTEM II

February 2022

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the actuarial funded condition of the Judges' Retirement System II. This valuation is based on the member and financial data as of June 30, 2021, provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. In our opinion, this valuation has been performed in accordance with generally accepted actuarial principles, and in accordance with the standards of practice prescribed by the Actuarial Standards Board. The assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the Judges' Retirement System II Law.

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

Further, we have provided information for the completion of Exhibits A, B, H, and I in the Actuarial Section of the Annual Comprehensive Financial Report (ACFR).

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

Julian Robinson, FSA, EA, MAAA
Senior Pension Actuary, CalPERS

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

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

ACTUARIAL METHODS & ASSUMPTIONS

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

Actuarial Data

As stated in the Actuarial Certifications, the data that serves as the basis of these valuations have been obtained from the various CalPERS databases. We have reviewed the valuation data and believe that it is reasonable and appropriate in aggregate. We are unaware of any potential data issues that would have a material effect on the results of the valuations. Summary information regarding plan membership data for various groups is provided in Exhibits F through G.

Actuarial Cost Method

The primary funding method used is the Entry Age Actuarial Cost Method. This method is used for all defined benefit pay-related plans within CalPERS, including the Legislators' Retirement System (LRS), the Judges' Retirement System (JRS), and the Judges' Retirement System II (JRS II). It is also used for the Indexed Level of 1959 Survivor Benefits.

Under this method, projected benefits are determined for all members and the associated liabilities are spread in a manner that produces level annual cost as a percentage of pay in each year from the member's entry age to their assumed retirement age on the valuation date. The cost allocated to the current fiscal year is called the normal cost.

The actuarial accrued liability for active members is calculated as the portion of the total cost of the plan allocated to prior years. The actuarial accrued liability for members currently receiving benefits and for separated members entitled to deferred benefits is equal to the present value of the benefits expected to be paid. No normal costs are applicable for these participants.

For CalPERS non-pay-related plans, the financial objective is to produce annual costs that coincide with the value of benefits earned for that year. The Term Insurance Cost Method is used for the plans within the 1959 Survivor Program that are not indexed. The Term Insurance Cost Method is also used for the State Group Term Life Insurance Program, where the normal cost is equal to the expected life insurance payments for the coming year.

Amortization of Unfunded Actuarial Accrued Liability

The excess of the total actuarial accrued liability over the market value of plan assets is called the unfunded actuarial accrued liability (UAL). Funding requirements are determined by adding the normal cost and an amortization payment toward the unfunded liability.

Amortization periods and payment methods are based on the source of the liability change and the date created. Periods range from five to 30 years. Payment methods include "level dollar," "level percent of payroll," and with or without five-year ramps. A five-year ramp-up means that the payments in the first four years of the amortization period are 20 percent, 40 percent, 60 percent, and 80 percent of the "full" payment which begins in year five. The five-year ramp-down means that the reverse is true in the final four years of the amortization period. A summary of the current policy is provided in the following tables:

	Bases Created June 30, 2018 or Earlier				
	(Gain)/Loss				
Driver	Investment	Non-Investment	Assumption/ Method Change	Benefit Change	Golden Handshake
Amortization Period	30 Years	30 Years	20 Years	20 Years	5 Years
Escalation Rate:					
Active Plans	2.80%	2.80%	2.80%	2.80%	2.80%
Inactive Plans	—%	—%	—%	—%	—%
Ramp-Up	5 Years	5 Years	5 Years	N/A	N/A
Ramp-Down	5 Years	5 Years	5 Years	N/A	N/A

	Bases Created June 30, 2019 or Later				
	(Gain)/Loss				
Driver	Investment	Non-Investment	Assumption/ Method Change	Benefit Change	Golden Handshake
Amortization Period	20 Years	20 Years	20 Years	20 Years	5 Years
Escalation Rate:					
Active Plans	—%	—%	—%	—%	—%
Inactive Plans	—%	—%	—%	—%	—%
Ramp-Up	5 Years	N/A	N/A	N/A	N/A
Ramp-Down	N/A	N/A	N/A	N/A	N/A

Exceptions for "Inactive Plans" and "Inactive Employers"
The following exceptions apply to plans classified as inactive. These plans have no active members and no expectation to have active members in the future.

- Amortization of the unfunded liability is on a “level dollar” basis rather than a “level percent of pay” basis.
- Actuarial judgment will be used to shorten amortization periods for inactive plans with existing periods that are deemed too long given the duration of the liability. The specific demographics of the plan will be used to determine if shorter periods may be more appropriate.

For inactive employers the maximum amortization period is 15 years for all unfunded accrued liabilities. Furthermore, the plan actuary has the ability to further shorten the amortization period on any valuation date based on the life expectancy of plan members and projected cash flow needs to the plan.

Exception for JRS Plan
The JRS plan is not currently prefunded. The June 30, 2020, actuarial valuation provides a recommended contribution if the state were to begin prefunding. This recommended contribution includes a payment toward unfunded liability based on a 10-year amortization period and level dollar payments.

Asset Valuation Method
For all plans, market values of assets are used to set the required contributions.

ACTUARIAL ASSUMPTIONS

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

Economic Assumptions
Based upon the asset allocation of the Public Employees’ Retirement Fund (PERF), the prescribed discount rate assumption as of June 30, 2021, (net of investment and administrative expenses) adopted by the Board on November 17, 2021, is 6.8 percent compounded annually.

Different asset allocations and lower assumed investment returns apply to the LRF, JRF, and JRF II.

The discount rates used for funding purposes are net of administrative expenses. The financial reporting discount rates are not reduced for administrative expenses.

The price inflation assumption is a component of assumed investment return, payroll growth, wage inflation, and future post-retirement cost-of-living increases.

For plans within CalPERS, the overall payroll is assumed to increase by the price inflation assumption plus a 0.25 percent per annum productivity increase assumption. The overall payroll growth assumption is used to project future payroll over which the unfunded liability established before June 30, 2019, is amortized.

For plans within CalPERS, the assumed growth in an individual employee’s future pay is composed of the price inflation assumption, an additional 0.5 percent per annum productivity component, and an annual merit increase based on the member’s length of service. The service-based merit increase in an individual’s salary recognizes that larger salary increases tend to occur earlier in an employee’s career. Pay increase assumptions for individual members are shown for sample lengths of service on page 133 in Exhibit C. The following is a summary of economic assumptions:

Economic Assumptions	Public Agencies	State	Schools
June 30, 2021 Funding Valuations			
Contribution Year	2023-24	2022-23	2022-23
Discount Rate/ Investment Return (net of expenses)	6.80%	6.80%	6.80%
Administrative Expenses	10 basis points	10 basis points	10 basis points
Price Inflation	2.30%	2.30%	2.30%
Wage Inflation[1]	2.80%	2.80%	2.80%
Fiscal Year 2021-22 Financial Reporting			
Discount Rate	6.90%	6.90%	6.90%
Price Inflation	2.30%	2.30%	2.30%
Wage Inflation	2.80%	2.80%	2.80%

(1) This is also the assumed payroll growth that is used to amortize unfunded liabilities.

Economic Assumptions	JRF	JRF II	LRF
June 30, 2021 Funding Valuations			
Contribution Year	2022-23	2022-23	2022-23
Discount Rate/ Investment Return (net of expenses)	3.00%	6.00%	4.50%
Administrative Expenses	N/A	15 basis points	35 basis points
Price Inflation	2.30%	2.30%	2.30%
Wage Inflation[1]	2.80%	2.80%	2.80%
Fiscal Year 2021-22 Financial Reporting			
Discount Rate	3.69%	6.15%	4.85%
Price Inflation	2.30%	2.30%	2.30%
Wage Inflation	2.80%	2.80%	2.80%

(1) This is also the assumed payroll growth that is used to amortize unfunded liabilities.

Non-Economic Assumptions
Non-economic assumptions for plans within the PERF are based upon the most recent CalPERS experience study

(covering the period June 30, 2000, through June 30, 2019) that was completed and adopted by the Board in November 2021.

Post-retirement mortality rates are based on CalPERS' experience and include generational mortality improvement using 80 percent of Scale MP 2020 published by the Society of Actuaries. These tables are used to estimate the value of benefits expected to be paid for service and disability retirements. For disability retirements, impaired longevity is recognized by a separate table. Sample life annuity values based on these tables are shown on page 143 in Exhibit E.

CHANGES SINCE PRIOR VALUATION

Changes in Actuarial Assumptions

There were no changes in the actuarial methods for the schools pool, public agencies, LRF, JRF, and JRF II.

For the state rate plans, effective with the June 30, 2021, valuation, the Group Term Life Insurance (GTLI) benefits are funded by including the GTLI normal cost in the plan total normal cost.

On November 17, 2021, the Board adopted new actuarial assumptions based on the recommendations in the 2021 CalPERS Experience Study and Review of Actuarial Assumptions. This study reviewed the retirement rates, termination rates, mortality rates, rates of salary increases, and inflation assumptions for the state, the schools pool, public agencies, LRF, JRF, and JRF II. These new assumptions are incorporated in the June 30, 2021, funding valuations and the Fiscal Year 2021-22 accounting valuations. In addition, the Board adopted new asset portfolios as part of its Asset Liability Management process. The new asset mix allocations support the discount rates shown on the previous page.

Assumptions Changes	Public Agencies	State	Schools
June 30, 2021 Funding Valuations			
Contribution Year	2023-24	2022-23	2022-23
Discount Rate/ Investment Return (net of expenses)	6.80%	6.80%	6.80%
Administrative Expenses	10 basis points	10 basis points	10 basis points
Price Inflation	2.30%	2.30%	2.30%
Wage Inflation	2.80%	2.80%	2.80%
Demographic Assumptions	Changed	Changed	Changed
Fiscal Year 2021-22 Financial Reporting			
Discount Rate	6.90%	6.90%	6.90%
Price Inflation	2.30%	2.30%	2.30%
Wage Inflation	2.80%	2.80%	2.80%
Demographic Assumptions	Changed	Changed	Changed

Assumptions Changes	JRF	JRF II	LRF
June 30, 2021 Funding Valuations			
Contribution Year	2023-24	2022-23	2022-23
Discount Rate/ Investment Return (net of expenses)	No Change	6.00%	4.50%
Administrative Expenses	N/A	No Change	35 basis points
Price Inflation	2.30%	2.30%	2.30%
Wage Inflation	2.80%	2.80%	2.80%
Demographic Assumptions	Changed	Changed	Changed
Fiscal Year 2021-22 Financial Reporting			
Discount Rate	3.69%	6.15%	4.85%
Price Inflation	2.30%	2.30%	2.30%
Wage Inflation	2.80%	2.80%	2.80%
Demographic Assumptions	Changed	Changed	Changed

Changes in Plan Provisions

There were no changes in the plan provisions for the school plans, state plans, LRF, JRF, and JRF II. Public agencies can make changes to their plan provisions; such changes occur on an ongoing basis. A summary of the plan provisions that were used for a specific plan can be found in Appendix B of the plan’s Annual Valuation Report.

SUMMARY OF FUNDING PROGRESS

UNFUNDED LIABILITY & FUNDED RATIOS

For the plans in CalPERS, unfunded actuarial accrued liabilities are the difference between entry age accrued liabilities and the assets of the fund. It is required that these unfunded liabilities be financed systematically over future years.

While no single measure can fully describe the financial condition of a plan, the ratio of a pension plan's market value of assets to its accrued liabilities provides a meaningful index. A funded ratio of 100 percent means the plan is meeting its funding target, and contributions in excess of the normal cost are not required. The funded ratio over a period of time gives an indication of how well the actuarial policies and practices and the investment strategy are working to achieve the funding target. This measure, over the last 10 years, is presented on page 130 in Exhibit A.

For all plans, assets of the fund refers to the market value of assets.

SOLVENCY TEST

Exhibit B, Funding Progress — Solvency Test shown on page 132 demonstrates System solvency as measured using the System's own assumptions and liability calculation methods.

INDEPENDENT REVIEW

To ensure the quality of its valuations, CalPERS contracts with independent consulting actuaries to review the valuations on an annual basis. The review is broken into three groups, so that each group is reviewed every four years with the experience study reviewed every fourth year.

EXHIBIT A: FUNDING PROGRESS – UNFUNDED LIABILITY & FUNDED RATIOS[1]

Actuarial Valuation Date	Actuarial Value of Assets (1)	Actuarial Accrued Liability (AAL) (Entry Age) (2)	Unfunded AAL (UAAL)/ Surplus (AVA Basis) (3) = (2) - (1)	Funded Ratio (Actuarial Value of Assets Basis) (4) = (1) / (2)	Annual Covered Payroll (5)	UAAL/ Surplus as a % of Covered Payroll (6) = (3) / (5)	Market Value of Assets (MVA) (7)	Unfunded AAL (UAAL)/ Surplus (MVA Basis) (8) = (2) - (7)	Funded Ratio (Market Value of Assets Basis) (9) = (7) / (2)
PERF (Dollars in Millions)									
06/30/21	$477,338	$587,976	$110,638	81.2%	$58,748	188.3%	$477,338	$110,638	81.2%
06/30/20	391,381	554,679	163,298	70.6%	58,606	278.6%	391,381	163,298	70.6%
06/30/19	372,778	531,166	158,388	70.2%	56,391	280.9%	372,778	158,388	70.2%
06/30/18	354,616	504,996	150,380	70.2%	53,903	279.0%	354,616	150,380	70.2%
06/30/17	326,182	465,046	138,864	70.1%	51,991	267.1%	326,182	138,864	70.1%
06/30/16	298,126	436,703	138,577	68.3%	49,833	278.1%	298,126	138,577	68.3%
06/30/15	302,418	413,700	111,282	73.1%	47,458	234.5%	302,418	111,282	73.1%
06/30/14	301,257	394,726	93,469	76.3%	44,958	207.9%	301,257	93,469	76.3%
06/30/13	281,928	375,019	93,091	75.2%	42,575	218.7%	261,622	113,397	69.8%
06/30/12	282,991	340,429	57,438	83.1%	42,599	134.8%	236,800	103,629	69.6%
LRF (Dollars in Thousands)									
06/30/21	$123,525	$95,562	($27,963)	129.3%	$283	(9,880.9%)	$123,525	($27,963)	129.3%
06/30/20	115,538	96,348	(19,190)	119.9%	283	(6,780.9%)	115,538	(19,190)	119.9%
06/30/19	115,796	99,130	(16,666)	116.8%	272	(6,127.2%)	115,796	(16,666)	116.8%
06/30/18	115,484	98,927	(16,557)	116.7%	1,098	(1,507.9%)	115,484	(16,557)	116.7%
06/30/17	116,884	100,845	(16,039)	115.9%	1,209	(1,326.6%)	116,884	(16,039)	115.9%
06/30/16	119,050	106,975	(12,075)	111.3%	1,321	(914.1%)	119,050	(12,075)	111.3%
06/30/15	121,469	105,746	(15,723)	114.9%	1,275	(1,233.2%)	121,469	(15,723)	114.9%
06/30/14	130,353	111,274	(19,079)	117.1%	1,500	(1,271.9%)	130,353	(19,079)	117.1%
06/30/13	123,201	115,806	(7,395)	106.4%	1,427	(518.2%)	122,148	(6,342)	105.5%
06/30/12	124,212	108,585	(15,627)	114.4 %	1,983	(788.0%)	123,029	(14,444)	113.3%
JRF (Dollars in Thousands)									
06/30/21	$65,882	$2,803,230	$2,737,348	2.4%	$24,752	11,059.1%	$65,882	$2,737,348	2.4%
06/30/20	48,020	3,105,001	3,056,981	1.5%	29,137	10,491.7%	48,020	3,056,981	1.5%
06/30/19	14,081	3,173,229	3,159,148	0.4%	31,511	10,025.5%	14,081	3,159,148	0.4%
06/30/18	44,492	3,320,530	3,276,038	1.3%	35,335	9,271.4%	44,492	3,276,038	1.3%
06/30/17	48,275	3,315,731	3,267,456	1.5%	38,330	8,524.5%	48,275	3,267,456	1.5%
06/30/16	39,794	3,428,743	3,388,949	1.2%	42,430	7,987.2%	39,794	3,388,949	1.2%
06/30/15	41,178	3,322,610	3,281,432	1.2%	44,284	7,410.0%	41,178	3,281,432	1.2%
06/30/14	57,199	3,414,780	3,357,581	1.7%	52,335	6,415.6%	57,199	3,357,581	1.7%
06/30/13	53,820	3,383,310	3,329,490	1.6%	60,594	5,494.8%	53,820	3,329,490	1.6%
06/30/12	72,693	3,172,276	3,099,583	2.3%	69,227	4,477.4%	72,693	3,099,583	2.3%
JRF II (Dollars in Thousands)									
06/30/21	$2,403,366	$1,964,844	($438,522)	122.3%	$350,945	(125.0%)	$2,403,366	($438,522)	122.3%
06/30/20	1,885,404	1,913,088	27,684	98.6%	351,443	7.9%	1,885,404	27,684	98.6%
06/30/19	1,715,056	1,725,877	10,821	99.4%	343,260	3.2%	1,715,056	10,821	99.4%
06/30/18	1,531,543	1,554,348	22,805	98.5%	310,294	7.3%	1,531,543	22,805	98.5%
06/30/17	1,356,099	1,365,862	9,763	99.3%	291,383	3.4%	1,356,099	9,763	99.3%
06/30/16	1,172,953	1,272,751	99,798	92.2%	282,619	35.3%	1,172,953	99,798	92.2%
06/30/15	1,084,142	1,081,824	(2,318)	100.2%	272,698	(0.9%)	1,084,142	(2,318)	100.2%
06/30/14	1,013,840	950,642	(63,198)	106.6%	251,586	(25.1%)	1,013,840	(63,198)	106.6%
06/30/13	778,980	837,198	58,218	93.0%	241,988	24.1%	795,966	41,232	95.1%
06/30/12	667,557	702,732	35,175	95.0%	230,736	15.2%	655,384	47,348	93.3%

(1) For contributions data, the actuarially determined contribution compared with actual employer contributions received (including the excess or deficiency for each of the last nine years) is shown in the Schedule of Contributions in the Required Supplementary Information.

EXHIBIT B: FUNDING PROGRESS – SOLVENCY TEST

The funding objective for a retirement system is to be able to pay long-term benefit promises.

If a system follows actuarially sound financing principles, it will be able to pay all of its promised benefits when due—the ultimate test of financial soundness.

A short-term solvency test is one means of checking a system's funding progress. In a short-term solvency test, the plan's present assets (investments and cash) are compared with (1) member contributions on deposit, (2) the liabilities for future benefits to persons who have retired or terminated, and (3) the liabilities for projected benefits for service already rendered by active members. In a system that employs level contribution rate financing, the liabilities for member contributions on deposit (liability 1) and the liabilities for future benefits to present retirees (liability 2) will be fully covered by present assets, except in rare circumstances.

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

Refer to Exhibit B on page 132 for solvency test related to PERF, LRF, JRF, and JRF II.

EXHIBIT B: FUNDING PROGRESS – SOLVENCY TEST (CONTINUED)

	Accrued Liability					Portion of Actuarial Accrued Liabilities Covered by Valuation Assets		
Valuation Date	Member Contributions[1] (1)	Separated, Retirees & Beneficiaries (2)	Employer-Financed Portion of Active Members (3)	Total Accrued Liability (1) + (2) + (3)	Valuation Assets	(1)	(2)	(3)
PERF (Dollars in Millions)								
6/30/21	$64,056	$363,870	$160,050	$587,976	$477,338	100.0%	100.0%	30.9%
6/30/20	62,752	339,632	152,295	554,679	391,381	100.0%	99.1%	—%
6/30/19	60,326	322,055	148,785	531,166	372,778	100.0%	97.0%	—%
6/30/18	58,803	302,037	144,156	504,996	354,616	100.0%	97.9%	—%
6/30/17	56,009	275,222	133,815	465,046	326,182	100.0%	98.2%	—%
6/30/16	53,872	256,253	126,578	436,703	298,126	100.0%	95.3%	—%
6/30/15	51,572	241,931	120,197	413,700	302,418	100.0%	100.0%	7.4%
6/30/14	49,197	228,283	117,246	394,726	301,257	100.0%	100.0%	20.3%
6/30/13	46,343	203,680	124,996	375,019	281,900	100.0%	100.0%	25.5%
6/30/12	43,015	193,015	104,399	340,429	283,000	100.0%	100.0%	45.0%
LRF (Dollars in Thousands)								
6/30/21	$238	$94,051	$1,273	$95,562	$123,525	100.0%	100.0%	2,296.6%
6/30/20	190	95,019	1,139	96,348	115,538	100.0%	100.0%	1,784.8%
6/30/19	158	97,980	992	99,130	115,796	100.0%	100.0%	1,780.0%
6/30/18	799	93,565	4,563	98,927	115,484	100.0%	100.0%	462.9%
6/30/17	731	95,188	4,926	100,845	116,884	100.0%	100.0%	425.6%
6/30/16	673	101,400	4,902	106,975	119,050	100.0%	100.0%	346.3%
6/30/15	556	100,658	4,532	105,746	121,469	100.0%	100.0%	446.9%
6/30/14	508	104,992	5,774	111,274	130,353	100.0%	100.0%	430.4%
6/30/13	351	110,313	5,142	115,806	123,201	100.0%	100.0%	243.8%
6/30/12	801	100,337	7,447	108,585	124,212	100.0%	100.0%	309.8%
JRF (Dollars in Thousands)								
6/30/21	$43,348	$2,634,542	$125,340	$2,803,230	$65,882	100.0%	0.9%	0.0%
6/30/20	48,829	2,830,672	225,500	3,105,001	48,020	98.3%	—	—
6/30/19	51,927	2,860,638	260,664	3,173,229	14,081	27.1%	—	—
6/30/18	57,561	2,955,053	307,916	3,320,530	44,492	77.3%	—	—
6/30/17	61,748	2,914,854	339,129	3,315,731	48,275	78.2%	—	—
6/30/16	65,966	2,970,871	391,906	3,428,743	39,794	60.3%	—	—
6/30/15	66,911	2,761,781	493,918	3,322,610	41,178	61.5%	—	—
6/30/14	76,196	2,734,090	604,494	3,414,780	57,199	75.1%	—	—
6/30/13	84,692	2,691,326	607,292	3,383,310	53,820	64.0%	—	—
6/30/12	91,589	2,441,189	639,498	3,172,276	72,693	79.0%	—	—
JRF II (Dollars in Thousands)								
6/30/21	$471,939	$575,008	$917,897	$1,964,844	$2,403,366	100.0%	100.0%	147.8%
6/30/20	466,344	444,022	1,002,722	1,913,088	1,885,404	100.0%	100.0%	97.2%
6/30/19	426,860	377,779	921,238	1,725,877	1,715,056	100.0%	100.0%	98.8%
6/30/18	393,673	305,259	855,416	1,554,348	1,531,543	100.0%	100.0%	97.3%
6/30/17	364,967	207,997	792,898	1,365,862	1,356,099	100.0%	100.0%	98.8%
6/30/16	357,069	145,526	770,156	1,272,751	1,172,953	100.0%	100.0%	87.0%
6/30/15	348,475	110,645	622,704	1,081,824	1,084,142	100.0%	100.0%	100.4%
6/30/14	285,683	79,563	585,396	950,642	1,013,840	100.0%	100.0%	110.8%
6/30/13	243,049	58,393	535,756	837,198	778,980	100.0%	100.0%	89.1%
6/30/12	223,897	41,142	437,693	702,732	667,557	100.0%	100.0%	92.0%

(1) Includes accrued interest on member contributions.

EXHIBIT C: SAMPLE PAY INCREASE ASSUMPTIONS FOR INDIVIDUAL MEMBERS

Annual Percentage Increases by Duration of Service[1]

Duration of Services	State Miscellaneous First & Second Tier			State Industrial First & Second Tier			State Safety		
	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40
0	8.97%	6.77%	6.28%	8.59%	8.35%	8.35%	7.90%	7.90%	7.90%
3	7.97%	6.14%	5.38%	7.50%	6.72%	6.72%	6.11%	6.11%	6.11%
5	7.39%	5.78%	4.91%	6.90%	5.91%	5.91%	5.14%	5.14%	5.14%
10	5.38%	4.34%	3.81%	5.49%	4.38%	4.38%	3.90%	3.90%	3.90%
15	4.63%	3.98%	3.62%	4.57%	3.95%	3.95%	3.80%	3.80%	3.80%
20	4.10%	3.70%	3.46%	3.96%	3.63%	3.63%	3.70%	3.70%	3.70%
25	3.72%	3.48%	3.34%	3.56%	3.41%	3.41%	3.61%	3.61%	3.61%
30	3.45%	3.32%	3.24%	3.30%	3.24%	3.24%	3.54%	3.54%	3.54%

Duration of Services	State Peace Officer/Firefighter			California Highway Patrol			School		
	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40
0	14.30%	14.30%	14.30%	15.10%	15.10%	15.10%	5.55%	5.55%	4.80%
3	9.43%	9.43%	9.43%	8.14%	8.14%	8.14%	7.02%	6.53%	5.78%
5	7.05%	7.05%	7.05%	5.42%	5.42%	5.42%	5.88%	5.19%	4.59%
10	4.20%	4.20%	4.20%	4.05%	4.05%	4.05%	5.16%	4.40%	4.01%
15	3.92%	3.92%	3.92%	4.21%	4.21%	4.21%	4.62%	4.15%	3.83%
20	3.99%	3.99%	3.99%	5.11%	5.11%	5.11%	4.25%	3.89%	3.65%
25	4.06%	4.06%	4.06%	5.11%	5.11%	5.11%	4.04%	3.82%	3.38%
30	4.14%	4.14%	4.14%	4.34%	4.34%	4.34%	3.55%	3.33%	2.99%

Duration of Services	Public Agency Miscellaneous			Public Agency Fire			Public Agency Police		
	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40
0	10.44%	9.01%	8.01%	17.97%	18.29%	9.11%	14.61%	13.31%	9.33%
3	7.81%	6.61%	5.62%	10.15%	8.93%	6.26%	8.64%	7.65%	6.33%
5	6.58%	5.56%	4.67%	7.33%	6.11%	5.12%	6.45%	5.70%	5.15%
10	4.81%	4.06%	3.88%	4.68%	4.23%	3.57%	4.65%	4.35%	3.98%
15	4.35%	3.82%	3.51%	4.45%	4.04%	3.68%	4.63%	4.30%	4.11%
20	3.99%	3.63%	3.27%	4.25%	3.88%	3.81%	4.61%	4.25%	4.25%
25	3.71%	3.47%	3.11%	4.07%	3.74%	3.95%	4.59%	4.21%	4.41%
30	3.50%	3.34%	3.00%	3.92%	3.62%	4.12%	4.58%	4.16%	4.59%

Duration of Services	Public Agency County Peace Officer		
	Entry Age 20	Entry Age 30	Entry Age 40
0	15.18%	13.33%	11.70%
3	8.24%	7.51%	6.67%
5	5.94%	5.56%	5.02%
10	4.64%	4.22%	3.52%
15	4.54%	4.04%	3.53%
20	4.44%	3.88%	3.54%
25	4.35%	3.74%	3.55%
30	4.27%	3.63%	3.57%

(1) Increase includes the assumed wage inflation rate of 2.8 percent per year for all plans.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS

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

	Termination with Refund		Termination with Vested Deferred Benefits		Service Retirement[3]		Non-Industrial Death[4]		Non-Industrial Disability		Industrial Death	Industrial Disability
	5 Years[2]		5 Years[2]								Male &	Male &
AGE[1]	Male	Female	Male	Female	10 Years[2]	25 Years[2]	Male	Female	Male	Female	Female	Female
20	0.04425	0.04647	0.04657	0.05259	N/A	N/A	0.00039	0.00014	0.00019	0.00030	N/A	N/A
25	0.04041	0.04303	0.04657	0.05259	N/A	N/A	0.00033	0.00013	0.00019	0.00031	N/A	N/A
30	0.03402	0.03730	0.03951	0.04556	N/A	N/A	0.00044	0.00019	0.00019	0.00044	N/A	N/A
35	0.02762	0.03157	0.03245	0.03853	N/A	N/A	0.00058	0.00029	0.00036	0.00079	N/A	N/A
40	0.02429	0.02835	0.02653	0.03160	N/A	N/A	0.00075	0.00039	0.00103	0.00150	N/A	N/A
45	0.02096	0.02513	0.02060	0.02466	N/A	N/A	0.00093	0.00054	0.00204	0.00291	N/A	N/A
50	0.02137	0.02482	0.01683	0.01829	0.01100	0.01400	0.00134	0.00081	0.00274	0.00403	N/A	N/A
55	0.02177	0.02451	0.00000	0.00000	0.03100	0.08000	0.00198	0.00123	0.00238	0.00292	N/A	N/A
56	0.02185	0.02444	0.00000	0.00000	0.03300	0.07900	0.00213	0.00134	0.00222	0.00259	N/A	N/A
57	0.02193	0.02438	0.00000	0.00000	0.03400	0.07500	0.00231	0.00145	0.00200	0.00242	N/A	N/A
58	0.02202	0.02432	0.00000	0.00000	0.03500	0.08500	0.00249	0.00157	0.00200	0.00231	N/A	N/A
59	0.02210	0.02426	0.00000	0.00000	0.04200	0.08800	0.00267	0.00168	0.00200	0.00231	N/A	N/A
60	0.02218	0.02420	0.00000	0.00000	0.03600	0.12600	0.00287	0.00179	0.00200	0.00238	N/A	N/A
61	0.02226	0.02413	0.00000	0.00000	0.05800	0.10800	0.00307	0.00190	0.00200	0.00251	N/A	N/A
62	0.02234	0.02407	0.00000	0.00000	0.11500	0.19700	0.00328	0.00202	0.00200	0.00267	N/A	N/A
63	0.02242	0.02401	0.00000	0.00000	0.12300	0.23400	0.00350	0.00216	0.00200	0.00284	N/A	N/A
64	0.02250	0.02395	0.00000	0.00000	0.12300	0.21100	0.00375	0.00234	0.00200	0.00299	N/A	N/A
65	0.02258	0.02388	0.00000	0.00000	0.16400	0.21800	0.00403	0.00250	0.00200	0.00312	N/A	N/A
70	0.02274	0.02376	0.00000	0.00000	0.22600	0.27800	0.00594	0.00404	0.00200	0.00312	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) State Miscellaneous Second Tier members have the right to convert their Second Tier service to First Tier service provided that they make up the shortfall in their accumulated contributions with interest. The assumption is that all Second Tier members will elect to convert to First Tier service.
(4) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP 2020.

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

	Termination with Refund		Termination with Vested Deferred Benefits		Service Retirement		Non-Industrial Death[3]		Non-Industrial Disability	Industrial Death		Industrial Disability
	5 Years[2]		5 Years[2]						Male &			Male &
AGE[1]	Male	Female	Male	Female	10 Years[2]	25 Years[2]	Male	Female	Female	Male	Female	Female
20	0.02799	0.02799	0.02613	0.02613	N/A	N/A	0.00038	0.00014	0.00035	0.00004	0.00002	0.00006
25	0.02799	0.02799	0.02613	0.02613	N/A	N/A	0.00034	0.00018	0.00035	0.00004	0.00002	0.00006
30	0.02799	0.02799	0.02613	0.02613	N/A	N/A	0.00042	0.00025	0.00086	0.00005	0.00003	0.00006
35	0.02799	0.02799	0.02613	0.02613	N/A	N/A	0.00048	0.00034	0.00149	0.00005	0.00004	0.00012
40	0.02799	0.02799	0.02613	0.02613	N/A	N/A	0.00055	0.00042	0.00239	0.00006	0.00005	0.00012
45	0.02799	0.02799	0.02613	0.02613	N/A	N/A	0.00066	0.00053	0.00364	0.00007	0.00006	0.00018
50	0.02799	0.02799	0.00000	0.00000	0.00900	0.02300	0.00092	0.00073	0.00488	0.00010	0.00008	0.00018
55	0.02799	0.02799	0.00000	0.00000	0.03000	0.15000	0.00138	0.00106	0.00626	0.00015	0.00012	0.00023
56	0.02799	0.02799	0.00000	0.00000	0.02800	0.15700	0.00151	0.00114	0.00626	0.00017	0.00013	0.00023
57	0.02799	0.02799	0.00000	0.00000	0.04000	0.12600	0.00166	0.00123	0.00626	0.00018	0.00014	0.00023
58	0.02799	0.02799	0.00000	0.00000	0.03800	0.13300	0.00182	0.00132	0.00626	0.00020	0.00015	0.00023
59	0.02799	0.02799	0.00000	0.00000	0.06000	0.11600	0.00200	0.00142	0.00626	0.00022	0.00016	0.00023
60	0.02799	0.02799	0.00000	0.00000	0.06500	0.19600	0.00221	0.00151	0.00626	0.00025	0.00017	0.00023
61	0.02799	0.02799	0.00000	0.00000	0.07800	0.18800	0.00242	0.00160	0.00626	0.00027	0.00018	0.00023
62	0.02799	0.02799	0.00000	0.00000	0.19000	0.32100	0.00266	0.00168	0.00626	0.00030	0.00019	0.00023
63	0.02799	0.02799	0.00000	0.00000	0.16700	0.34900	0.00291	0.00178	0.00626	0.00032	0.00020	0.00023
64	0.02799	0.02799	0.00000	0.00000	0.15100	0.31000	0.00317	0.00187	0.00626	0.00035	0.00021	0.00023
65	0.02799	0.02799	0.00000	0.00000	0.26100	0.24300	0.00346	0.00194	0.00626	0.00038	0.00022	0.00023
70	0.02799	0.02799	0.00000	0.00000	0.22700	0.22700	0.00606	0.00358	0.00626	0.00067	0.00040	0.00023

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

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

AGE[1]	Termination with Refund 5 Years[2] Male	Termination with Refund 5 Years[2] Female	Termination with Vested Deferred Benefits 5 Years[2] Male	Termination with Vested Deferred Benefits 5 Years[2] Female	Service Retirement 10 Years	Service Retirement 25 Years	Non-Industrial Death[3] Male	Non-Industrial Death[3] Female	Non-Industrial Disability Male & Female	Industrial Death Male	Industrial Death Female	Industrial Disability Male & Female
20	0.00301	0.00286	0.00875	0.01750	N/A	N/A	0.00038	0.00014	0.00008	0.00004	0.00002	0.00016
25	0.00301	0.00286	0.00875	0.01750	N/A	N/A	0.00034	0.00018	0.00008	0.00004	0.00002	0.00035
30	0.00301	0.00286	0.00875	0.01750	N/A	N/A	0.00042	0.00025	0.00008	0.00005	0.00003	0.00068
35	0.00301	0.00286	0.00875	0.01750	N/A	N/A	0.00048	0.00034	0.00008	0.00005	0.00004	0.00122
40	0.00301	0.00286	0.00875	0.01750	N/A	N/A	0.00055	0.00042	0.00008	0.00006	0.00005	0.00202
45	0.00301	0.00286	0.00875	0.01750	N/A	N/A	0.00066	0.00053	0.00017	0.00007	0.00006	0.00316
50	0.00301	0.00286	0.00000	0.00000	0.04300	0.21100	0.00092	0.00073	0.00017	0.00010	0.00008	0.01214
55	0.00301	0.00286	0.00000	0.00000	0.09000	0.21900	0.00138	0.00106	0.00017	0.00015	0.00012	0.05407
56	0.00301	0.00286	0.00000	0.00000	0.09100	0.22100	0.00151	0.00114	0.00017	0.00017	0.00013	0.07109
57	0.00301	0.00286	0.00000	0.00000	0.09300	0.22600	0.00166	0.00123	0.00017	0.00018	0.00014	0.09310
58	0.00301	0.00286	0.00000	0.00000	0.09500	0.23000	0.00182	0.00132	0.00017	0.00020	0.00015	0.12144
59	0.00301	0.00286	0.00000	0.00000	0.49200	0.49200	0.00200	0.00142	0.00017	0.00022	0.00016	0.15781
60	0.00301	0.00286	0.00000	0.00000	1.00000	1.00000	0.00221	0.00151	0.00017	0.00025	0.00017	0.20431
61	0.00301	0.00286	0.00000	0.00000	1.00000	1.00000	0.00242	0.00160	0.00017	0.00027	0.00018	0.26350
62	0.00301	0.00286	0.00000	0.00000	1.00000	1.00000	0.00266	0.00168	0.00017	0.00030	0.00019	0.27373
63	0.00301	0.00286	0.00000	0.00000	1.00000	1.00000	0.00291	0.00178	0.00017	0.00032	0.00020	0.27395
64	0.00301	0.00286	0.00000	0.00000	1.00000	1.00000	0.00317	0.00187	0.00017	0.00035	0.00021	0.27418
65	0.00301	0.00286	0.00000	0.00000	1.00000	1.00000	0.00346	0.00194	0.00017	0.00038	0.00022	0.27440
70	0.00301	0.00286	0.00000	0.00000	1.00000	1.00000	0.00606	0.00358	0.00017	0.00067	0.00040	0.27551

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

Schools – Probability of an active member leaving due to:

AGE[1]	Termination with Refund 5 Years[2] Male	Termination with Refund 5 Years[2] Female	Termination with Vested Deferred Benefits 5 Years[2] Male	Termination with Vested Deferred Benefits 5 Years[2] Female	Service Retirement 10 Years[2]	Service Retirement 25 Years[2]	Non-Industrial Death[3] Male	Non-Industrial Death[3] Female	Non-Industrial Disability Male	Non-Industrial Disability Female	Industrial Death[3] Male & Female	Industrial Disability Male & Female
20	0.08162	0.09911	0.03590	0.05007	N/A	N/A	0.00039	0.00014	0.00004	0.00015	N/A	N/A
25	0.07316	0.08868	0.03590	0.05007	N/A	N/A	0.00033	0.00013	0.00004	0.00015	N/A	N/A
30	0.05905	0.07130	0.03319	0.04023	N/A	N/A	0.00044	0.00019	0.00018	0.00017	N/A	N/A
35	0.04493	0.05392	0.03049	0.03040	N/A	N/A	0.00058	0.00029	0.00047	0.00038	N/A	N/A
40	0.03831	0.04763	0.02662	0.02721	N/A	N/A	0.00075	0.00039	0.00098	0.00077	N/A	N/A
45	0.03168	0.04133	0.02276	0.02401	N/A	N/A	0.00093	0.00054	0.00191	0.00153	N/A	N/A
50	0.03321	0.04338	0.02103	0.02143	0.00400	0.01000	0.00134	0.00081	0.00273	0.00214	N/A	N/A
55	0.03474	0.04543	0.00000	0.00000	0.02300	0.07000	0.00198	0.00123	0.00235	0.00169	N/A	N/A
56	0.03505	0.04584	0.00000	0.00000	0.02700	0.07300	0.00213	0.00134	0.00223	0.00150	N/A	N/A
57	0.03535	0.04625	0.00000	0.00000	0.02700	0.06800	0.00231	0.00145	0.00214	0.00135	N/A	N/A
58	0.03566	0.04666	0.00000	0.00000	0.03000	0.07800	0.00249	0.00157	0.00206	0.00122	N/A	N/A
59	0.03596	0.04707	0.00000	0.00000	0.03400	0.08500	0.00267	0.00168	0.00201	0.00111	N/A	N/A
60	0.03627	0.04748	0.00000	0.00000	0.04300	0.11300	0.00287	0.00179	0.00198	0.00102	N/A	N/A
61	0.03658	0.04789	0.00000	0.00000	0.05100	0.12400	0.00307	0.00190	0.00196	0.00094	N/A	N/A
62	0.03688	0.04830	0.00000	0.00000	0.09800	0.21600	0.00328	0.00202	0.00195	0.00088	N/A	N/A
63	0.03719	0.04871	0.00000	0.00000	0.11200	0.22200	0.00350	0.00216	0.00193	0.00082	N/A	N/A
64	0.03749	0.04912	0.00000	0.00000	0.11600	0.19600	0.00375	0.00234	0.00193	0.00077	N/A	N/A
65	0.03780	0.04953	0.00000	0.00000	0.16400	0.25000	0.00403	0.00250	0.00193	0.00073	N/A	N/A
70	0.03841	0.05035	0.00000	0.00000	0.19000	0.24600	0.00594	0.00404	0.00193	0.00063	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

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

AGE[1]	Termination with Refund 5 Years[2] Male	Termination with Refund 5 Years[2] Female	Termination with Vested Deferred Benefits 5 Years[2] Male	Termination with Vested Deferred Benefits 5 Years[2] Female	Service Retirement 10 Years[2]	Service Retirement 25 Years[2]	Non-Industrial Death[3] Male	Non-Industrial Death[3] Female	Non-Industrial Disability Male & Female	Industrial Death[3] Male	Industrial Death[3] Female	Industrial Disability Male & Female
20	0.02027	0.02889	0.02284	0.03006	N/A	N/A	0.00038	0.00014	0.00036	0.00004	0.00002	0.00000
25	0.02027	0.02889	0.02284	0.03006	N/A	N/A	0.00034	0.00018	0.00054	0.00004	0.00002	0.00018
30	0.02027	0.02889	0.02284	0.03006	N/A	N/A	0.00042	0.00025	0.00063	0.00005	0.00003	0.00121
35	0.02027	0.02889	0.02284	0.03006	N/A	N/A	0.00048	0.00034	0.00072	0.00005	0.00004	0.00207
40	0.02027	0.02889	0.02284	0.03006	N/A	N/A	0.00055	0.00042	0.00072	0.00006	0.00005	0.00296
45	0.02027	0.02889	0.02284	0.03006	N/A	N/A	0.00066	0.00053	0.00108	0.00007	0.00006	0.00420
50	0.02027	0.02889	0.00000	0.00000	0.01400	0.02200	0.00092	0.00073	0.00201	0.00010	0.00008	0.00578
55	0.02027	0.02889	0.00000	0.00000	0.03600	0.18300	0.00138	0.00106	0.00240	0.00015	0.00012	0.00774
56	0.02027	0.02889	0.00000	0.00000	0.04200	0.16100	0.00151	0.00114	0.00255	0.00017	0.00013	0.00815
57	0.02027	0.02889	0.00000	0.00000	0.04000	0.14200	0.00166	0.00123	0.00262	0.00018	0.00014	0.00854
58	0.02027	0.02889	0.00000	0.00000	0.05000	0.12700	0.00182	0.00132	0.00280	0.00020	0.00015	0.00892
59	0.02027	0.02889	0.00000	0.00000	0.04400	0.12900	0.00200	0.00142	0.00290	0.00022	0.00016	0.00928
60	0.02027	0.02889	0.00000	0.00000	0.05700	0.17000	0.00221	0.00151	0.00320	0.00025	0.00017	0.00963
61	0.02027	0.02889	0.00000	0.00000	0.07100	0.15900	0.00242	0.00160	0.00350	0.00027	0.00018	0.00996
62	0.02027	0.02889	0.00000	0.00000	0.10400	0.21200	0.00266	0.00168	0.00375	0.00030	0.00019	0.01026
63	0.02027	0.02889	0.00000	0.00000	0.09900	0.23300	0.00291	0.00178	0.00420	0.00032	0.00020	0.01054
64	0.02027	0.02889	0.00000	0.00000	0.09700	0.25600	0.00317	0.00187	0.00440	0.00035	0.00021	0.01080
65	0.02027	0.02889	0.00000	0.00000	0.16300	0.22900	0.00346	0.00194	0.00459	0.00038	0.00022	0.01105
70	0.02027	0.02889	0.00000	0.00000	0.22300	0.26000	0.00606	0.00358	0.00459	0.00067	0.00040	0.01105

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

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

AGE[1]	Termination with Refund 5 Years[2] Male	Termination with Refund 5 Years[2] Female	Termination with Vested Deferred Benefits 5 Years[2] Male	Termination with Vested Deferred Benefits 5 Years[2] Female	Service Retirement 10 Years[2]	Service Retirement 25 Years[2]	Non-Industrial Death[3] Male	Non-Industrial Death[3] Female	Non-Industrial Disability Male & Female	Industrial Death[3] Male	Industrial Death[3] Female	Industrial Disability Male & Female
20	0.02133	0.02732	0.01109	0.02295	N/A	N/A	0.00038	0.00014	0.00030	0.00004	0.00002	0.00039
25	0.02133	0.02732	0.01109	0.02295	N/A	N/A	0.00034	0.00018	0.00030	0.00004	0.00002	0.00087
30	0.02133	0.02732	0.01109	0.02295	N/A	N/A	0.00042	0.00025	0.00030	0.00005	0.00003	0.00167
35	0.02133	0.02732	0.01109	0.02295	N/A	N/A	0.00048	0.00034	0.00030	0.00005	0.00004	0.00289
40	0.02133	0.02732	0.01109	0.02295	N/A	N/A	0.00055	0.00042	0.00040	0.00006	0.00005	0.00464
45	0.02133	0.02732	0.01109	0.02295	N/A	N/A	0.00066	0.00053	0.00060	0.00007	0.00006	0.00706
50	0.02133	0.02732	0.00000	0.00000	0.02900	0.29000	0.00092	0.00073	0.00098	0.00010	0.00008	0.01027
55	0.02133	0.02732	0.00000	0.00000	0.02900	0.21400	0.00138	0.00106	0.00143	0.00015	0.00012	0.01442
56	0.02133	0.02732	0.00000	0.00000	0.03400	0.21700	0.00151	0.00114	0.00150	0.00017	0.00013	0.01538
57	0.02133	0.02732	0.00000	0.00000	0.03400	0.23700	0.00166	0.00123	0.00158	0.00018	0.00014	0.01638
58	0.02133	0.02732	0.00000	0.00000	0.04100	0.23300	0.00182	0.00132	0.00165	0.00020	0.00015	0.01742
59	0.02133	0.02732	0.00000	0.00000	0.06200	0.26700	0.00200	0.00142	0.00180	0.00022	0.00016	0.01852
60	0.02133	0.02732	0.00000	0.00000	0.07500	0.31900	0.00221	0.00151	0.00188	0.00025	0.00017	0.01966
61	0.02133	0.02732	0.00000	0.00000	0.07200	0.28200	0.00242	0.00160	0.00195	0.00027	0.00018	0.02085
62	0.02133	0.02732	0.00000	0.00000	0.11300	0.33700	0.00266	0.00168	0.00203	0.00030	0.00019	0.02209
63	0.02133	0.02732	0.00000	0.00000	0.14200	0.32400	0.00291	0.00178	0.00218	0.00032	0.00020	0.02339
64	0.02133	0.02732	0.00000	0.00000	0.10200	0.33800	0.00317	0.00187	0.00225	0.00035	0.00021	0.02474
65	0.02133	0.02732	0.00000	0.00000	0.18100	0.34700	0.00346	0.00194	0.00233	0.00038	0.00022	0.02614
70	0.02133	0.02732	0.00000	0.00000	1.00000	1.00000	0.00606	0.00358	0.00233	0.00067	0.00040	0.03403

(1) Years of service.
(2) Age for Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

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

	Termination with Refund		Termination with Vested Deferred Benefits		Service Retirement		Non-Industrial Death[3]		Non-Industrial Disability		Industrial Death[3]	Industrial Disability
	5 Years[2]		5 Years[2]								Male &	Male &
AGE[1]	Male	Female	Male	Female	10 Years[2]	25 Years[2]	Male	Female	Male	Male	Female	Female
20	0.04625	0.05509	0.03808	0.05235	N/A	N/A	0.00039	0.00014	0.00007	0.00004	N/A	N/A
25	0.04232	0.05171	0.03808	0.05235	N/A	N/A	0.00033	0.00013	0.00007	0.00009	N/A	N/A
30	0.03576	0.04607	0.03576	0.04642	N/A	N/A	0.00044	0.00019	0.00017	0.00033	N/A	N/A
35	0.02921	0.04044	0.03344	0.04048	N/A	N/A	0.00058	0.00029	0.00035	0.00065	N/A	N/A
40	0.02611	0.03501	0.03007	0.03797	N/A	N/A	0.00075	0.00039	0.00091	0.00119	N/A	N/A
45	0.02301	0.02957	0.02670	0.03545	N/A	N/A	0.00093	0.00054	0.00149	0.00185	N/A	N/A
50	0.02387	0.02944	0.02221	0.02860	0.01400	0.02300	0.00134	0.00081	0.00154	0.00193	N/A	N/A
55	0.02474	0.02931	0.00000	0.00000	0.04200	0.09800	0.00198	0.00123	0.00139	0.00129	N/A	N/A
56	0.02491	0.02928	0.00000	0.00000	0.03600	0.10200	0.00213	0.00134	0.00136	0.00118	N/A	N/A
57	0.02509	0.02926	0.00000	0.00000	0.04600	0.09400	0.00231	0.00145	0.00133	0.00109	N/A	N/A
58	0.02526	0.02923	0.00000	0.00000	0.04400	0.10600	0.00249	0.00157	0.00130	0.00103	N/A	N/A
59	0.02543	0.02920	0.00000	0.00000	0.05800	0.10500	0.00267	0.00168	0.00127	0.00098	N/A	N/A
60	0.02561	0.02918	0.00000	0.00000	0.06400	0.15400	0.00287	0.00179	0.00124	0.00094	N/A	N/A
61	0.02578	0.02915	0.00000	0.00000	0.07400	0.14700	0.00307	0.00190	0.00121	0.00092	N/A	N/A
62	0.02595	0.02912	0.00000	0.00000	0.12300	0.22700	0.00328	0.00202	0.00118	0.00090	N/A	N/A
63	0.02613	0.02910	0.00000	0.00000	0.12700	0.25200	0.00350	0.00216	0.00115	0.00088	N/A	N/A
64	0.02630	0.02907	0.00000	0.00000	0.13800	0.22700	0.00375	0.00234	0.00112	0.00086	N/A	N/A
65	0.02647	0.02905	0.00000	0.00000	0.18700	0.28800	0.00403	0.00250	0.00109	0.00083	N/A	N/A
70	0.02682	0.02899	0.00000	0.00000	0.22900	0.22900	0.00594	0.00404	0.00097	0.00054	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

Public Agency 2% at 60 Miscellaneous – Probability of an active member leaving due to:

	Termination with Refund		Termination with Vested Deferred Benefits		Service Retirement		Non-Industrial Death[3]		Non-Industrial Disability		Industrial Death[3]	Industrial Disability
	5 Years[2]		5 Years[2]								Male &	Male &
AGE[1]	Male	Female	Male	Female	10 Years[2]	25 Years[2]	Male	Female	Male	Male	Female	Female
20	0.04625	0.05509	0.03808	0.05235	N/A	N/A	0.00039	0.00014	0.00007	0.00004	N/A	N/A
25	0.04232	0.05171	0.03808	0.05235	N/A	N/A	0.00033	0.00013	0.00007	0.00009	N/A	N/A
30	0.03576	0.04607	0.03576	0.04642	N/A	N/A	0.00044	0.00019	0.00017	0.00033	N/A	N/A
35	0.02921	0.04044	0.03344	0.04048	N/A	N/A	0.00058	0.00029	0.00035	0.00065	N/A	N/A
40	0.02611	0.03501	0.03007	0.03797	N/A	N/A	0.00075	0.00039	0.00091	0.00119	N/A	N/A
45	0.02301	0.02957	0.02670	0.03545	N/A	N/A	0.00093	0.00054	0.00149	0.00185	N/A	N/A
50	0.02387	0.02944	0.02221	0.02860	0.01100	0.01700	0.00134	0.00081	0.00154	0.00193	N/A	N/A
55	0.02474	0.02931	0.00000	0.00000	0.01600	0.03600	0.00198	0.00123	0.00139	0.00129	N/A	N/A
56	0.02491	0.02928	0.00000	0.00000	0.01400	0.03400	0.00213	0.00134	0.00136	0.00118	N/A	N/A
57	0.02509	0.02926	0.00000	0.00000	0.01800	0.04400	0.00231	0.00145	0.00133	0.00109	N/A	N/A
58	0.02526	0.02923	0.00000	0.00000	0.02300	0.04600	0.00249	0.00157	0.00130	0.00103	N/A	N/A
59	0.02543	0.02920	0.00000	0.00000	0.03300	0.05000	0.00267	0.00168	0.00127	0.00098	N/A	N/A
60	0.02561	0.02918	0.00000	0.00000	0.06900	0.13700	0.00287	0.00179	0.00124	0.00094	N/A	N/A
61	0.02578	0.02915	0.00000	0.00000	0.05800	0.13100	0.00307	0.00190	0.00121	0.00092	N/A	N/A
62	0.02595	0.02912	0.00000	0.00000	0.10700	0.23800	0.00328	0.00202	0.00118	0.00090	N/A	N/A
63	0.02613	0.02910	0.00000	0.00000	0.16600	0.28300	0.00350	0.00216	0.00115	0.00088	N/A	N/A
64	0.02630	0.02907	0.00000	0.00000	0.14500	0.16000	0.00375	0.00234	0.00112	0.00086	N/A	N/A
65	0.02647	0.02905	0.00000	0.00000	0.16000	0.23700	0.00403	0.00250	0.00109	0.00083	N/A	N/A
70	0.02682	0.02899	0.00000	0.00000	0.20000	0.20000	0.00594	0.00404	0.00097	0.00054	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

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

AGE[1]	Termination with Refund 5 Years[2] Male	Termination with Refund 5 Years[2] Female	Termination with Vested Deferred Benefits 5 Years[2] Male	Termination with Vested Deferred Benefits 5 Years[2] Female	Service Retirement 10 Years[2]	Service Retirement 25 Years[2]	Non-Industrial Death[3] Male	Non-Industrial Death[3] Female	Non-Industrial Disability Male	Non-Industrial Disability Male	Industrial Death[3] Male & Female	Industrial Disability Male & Female
20	0.04625	0.05509	0.03808	0.05235	N/A	N/A	0.00039	0.00014	0.00007	0.00004	N/A	N/A
25	0.04232	0.05171	0.03808	0.05235	N/A	N/A	0.00033	0.00013	0.00007	0.00009	N/A	N/A
30	0.03576	0.04607	0.03576	0.04642	N/A	N/A	0.00044	0.00019	0.00017	0.00033	N/A	N/A
35	0.02921	0.04044	0.03344	0.04048	N/A	N/A	0.00058	0.00029	0.00035	0.00065	N/A	N/A
40	0.02611	0.03501	0.03007	0.03797	N/A	N/A	0.00075	0.00039	0.00091	0.00119	N/A	N/A
45	0.02301	0.02957	0.02670	0.03545	N/A	N/A	0.00093	0.00054	0.00149	0.00185	N/A	N/A
50	0.02387	0.02944	0.02221	0.02860	0.01700	0.04600	0.00134	0.00081	0.00154	0.00193	N/A	N/A
55	0.02474	0.02931	0.00000	0.00000	0.04200	0.15000	0.00198	0.00123	0.00139	0.00129	N/A	N/A
56	0.02491	0.02928	0.00000	0.00000	0.04700	0.13400	0.00213	0.00134	0.00136	0.00118	N/A	N/A
57	0.02509	0.02926	0.00000	0.00000	0.04700	0.11600	0.00231	0.00145	0.00133	0.00109	N/A	N/A
58	0.02526	0.02923	0.00000	0.00000	0.04600	0.11900	0.00249	0.00157	0.00130	0.00103	N/A	N/A
59	0.02543	0.02920	0.00000	0.00000	0.05300	0.13900	0.00267	0.00168	0.00127	0.00098	N/A	N/A
60	0.02561	0.02918	0.00000	0.00000	0.06900	0.17700	0.00287	0.00179	0.00124	0.00094	N/A	N/A
61	0.02578	0.02915	0.00000	0.00000	0.07700	0.16700	0.00307	0.00190	0.00121	0.00092	N/A	N/A
62	0.02595	0.02912	0.00000	0.00000	0.13100	0.24400	0.00328	0.00202	0.00118	0.00090	N/A	N/A
63	0.02613	0.02910	0.00000	0.00000	0.13500	0.22200	0.00350	0.00216	0.00115	0.00088	N/A	N/A
64	0.02630	0.02907	0.00000	0.00000	0.12800	0.23300	0.00375	0.00234	0.00112	0.00086	N/A	N/A
65	0.02647	0.02905	0.00000	0.00000	0.17400	0.26800	0.00403	0.00250	0.00109	0.00083	N/A	N/A
70	0.02682	0.02899	0.00000	0.00000	0.22900	0.22900	0.00594	0.00404	0.00097	0.00054	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

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

AGE[1]	Termination with Refund 5 Years[2] Male	Termination with Refund 5 Years[2] Female	Termination with Vested Deferred Benefits 5 Years[2] Male	Termination with Vested Deferred Benefits 5 Years[2] Female	Service Retirement 10 Years[2]	Service Retirement 25 Years[2]	Non-Industrial Death[3] Male	Non-Industrial Death[3] Female	Non-Industrial Disability Male	Non-Industrial Disability Male	Industrial Death[3] Male & Female	Industrial Disability Male & Female
20	0.04625	0.05509	0.03808	0.05235	N/A	N/A	0.00039	0.00014	0.00007	0.00004	N/A	N/A
25	0.04232	0.05171	0.03808	0.05235	N/A	N/A	0.00033	0.00013	0.00007	0.00009	N/A	N/A
30	0.03576	0.04607	0.03576	0.04642	N/A	N/A	0.00044	0.00019	0.00017	0.00033	N/A	N/A
35	0.02921	0.04044	0.03344	0.04048	N/A	N/A	0.00058	0.00029	0.00035	0.00065	N/A	N/A
40	0.02611	0.03501	0.03007	0.03797	N/A	N/A	0.00075	0.00039	0.00091	0.00119	N/A	N/A
45	0.02301	0.02957	0.02670	0.03545	N/A	N/A	0.00093	0.00054	0.00149	0.00185	N/A	N/A
50	0.02387	0.02944	0.02221	0.02860	0.01600	0.03400	0.00134	0.00081	0.00154	0.00193	N/A	N/A
55	0.02474	0.02931	0.00000	0.00000	0.05800	0.20800	0.00198	0.00123	0.00139	0.00129	N/A	N/A
56	0.02491	0.02928	0.00000	0.00000	0.06200	0.17800	0.00213	0.00134	0.00136	0.00118	N/A	N/A
57	0.02509	0.02926	0.00000	0.00000	0.05200	0.14700	0.00231	0.00145	0.00133	0.00109	N/A	N/A
58	0.02526	0.02923	0.00000	0.00000	0.06000	0.16300	0.00249	0.00157	0.00130	0.00103	N/A	N/A
59	0.02543	0.02920	0.00000	0.00000	0.06700	0.15800	0.00267	0.00168	0.00127	0.00098	N/A	N/A
60	0.02561	0.02918	0.00000	0.00000	0.08400	0.16500	0.00287	0.00179	0.00124	0.00094	N/A	N/A
61	0.02578	0.02915	0.00000	0.00000	0.08400	0.17300	0.00307	0.00190	0.00121	0.00092	N/A	N/A
62	0.02595	0.02912	0.00000	0.00000	0.13300	0.21400	0.00328	0.00202	0.00118	0.00090	N/A	N/A
63	0.02613	0.02910	0.00000	0.00000	0.14000	0.20900	0.00350	0.00216	0.00115	0.00088	N/A	N/A
64	0.02630	0.02907	0.00000	0.00000	0.12400	0.21400	0.00375	0.00234	0.00112	0.00086	N/A	N/A
65	0.02647	0.02905	0.00000	0.00000	0.20100	0.29300	0.00403	0.00250	0.00109	0.00083	N/A	N/A
70	0.02682	0.02899	0.00000	0.00000	0.22700	0.22700	0.00594	0.00404	0.00097	0.00054	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

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

	Termination with Refund		Termination with Vested Deferred Benefits		Service Retirement		Non-Industrial Death[3]		Non-Industrial Disability		Industrial Death[3]	Industrial Disability
	5 Years²		5 Years²								Male &	Male &
AGE¹	Male	Female	Male	Female	10 Years[2]	25 Years[2]	Male	Female	Male	Male	Female	Female
20	0.04625	0.05509	0.03808	0.05235	N/A	N/A	0.00039	0.00014	0.00007	0.00004	N/A	N/A
25	0.04232	0.05171	0.03808	0.05235	N/A	N/A	0.00033	0.00013	0.00007	0.00009	N/A	N/A
30	0.03576	0.04607	0.03576	0.04642	N/A	N/A	0.00044	0.00019	0.00017	0.00033	N/A	N/A
35	0.02921	0.04044	0.03344	0.04048	N/A	N/A	0.00058	0.00029	0.00035	0.00065	N/A	N/A
40	0.02611	0.03501	0.03007	0.03797	N/A	N/A	0.00075	0.00039	0.00091	0.00119	N/A	N/A
45	0.02301	0.02957	0.02670	0.03545	N/A	N/A	0.00093	0.00054	0.00149	0.00185	N/A	N/A
50	0.02387	0.02944	0.02221	0.02860	0.02000	0.04000	0.00134	0.00081	0.00154	0.00193	N/A	N/A
55	0.02474	0.02931	0.00000	0.00000	0.04300	0.07600	0.00198	0.00123	0.00139	0.00129	N/A	N/A
56	0.02491	0.02928	0.00000	0.00000	0.03800	0.08500	0.00213	0.00134	0.00136	0.00118	N/A	N/A
57	0.02509	0.02926	0.00000	0.00000	0.03500	0.11100	0.00231	0.00145	0.00133	0.00109	N/A	N/A
58	0.02526	0.02923	0.00000	0.00000	0.04000	0.13300	0.00249	0.00157	0.00130	0.00103	N/A	N/A
59	0.02543	0.02920	0.00000	0.00000	0.05600	0.11300	0.00267	0.00168	0.00127	0.00098	N/A	N/A
60	0.02561	0.02918	0.00000	0.00000	0.08500	0.28000	0.00287	0.00179	0.00124	0.00094	N/A	N/A
61	0.02578	0.02915	0.00000	0.00000	0.09000	0.22300	0.00307	0.00190	0.00121	0.00092	N/A	N/A
62	0.02595	0.02912	0.00000	0.00000	0.15300	0.27800	0.00328	0.00202	0.00118	0.00090	N/A	N/A
63	0.02613	0.02910	0.00000	0.00000	0.14000	0.25100	0.00350	0.00216	0.00115	0.00088	N/A	N/A
64	0.02630	0.02907	0.00000	0.00000	0.14700	0.23900	0.00375	0.00234	0.00112	0.00086	N/A	N/A
65	0.02647	0.02905	0.00000	0.00000	0.20100	0.32300	0.00403	0.00250	0.00109	0.00083	N/A	N/A
70	0.02682	0.02899	0.00000	0.00000	0.24500	0.24500	0.00594	0.00404	0.00097	0.00054	N/A	N/A

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

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

	Termination with Refund		Termination with Vested Deferred Benefits		Service Retirement		Non-Industrial Death[3]		Non-Industrial Disability	Industrial Death[3]		Industrial Disability
	5 Years²		5 Years²						Male &			Male &
AGE¹	Male	Female	Male	Female	10 Years[2]	25 Years[2]	Male	Female	Female	Male	Female	Female
20	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00038	0.00014	0.00006	0.00004	0.00002	0.00000
25	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00034	0.00018	0.00006	0.00004	0.00002	0.00165
30	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00042	0.00025	0.00011	0.00005	0.00003	0.00476
35	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00048	0.00034	0.00017	0.00005	0.00004	0.00788
40	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00055	0.00042	0.00023	0.00006	0.00005	0.01100
45	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00066	0.00053	0.00028	0.00007	0.00006	0.01412
50	0.01129	0.01276	0.00000	0.00000	0.07700	0.04300	0.00092	0.00073	0.00045	0.00010	0.00008	0.01846
55	0.01129	0.01276	0.00000	0.00000	0.04000	0.18600	0.00138	0.00106	0.00074	0.00015	0.00012	0.04785
56	0.01129	0.01276	0.00000	0.00000	0.05100	0.19400	0.00151	0.00114	0.00085	0.00017	0.00013	0.05032
57	0.01129	0.01276	0.00000	0.00000	0.07200	0.15600	0.00166	0.00123	0.00091	0.00018	0.00014	0.05279
58	0.01129	0.01276	0.00000	0.00000	0.04600	0.15200	0.00182	0.00132	0.00102	0.00020	0.00015	0.05527
59	0.01129	0.01276	0.00000	0.00000	0.09400	0.15500	0.00200	0.00142	0.00113	0.00022	0.00016	0.05775
60	0.01129	0.01276	0.00000	0.00000	0.17700	0.17700	0.00221	0.00151	0.00113	0.00025	0.00017	0.06024
61	0.01129	0.01276	0.00000	0.00000	0.13400	0.13400	0.00242	0.00160	0.00113	0.00027	0.00018	0.06273
62	0.01129	0.01276	0.00000	0.00000	0.18400	0.18400	0.00266	0.00168	0.00113	0.00030	0.00019	0.06523
63	0.01129	0.01276	0.00000	0.00000	0.25000	0.25000	0.00291	0.00178	0.00113	0.00032	0.00020	0.06774
64	0.01129	0.01276	0.00000	0.00000	0.17700	0.17700	0.00317	0.00187	0.00113	0.00035	0.00021	0.07025
65	0.01129	0.01276	0.00000	0.00000	1.00000	1.00000	0.00346	0.00194	0.00113	0.00038	0.00022	0.07277
70	0.01129	0.01276	0.00000	0.00000	1.00000	1.00000	0.00606	0.00358	0.00113	0.00067	0.00040	0.08549

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

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

AGE[1]	Termination with Refund 5 Years[2] Male	Termination with Refund 5 Years[2] Female	Termination with Vested Deferred Benefits 5 Years[2] Male	Termination with Vested Deferred Benefits 5 Years[2] Female	Service Retirement 10 Years[2]	Service Retirement 25 Years[2]	Non-Industrial Death[3] Male	Non-Industrial Death[3] Female	Non-Industrial Disability Male & Female	Industrial Death[3] Male	Industrial Death[3] Female	Industrial Disability Male & Female
20	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00038	0.00014	0.00008	0.00004	0.00002	0.00005
25	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00034	0.00018	0.00008	0.00004	0.00002	0.00019
30	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00042	0.00025	0.00008	0.00005	0.00003	0.00056
35	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00048	0.00034	0.00008	0.00005	0.00004	0.00119
40	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00055	0.00042	0.00008	0.00006	0.00005	0.00225
45	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00066	0.00053	0.00016	0.00007	0.00006	0.00398
50	0.00920	0.02143	0.00000	0.00000	0.05400	0.06400	0.00092	0.00073	0.00040	0.00010	0.00008	0.02079
55	0.00920	0.02143	0.00000	0.00000	0.13900	0.13900	0.00138	0.00106	0.00056	0.00015	0.00012	0.03066
56	0.00920	0.02143	0.00000	0.00000	0.12900	0.12900	0.00151	0.00114	0.00056	0.00017	0.00013	0.03300
57	0.00920	0.02143	0.00000	0.00000	0.08500	0.08500	0.00166	0.00123	0.00056	0.00018	0.00014	0.03548
58	0.00920	0.02143	0.00000	0.00000	0.11900	0.11900	0.00182	0.00132	0.00056	0.00020	0.00015	0.03809
59	0.00920	0.02143	0.00000	0.00000	0.16700	0.16700	0.00200	0.00142	0.00056	0.00022	0.00016	0.04085
60	0.00920	0.02143	0.00000	0.00000	0.15200	0.15200	0.00221	0.00151	0.00056	0.00025	0.00017	0.04375
61	0.00920	0.02143	0.00000	0.00000	0.17900	0.17900	0.00242	0.00160	0.00056	0.00027	0.00018	0.04681
62	0.00920	0.02143	0.00000	0.00000	0.17900	0.17900	0.00266	0.00168	0.00056	0.00030	0.00019	0.05003
63	0.00920	0.02143	0.00000	0.00000	0.17900	0.17900	0.00291	0.00178	0.00056	0.00032	0.00020	0.05341
64	0.00920	0.02143	0.00000	0.00000	0.17900	0.17900	0.00317	0.00187	0.00056	0.00035	0.00021	0.05696
65	0.00920	0.02143	0.00000	0.00000	1.00000	1.00000	0.00346	0.00194	0.00056	0.00038	0.00022	0.06069
70	0.00920	0.02143	0.00000	0.00000	1.00000	1.00000	0.00606	0.00358	0.00056	0.00067	0.00040	0.08221

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

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

AGE[1]	Termination with Refund 5 Years[2] Male	Termination with Refund 5 Years[2] Female	Termination with Vested Deferred Benefits 5 Years[2] Male	Termination with Vested Deferred Benefits 5 Years[2] Female	Service Retirement 10 Years[2]	Service Retirement 25 Years[2]	Non-Industrial Death[3] Male	Non-Industrial Death[3] Female	Non-Industrial Disability Male & Female	Industrial Death[3] Male	Industrial Death[3] Female	Industrial Disability Male & Female
20	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00038	0.00014	0.00006	0.00004	0.00002	0.00000
25	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00034	0.00018	0.00006	0.00004	0.00002	0.00165
30	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00042	0.00025	0.00011	0.00005	0.00003	0.00476
35	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00048	0.00034	0.00017	0.00005	0.00004	0.00788
40	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00055	0.00042	0.00023	0.00006	0.00005	0.01100
45	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00066	0.00053	0.00028	0.00007	0.00006	0.01412
50	0.01129	0.01276	0.00000	0.00000	0.10300	0.24400	0.00092	0.00073	0.00045	0.00010	0.00008	0.01846
55	0.01129	0.01276	0.00000	0.00000	0.07400	0.20900	0.00138	0.00106	0.00074	0.00015	0.00012	0.04785
56	0.01129	0.01276	0.00000	0.00000	0.10800	0.19000	0.00151	0.00114	0.00085	0.00017	0.00013	0.05032
57	0.01129	0.01276	0.00000	0.00000	0.10900	0.21000	0.00166	0.00123	0.00091	0.00018	0.00014	0.05279
58	0.01129	0.01276	0.00000	0.00000	0.12900	0.21400	0.00182	0.00132	0.00102	0.00020	0.00015	0.05527
59	0.01129	0.01276	0.00000	0.00000	0.14400	0.26200	0.00200	0.00142	0.00113	0.00022	0.00016	0.05775
60	0.01129	0.01276	0.00000	0.00000	0.18000	0.24700	0.00221	0.00151	0.00113	0.00025	0.00017	0.06024
61	0.01129	0.01276	0.00000	0.00000	0.22100	0.22100	0.00242	0.00160	0.00113	0.00027	0.00018	0.06273
62	0.01129	0.01276	0.00000	0.00000	0.21300	0.21300	0.00266	0.00168	0.00113	0.00030	0.00019	0.06523
63	0.01129	0.01276	0.00000	0.00000	0.23300	0.23300	0.00291	0.00178	0.00113	0.00032	0.00020	0.06774
64	0.01129	0.01276	0.00000	0.00000	0.23400	0.23400	0.00317	0.00187	0.00113	0.00035	0.00021	0.07025
65	0.01129	0.01276	0.00000	0.00000	1.00000	1.00000	0.00346	0.00194	0.00113	0.00038	0.00022	0.07277
70	0.01129	0.01276	0.00000	0.00000	1.00000	1.00000	0.00606	0.00358	0.00113	0.00067	0.00040	0.08549

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

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

AGE[1]	Termination with Refund 5 Years[2] Male	Termination with Refund 5 Years[2] Female	Termination with Vested Deferred Benefits 5 Years[2] Male	Termination with Vested Deferred Benefits 5 Years[2] Female	Service Retirement 10 Years[2]	Service Retirement 25 Years[2]	Non-Industrial Death[3] Male	Non-Industrial Death[3] Female	Non-Industrial Disability Male & Female	Industrial Death[3] Male	Industrial Death[3] Female	Industrial Disability Male & Female
20	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00038	0.00014	0.00008	0.00004	0.00002	0.00005
25	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00034	0.00018	0.00008	0.00004	0.00002	0.00019
30	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00042	0.00025	0.00008	0.00005	0.00003	0.00056
35	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00048	0.00034	0.00008	0.00005	0.00004	0.00119
40	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00055	0.00042	0.00008	0.00006	0.00005	0.00225
45	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00066	0.00053	0.00016	0.00007	0.00006	0.00398
50	0.00920	0.02143	0.00000	0.00000	0.04800	0.13400	0.00092	0.00073	0.00040	0.00010	0.00008	0.02079
55	0.00920	0.02143	0.00000	0.00000	0.04300	0.13200	0.00138	0.00106	0.00056	0.00015	0.00012	0.03066
56	0.00920	0.02143	0.00000	0.00000	0.10300	0.15100	0.00151	0.00114	0.00056	0.00017	0.00013	0.03300
57	0.00920	0.02143	0.00000	0.00000	0.04800	0.17200	0.00166	0.00123	0.00056	0.00018	0.00014	0.03548
58	0.00920	0.02143	0.00000	0.00000	0.09700	0.19400	0.00182	0.00132	0.00056	0.00020	0.00015	0.03809
59	0.00920	0.02143	0.00000	0.00000	0.07100	0.19200	0.00200	0.00142	0.00056	0.00022	0.00016	0.04085
60	0.00920	0.02143	0.00000	0.00000	0.04400	0.18600	0.00221	0.00151	0.00056	0.00025	0.00017	0.04375
61	0.00920	0.02143	0.00000	0.00000	0.21900	0.23300	0.00242	0.00160	0.00056	0.00027	0.00018	0.04681
62	0.00920	0.02143	0.00000	0.00000	0.22700	0.24100	0.00266	0.00168	0.00056	0.00030	0.00019	0.05003
63	0.00920	0.02143	0.00000	0.00000	0.19600	0.19600	0.00291	0.00178	0.00056	0.00032	0.00020	0.05341
64	0.00920	0.02143	0.00000	0.00000	0.19700	0.19700	0.00317	0.00187	0.00056	0.00035	0.00021	0.05696
65	0.00920	0.02143	0.00000	0.00000	1.00000	1.00000	0.00346	0.00194	0.00056	0.00038	0.00022	0.06069
70	0.00920	0.02143	0.00000	0.00000	1.00000	1.00000	0.00606	0.00358	0.00056	0.00067	0.00040	0.08221

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

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

AGE[1]	Termination with Refund 5 Years[2] Male	Termination with Refund 5 Years[2] Female	Termination with Vested Deferred Benefits 5 Years[2] Male	Termination with Vested Deferred Benefits 5 Years[2] Female	Service Retirement 10 Years[2]	Service Retirement 25 Years[2]	Non-Industrial Death[3] Male	Non-Industrial Death[3] Female	Non-Industrial Disability Male & Female	Industrial Death[3] Male	Industrial Death[3] Female	Industrial Disability Male & Female
20	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00038	0.00014	0.00006	0.00004	0.00002	0.00000
25	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00034	0.00018	0.00006	0.00004	0.00002	0.00165
30	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00042	0.00025	0.00011	0.00005	0.00003	0.00476
35	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00048	0.00034	0.00017	0.00005	0.00004	0.00788
40	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00055	0.00042	0.00023	0.00006	0.00005	0.01100
45	0.01129	0.01276	0.01557	0.02724	N/A	N/A	0.00066	0.00053	0.00028	0.00007	0.00006	0.01412
50	0.01129	0.01276	0.00000	0.00000	0.05300	0.05700	0.00092	0.00073	0.00045	0.00010	0.00008	0.01846
55	0.01129	0.01276	0.00000	0.00000	0.11500	0.23100	0.00138	0.00106	0.00074	0.00015	0.00012	0.04785
56	0.01129	0.01276	0.00000	0.00000	0.18800	0.19900	0.00151	0.00114	0.00085	0.00017	0.00013	0.05032
57	0.01129	0.01276	0.00000	0.00000	0.13700	0.15700	0.00166	0.00123	0.00091	0.00018	0.00014	0.05279
58	0.01129	0.01276	0.00000	0.00000	0.12600	0.19400	0.00182	0.00132	0.00102	0.00020	0.00015	0.05527
59	0.01129	0.01276	0.00000	0.00000	0.14600	0.19500	0.00200	0.00142	0.00113	0.00022	0.00016	0.05775
60	0.01129	0.01276	0.00000	0.00000	0.15500	0.15500	0.00221	0.00151	0.00113	0.00025	0.00017	0.06024
61	0.01129	0.01276	0.00000	0.00000	0.21000	0.21000	0.00242	0.00160	0.00113	0.00027	0.00018	0.06273
62	0.01129	0.01276	0.00000	0.00000	0.26200	0.26200	0.00266	0.00168	0.00113	0.00030	0.00019	0.06523
63	0.01129	0.01276	0.00000	0.00000	0.17200	0.17200	0.00291	0.00178	0.00113	0.00032	0.00020	0.06774
64	0.01129	0.01276	0.00000	0.00000	0.22700	0.22700	0.00317	0.00187	0.00113	0.00035	0.00021	0.07025
65	0.01129	0.01276	0.00000	0.00000	1.00000	1.00000	0.00346	0.00194	0.00113	0.00038	0.00022	0.07277
70	0.01129	0.01276	0.00000	0.00000	1.00000	1.00000	0.00606	0.00358	0.00113	0.00067	0.00040	0.08549

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

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

	Termination with Refund		Termination with Vested Deferred Benefits		Service Retirement		Non-Industrial Death[3]		Non-Industrial Disability	Industrial Death[3]		Industrial Disability
	5 Years[2]		5 Years[2]						Male &			Male &
AGE[1]	Male	Female	Male	Female	10 Years[2]	25 Years[2]	Male	Female	Female	Male	Female	Female
20	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00038	0.00014	0.00008	0.00004	0.00002	0.00005
25	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00034	0.00018	0.00008	0.00004	0.00002	0.00019
30	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00042	0.00025	0.00008	0.00005	0.00003	0.00056
35	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00048	0.00034	0.00008	0.00005	0.00004	0.00119
40	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00055	0.00042	0.00008	0.00006	0.00005	0.00225
45	0.00920	0.02143	0.00894	0.02235	N/A	N/A	0.00066	0.00053	0.00016	0.00007	0.00006	0.00398
50	0.00920	0.02143	0.00000	0.00000	0.00600	0.02500	0.00092	0.00073	0.00040	0.00010	0.00008	0.02079
55	0.00920	0.02143	0.00000	0.00000	0.06700	0.13400	0.00138	0.00106	0.00056	0.00015	0.00012	0.03066
56	0.00920	0.02143	0.00000	0.00000	0.06300	0.12700	0.00151	0.00114	0.00056	0.00017	0.00013	0.03300
57	0.00920	0.02143	0.00000	0.00000	0.10000	0.22000	0.00166	0.00123	0.00056	0.00018	0.00014	0.03548
58	0.00920	0.02143	0.00000	0.00000	0.06200	0.13500	0.00182	0.00132	0.00056	0.00020	0.00015	0.03809
59	0.00920	0.02143	0.00000	0.00000	0.05300	0.17700	0.00200	0.00142	0.00056	0.00022	0.00016	0.04085
60	0.00920	0.02143	0.00000	0.00000	0.06300	0.20800	0.00221	0.00151	0.00056	0.00025	0.00017	0.04375
61	0.00920	0.02143	0.00000	0.00000	0.23100	0.23100	0.00242	0.00160	0.00056	0.00027	0.00018	0.04681
62	0.00920	0.02143	0.00000	0.00000	0.24000	0.24000	0.00266	0.00168	0.00056	0.00030	0.00019	0.05003
63	0.00920	0.02143	0.00000	0.00000	0.23600	0.23600	0.00291	0.00178	0.00056	0.00032	0.00020	0.05341
64	0.00920	0.02143	0.00000	0.00000	0.23600	0.23600	0.00317	0.00187	0.00056	0.00035	0.00021	0.05696
65	0.00920	0.02143	0.00000	0.00000	1.00000	1.00000	0.00346	0.00194	0.00056	0.00038	0.00022	0.06069
70	0.00920	0.02143	0.00000	0.00000	1.00000	1.00000	0.00606	0.00358	0.00056	0.00067	0.00040	0.08221

(1) Age for Termination with Refund and Termination with Vested Deferred Benefits means Entry Age. For all other decrements, age means Attained Age.
(2) Years of service.
(3) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

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

	Healthy Recipients[1]		Non-Industrially Disabled[1] (Not Job Related)		Industrially Disabled[1] (Job Related)	
AGE	Male	Female	Male	Female	Male	Female
50	0.00267	0.00199	0.01701	0.01439	0.00430	0.00311
55	0.00390	0.00325	0.02210	0.01734	0.00621	0.00550
60	0.00578	0.00455	0.02708	0.01962	0.00944	0.00868
65	0.00857	0.00612	0.03334	0.02276	0.01394	0.01190
70	0.01333	0.00996	0.04001	0.02910	0.02163	0.01858
75	0.02391	0.01783	0.05376	0.04160	0.03446	0.03134
80	0.04371	0.03403	0.07936	0.06112	0.05853	0.05183
85	0.08274	0.06166	0.11561	0.09385	0.10137	0.08045
90	0.14539	0.11086	0.16608	0.14396	0.16584	0.12434
95	0.24665	0.20364	0.24665	0.20364	0.24665	0.20364
100	0.36198	0.31582	0.36198	0.31582	0.36198	0.31582

(1) Mortality rates shown are for year 2017. These rates are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

EXHIBIT E: SINGLE LIFE RETIREMENT VALUES

Present value of $1 monthly increase 2 percent annually after two-year waiting period. Discount rate of 7.00 percent used for all plans.

	Schools					Public Agencies and State					
	Service Retirement		Non-Industrial Disability Retirement			Service Retirement		Non-Industrial Disability Retirement		Industrial Disability Retirement	
AGE	Male	Female	Male	Female	AGE	Male	Female	Male	Female	Male	Female
50	194.883	200.711	154.246	166.557	50	194.883	200.711	154.246	166.557	185.095	189.510
51	192.496	198.480	151.946	164.532	51	192.496	198.480	151.946	164.532	182.480	186.871
52	190.010	196.163	149.651	162.428	52	190.010	196.163	149.651	162.428	179.770	184.159
53	187.422	193.761	147.334	160.276	53	187.422	193.761	147.334	160.276	176.968	181.376
54	184.739	191.295	144.960	158.110	54	184.739	191.295	144.960	158.110	174.069	178.537
55	181.970	188.757	142.565	155.918	55	181.970	188.757	142.565	155.918	171.081	175.638
56	179.114	186.153	140.137	153.699	56	179.114	186.153	140.137	153.699	168.010	172.689
57	176.175	183.440	137.672	151.435	57	176.175	183.440	137.672	151.435	164.866	169.694
58	173.129	180.596	135.196	149.121	58	173.129	180.596	135.196	149.121	161.645	166.663
59	169.971	177.642	132.662	146.730	59	169.971	177.642	132.662	146.730	158.359	163.583
60	166.721	174.613	130.099	144.286	60	166.721	174.613	130.099	144.286	155.013	160.461
61	163.400	171.537	127.546	141.773	61	163.400	171.537	127.546	141.773	151.598	157.267
62	159.997	168.376	124.958	139.157	62	159.997	168.376	124.958	139.157	148.122	154.000
63	156.507	165.081	122.368	136.460	63	156.507	165.081	122.368	136.460	144.582	150.647
64	152.934	161.645	119.762	133.665	64	152.934	161.645	119.762	133.665	140.969	147.193
65	149.242	158.080	117.149	130.760	65	149.242	158.080	117.149	130.760	137.292	143.646
70	129.212	138.539	103.188	114.871	70	129.212	138.539	103.188	114.871	118.026	124.572
75	107.084	116.695	86.964	97.107	75	107.084	116.695	86.964	97.107	97.461	104.244
80	84.250	93.403	70.523	79.200	80	84.250	93.403	70.523	79.200	76.633	84.580
85	62.616	71.070	55.694	62.067	85	62.616	71.070	55.694	62.067	57.639	66.490
90	44.164	51.112	42.614	47.900	90	44.164	51.112	42.614	47.900	42.520	49.935
95	31.283	35.325	31.283	35.325	95	31.283	35.325	31.283	35.325	31.283	35.325
100	21.665	24.874	21.665	24.874	100	21.665	24.874	21.665	24.874	21.665	24.874

EXHIBIT F: SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Valuation Date	Number of Active Members	Annual Covered Payroll (in Millions)	Average Annual Salary	% Increase in Average Pay	Number of Employers
6/30/2021	844,953	$58,748	$69,528	2.3%	2,892
6/30/2020	861,976	58,606	67,990	3.7%	2,890
6/30/2019	860,485	56,391	65,534	2.9%	2,890
6/30/2018	846,467	53,903	63,680	2.3%	2,892
6/30/2017	835,473	51,991	62,229	2.3%	2,946
6/30/2016	818,889	49,833	60,854	2.6%	3,022
6/30/2015	800,205	47,458	59,307	1.9%	3,008
6/30/2014	772,817	44,958	58,174	2.8 %	3,094
6/30/2013	752,681	42,575	56,564	1.2 %	3,090
6/30/2012	762,459	42,599	55,871	(0.8)%	3,065

EXHIBIT G: MEMBERS IN VALUATION

State Miscellaneous First & Second Tier – By Attained Age & Years of Service – June 30, 2021

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date[1]						Total	Total Valuation Payroll[2]
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	2,799	6	—	—	—	—	2,805	$119,605,585
25-29	11,202	1,477	5	—	—	—	12,684	669,562,691
30-34	12,510	6,832	930	18	1	—	20,291	1,279,924,639
35-39	9,995	7,927	4,431	798	85	2	23,238	1,694,417,692
40-44	7,511	6,299	4,951	2,903	1,266	86	23,016	1,798,787,106
45-49	5,742	4,733	4,357	3,512	3,622	823	22,789	1,875,155,205
50-54	4,781	4,290	4,036	3,932	4,757	3,765	25,561	2,165,406,488
55-59	3,770	3,563	3,473	3,070	4,217	5,516	23,609	2,021,018,438
60-64	2,318	2,710	2,546	2,203	2,806	3,507	16,090	1,351,196,648
65 & up	1,254	1,601	1,567	1,257	1,374	1,819	8,872	743,439,330
Total	**61,882**	**39,438**	**26,296**	**17,693**	**18,128**	**15,518**	**178,955**	**$13,718,513,822**

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.
(2) The grand total of Total Valuation Payroll may not agree to published valuation reports due to rounding.

State Industrial First & Second Tier – By Attained Age & Year of Service – June 30, 2021

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date[1]						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	210	—	—	—	—	—	210	$8,127,212
25-29	839	134	—	—	—	—	973	44,298,977
30-34	902	449	115	1	—	—	1,467	83,605,681
35-39	720	518	384	39	2	—	1,663	106,742,863
40-44	496	373	438	140	61	—	1,508	105,004,930
45-49	445	353	388	191	139	46	1,562	115,156,053
50-54	348	322	389	202	213	163	1,637	121,586,455
55-59	258	273	326	182	164	156	1,359	98,028,926
60-64	139	177	204	101	111	72	804	55,982,884
65 & up	41	90	96	40	45	30	342	25,043,387
Total	**4,398**	**2,689**	**2,340**	**896**	**735**	**467**	**11,525**	**$763,577,368**

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

State Safety – By Attained Age & Years of Service – June 30, 2021

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date[1]						Total	Total Valuation Payroll[2]
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	388	3	—	—	—	—	391	$17,107,126
25-29	1,449	192	1	—	—	—	1,642	95,791,806
30-34	2,041	977	133	2	—	—	3,153	221,750,117
35-39	1,880	1,311	561	98	—	—	3,850	301,125,035
40-44	1,431	1,190	941	340	46	—	3,948	325,009,448
45-49	1,278	1,058	1,032	589	164	8	4,129	377,378,438
50-54	1,075	1,011	969	665	315	108	4,143	380,059,316
55-59	833	849	814	543	251	79	3,369	302,454,888
60-64	451	612	663	432	218	75	2,451	229,433,183
65 & up	162	319	401	255	162	76	1,375	155,471,003
Total	**10,988**	**7,522**	**5,515**	**2,924**	**1,156**	**346**	**28,451**	**$2,405,580,360**

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.
(2) The grand total of Total Valuation Payroll may not agree to published valuation reports due to rounding.

EXHIBIT G: MEMBERS IN VALUATION (CONTINUED)

California Highway Patrol – By Attained Age & Years of Service – June 30, 2021

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date[1]						Total	Total Valuation Payroll[2]
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	47	—	—	—	—	—	47	$4,774,698
25-29	458	97	—	—	—	—	555	64,002,497
30-34	409	315	136	—	—	—	860	104,368,156
35-39	204	288	712	105	—	—	1,309	167,378,616
40-44	45	140	550	402	258	—	1,395	186,800,470
45-49	1	35	291	375	610	274	1,586	225,084,100
50-54	—	1	24	154	349	257	785	115,922,407
55-59	—	1	1	9	25	89	125	18,853,739
60-64	—	—	—	—	—	—	—	—
65 & up	—	—	—	—	—	—	—	—
Total	**1,164**	**877**	**1,714**	**1,045**	**1,242**	**620**	**6,662**	**$887,184,683**

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.
(2) The grand total of Total Valuation Payroll may not agree to published valuation reports due to rounding.

State Peace Officer/Firefighter – By Attained Age & Years of Service – June 30, 2021

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date[1]						Total	Total Valuation Payroll[2]
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	1,621	—	—	—	—	—	1,621	$76,973,755
25-29	3,956	1,054	—	—	—	—	5,010	329,727,735
30-34	2,976	2,990	283	2	—	—	6,251	487,377,041
35-39	1,581	1,917	2,540	620	3	—	6,661	598,243,969
40-44	702	1,025	2,018	2,375	678	3	6,801	664,926,264
45-49	380	544	1,416	1,958	2,169	645	7,112	741,970,616
50-54	228	306	873	1,149	1,190	788	4,534	478,240,340
55-59	115	151	440	619	467	377	2,169	223,156,827
60-64	44	66	152	245	190	160	857	86,515,594
65 & up	8	18	49	65	34	52	226	22,564,872
Total	**11,611**	**8,071**	**7,771**	**7,033**	**4,731**	**2,025**	**41,242**	**$3,709,697,013**

(1) Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double count of liabilities.
(2) The grand total of Total Valuation Payroll may not agree to published valuation reports due to rounding.

School – By Attained Age & Years of Service – June 30, 2021

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date						Total	Total Valuation Payroll[1]
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	9,539	60	—	—	—	—	9,599	$265,057,320
25-29	23,568	2,967	9	—	—	—	26,544	893,639,099
30-34	21,872	9,354	1,462	61	—	—	32,749	1,333,160,130
35-39	17,864	10,110	5,223	1,857	82	1	35,137	1,609,550,713
40-44	15,982	9,075	6,225	4,689	1,722	55	37,748	1,813,757,304
45-49	14,265	8,862	6,179	5,527	4,031	905	39,769	1,923,309,495
50-54	12,667	9,476	7,491	6,185	4,979	3,120	43,918	2,140,487,727
55-59	9,446	8,591	8,110	7,154	5,577	5,068	43,946	2,164,441,825
60-64	5,731	5,939	6,040	5,889	4,558	3,893	32,050	1,544,070,823
65 & up	2,914	2,821	3,021	2,738	2,032	1,861	15,387	677,518,470
Total	**133,848**	**67,255**	**43,760**	**34,100**	**22,981**	**14,903**	**316,847**	**$14,364,992,906**

(1) The grand total of Total Valuation Payroll may not agree to published valuation reports due to rounding.

EXHIBIT G: MEMBERS IN VALUATION (CONTINUED)

Public Agency Miscellaneous – By Attained Age & Years of Service – June 30, 2021

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date[1]						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	4,655	34	—	—	—	—	4,689	$200,817,535
25-29	15,248	1,767	15	—	—	—	17,030	956,622,634
30-34	17,517	7,609	1,084	68	1	—	26,279	1,756,721,819
35-39	14,087	9,004	4,465	1,774	99	3	29,432	2,257,590,348
40-44	11,054	7,538	5,147	4,547	1,592	93	29,971	2,529,362,966
45-49	8,132	5,774	4,514	5,053	3,701	962	28,136	2,515,564,243
50-54	6,702	4,997	4,166	4,870	4,421	3,332	28,488	2,632,653,652
55-59	4,965	4,129	3,564	4,092	3,577	4,057	24,384	2,229,608,989
60-64	2,953	2,673	2,383	2,868	2,400	2,766	16,043	1,431,340,915
65 & up	1,293	1,334	1,137	1,296	1,050	1,299	7,409	626,564,145
Total	**86,606**	**44,859**	**26,475**	**24,568**	**16,841**	**12,512**	**211,861**	**$17,136,847,246**

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

Public Agency Safety – By Attained Age & Years of Service – June 30, 2021

Attained Age	Distribution of Active Members by Age & Service Years of Service at Valuation Date[1]						Total	Total Valuation Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up		
15-24	1,452	9	—	—	—	—	1,461	$102,802,729
25-29	5,533	899	—	—	—	—	6,432	565,521,665
30-34	4,661	3,480	466	10	—	—	8,617	866,152,623
35-39	2,344	2,852	2,680	896	4	—	8,776	1,004,017,856
40-44	1,036	1,357	2,230	3,087	689	2	8,401	1,062,495,828
45-49	515	606	1,216	2,505	2,576	573	7,991	1,087,893,325
50-54	311	298	521	1,246	1,615	1,223	5,214	735,337,667
55-59	159	118	162	355	465	580	1,839	252,440,909
60-64	56	44	54	86	128	167	535	68,015,395
65 & up	24	14	22	20	18	46	144	17,208,443
Total	**16,091**	**9,677**	**7,351**	**8,205**	**5,495**	**2,591**	**49,410**	**$5,761,886,440**

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

EXHIBIT H: SCHEDULE OF RETIREES & BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

	Added to Rolls		Removed from Rolls		Rolls – End of Year		% Increase/ (Decrease) in Annual Allowances	Average Annual Allowance
Year Ended	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
PERF								
6/30/22	49,965	$1,827,485,154	26,264	$714,426,192	787,184	$26,940,047,532	4.3%	$34,223
6/30/21	49,198	1,936,346,603	25,664	677,349,858	763,483	25,826,988,570	5.1%	33,828
6/30/20	45,701	1,680,586,052	21,666	540,832,696	739,949	24,567,991,825	4.9%	33,202
6/30/19	45,954	1,624,873,200	21,529	531,826,415	715,914	23,428,238,469	4.9%	32,725
6/30/18	46,834	1,601,849,767	21,614	504,232,434	691,489	22,335,191,684	5.2%	32,300
6/30/17[1]	44,619	1,457,465,533	21,783	480,093,857	666,269	21,237,574,351	4.8%	31,875
6/30/16[1]	43,132	1,379,126,240	20,399	475,981,343	643,433	20,260,202,675	4.7%	31,488
6/30/15[1]	43,501	1,333,700,350	18,731	399,466,572	620,700	19,357,057,778	5.1%	31,186
6/30/14[2]	36,000	1,229,596,000	17,358	393,057,000	595,930	18,422,824,000	6.8%	30,914
LRF								
6/30/22	6	$188,600	17	$427,077	163	$5,920,160	(3.9%)	$36,320
6/30/21	6	211,612	15	468,508	174	6,158,637	(4.0%)	35,394
6/30/20	5	150,301	22	558,470	183	6,415,533	(6.0%)	35,058
6/30/19	14	482,883	14	314,651	200	6,823,702	2.5%	34,119
6/30/18	—	—	8	293,767	200	6,655,470	(4.2%)	33,277
6/30/17[1]	8	342,858	16	592,323	208	6,949,237	(3.5%)	33,410
6/30/16[1]	3	86,709	8	250,007	216	7,198,702	(2.2%)	33,327
6/30/15[1]	6	233,438	9	592,552	221	7,362,000	0.9%	33,312
6/30/14[2]	1	13,000	10	434,000	224	7,297,000	(5.0%)	32,576
JRF								
6/30/22	61	$4,719,272	102	$11,286,378	1,685	$155,079,146	(4.1%)	$92,035
6/30/21	60	5,667,505	100	11,241,363	1,726	161,646,252	(3.3%)	93,654
6/30/20	42	4,015,220	73	8,207,420	1,766	167,220,110	(2.4%)	94,689
6/30/19	66	6,271,344	84	15,446,222	1,797	171,412,310	(5.1%)	95,388
6/30/18	74	7,011,721	96	9,836,577	1,815	180,587,188	(1.5%)	99,497
6/30/17[1]	83	6,500,928	106	11,047,170	1,837	183,412,044	(2.4%)	99,843
6/30/16[1]	68	4,719,741	80	8,389,989	1,860	187,958,286	0.6%	101,053
6/30/15[1]	102	9,011,281	84	7,820,995	1,872	186,768,000	2.4%	99,769
6/30/14[2]	55	6,608,000	68	6,696,000	1,854	182,464,000	(1.3%)	98,416
JRF II								
6/30/22	76	$9,704,448	4	$457,712	445	$45,990,852	25.2%	$103,350
6/30/21	88	10,134,604	12	1,328,180	373	36,744,116	31.5%	98,510
6/30/20	41	4,827,219	6	570,590	297	27,937,692	18.0%	94,066
6/30/19	55	6,043,661	4	536,208	262	23,681,063	30.3%	90,386
6/30/18	57	6,710,581	3	231,646	211	18,173,610	55.4%	86,131
6/30/17[1]	41	4,654,642	1	125,977	157	11,694,675	63.2%	74,488
6/30/16[1]	30	2,479,659	3	260,218	117	7,166,010	49.9%	61,248
6/30/15[1]	27	2,551,990	2	164,980	90	4,779,000	35.7%	53,100
6/30/14[2]	20	1,648,000	3	378,000	65	3,522,700	13.9%	54,195

(1) These total counts and allowances account for all payment types with the exception of one-time lump-sum payments.
(2) These total counts and allowances are for service, disability, industrial retirement, special death, 1957 Survivor, Pre-Retirement Option 2, and 1959 Survivor beneficiaries and nonmembers.

EXHIBIT I: ANALYSIS OF FINANCIAL EXPERIENCE

PERF B[1] (Dollars in Millions)

	2021	2020
1) Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of June 30	$32,662	$31,351
b) Expected Payment on the UAL	1,696	1,627
c) Interest	2,228	2,139
d) Expected UAL Before Other Changes [1a - 1b + 1c]	**$33,194**	**$31,863**
e) Change Due to Plan Changes	$0	$0
f) Change Due to Assumption Changes	260	—
g) Change due to Risk Mitigation	2,610	—
h) Expected UAL After All Changes	**$36,064**	**$31,863**
i) Actual UAL as of June 30	$23,988	$32,662
j) Total (Gain)/Loss [1i - 1h]	**($12,076)**	**$799**
2) Contribution (Gain)/Loss for the Year		
a) Expected Contributions	$4,265	$4,144
b) Actual Contributions	4,114	4,952
c) Contributions (Gain)/Loss [2a - 2b]	**$151**	**($808)**
3) Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of June 30	$71,400	$68,177
b) Prior Fiscal Year Receivables	(105)	(106)
c) Current Fiscal Year Receivables	92	105
d) Contributions Received	3,977	4,787
e) Benefits and Refunds Paid	(4,932)	(4,671)
f) Transfers and Miscellaneous Adjustments	28	32
g) Expected Interest	4,958	4,770
h) Expected Assets as of June 30 [3a + 3b + 3c + 3d + 3e + 3f + 3g]	**$75,418**	**$73,094**
i) Market Value of Assets as of June 30	$86,519	$71,400
j) Asset (Gain)/Loss [3h - 3i]	**($11,101)**	**$1,694**
4) Liability (Gain)/Loss for the Year		
a) Total (Gain)/Loss (1j)	($12,076)	$799
b) Contribution (Gain)/Loss (2c)	151	(808)
c) Asset (Gain)/Loss (3j)	(11,101)	1,694
d) Liability (Gain)/Loss [4a - 4b - 4c]	**($1,126)**	**($87)**

(1) Gains and losses in actuarial accrued liability resulting from differences between assumed and actual experience.

EXHIBIT I: ANALYSIS OF FINANCIAL EXPERIENCE (CONTINUED)

PERF C[1] (Dollars in Millions)

	2021	2020
1) Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of June 30	$12,060	$11,274
b) Expected Payment on the UAL	1,343	1,032
c) Interest	798	754
d) Expected UAL Before Other Changes [1a - 1b + 1c]	**$11,515**	**$10,996**
e) Change Due to Plan Amendments	$0	$0
f) Change Due to Plan Golden Handshakes and Service Purchases	4	1
g) Transfers Out of Risk Pool	—	2
h) Transfers Into Risk Pool	—	144
i) Change Due to Assumption Change	205	—
j) Change Due to Method Change	—	—
k) Change Due to Funding Risk Mitigation	1,157	—
l) Change Due to Excessive Liability	—	1
m) Expected UAL After All Other Changes [1d + 1e + 1f + 1g + 1h + 1i + 1j + 1k + 1l]	**$12,881**	**$11,144**
n) Actual UAL as of June 30	$7,431	$12,060
o) Total (Gain)/Loss [1n-1m]	**($5,450)**	**$916**
2) Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of June 30	$33,075	$31,383
b) Transfers Out of Pool	—	—
c) Transfers Into Pool	—	361
d) Adjusted MVA at Beginning of Year [2a + 2b + 2c]	**$33,075**	**$31,744**
e) Receivables Prior Year	($39)	($42)
f) Receivables Current Year	34	39
g) Contributions Received	2,311	1,985
h) Benefits and Refunds Paid	(2,210)	(2,077)
i) Transfers and Miscellaneous Adjustments	12	(8)
j) Expected Interest	2,316	2,216
k) Expected Assets as of June 30 [2d + 2e + 2f + 2g + 2h + 2i + 2j]	**$35,499**	**$33,857**
l) Market Value of Assets as of June 30	$40,762	$33,075
m) Asset (Gain)/Loss [2k - 2l]	**($5,263)**	**$782**
3) Liability (Gain)/Loss for the Year		
a) Total (Gain)/Loss (1o)	($5,450)	$916
b) Asset (Gain)/Loss (2m)	(5,263)	782
c) Liability (Gain)/Loss [3a - 3b]	**($187)**	**$134**

(1) Gains and losses in actuarial accrued liability resulting from differences between assumed and actual experience.

EXHIBIT I: ANALYSIS OF FINANCIAL EXPERIENCE (CONTINUED)

LRF[1] (Dollars in Thousands)

	2021	2020
1) Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of June 30	($19,190)	($16,666)
b) Expected Payment on the UAL	—	15
c) Interest	(959)	(833)
d) Expected UAL Before All Other Changes [1a - 1b + 1c]	**($20,149)**	**($17,514)**
e) Change Due to Revised Actuarial Methods	$0	$0
f) Change Due to New Actuarial Assumptions	2,222	—
g) Expected UAL After All Changes [1d + 1e + 1f]	**($17,927)**	**($17,514)**
h) Actual UAL as of June 30	($27,963)	($19,190)
i) Total (Gain)/Loss [1h - 1g]	**($10,036)**	**($1,676)**
2) Contribution (Gain)/Loss for the Year		
a) Expected Contributions	$108	$119
b) Interest on Expected Contributions	3	3
c) Actual Contributions	100	120
d) Interest on Actual Contributions	2	3
e) Contributions (Gain)/Loss [(2a + 2b) - (2c + 2d)]	**$9**	**($1)**
3) Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of June 30	$115,538	$115,796
b) Contributions Received	100	120
c) Benefits and Refunds Paid and Administrative Costs	(6,761)	(6,939)
d) Transfers, SCP Payments and Interest, and Miscellaneous Adjustments	12	2
e) Expected Interest	5,613	5,621
f) Expected Assets as of June 30 [3a + 3b + 3c + 3d + 3e]	**$114,502**	**$114,600**
g) Market Value of Assets as of June 30	$123,525	$115,538
h) Asset (Gain)/Loss [3f - 3g]	**($9,023)**	**($938)**
4) Liability (Gain)/Loss for the Year		
a) Total (Gain)/Loss (1i)	($10,036)	($1,676)
b) Contribution (Gain)/Loss (2e)	9	(1)
c) Asset (Gain)/Loss (3h)	(9,023)	(938)
d) Liability (Gain)/Loss [4a - 4b - 4c]	**($1,022)**	**($737)**

(1) Gains and losses in actuarial accrued liability resulting from differences between assumed and actual experience.

EXHIBIT I: ANALYSIS OF FINANCIAL EXPERIENCE (CONTINUED)

JRF[1] (Dollars in Thousands)

	2021	2020
1) Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of June 30	$3,056,981	$3,159,148
b) Expected Pay as You Go Excluding Normal Cost	197,118	191,392
c) Interest	91,437	91,924
d) Expected UAL Before All Other Changes [1a - 1b + 1c]	**$2,951,300**	**$3,059,680**
e) Change Due to Revised Actuarial Methods		—
f) Change Due to New Actuarial Assumptions	(111,491.00)	—
g) Expected UAL After All Changes [1d + 1e + 1f]	**$2,839,809**	**$3,059,680**
h) Actual UAL as of June 30	$2,737,347	$3,056,981
i) Total (Gain)/Loss [1h - 1g]	**($102,462)**	**($2,699)**
2) Contribution (Gain)/Loss for the Year		
a) Expected Contributions	$210,757	$210,046
b) Interest on Expected Contributions	3,138	3,127
c) Actual Contributions	227,970	245,974
d) Interest on Actual Contributions	3,394	3,662
e) Contributions (Gain)/Loss [(2a + 2b) - (2c + 2d)]	**($17,469)**	**($36,463)**
3) Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of June 30	$48,020	$14,081
b) Contributions Received	227,970	245,974
c) Benefits and Refunds Paid and Administrative Costs	(210,951)	(213,234)
d) Transfers, SCP, and Miscellaneous Adjustments	2,462	2,202
e) Expected Interest	1,731	943
f) Expected Assets as of June 30 [3a + 3b + 3c + 3d + 3e]	**$69,232**	**$49,966**
g) Market Value of Assets as of June 30	$65,882	$48,020
h) Asset (Gain)/Loss [3f - 3g]	**$3,350**	**$1,946**
4) Liability (Gain)/Loss for the Year		
a) Total (Gain)/Loss (1i)	($102,462)	($2,699)
b) Contribution (Gain)/Loss (2e)	(17,469)	(36,463)
c) Asset (Gain)/Loss (3h)	3,350	1,946
d) Liability (Gain)/Loss [4a - 4b - 4c]	**($88,343)**	**$31,818**

(1) Gains and losses in actuarial accrued liability resulting from differences between assumed and actual experience.

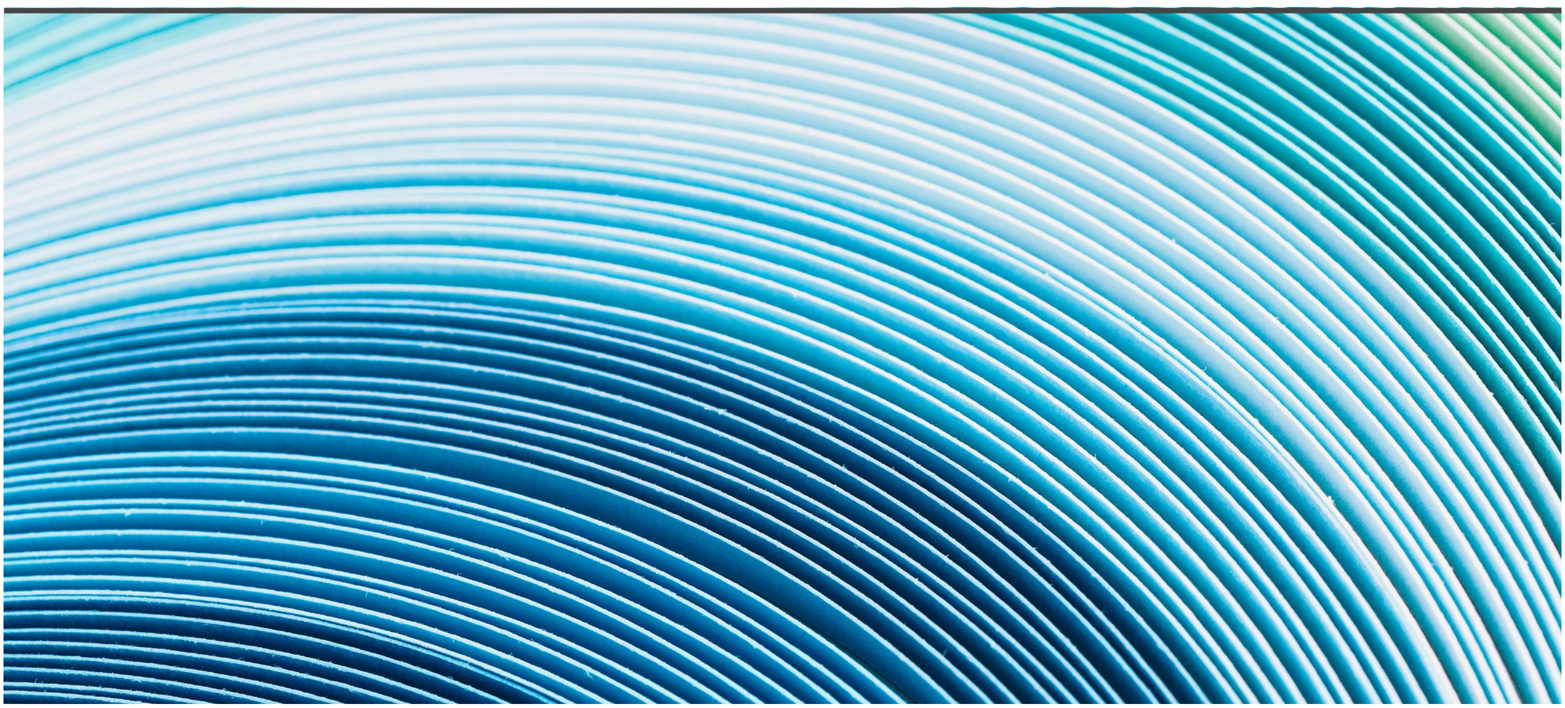
EXHIBIT I: ANALYSIS OF FINANCIAL EXPERIENCE (CONTINUED)

JRF II[1] (Dollars in Thousands)

	2021	2020
1) Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of June 30	$27,684	$10,821
b) Expected Payment on the UAL	2,419	2,827
c) Interest	1,722	613
d) Expected UAL Before All Other Changes [1a - 1b + 1c]	**$26,987**	**$8,607**
e) Change Due to Revised Actuarial Methods	$0	$0
f) Change Due to New Actuarial Assumptions	(63,261)	—
g) Expected UAL After All Changes [1d + 1e + 1f]	**($36,274)**	**$8,607**
h) Actual UAL as of June 30	($438,523)	$27,684
i) Total (Gain)/Loss [1h - 1g]	**($402,249)**	**$19,077**
2) Contribution (Gain)/Loss for the Year		
a) Expected Contributions	$122,379	$120,415
b) Interest on Expected Contributions	3,915	3,852
c) Actual Contributions	118,241	126,943
d) Interest on Actual Contributions	3,782	4,061
e) Contributions (Gain)/Loss [(2a + 2b) - (2c + 2d)]	**$4,271**	**($6,737)**
3) Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of June 30	$1,885,404	$1,715,056
b) Contributions Received	118,241	126,943
c) Benefits and Refunds Paid and Administrative Costs	(61,994)	(34,547)
d) Expected Interest	124,350	114,434
e) Expected Assets as of June 30 [3a + 3b + 3c + 3d]	**$2,066,001**	**$1,921,886**
f) Market Value of Assets as of June 30	$2,403,366	$1,885,404
g) Asset (Gain)/Loss [3e - 3f]	**($337,365)**	**$36,482**
4) Liability (Gain)/Loss for the Year		
a) Total (Gain)/Loss (1i)	($402,249)	$19,077
b) Contribution (Gain)/Loss (2e)	4,271	(6,737)
c) Asset (Gain)/Loss (3g)	(337,365)	36,482
d) Liability (Gain)/Loss [4a - 4b - 4c]	**($69,155)**	**($10,668)**

(1) Gains and losses in actuarial accrued liability resulting from differences between assumed and actual experience.

STATISTICAL SECTION



Statistical Section

INTRODUCTION

The Statistical Section provides additional historical information to understand the economic condition of the California Public Employees' Retirement System (CalPERS).

The schedules presented contain information on financial trends, analysis, and additional analytical information on employees' membership data, retirement benefits, health benefits, supplemental income, long-term care, and public agency employers.

The information in this section is obtained from annual comprehensive financial reports for relevant years and other internal sources.

CHANGES IN FIDUCIARY NET POSITION – RETIREMENT PROGRAMS

PERF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2022 – 10-Year Review (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ADDITIONS										
Member	$5,159,664	$4,757,000	$4,901,000	$4,664,618	$4,415,129	$4,214,578	$4,015,754	$3,826,072	$3,775,038	$3,896,078
Employer	22,702,547	20,034,757	22,039,561	15,612,678	19,917,796	12,329,837	10,892,489	9,977,705	8,777,602	8,123,833
Nonemployer Contribution	—	—	904,000	—	—	—	—	—	—	—
Investment Income/(Loss)	(36,182,422)	88,059,909	18,516,994	22,969,664	27,448,098	32,977,020	1,398,927	6,579,019	45,471,821	30,284,807
Plan-to-Plan Resource Movement	8,335	348,384	185,907	167,612	116,552	134,661	49,803	469,688	—	—
Miscellaneous Income	101,861	113,411	109,104	111,079	121,573	153,008	149,494	123,978	126,223	7,176
TOTAL ADDITIONS	**($8,210,015)**	**$113,313,461**	**$46,656,566**	**$43,525,651**	**$52,019,148**	**$49,809,104**	**$16,506,467**	**$20,976,462**	**$58,150,684**	**$42,311,894**
DEDUCTIONS										
Benefit Payments	$29,118,354	$27,415,194	$25,781,920	$24,209,283	$22,654,444	$21,215,889	$20,093,933	$18,922,292	$17,760,584	$16,635,263
Refund of Contributions	329,555	287,556	323,180	280,266	286,979	222,275	238,821	240,623	236,968	242,595
Administrative Expenses	297,464	392,119	524,451	252,558	505,513	441,283	184,426	340,880	381,497	426,077
Plan-to-Plan Resource Movement	8,335	348,384	185,907	167,612	116,552	134,661	49,803	469,688	—	—
TOTAL DEDUCTIONS	**$29,753,708**	**$28,443,253**	**$26,815,458**	**$24,909,719**	**$23,563,488**	**$22,014,108**	**$20,566,983**	**$19,973,483**	**$18,379,049**	**$17,303,935**
CHANGE IN NET POSITION	**($37,963,723)**	**$84,870,208**	**$19,841,108**	**$18,615,932**	**$28,455,660**	**$27,794,996**	**($4,060,516)**	**$1,002,979**	**$39,771,635**	**$25,007,959**
NET POSITION										
Beginning of Year	**$477,322,749**	**$392,452,541**	**$372,611,433**	**$353,995,501**	**$325,539,841[1]**	**$298,704,002**	**$302,764,518**	**$301,761,539**	**$261,989,904**	**$236,981,945**
End of Year	**$439,359,026**	**$477,322,749**	**$392,452,541**	**$372,611,433**	**$353,995,501**	**$326,498,998**	**$298,704,002**	**$302,764,518**	**$301,761,539**	**$261,989,904**

(1) Due to prior period adjustment, beginning balance was restated.

CHANGES IN FIDUCIARY NET POSITION – RETIREMENT PROGRAMS (CONTINUED)

LRF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2022 – 10-Year Review (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ADDITIONS										
Member	$23	$21	$22	$91	$82	$94	$97	$105	$113	$31
Employer	85	92	98	250	467	516	549	590	565	80
Investment Income/(Loss)	(12,450)	15,098	7,011	7,860	5,458	5,006	4,511	(125)	15,332	6,974
Miscellaneous Income	1	—	2	—	28	42	34	31	40	—
TOTAL ADDITIONS	**($12,341)**	**$15,211**	**$7,133**	**$8,201**	**$6,035**	**$5,658**	**$5,191**	**$601**	**$16,050**	**$7,085**
DEDUCTIONS										
Benefit Payments	$6,647	$6,761	$6,939	$7,005	$6,918	$6,960	$7,028	$7,393	$7,482	$7,548
Refund of Contributions	—	—	—	344	—	289	379	1,693	—	—
Administrative Expenses	436	450	550	324	671	575	203	400	362	418
TOTAL DEDUCTIONS	**$7,083**	**$7,211**	**$7,489**	**$7,673**	**$7,589**	**$7,824**	**$7,610**	**$9,486**	**$7,844**	**$7,966**
CHANGE IN NET POSITION	**($19,424)**	**$8,000**	**($356)**	**$528**	**($1,554)**	**($2,166)**	**($2,419)**	**($8,885)**	**$8,206**	**($881)**
NET POSITION										
Beginning of Year	**$122,048**	**$114,048**	**$114,404**	**$113,876**	**$115,430[1]**	**$119,050**	**$121,469**	**$130,354**	**$122,148**	**$123,029**
End of Year	**$102,624**	**$122,048**	**$114,048**	**$114,404**	**$113,876**	**$116,884**	**$119,050**	**$121,469**	**$130,354**	**$122,148**

(1) Due to prior period adjustment, beginning balance was restated.

JRF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2022 – 10-Year Review (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ADDITIONS										
Member	$1,956	$2,146	$2,843	$2,679	$3,062	$3,398	$3,559	$3,877	$4,724	$4,909
Employer	194,960	225,824	243,131	195,903	199,241	204,475	192,287	180,910	191,148	161,945
Investment Income	194	163	885	1,166	845	424	194	88	54	76
Miscellaneous Income	2,305	2,462	2,202	2,776	2,533	2,395	2,568	2,198	2,529	2,694
TOTAL ADDITIONS	**$199,415**	**$230,595**	**$249,061**	**$202,524**	**$205,681**	**$210,692**	**$198,608**	**$187,073**	**$198,455**	**$169,624**
DEDUCTIONS										
Benefit Payments	$210,492	$210,951	$212,775	$221,954	$207,815	$200,440	$199,271	$201,734	$193,925	$187,084
Refund of Contributions	—	—	458	—	8	—	78	134	10	—
Administrative Expenses	1,677	1,731	2,270	10,032	2,106	1,771	642	1,227	1,141	1,413
TOTAL DEDUCTIONS	**$212,169**	**$212,682**	**$215,503**	**$231,986**	**$209,929**	**$202,211**	**$199,991**	**$203,095**	**$195,076**	**$188,497**
CHANGE IN NET POSITION	**($12,754)**	**$17,913**	**$33,558**	**($29,462)**	**($4,248)**	**$8,481**	**($1,383)**	**($16,022)**	**$3,379**	**($18,873)**
NET POSITION										
Beginning of Year	**$61,640**	**$43,727**	**$10,169**	**$39,631**	**$43,879[1]**	**$39,794**	**$41,177**	**$57,199**	**$53,820**	**$72,693**
End of Year	**$48,886**	**$61,640**	**$43,727**	**$10,169**	**$39,631**	**$48,275**	**$39,794**	**$41,177**	**$57,199**	**$53,820**

(1) Due to prior period adjustment, beginning balance was restated.

CHANGES IN FIDUCIARY NET POSITION – RETIREMENT PROGRAMS (CONTINUED)

JRF II Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2022 – 10-Year Review (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ADDITIONS										
Member	$36,529	$34,094	$35,796	$31,376	$27,513	$25,076	$24,598	$22,242	$20,413	$18,819
Employer	92,773	84,147	91,147	84,099	79,699	67,102	65,839	65,629	57,027	54,025
Investment Income/(Loss)	(324,365)	463,478	80,074	106,781	101,244	114,331	20,213	(2,863)	149,679	79,214
Miscellaneous Income	3	—	—	—	576	726	597	462	489	—
TOTAL ADDITIONS	**($195,060)**	**$581,719**	**$207,017**	**$222,256**	**$209,032**	**$207,235**	**$111,247**	**$85,470**	**$227,608**	**$152,058**
DEDUCTIONS										
Benefit Payments	$66,382	$61,613	$34,547	$36,045	$31,745	$22,326	$21,549	$14,024	$8,865	$10,518
Refund of Contributions	357	381	—	159	50	80	155	16	85	58
Administrative Expenses	1,842	1,703	2,552	1,477	2,370	1,683	732	1,127	785	899
TOTAL DEDUCTIONS	**$68,581**	**$63,697**	**$37,099**	**$37,681**	**$34,165**	**$24,089**	**$22,436**	**$15,167**	**$9,735**	**$11,475**
CHANGE IN NET POSITION	**($263,641)**	**$518,022**	**$169,918**	**$184,575**	**$174,867**	**$183,146**	**$88,811**	**$70,303**	**$217,873**	**$140,583**
NET POSITION										
Beginning of Year	**$2,398,029**	**$1,880,007**	**$ 1,710,089**	**$1,525,514**	**$1,350,647[1]**	**$1,172,953**	**$1,084,142**	**$1,013,839**	**$795,966**	**$655,383**
End of Year	**$2,134,388**	**$2,398,029**	**$1,880,007**	**$1,710,089**	**$1,525,514**	**$1,356,099**	**$1,172,953**	**$1,084,142**	**$1,013,839**	**$795,966**

(1) Due to prior period adjustment, beginning balance was restated.

DCF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2022 – 10-Year Review (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ADDITIONS										
Member	$137,437	$127,135	$150,108	$251,102	$112,586	$110,258	$106,072	$106,272	$131,900	$99,977
Employer	—	—	—	—	977	962	909	783	698	455
Investment Income/ (Loss)	(276,428)	479,324	71,266	92,546	108,821	132,305	7,541	32,735	164,384	114,471
Miscellaneous Income	6,608	6,212	7,192	6,590	6,306	5,583	5,354	6,260	5,258	—
TOTAL ADDITIONS	**($132,383)**	**$612,671**	**$228,566**	**$350,238**	**$228,690**	**$249,108**	**$119,876**	**$146,050**	**$302,240**	**$214,903**
DEDUCTIONS										
Participant Withdrawals	$116,874	$205,540	$128,159	$156,796	$168,064	$90,333	$164,362	$88,973	$97,388	$82,587
Administrative Expenses	4,475	4,466	5,217	4,202	5,296	4,576	4,677	4,320	4,101	3,467
TOTAL DEDUCTIONS	**$121,349**	**$210,006**	**$133,376**	**$160,998**	**$173,360**	**$94,909**	**$169,039**	**$93,293**	**$101,489**	**$86,054**
CHANGE IN NET POSITION	**($253,732)**	**$402,665**	**$95,190**	**$189,240**	**$55,330**	**$154,199**	**($49,163)**	**$52,757**	**$200,751**	**$128,849**
NET POSITION										
Beginning of Year	**$2,182,841**	**$1,780,176**	**$1,684,986**	**$1,495,746**	**$1,440,416[1]**	**$1,290,407**	**$1,339,570**	**$1,286,813**	**$1,086,062**	**$957,213[1]**
End of Year	**$1,929,109**	**$2,182,841**	**$1,780,176**	**$1,684,986**	**$1,495,746**	**$1,444,606**	**$1,290,407**	**$1,339,570**	**$1,286,813**	**$1,086,062**

(1) Due to prior period adjustment, beginning balance was restated.

CHANGES IN FIDUCIARY NET POSITION – RETIREMENT PROGRAMS (CONTINUED)

SCPF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2022 – 10-Year Review (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ADDITIONS										
Member	$243	$343	$254	$251	$252	$246	$269	$127,833	$160	$164
Investment Income/(Loss)	(14,391)	22,713	5,495	5,360	4,362	6,890	416	1,058	2,077	2,051
Miscellaneous Income	88	87	93	337	619	628	668	305	111	—
TOTAL ADDITIONS	**($14,060)**	**$23,143**	**$5,842**	**$5,948**	**$5,233**	**$7,764**	**$1,353**	**$129,196**	**$2,348**	**$2,215**
DEDUCTIONS										
Participant Withdrawals	$5,186	$5,484	$6,137	$7,749	$9,046	$11,041	$16,130	$15,751	$1,013	$1,448
Administrative Expenses	250	264	327	283	398	373	330	135	62	58
TOTAL DEDUCTIONS	**$5,436**	**$5,748**	**$6,464**	**$8,032**	**$9,444**	**$11,414**	**$16,460**	**$15,886**	**$1,075**	**$1,506**
Interfund Transfer In	$0	$0	$0	$0	$0	$0	$5,582	$0	$0	$0
CHANGE IN NET POSITION	**($19,496)**	**$17,395**	**($622)**	**($2,084)**	**($4,211)**	**($3,650)**	**($15,107)**	**$113,310**	**$1,273**	**$709**
NET POSITION										
Beginning of Year	**$130,824**	**$113,429**	**$114,051**	**$116,135**	**$120,346**[1]	**$124,354**	**$133,879**	**$20,569**	**$19,296**	**$18,587**
End of Year	**$111,328**	**$130,824**	**$113,429**	**$114,051**	**$116,135**	**$120,704**	**$124,354**	**$133,879**	**$20,569**	**$19,296**

(1) Due to prior period adjustment, beginning balance was restated.

CHANGES IN FIDUCIARY NET POSITION – PENSION PREFUNDING PLAN

CEPPTF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2022 – 3-Year Review[1] (Dollars in Thousands)

	2022	2021	2020
ADDITIONS			
Employer	$36,474	$45,764	$10,523
Investment Income/(Loss)	(9,544)	2,995	502
Miscellaneous Income	154	53	10
TOTAL ADDITIONS	**$27,084**	**$48,812**	**$11,035**
DEDUCTIONS			
Employer Withdrawals	$0	$1,707	$0
Administrative Expenses	43	16	96
TOTAL DEDUCTIONS	**$43**	**$1,723**	**$96**
CHANGE IN NET POSITION	**$27,041**	**$47,089**	**$10,939**
NET POSITION			
Beginning of Year	**$58,028**	**$10,939**	**$0**
End of Year	**$85,069**	**$58,028**	**$10,939**

(1) This will be a 10-year schedule. Information in this schedule is not available prior to 2020. Additional years will be added to this schedule in future fiscal years until 10 years of data is presented.

CHANGES IN FIDUCIARY NET POSITION – OPEB PLAN

CERBTF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2022 – 10-Year Review (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ADDITIONS										
Employer	$5,503,086	$4,079,904	$4,634,449	$4,007,941	$3,915,969	$3,754,709	$1,780,240	$1,714,060	$1,681,053	$1,031,619
Investment Income/ (Loss)	(2,346,058)	3,091,811	402,609	568,801	530,189	559,967	76,638	(13,988)	515,507	237,710
Miscellaneous Income	14,097	11,704	9,094	7,490	6,985	5,599	4,048	4,932	4,483	—
TOTAL ADDITIONS	**$3,171,125**	**$7,183,419**	**$5,046,152**	**$4,584,232**	**$4,453,143**	**$4,320,275**	**$1,860,926**	**$1,705,004**	**$2,201,043**	**$1,269,329**
DEDUCTIONS										
OPEB Reimbursements & Employer Withdrawals	$3,473,147	$3,244,257	$3,152,357	$3,061,217	$2,937,413	$2,648,160	$1,229,523	$1,099,376	$1,020,924	$635,074
Administrative Expenses	4,241	4,544	5,161	1,882	3,862	3,014	1,559	2,044	1,786	2,062
TOTAL DEDUCTIONS	**$3,477,388**	**$3,248,801**	**$3,157,518**	**$3,063,099**	**$2,941,275**	**$2,651,174**	**$1,231,082**	**$1,101,420**	**$1,022,710**	**$637,136**
CHANGE IN NET POSITION	**($306,263)**	**$3,934,618**	**$1,888,634**	**$1,521,133**	**$1,511,868**	**$1,669,101**	**$629,844**	**$603,584**	**$1,178,333**	**$632,193**
NET POSITION										
Beginning of Year	**$15,638,557**	**$11,703,939**	**$9,815,305**	**$8,294,172**	**$6,782,304**[1]	**$5,122,188**	**$4,492,344**	**$3,888,760**	**$2,710,427**	**$2,078,234**
End of Year	**$15,332,294**	**$15,638,557**	**$11,703,939**	**$9,815,305**	**$8,294,172**	**$6,791,289**	**$5,122,188**	**$4,492,344**	**$3,888,760**	**$2,710,427**

(1) Due to prior period adjustment, beginning balance was restated.

CHANGES IN FIDUCIARY NET POSITION – CUSTODIAL FUNDS

RBF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2022 – 6-Year Review[1] (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017
ADDITIONS						
Replacement Benefits	$37,072	$35,594	$29,125	$25,756	$22,487	$20,573
Investment Income	74	85	276	301	163	168
Miscellaneous Income	246	—	256	482	444	239
TOTAL ADDITIONS	**$37,392**	**$35,679**	**$29,657**	**$26,539**	**$23,094**	**$20,980**
DEDUCTIONS						
Replacement Benefit Payments	$37,071	$35,594	$29,125	$25,756	$22,487	$20,573
Administrative Expenses	597	605	246	450	450	239
TOTAL DEDUCTIONS	**$37,668**	**$36,199**	**$29,371**	**$26,206**	**$22,937**	**$20,812**
CHANGE IN NET POSITION	**($276)**	**($520)**	**$286**	**$333**	**$157**	**$168**
NET POSITION						
Beginning of Year	**$424**	**$944**	**$658**	**$325**	**$168**	**$0**[2]
End of Year	**$148**	**$424**	**$944**	**$658**	**$325**	**$168**

(1) This will be a 10-year schedule. Information in this schedule is not available prior to 2017 due to the implementation of GASB 84. Additional years will be added to this schedule in future fiscal years until 10 years of data is presented.
(2) Due to prior period adjustment, beginning balance was restated.

OASI Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2022 – 4-Year Review[1] (Dollars in Thousands)

	2022	2021	2020	2019
ADDITIONS				
Investment Income	$12	$11	$21	$1
Other Income	36	2,344	2,012	—
TOTAL ADDITIONS	**$48**	**$2,355**	**$2,033**	**$1**
DEDUCTIONS				
Administrative Expenses	$800	$508	$1,178	$667
TOTAL DEDUCTIONS	**$800**	**$508**	**$1,178**	**$667**
CHANGE IN NET POSITION	**($752)**	**$1,847**	**$855**	**($666)**
NET POSITION				
Beginning of Year	**$3,739**	**$1,892**	**$1,037**	**$—**
Adjustments	$0	$0	$0	$1,703
End of Year	**$2,987**	**$3,739**	**$1,892**	**$1,037**

(1) This will be a 10-year schedule. Information in this schedule is not available prior to 2019 due to the breakout from the PERF. Additional years will be added to this schedule in future fiscal years until 10 years of data is presented.

PUBLIC EMPLOYEES' RETIREMENT SYSTEM MEMBERSHIP & RETIREMENT DATA

The presentation of the following table has been modified to better align statistical data with current categorizations of members and beneficiaries by rate plan and current pension reform changes. This table will continue populating each subsequent year until 10 years of data is available.

Public Employees' Retirement System – Eight-Year Review

	2022	2021	2020	2019	2018	2017	2016	2015
ACTIVE & INACTIVE MEMBERS								
STATE MEMBERS								
State Miscellaneous – Classic	163,920	172,118	181,136	189,514	200,645	216,008	216,647	233,574
State Miscellaneous – PEPRA	131,867	117,158	104,049	90,313	76,222	59,617	44,057	29,009
State Safety – Classic	49,903	53,433	57,897	60,807	64,165	68,086	68,020	64,167
State Safety – PEPRA	43,945	39,870	35,783	30,786	26,540	22,051	16,991	11,054
Total State Members	**389,635**	**382,579**	**378,865**	**371,420**	**367,572**	**365,762**	**345,715**	**337,804**
PUBLIC AGENCY MEMBERS								
School – Miscellaneous – Classic	287,474	302,943	318,039	332,074	348,372	376,546	396,832	422,114
School – Miscellaneous – PEPRA	288,453	240,629	224,606	200,455	167,654	137,356	102,550	67,363
Public Agency – Miscellaneous – Classic	173,484	183,830	194,781	204,679	216,445	231,458	241,605	269,528
Public Agency – Miscellaneous – PEPRA	178,520	154,258	140,641	123,966	103,226	84,913	64,234	46,091
Public Agency – Safety – Classic	36,008	38,575	41,121	43,263	45,704	48,596	50,372	54,825
Public Agency – Safety – PEPRA	27,037	23,863	21,500	18,397	15,345	12,769	9,601	6,896
Total Public Agency Members	**990,976**	**944,098**	**940,688**	**922,834**	**896,746**	**891,638**	**865,194**	**866,817**
MEMBERS[1]	**1,380,611**	**1,326,677**	**1,319,553**	**1,294,254**	**1,264,318**	**1,257,400**	**1,210,909**	**1,204,621**
BENEFIT RECIPIENTS								
Retired								
Classic	664,141	648,773	631,344	614,257	595,483	576,228	557,679	530,725
PEPRA	5,735	3,530	2,125	1,145	534	284	166	90
Survivors and Beneficiaries								
Classic	104,971	98,045	98,897	96,570	98,457	91,488	90,774	80,250
PEPRA	438	270	163	143	96	59	26	13
TOTAL BENEFIT RECIPIENTS[2]	**775,285**	**750,618**	**732,529**	**712,115**	**694,570**	**668,059**	**648,645**	**611,078**
TOTAL MEMBERS AND BENEFIT RECIPIENTS	**2,155,896**	**2,077,295**	**2,052,082**	**2,006,369**	**1,958,888**	**1,925,459**	**1,859,554**	**1,815,699**

(1) A participant could be counted more than once if they have multiple active appointments on the report effective date.
(2) This total includes payments to individual retirees, survivors, and beneficiaries who have received any monthly and/or lump-sum payments.

PUBLIC EMPLOYEES’ RETIREMENT SYSTEM MEMBERSHIP & RETIREMENT DATA (CONTINUED)

Public Employees’ Retirement System – Two-Year Review[1]

	2014	2013
ACTIVE & INACTIVE MEMBERS		
STATE MEMBERS		
Miscellaneous	236,552	227,291
University of California	44	44
Industrial	13,669	13,038
Alternative Retirement Plan	7,407	12,160
Highway Patrol	7,479	7,556
Safety	31,150	28,878
Peace Officer/Firefighter	45,346	45,116
Total State Members	**341,647**	**334,083**
PUBLIC AGENCY MEMBERS		
Schools	442,088	430,865
Cities	160,127	158,649
Counties	97,780	94,980
Districts & Other Public Agencies	87,372	85,660
Total Public Agency Members	**787,367**	**770,154**
TOTAL ACTIVE & INACTIVE MEMBERS	**1,129,014**	**1,104,237**
BENEFIT RECIPIENTS		
Service Retirement	505,031	486,625
Disability Retirement	44,242	43,857
Industrial Disability Retirement	37,686	36,493
Industrial Death	891	894
1957 Survivor Benefit	3,775	3,698
1959 Survivor Benefit	3,217	3,192
TOTAL BENEFIT RECIPIENTS[1]	**594,842**	**574,759**
TOTAL MEMBERS	**1,723,856**	**1,678,996**

(1) Information presented using different categorization of members and beneficiaries.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA

PRIMARY BENEFITS

CalPERS benefit categories are established in the Public Employees' Retirement Law (PERL) and the Public Employees' Pension Reform Act of 2013 (PEPRA). The PERL and PEPRA categorize members under two distinct levels of membership, which are:

- **Public Employees' Pension Reform Act (PEPRA) Members** – Members who first became members of CalPERS on or after January 1, 2013, or were hired on or after January 1, 2013, by a new employer after a break in service longer than six months from previous eligible employment.
- **Classic Members** – All members that do not fit within the definition of a new member as defined by PEPRA. These existing CalPERS members as of December 31, 2012, will retain the existing benefit levels for future service with the same employer. Because the new member determination is made on an appointment-by-appointment basis, classic members will be tested against the "new member" definition upon each new appointment.

Benefits are paid according to the category of employment and the type of benefit coverage provided by an employer. A local agency's benefits may vary based upon statutory elections made by the employer.

The four categories of membership are:

- **Miscellaneous Members** – Staff, operational, supervisory, and all other eligible employees who are not in special membership categories.
- **Safety Members** – California Highway Patrol officers, police officers, firefighters, and other employees whose principal duties are in active law enforcement or fire prevention and suppression work, or who occupy positions designated by law as safety member positions.
- **State Industrial Members** – Employees of the California Department of Corrections and Rehabilitation who have the same service retirement and other benefits as miscellaneous members, but who also have industrial death and disability benefits under certain limited circumstances.
- **State Peace Officer/Firefighter Members** – State employees who are involved in law enforcement, firefighting and fire suppression, public safety, protective services, or the management and supervision thereof, whose positions are defined as state peace officer/ firefighter members in the Government Code or by the Department of Human Resources.

SERVICE RETIREMENT

State Miscellaneous & State Industrial Members – Classic

- 2 percent at 55 – A guarantee of 2 percent of final compensation at age 55 for each year of service credit.
- 2 percent at 60 – A guarantee of 2 percent of final compensation at age 60 for each year of service credit.

Retirement may begin at age 50 with a reduced benefit rate, or at age 55 or 60 with an increased benefit rate to age 63.

- 1.25 percent at 65 – A guarantee of 1.25 percent of final compensation at age 65 for each year of service credit. Retirement may begin at age 55 with a reduced benefit rate.

State Miscellaneous & State Industrial Members – PEPRA

- 2 percent at 62 – A guarantee of 2 percent of final compensation at age 62 for each year of service credit. Retirement may begin at age 52 with a reduced benefit rate, or after age 62 with an increased benefit rate to age 67.
- 1.25 percent at 67 – A guarantee of 1.25 percent of final compensation at age 67 for each year of service credit. Retirement may begin at age 55 with a reduced benefit rate.

State Safety Members – Classic

- 2 percent at 55 – It provides 2 percent of final compensation for each year of service for retirement at age 55.
- 2.5 percent at 55 – It provides 2.5 percent of final compensation for each year of service for retirement at age 55.

The maximum allowance payable is 80 percent of final compensation. Retirement may begin at age 50 with a reduced benefit rate.

- 3 percent at 50 – It provides 3 percent of final compensation for each year of service for retirement at age 50.
- 3 percent at 55 – It provides 3 percent of final compensation for each year of service for retirement at age 55. Retirement may begin at age 50 with a reduced benefit rate.

The maximum allowance payable is 90 percent.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

State Safety Members – PEPRA

- 2 percent at 57 – It provides 2 percent of final compensation for each year of service for retirement at age 57.
- 2.5 percent at 57 – It provides 2.5 percent of final compensation for each year of service for retirement at age 57.
- 2.7 percent at 57 – It provides 2.7 percent of final compensation for each year of service for retirement at age 57.

Retirement may begin at age 50 with a reduced benefit rate.

School Members 2 Percent at 55 – Classic

A guarantee of 2 percent of final compensation at age 55 for each year of service credit. Retirement may begin at age 50 with a reduced benefit rate, or after age 55 with an increased benefit rate to age 63.

School Members 2 Percent at 62 – PEPRA

A guarantee of 2 percent of final compensation at age 62 for each year of service credit. Retirement may begin at age 52 with a reduced benefit rate, or after age 62 with an increased benefit rate to age 67.

Local Miscellaneous Members – Classic

- 2 percent at 55 – A guarantee of 2 percent of final compensation at age 55 for each year of service credit.
- 2 percent at 60 – A guarantee of 2 percent of final compensation at age 60 for each year of service.

Retirement may begin at age 50 with a reduced benefit rate, or after age 55 or 60 with an increased benefit rate to age 63.

- 2.5 percent at 55 – A guarantee of 2.5 percent of final compensation at age 55 for each year of service credit.
- 2.7 percent at 55 – A guarantee of 2.7 percent of final compensation at age 55 for each year of service credit.
- 3 percent at 60 – A guarantee of 3 percent of final compensation at age 60 for each year or service credit.

Retirement may begin at age 50 with a reduced benefit rate.

- 1.5 percent at 65 – A guarantee of 1.5 percent of final compensation at age 65 for each year of service credit. Retirement may begin at age 55 with a reduced benefit rate.

Local Miscellaneous Members 2 Percent at 62 – PEPRA

A guarantee of 2 percent of final compensation at age 62 for each year of service credit. Retirement may begin at age 52 with a reduced benefit rate, or after age 62 with an increased benefit rate to age 67.

Local Safety Members 2 Percent at 50

2 percent of final compensation for each year of service for retirement at age 50, with an increased benefit rate to age 55. The maximum allowance payable is 90 percent of final compensation.

Local Safety Members – Classic

- 2 percent at 50 – It provides 2 percent of final compensation for each year of service for retirement at age 50, with an increased benefit rate to age 55.
- 3 percent at 50 – It provides 3 percent of final compensation for each year of service for retirement at age 50.

The maximum allowance payable is 90 percent of final compensation.

- 2 percent at 55 – It provides 2 percent of final compensation for each year of service for retirement at age 55.
- 2.5 percent at 55 – It provides 2.5 percent of final compensation for each year of service retirement at age 55.
- 3 percent at 55 – It provides 3 percent of final compensation for each year of service for retirement at age 55.

Retirement may begin at age 50 with a reduced benefit rate. The maximum allowance payable is 90 percent of final compensation.

Local Safety Members – PEPRA

- 2 percent at 57 – It provides 2 percent of final compensation for each year of service for retirement at age 57.
- 2.5 percent at 57 – It provides 2.5 percent of final compensation for each year of service for retirement at age 57.
- 2.7 percent at 57 – It provides 2.7 percent of final compensation for each year of service for retirement at age 57.

Retirement may begin at age 50 with a reduced benefit rate.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

DISABILITY RETIREMENT

For Most Members
A monthly allowance of 1.8 percent of final compensation for each year of service, improved under certain conditions to 33.33 percent of final compensation, applicable to members with at least five years of service credit.

By Contract Amendment Only for Local Agencies
A monthly allowance of 30 percent of final compensation, plus an additional 1 percent for each year of service over five years to a maximum of 50 percent.

For State Second Tier Members
A monthly allowance of 1.125 percent of final compensation for each year of service, improved under certain conditions to 33.33 percent of final compensation, applicable to members with at least 10 years of service credit or five years if credited as of January 1, 1985.

For Certain Local Miscellaneous Second Tier Members
A monthly allowance of 1.35 percent of final compensation for each year of service, improved under certain conditions to 33.33 percent of final compensation, applicable to members with at least five years of service credit.

INDUSTRIAL DISABILITY RETIREMENT

For Most Members
A monthly allowance of 50 percent of final compensation, applicable to California Highway Patrol (CHP) members, state and local safety members, state peace officer/firefighter members, state industrial members, local miscellaneous members (by contract amendment only), and certain state miscellaneous members defined by law. The injury or illness must be job related and the member must be serving in one of these categories at the time the industrial disability occurs. CHP members may be entitled to an enhanced benefit if specific qualifying factors are met.

By Contract Amendment Only for Local Agencies
A monthly allowance of 75 percent of final compensation, if found totally disabled.

By Contract Amendment Only for Local Agencies
A monthly allowance of 50 percent to 90 percent of final compensation, depending on the disability rating by the Workers' Compensation Appeals Board.

SURVIVOR BENEFITS (PRIOR TO RETIREMENT)

STATE MEMBERS: LUMP SUM

Basic Death Benefit – State Members Only
Eligible to retire or not eligible to retire with 20 years or more of state service credit – a return of member contributions plus interest (compounded annually) and a state-paid portion equal to six months' pay (50 percent of the member's earnable pay for the 12 months prior to the member's death).
Not eligible to retire with less than 20 years of state service credit – a return of only the member contributions plus interest (compounded annually).

Group Term Life Insurance – State Members Only
Eligible to retire or not eligible to retire with 20 years or more of state service credit – $5,000 in a lump sum.
Not eligible to retire with less than 20 years of state service credit – $5,000 in a lump sum plus six months' pay (50 percent of annual compensation).

STATE MEMBERS – MONTHLY

Alternate Death Benefit[1] – For State Members in Bargaining Units Contracting for this Benefit
Not Eligible to Retire, With 20 Years or More of State Service Credit – a monthly allowance payable to a surviving spouse or registered domestic partner until death, then to children under age 18. It is calculated similarly to pre-retirement Option 2W (if the beneficiary is a spouse or registered domestic partner), or like a 1957 Survivor Benefit (if the beneficiary is a minor child), as though the member had been old enough to retire. A spouse or registered domestic partner or minor child may receive continued health and dental insurance with the Alternate Death Benefit. Once the allowance stops, the total allowance paid is compared with the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

(1) The surviving spouse or registered domestic partner of other than a state member, or a guardian of a minor child, may elect the Basic Death Benefit or the 1957 Survivor Benefit. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the Pre-Retirement Option 2W Death Benefit.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

Pre-Retirement Option 2W Benefit[1] – For All State Members, Married, or Registered Domestic Partnership
A monthly allowance payable to the surviving spouse or registered domestic partner until death, then to children under age 18, equal to 100 percent of the option portion had the member retired on their date of death. Once the allowance stops, the total allowance paid is compared with the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

1957 Survivor Benefit[1] – For All State Members, Not Married, or No Registered Domestic Partnership
For members eligible to retire who are not married or in a registered domestic partnership, a monthly allowance payable to the unmarried surviving minor children until age 18, equal to one-half of the highest allowance (unmodified) the member would have received had they retired on the date of death. Once allowance stops, the total allowance paid is compared with the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

1959 Survivor Benefit – State Members
A monthly benefit paid to survivors of deceased members who died prior to retirement. This benefit is similar to the Social Security Survivor Benefit and is paid in addition to any other applicable pre-retirement survivor benefit, except the Special Death Benefit.

Special Death Benefit[1] – Survivors of State, State Industrial, State Peace Officer/Firefighter Members, State Miscellaneous[2]
A monthly allowance equal to 50 percent of final compensation payable to the surviving spouse or registered domestic partner until death, or if no spouse, to natural or adopted unmarried children up to age 22. For members who pass under the age of 50, the monthly allowance is recalculated annually on October 1 based on the salary rates for employees who work in the position the member held at the time of death until such time as the member would have attained age 50.

Special Death Benefit[3] – Additional Special Death
Provides increased benefits (up to 50 percent of final compensation) based upon the number of surviving children, if the member's death is the result of external violence or physical force.

SCHOOL MEMBERS – LUMP SUM

Basic Death Benefit – School Members
Eligible to retire or not—A return of member contributions plus interest (compounded annually) and an employer-paid portion equal to one month's compensation earnable for each year of current service to a maximum of six months.

SCHOOL MEMBERS – MONTHLY

1957 Survivor Benefit[1] – School Members, Married, or Registered Domestic Partnership
For all members eligible to retire who are married or in a registered domestic partnership, a monthly allowance payable to the surviving spouse or registered domestic partner until death, then to children under age 18, equal to one-half of the highest allowance (unmodified) the member would have received had they retired on the date of death. Once the allowance stops, the total allowance paid is compared with the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

1957 Survivor Benefit – For All School Members, Not Married, or No Registered Domestic Partnership
For members eligible to retire who are not married or in a registered domestic partnership, a monthly allowance payable to the unmarried surviving minor children until age 18, equal to one-half of the highest allowance (unmodified) the member would have received had they retired on the date of death. Once allowance stops, the total allowance paid is compared with the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

(1) The surviving spouse or registered domestic partner of other than a state member, or a guardian of a minor child, may elect the Basic Death Benefit or the 1957 Survivor Benefit. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the Pre-Retirement Option 2W Death Benefit.
(2) The survivor of a state or local miscellaneous member qualifies for the Special Death Benefit if the member was killed or fatally injured while performing their official duties.
(3) The Special Death Benefit is payable if the member's death is job related.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

1959 Survivor Benefit – School Members
A monthly benefit paid to survivors of deceased members who died prior to retirement. This benefit is similar to the Social Security Survivor Benefit and is paid in addition to any other applicable pre-retirement death benefit, except the Special Death Benefit.

LOCAL AGENCY MEMBERS – LUMP SUM

Basic Death Benefit – Local Agency Members
Eligible to retire or not – A return of member contributions plus interest (compounded annually) and an employer-paid portion equal to one month's compensation earnable for each year of current service to a maximum of six months.

LOCAL AGENCY MEMBERS – MONTHLY

1957 Survivor Benefit[1] – Local Agency Members, Married, or Registered Domestic Partnership
For all members eligible to retire who are married or in a registered domestic partnership, a monthly allowance payable to the surviving spouse or registered domestic partner until death, then to children under age 18, equal to one-half of the highest allowance (unmodified) the member would have received had they retired on the date of death. Once the allowance stops, the total allowance paid is compared with the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

1957 Survivor Benefit – For All Local Agency Members, Not Married, or No Registered Domestic Partnership
For members eligible to retire who are not married or in a registered domestic partnership, a monthly allowance payable to the unmarried surviving minor children until age 18, equal to one-half of the highest allowance (unmodified) the member would have received had they retired on the date of death. Once allowance stops, the total allowance paid is compared with the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

1959 Survivor Benefit – Local Agency Members Not Coordinated With Social Security by Contract Option Amendment
A monthly benefit paid to survivors of deceased members who died prior to retirement. This benefit is similar to the Social Security Survivor Benefit and is paid in addition to any other applicable pre-retirement death benefit, except the Special Death Benefit.

Alternate Death Benefit for Firefighters – Local Agencies by Contract With 20 Years or More of Total Service Credit
A monthly non-job-related allowance payable to a surviving spouse or registered domestic partner until death, then to children under age 18. It is calculated similarly to Pre-Retirement Option 2W (if the beneficiary is a spouse or registered domestic partner, even if the agency does not contract separately for the Pre-Retirement Option 2W benefit), or like a 1957 Survivor Benefit (if the beneficiary is a minor child), as though the member had either been old enough to retire (if the member died before reaching retirement age), or based on the member's actual age if the member was eligible to retire at the time of death. This benefit applies to all service credit earned by the member, including service that may have been earned with a local agency that does not contract for the Alternate Death Benefit, as long as the member was employed at the time of death by a local agency that provides this benefit in their contract. Once the allowance stops, the total allowance paid is compared with the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

Pre-Retirement Option 2W Benefit – Local Agencies by Contract, Married, or Registered Domestic Partnership
A monthly allowance payable to the surviving spouse or registered domestic partner until death, then to children under age 18, equal to 100 percent of the option portion had the member retired on their date of death. Once the allowance stops, the total allowance paid is compared with the Basic Death Benefit amount, and any difference is paid in a lump sum to all of the member's surviving children.

(1) The surviving spouse or registered domestic partner of other than a state member, or a guardian of a minor child, may elect the Basic Death Benefit or the 1957 Survivor Benefit. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the Pre-Retirement Option 2W Death Benefit.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

Special Death Benefit[1] – Survivors of Patrol, Local Safety & Local Miscellaneous by Contract Amendment[2]
A monthly allowance equal to 50 percent of final compensation payable to the surviving spouse or registered domestic partner until death, or if no spouse, to natural or adopted unmarried children up to age 22. For members who pass under the age of 50, the monthly allowance is recalculated annually on October 1 based on the salary rates for employees who work in the position the member held at the time of death until such time as the member would have attained age 50.

Special Death Benefit[3] – Additional Special Death
Provides increased benefits (up to 50 percent of final compensation) based upon the number of surviving children, if the member's death is the result of external violence or physical force.

COST-OF-LIVING ADJUSTMENTS

For All Members – Except State Second Tier
A maximum of 2 percent compounded annually (up to 5 percent maximum as a contract option for retired members of local agencies). Note: Does not apply to the 1959 Survivor Death Benefit.

For State Second Tier Members Only
A fixed 3 percent compounded annually.

SEPARATION FROM EMPLOYMENT/REFUNDS

At permanent separation from employment, members may either leave their contributions on deposit and defer retirement[4] or terminate membership by electing to take a refund of member contributions plus interest (compounded annually). With a refund election, CalPERS is required to deduct federal withholding of 20 percent from the untaxed portion of the refund, unless the taxable portion is directly rolled over to a qualified plan or Individual Retirement Account (IRA).

(1) The surviving spouse or registered domestic partner of other than a state member, or a guardian of a minor child, may elect the Basic Death Benefit or the 1957 Survivor Benefit. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the Pre-Retirement Option 2W Death Benefit.
(2) The survivor of a state or local miscellaneous member qualifies for the Special Death Benefit if the member was killed or fatally injured while performing their official duties.
(3) The Special Death Benefit is payable if the member's death is job related.
(4) A member who has less than the required amount of service credit may return to CalPERS-covered employment to obtain the minimum service credit required to be eligible for retirement.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

The presentation of the following table has been modified to better align statistical data with current categorizations of members and beneficiaries by rate plan and current pension reform changes. For financial reporting purposes only, the Public Employees' Retirement Fund (PERF) is comprised of and reported as three separate entities. PERF A is comprised of agent multiple-employer plans, which includes State of California and most public agencies' rate plans with more than 100 active members. PERF B is a cost-sharing multiple-employer plan of school employers consisting of non-teaching and non-certified employees. PERF C is a cost-sharing multiple-employer plan of public agencies' plans with generally fewer than 100 active members. Under applicable law, the CalPERS Board of Administration (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.

Retirement Benefit Recipients and Members by Employer Category – PERF – As of June 30, 2022

Employer/Category	Plan Type	Active[1]	Inactive	Retired[2]	Survivors & Beneficiaries[3]	Total
STATE						
Miscellaneous – Classic[4]	PERF A	96,820	67,100	160,767	29,031	353,718
Miscellaneous – PEPRA[4]	PERF A	101,672	30,195	1,419	27	133,313
Safety – Classic[5]	PERF A	40,158	9,745	69,105	8,943	127,951
Safety – PEPRA[5]	PERF A	36,647	7,298	498	10	44,453
Pre-Retirement Death – Classic	PERF A	—	—	—	3,160	3,160
Pre-Retirement Death – PEPRA	PERF A	—	—	—	65	65
TOTAL STATE		**275,297**	**114,338**	**231,789**	**41,236**	**662,660**
SCHOOL						
Miscellaneous – Classic	PERF B	146,276	141,198	211,610	30,866	529,950
Miscellaneous – PEPRA	PERF B	195,421	93,032	1,624	30	290,107
Pre-Retirement Death – Classic	PERF B	—	—	—	1,294	1,294
Pre-Retirement Death – PEPRA	PERF B	—	—	—	149	149
TOTAL SCHOOL		**341,697**	**234,230**	**213,234**	**32,339**	**821,500**
PUBLIC AGENCY						
Miscellaneous – Classic	PERF A	80,242	64,992	141,794	18,983	306,011
Miscellaneous – PEPRA	PERF A	103,254	44,448	1,472	18	149,192
Safety – Classic	PERF A	19,409	5,094	39,420	5,386	69,309
Safety – PEPRA	PERF A	14,387	2,926	158	—	17,471
Pre-Retirement Death – Classic	PERF A	—	—	—	1,504	1,504
Pre-Retirement Death – PEPRA	PERF A	—	—	—	100	100
Miscellaneous – Classic	PERF C	14,140	14,110	23,810	2,966	55,026
Miscellaneous – PEPRA	PERF C	20,943	9,875	449	6	31,273
Safety – Classic	PERF C	7,874	3,631	17,635	2,418	31,558
Safety – PEPRA	PERF C	7,700	2,024	115	—	9,839
Pre-Retirement Death – Classic	PERF C	—	—	—	420	420
Pre-Retirement Death – PEPRA	PERF C	—	—	—	33	33
TOTAL PUBLIC AGENCY		**267,949**	**147,100**	**224,853**	**31,834**	**671,736**
TOTAL BENEFIT RECIPIENTS AND MEMBERS		**884,943**	**495,668**	**669,876**	**105,409**	**2,155,896**

(1) A participant could be counted more than once if they have multiple active appointments on the report effective date.
(2) The actual number of retirees is by the employer category from which they retired, regardless of whether they had service in other employer categories.
(3) The total includes those recipients receiving either a lump sum, one-time only payment, and/or continuous payments.
(4) State miscellaneous includes state industrial.
(5) State safety includes Highway Patrol and Peace Officer/Firefighter.

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

Benefit and Refund Deductions from Fiduciary Net Position – Eight-Year Review – PERF

Category	2022	2021	2020	2019	2018	2017
Service Retirement	$25,874,123,203	$24,292,900,750	$22,753,798,454	$21,288,786,325	$19,851,652,792	$18,537,701,906
Disability Retirement	650,551,499	648,971,739	647,385,586	640,390,289	629,909,937	621,706,049
Industrial Disability Retirement	2,355,505,597	2,249,389,340	2,148,950,254	2,044,665,647	1,946,751,674	1,867,178,738
PPPA Payments[1]	8,590,146	9,799,332	11,482,597	12,956,146	14,739,908	17,399,875
Total	**$28,888,770,445**	**$27,201,061,161**	**$25,561,616,891**	**$23,986,798,407**	**$22,443,054,311**	**$21,043,986,568**
Basic Death Benefit/Group Term Life Insurance	$51,802,816	$42,764,996	$41,489,834	$42,184,086	$45,353,650	$36,354,849
1957 Survivor Benefit	120,878,557	115,198,670	111,565,097	107,503,062	103,212,410	99,140,672
1959 Survivor Benefit	34,013,184	33,923,153	34,472,004	33,431,530	33,515,158	33,448,316
Industrial Death Allowance	61,637,532	58,226,946	55,500,395	53,295,292	50,041,476	48,682,349
Option 1, Temporary Annuity, Other Lump-Sum Death Benefits & Other Prior-Year Adjustments	50,957,228	37,997,957	40,068,528	41,755,031	44,705,434	30,796,681
Adjustments[2]	(89,706,213)	(73,978,940)	(62,792,096)	(55,684,211)	(65,438,104)	(76,521,097)
Total	**$229,583,104**	**$214,132,782**	**$220,303,762**	**$222,484,790**	**$211,390,024**	**$171,901,770**
Total Retirement and Death Payments	**$29,118,353,549**	**$27,415,193,943**	**$25,781,920,653**	**$24,209,283,197**	**$22,654,444,335**	**$21,215,888,338**
Refunds	329,554,169	287,555,810	323,180,050	280,265,587	286,978,986	222,274,594
GRAND TOTAL	**$29,447,907,718**	**$27,702,749,753**	**$26,105,100,703**	**$24,489,548,784**	**$22,941,423,321**	**$21,438,162,932**

(1) These payments were made from the Purchasing Power Protection Account, which is structured to maintain current benefit levels and to restore CalPERS allowances to 75 percent of their original purchasing power (80 percent for public agencies).
(2) Adjustment category added in Fiscal Year 2014-15 to accommodate manual claims and overpayment recoveries.

2016	2015
$17,482,814,843	$16,399,932,312
614,204,683	599,845,301
1,784,205,878	1,695,674,147
21,742,842	25,792,689
$19,902,968,246	**$18,721,244,449**
$37,528,299	$25,652,204
95,869,358	92,157,432
33,770,778	33,886,098
47,735,846	45,653,060
36,775,082	55,058,746
(60,714,425)	(51,360,036)
$190,964,938	**$201,047,504**
$20,093,933,184	**$18,922,291,953**
238,821,624	240,623,206
$20,332,754,808	**$19,162,915,159**

PUBLIC EMPLOYEES' RETIREMENT FUND PROGRAM DATA (CONTINUED)

Program Data – PERF – Average Benefit Payments – As of June 30, 2022 – 10-Year Review

	Years of Service Credit						
Retirement Effective Dates	**0 - 5**	**6 - 10**	**11 - 15**	**16 - 20**	**21 - 25**	**26 - 30**	**31+**
2021-22							
Average Monthly Allowance[1]	$702	$1,078	$1,991	$2,859	$4,134	$5,982	$6,480
Average Final Compensation	$6,889	$5,716	$6,268	$6,677	$7,630	$8,896	$8,571
Number of Recipients[1]	1,596	5,111	6,034	6,432	6,965	5,087	5,418
2020-21							
Average Monthly Allowance[1]	$650	$1,080	$1,980	$2,866	$4,232	$5,983	$6,522
Average Final Compensation	$6,927	$5,603	$6,131	$6,627	$7,639	$8,818	$8,513
Number of Recipients[1]	1,461	4,506	5,824	6,502	6,966	6,102	6,516
2019-20							
Average Monthly Allowance[1]	$641	$1,089	$1,903	$2,708	$3,946	$5,744	$6,331
Average Final Compensation	$6,746	$5,510	$6,071	$6,390	$7,303	$8,479	$8,293
Number of Recipients[1]	1,551	4,382	5,663	6,039	5,817	5,490	5,814
2018-19							
Average Monthly Allowance[1]	$613	$1,037	$1,752	$2,563	$3,807	$5,484	$6,199
Average Final Compensation	$6,442	$5,310	$5,718	$6,132	$7,063	$8,146	$8,082
Number of Recipients[1]	1,552	4,643	5,825	6,429	5,391	5,685	5,961
2017-18							
Average Monthly Allowance[1]	$614	$1,069	$1,766	$2,508	$3,672	$5,510	$6,192
Average Final Compensation	$6,427	$5,310	$5,598	$6,023	$6,776	$7,993	$7,854
Number of Recipients[1]	1,482	4,669	5,531	6,209	5,100	5,994	5,620
2016-17							
Average Monthly Allowance[1]	$569	$1,059	$1,630	$2,426	$3,487	$5,288	$5,841
Average Final Compensation	$6,366	$5,244	$5,311	$5,865	$6,491	$7,700	$7,476
Number of Recipients[1]	1,551	5,101	5,481	5,806	4,641	5,805	5,312
2015-16							
Average Monthly Allowance[1]	$541	$1,053	$1,641	$2,392	$3,443	$5,223	$5,744
Average Final Compensation	$5,942	$5,130	$5,282	$5,728	$6,361	$7,565	$7,307
Number of Recipients[1]	1,383	4,840	5,571	5,140	4,741	5,599	5,057
2014-15							
Average Monthly Allowance[2]	$634	$1,034	$1,591	$2,313	$3,264	$5,026	$5,370
Average Final Compensation	$6,024	$5,028	$5,131	$5,625	$6,227	$7,503	$7,081
Number of Recipients[2]	1,510	5,240	5,908	5,277	5,020	5,534	5,168
2013-14							
Average Monthly Allowance[3]	$530	$837	$1,340	$1,890	$2,791	$4,295	$4,975
Average Final Compensation	$5,923	$4,680	$4,782	$5,041	$5,643	$6,680	$6,720
Number of Recipients[3]	880	5,029	5,707	4,890	5,013	5,085	5,808
2012-13							
Average Monthly Allowance[3]	$540	$774	$1,304	$1,911	$2,806	$4,337	$4,954
Average Final Compensation	$6,098	$4,537	$4,758	$5,127	$5,651	$6,692	$6,686
Number of Recipients[3]	774	5,053	5,864	4,958	5,664	5,557	6,861

(1) These averages and totals are for retired members only.
(2) These averages and totals are for retired members and community property only.
(3) These averages and totals are for retired members, survivors, beneficiaries, and community property recipients.

PUBLIC AGENCY EMPLOYERS

CONTRACTS SUMMARY

On June 30, 2022, 1,557 public agency contracts provided retirement, death, and survivor benefits for participants of 57 county offices of education; 4 school district offices; 452 cities and towns; 37 counties; the State of California; and 1,006 districts and other public agencies. The 57 county offices of education contracts provide benefits for 1,335 school districts and charter schools, bringing the total number of public agency employers to 2,892.

During Fiscal Year 2021-22, one additional agency contracted with CalPERS for retirement, death, and survivor benefits.

New Contracts

Effective Date	Public Agency	Misc. Member Formula	Safety Member Formula
1/2/2022	South San Joaquin County Fire Authority	2% @ 62	2.7% @ 57

Amendments

Public agency contracts vary depending upon the member categories covered, the formula the agency elects to provide, and the optional benefit provisions selected from the group of 41 benefits. These optional benefits may be provided at the time the original contract is established or they may be added later through the contract amendment process.

During Fiscal Year 2021-22, 39 contract amendments were completed.

Two Years of Additional Service Credit – Golden Handshake

Contracting agencies may amend their contracts to provide additional service credit if there are impending mandatory transfers, layoffs, or demotions. Eligible employees who retire within a 90 to 180 day window, as established by the employer, receive two years additional service credit. The county offices of education may also contract for this benefit when there is an impending curtailment of, or change in, the manner of performing services, and their best interest would be served by granting the additional service credit. Once the contract is amended, the employer may establish additional window periods.

Popular Benefit Amendments

Benefit	Number of Amendments
Employees Sharing Additional Cost	30
Section 20903 - Two Years Additional Service Credit	2
Member Reclass - Local Safety	2
Add new category - Miscellaneous	1
Add new category - Safety Police	1
Different Level of Benefits	1
Add Exclusion	1
Terminate Portion of the Contract	1

Mergers

The following mergers occurred in Fiscal Year 2021-22:

- Aptos/La Selva Fire Protection Agency merged into Central Fire Protection District of Santa Cruz County – Effective date July 24, 2021
- Redwood Municipal Insurance Fund merged into Public Agency Risk Sharing Authority of California, becoming California Intergovernmental Risk Authority – Effective date June 1, 2022

Terminations

Under the Public Employees' Retirement Law (PERL), a contracting agency may voluntarily terminate its CalPERS contract with the adoption of a formal resolution effectuating this action. The termination is effective with Board approval on the date designated in the resolution terminating the contract. In addition, the Board may involuntarily terminate a contracting agency's contract due to failure to comply with the requirements of the PERL. In either case, 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. The following agencies were voluntarily terminated in Fiscal Year 2021-22:

- Intelecom Intelligent Telecommunications, Effective Date December 31, 2021
- Downey Cemetery District, Effective Date March 7, 2022

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Reciprocal Systems

Reciprocity is a valuable addition to the CalPERS benefit package. Its purpose is to encourage career public service, by allowing members to move between employers under different public retirement systems without losing their retirement and related benefits. The following retirement systems have reciprocity with CalPERS:

Counties Under the County Employees' Retirement Law of 1937

- Alameda
- Contra Costa
- Fresno
- Imperial
- Kern
- Los Angeles
- Marin
- Mendocino
- Merced
- Orange
- Sacramento
- San Bernardino
- San Diego
- San Joaquin
- San Mateo
- Santa Barbara
- Sonoma
- Stanislaus
- Tulare
- Ventura

The University of California Retirement Plan (UCRP)

Reciprocal Public Retirement Systems

- Concord, City of
- Contra Costa Water District
- Costa Mesa, City of (safety only)
- East Bay Municipal Utility District
- East Bay Regional Park District (safety only)
- Fresno, City of
- Los Angeles City Employees' Retirement Plan
- Los Angeles County Metropolitan Transportation Authority (Non-Contract Employees' Retirement Income Plan)
- Oakland, City of (non-safety only)
- Pasadena, City of (fire and police only)
- Sacramento, City of
- San Clemente, City of (non-safety only)
- San Diego, City of
- San Francisco, City and County of
- San Jose, City of
- San Luis Obispo, County of

Systems with Limited Reciprocity

- Judges' Retirement System
- Judges' Retirement System II
- Legislators' Retirement System
- California State Teachers' Retirement System

PARTICIPATING PUBLIC AGENCIES BY TYPE

The following tables are counts of active participants, excluding retirees, sorted by public agency. In most cases, a participant is only counted once. A participant could be counted more than once if they have multiple active appointments on the report effective date. An active member is one who is currently employed by the State of California, a CalPERS contracting public agency, or a school district. Agencies that contract with CalPERS for retirement benefits and have zero participants were included.

For 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 agency plans 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.

Largest Participating Employers – Current Year

Rank	Employer	2022 Number of Employees[1]	% of Total System
1	State of California	275,297	31.11%
2	Los Angeles County Schools	46,621	5.27%
3	Los Angeles Unified School District	28,522	3.22%
4	San Diego County Schools	27,026	3.06%
5	Orange County Schools	26,218	2.96%
6	Riverside County Schools	23,208	2.62%
7	County of Riverside	21,530	2.43%
	All Other	436,521	49.33%
	Total Covered Employees	**884,943**	**100.00%**

(1) Number of Employees includes only active members.

Largest Participating Employers – Nine Years Prior

Rank	Employer	2013 Number of Employees[1]	% of Total System
1	State of California	321,924	27.58%
2	Los Angeles County Schools	104,393	8.95%
3	Los Angeles Unified School District	41,684	3.57%
4	San Diego County Schools	36,843	3.16%
5	Orange County Schools	32,599	2.79%
6	County of Riverside	25,692	2.20%
7	San Bernardino County Schools	24,488	2.10%
	All Other	579,473	49.65%
	Total Covered Employees	**1,167,096**	**100.00%**

(1) Number of Employees includes active and inactive members.

PUBLIC AGENCY EMPLOYERS (CONTINUED)

County Offices of Education (57)

	Active PERF B		Active PERF B
Alameda	11,059	Orange	26,193
Alpine	30	Placer	3,333
Amador	259	Plumas	300
Butte	2,593	Riverside	23,202
Calaveras	465	Sacramento	13,083
Colusa	400	San Benito	628
Contra Costa	7,747	San Bernardino	21,142
Del Norte	348	San Diego	26,957
El Dorado	1,653	San Joaquin	7,934
Fresno	12,757	San Luis Obispo	2,388
Glenn	455	San Mateo	5,143
Humboldt	1,875	Santa Barbara	4,517
Imperial	2,788	Santa Clara	13,144
Inyo	227	Santa Cruz	2,295
Kern	13,557	Shasta	2,272
Kings	1,691	Sierra	36
Lake	713	Siskiyou	695
Lassen	403	Solano	3,350
Los Angeles	46,578	Sonoma	3,943
Madera	1,930	Stanislaus	7,536
Marin	1,688	Sutter	1,167
Mariposa	148	Tehama	933
Mendocino	1,419	Trinity	197
Merced	4,089	Tulare	7,087
Modoc	183	Tuolumne	488
Mono	160	Ventura	7,712
Monterey	5,167	Yolo	1,824
Napa	1,285	Yuba	1,208
Nevada	644	**Total**	**311,018**

School District Offices[1] (4)

	Active		
	PERF A	PERF B	Total
Los Angeles Unified School District	228	28,294	28,522
Los Angeles Community College District	—	2,385	2,385
Los Angeles County Office of Education	1,118	—	1,118
San Diego County Office of Education	738	—	738
Total	**2,084**	**30,679**	**32,763**

(1) Agencies that contract with CalPERS as public agencies and are not reflected elsewhere in this report.

Counties (37 total)

	Active		
	PERF A	PERF C	Total
Alpine	—	79	79
Amador	295	104	399
Butte	2,122	—	2,122
Calaveras	496	101	597
Colusa	336	61	397
Del Norte	362	51	413
El Dorado	1,804	—	1,804
Glenn	439	27	466
Humboldt	1,996	—	1,996
Inyo	364	37	401
Kings	1,505	—	1,505
Lake	885	—	885
Lassen	307	55	362
Madera	1,521	—	1,521
Mariposa	363	77	440
Modoc	186	24	210
Mono	233	73	306
Monterey	5,344	—	5,344
Napa	1,340	114	1,454
Nevada	738	68	806
Placer	2,682	—	2,682
Plumas	294	33	327
Riverside	21,530	—	21,530
San Benito	424	84	508
San Joaquin	—	—	—
Santa Clara	20,206	—	20,206
Santa Cruz	2,495	—	2,495
Shasta	1,978	—	1,978
Sierra	—	114	114
Siskiyou	503	84	587
Solano	2,991	—	2,991
Sutter	964	—	964
Tehama	727	—	727
Trinity	255	49	304
Tuolumne	531	129	660
Yolo	1,690	—	1,690
Yuba	851	—	851
Total	**78,757**	**1,364**	**80,121**

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Cities & Towns (452)

	Active		
City/Town	PERF A	PERF C	Total
Adelanto	—	26	26
Agoura Hills	—	35	35
Alameda	517	—	517
Albany	—	109	109
Alhambra	387	—	387
Aliso Viejo	—	26	26
Alturas	—	22	22
American Canyon	—	67	67
Anaheim	2,223	—	2,223
Anderson	—	67	67
Angels	—	34	34
Antioch	220	99	319
Apple Valley	—	113	113
Arcadia	292	—	292
Arcata	—	116	116
Arroyo Grande	—	96	96
Artesia	—	30	30
Arvin	—	56	56
Atascadero	—	145	145
Atherton	—	44	44
Atwater	—	91	91
Auburn	—	77	77
Avalon	—	59	59
Avenal	—	47	47
Azusa	225	56	281
Bakersfield	1,738	—	1,738
Baldwin Park	156	55	211
Banning	140	33	173
Barstow	—	145	145
Beaumont	—	166	166
Bell	—	103	103
Bell Gardens	—	153	153
Bellflower	—	85	85
Belmont	—	125	125
Belvedere	—	17	17
Benicia	166	64	230
Berkeley	1,363	—	1,363
Beverly Hills	852	—	852
Biggs	—	7	7
Bishop	—	40	40
Blue Lake	—	13	13
Blythe	—	60	60
Bradbury	—	3	3
Brawley	—	121	121
Brea	174	94	268
Brentwood	253	65	318
Brisbane	—	98	98
Buellton	—	23	23
Buena Park	183	80	263
Burbank	1,245	—	1,245
Burlingame	192	36	228

	Active		
City/Town	PERF A	PERF C	Total
Calabasas	—	72	72
Calexico	—	149	149
California City	—	95	95
Calimesa	—	13	13
Calipatria	—	12	12
Calistoga	—	65	65
Camarillo	137	—	137
Campbell	118	43	161
Canyon Lake	—	11	11
Capitola	—	73	73
Carlsbad	776	—	776
Carmel-By-The-Sea	—	73	73
Carpinteria	—	37	37
Carson	377	—	377
Cathedral City	—	188	188
Cerritos	222	—	222
Chico	392	—	392
Chino	344	116	460
Chowchilla	—	80	80
Chula Vista	1,111	—	1,111
Citrus Heights	—	199	199
Claremont	123	35	158
Clayton	—	26	26
Clearlake	—	61	61
Cloverdale	—	40	40
Clovis	670	—	670
Coachella City	—	74	74
Coalinga	—	88	88
Colfax	—	9	9
Colma	—	48	48
Colton	203	90	293
Colusa	—	32	32
Commerce	139	—	139
Compton	206	60	266
Concord	352	—	352
Corcoran	—	69	69
Corning	—	41	41
Corona	566	104	670
Coronado	171	71	242
Corte Madera	—	45	45
Costa Mesa	491	78	569
Cotati	—	36	36
Covina	110	58	168
Crescent City	—	56	56
Cudahy	—	32	32
Culver City	619	—	619
Cupertino	204	—	204
Cypress	—	125	125
Daly City	459	—	459
Dana Point	—	62	62
Davis	259	100	359

	Active		
City/Town	PERF A	PERF C	Total
Del Mar	—	56	56
Del Rey Oaks	—	13	13
Delano	—	44	44
Desert Hot Springs	—	102	102
Diamond Bar	—	58	58
Dinuba	—	155	155
Dixon	—	124	124
Dos Palos	—	30	30
Downey	400	—	400
Duarte	—	48	48
Dublin	—	97	97
Dunsmuir	—	10	10
East Palo Alto	—	92	92
Eastvale	—	42	42
El Cajon	388	—	388
El Centro	177	78	255
El Cerrito	—	153	153
El Monte	286	—	286
El Segundo	161	95	256
Elk Grove	—	354	354
Emeryville	—	34	34
Encinitas	172	72	244
Escalon	—	41	41
Escondido	819	—	819
Etna	—	12	12
Eureka	187	37	224
Exeter	—	38	38
Fairfax	—	35	35
Fairfield	544	—	544
Farmersville	—	37	37
Fillmore	—	35	35
Firebaugh	—	37	37
Folsom	433	—	433
Fontana	683	—	683
Fort Bragg	—	55	55
Fortuna	—	70	70
Foster City	122	34	156
Fountain Valley	—	207	207
Fowler	—	32	32
Fremont	907	—	907
Fullerton	477	—	477
Galt	113	33	146
Garden Grove	559	—	559
Gardena	291	84	375
Gilroy	232	—	232
Glendale	1,756	—	1,756
Glendora	154	57	211
Goleta	—	86	86
Gonzales	—	50	50
Grand Terrace	—	18	18
Grass Valley	—	99	99

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Cities & Towns (continued)

	Active				Active				Active		
City/Town	PERF A	PERF C	Total	City/Town	PERF A	PERF C	Total	City/Town	PERF A	PERF C	Total
Greenfield	—	76	76	Lakewood	286	—	286	Moreno Valley	319	—	319
Gridley	—	47	47	Lancaster	284	—	284	Morgan Hill	158	38	196
Grover Beach	—	60	60	Larkspur	—	37	37	Morro Bay	—	99	99
Guadalupe	—	41	41	Lathrop	—	128	128	Mountain View	628	—	628
Gustine	—	28	28	Lawndale	—	44	44	Mt. Shasta	—	39	39
Half Moon Bay	—	41	41	Lemon Grove	—	53	53	Murrieta	—	303	303
Hanford	192	87	279	Lemoore	—	93	93	Napa	448	—	448
Hawaiian Gardens	—	66	66	Lincoln	—	170	170	National City	294	—	294
Hawthorne	175	90	265	Lindsay	—	45	45	Needles	—	49	49
Hayward	818	—	818	Live Oak	—	25	25	Nevada City	—	28	28
Healdsburg	—	134	134	Livermore	295	91	386	Newark	122	49	171
Hemet	254	—	254	Livingston	—	57	57	Newman	—	44	44
Hercules	—	74	74	Lodi	400	—	400	Newport Beach	801	—	801
Hermosa Beach	—	138	138	Loma Linda	—	82	82	Norco	—	72	72
Hesperia	—	115	115	Lomita	—	47	47	Norwalk	252	—	252
Hidden Hills	—	4	4	Lompoc	285	71	356	Novato	136	55	191
Highland	—	38	38	Long Beach	4,776	—	4,776	Oakdale	—	101	101
Hillsborough	—	91	91	Loomis	—	14	14	Oakland	3,888	—	3,888
Hollister	—	184	184	Los Alamitos	—	49	49	Oakley	—	79	79
Hughson	—	17	17	Los Altos	—	139	139	Oceanside	905	—	905
Huntington Beach	986	—	986	Los Altos Hills	—	24	24	Ojai	—	36	36
Huntington Park	—	152	152	Los Banos	—	161	161	Ontario	1,167	—	1,167
Imperial	—	88	88	Los Gatos	110	37	147	Orange	627	—	627
Imperial Beach	—	82	82	Lynwood	104	—	104	Orange Cove	—	34	34
Indian Wells	—	31	31	Madera	173	59	232	Orland	—	39	39
Indio	181	62	243	Malibu	—	85	85	Oroville	—	102	102
Industry	—	25	25	Mammoth Lakes	—	81	81	Oxnard	1,142	124	1,266
Inglewood	595	—	595	Manhattan Beach	245	87	332	Pacific Grove	—	92	92
Ione	—	18	18	Manteca	305	121	426	Pacifica	122	55	177
Irvine	984	—	984	Marina	—	96	96	Palm Desert	112	—	112
Irwindale	—	109	109	Martinez	—	126	126	Palm Springs	472	—	472
Jackson	—	31	31	Marysville	—	73	73	Palmdale	242	—	242
Kerman	—	71	71	Maywood	—	21	21	Palo Alto	868	—	868
King City	—	35	35	Mendota	—	31	31	Palos Verdes			
Kingsburg	—	76	76	Menifee	—	253	253	Estates	—	49	49
La Canada Flintridge	—	41	41	Menlo Park	204	43	247	Paradise	—	75	75
La Habra	236	71	307	Merced	463	—	463	Paramount	—	93	93
La Habra Heights	—	19	19	Mill Valley	—	151	151	Parlier	—	63	63
La Mesa	255	—	255	Millbrae	—	81	81	Pasadena	1,754	—	1,754
La Mirada	—	80	80	Milpitas	400	—	400	Paso Robles	135	78	213
La Palma	—	53	53	Mission Viejo	152	—	152	Patterson	—	126	126
La Puente	—	62	62	Modesto	1,138	—	1,138	Perris	—	120	120
La Quinta	—	91	91	Monrovia	145	86	231	Petaluma	339	—	339
La Verne	—	169	169	Montague	—	7	7	Pico Rivera	143	—	143
Laguna Beach	171	104	275	Montclair	—	161	161	Piedmont	—	104	104
Laguna Hills	—	35	35	Monte Sereno	—	7	7	Pinole	—	102	102
Laguna Niguel	—	82	82	Montebello	441	—	441	Pismo Beach	—	95	95
Laguna Woods	—	8	8	Monterey	254	128	382	Pittsburg	201	78	279
Lake Elsinore	—	115	115	Monterey Park	290	—	290	Placentia	—	147	147
Lake Forest	—	67	67	Moorpark	—	61	61	Placerville	—	79	79
Lakeport	—	49	49	Moraga	—	37	37	Pleasant Hill	—	106	106

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Cities & Towns (continued)

	Active		
City/Town	PERF A	PERF C	Total
Pleasanton	427	79	506
Pomona	530	—	530
Port Hueneme	—	116	116
Porterville	206	106	312
Portola	—	12	12
Portola Valley	—	16	16
Poway	184	50	234
Rancho Cordova	—	101	101
Rancho Cucamonga	362	—	362
Rancho Mirage	—	85	85
Rancho Palos Verdes	—	91	91
Rancho Santa Margarita	—	25	25
Red Bluff	—	111	111
Redding	870	—	870
Redlands	339	131	470
Redondo Beach	436	—	436
Redwood City	555	—	555
Reedley	—	107	107
Rialto	356	—	356
Richmond	599	—	599
Ridgecrest	—	104	104
Rio Vista	—	37	37
Ripon	—	24	24
Riverbank	—	50	50
Riverside	2,094	—	2,094
Rocklin	142	98	240
Rohnert Park	159	71	230
Rolling Hills	—	5	5
Rolling Hills Estates	—	23	23
Rosemead	—	65	65
Roseville	1,374	—	1,374
Ross	—	19	19
Sacramento	3,924	—	3,924
Salinas	450	99	549
San Anselmo	—	34	34
San Bernardino	923	—	923
San Bruno	144	78	222
San Buenaventura	623	—	623
San Carlos	—	88	88
San Clemente	160	5	165
San Dimas	—	90	90
San Fernando	—	103	103
San Francisco[1]	582	—	582
San Gabriel	—	178	178
San Jacinto	—	65	65
San Joaquin	—	17	17
San Jose	—	14	14
San Leandro	255	67	322
San Luis Obispo	345	105	450
San Marcos	183	67	250
San Marino	—	106	106
San Mateo	464	—	464
San Pablo	—	152	152
San Ramon	215	63	278
Sand City	—	21	21
Sanger	—	101	101
Santa Ana	1,181	—	1,181
Santa Barbara	898	92	990
Santa Clara	1,014	—	1,014
Santa Clarita	474	—	474
Santa Cruz	685	144	829
Santa Fe Springs	127	49	176
Santa Maria	409	170	579
Santa Monica	1,856	—	1,856
Santa Paula	—	110	110
Santa Rosa	1,122	—	1,122
Santee	—	131	131
Saratoga	—	61	61
Sausalito	—	58	58
Scotts Valley	—	53	53
Seal Beach	—	102	102
Seaside	—	168	168
Sebastopol	—	42	42
Selma	—	122	122
Shafter	—	103	103
Shasta Lake	—	55	55
Sierra Madre	—	94	94
Signal Hill	—	95	95
Simi Valley	484	—	484
Solana Beach	—	71	71
Soledad	—	76	76
Solvang	—	26	26
Sonoma	—	39	39
Sonora	—	43	43
South El Monte	—	54	54
South Gate	246	71	317
South Lake Tahoe	114	76	190
South Pasadena	—	155	155
South San Francisco	445	—	445
St. Helena	—	67	67
Stanton	—	48	48
Stockton	1,518	—	1,518
Suisun City	—	91	91
Sunnyvale	869	—	869
Susanville	—	59	59
Sutter Creek	—	14	14
Taft	—	50	50
Tehachapi	—	66	66
Temecula	204	—	204
Temple City	—	45	45
Thousand Oaks	340	—	340
Tiburon	—	39	39
Torrance	1,234	—	1,234
Tracy	431	—	431
Truckee	—	129	129
Tulare	238	101	339
Tulelake	—	10	10
Turlock	207	119	326
Tustin	214	95	309
Twentynine Palms	—	41	41
Ukiah	166	54	220
Union City	175	67	242
Upland	161	66	227
Vacaville	554	—	554
Vallejo	493	—	493
Vernon	167	43	210
Victorville	363	54	417
Villa Park	—	8	8
Visalia	599	—	599
Vista	215	83	298
Walnut	—	42	42
Walnut Creek	293	75	368
Wasco	—	59	59
Waterford	—	18	18
Watsonville	301	102	403
Weed	—	31	31
West Covina	285	—	285
West Hollywood	231	—	231
West Sacramento	292	129	421
Westlake Village	—	16	16
Westminster	140	82	222
Whittier	352	—	352
Wildomar	—	35	35
Williams	—	38	38
Willits	—	49	49
Willows	—	13	13
Windsor	—	110	110
Winters	—	42	42
Woodlake	—	34	34
Woodland	305	—	305
Woodside	—	20	20
Yorba Linda	129	—	129
Yountville	—	32	32
Yreka	—	62	62
Yuba City	181	113	294
Yucaipa	—	69	69
Yucca Valley	—	45	45
Total	**94,721**	**25,297**	**120,018**

(1) San Francisco has both City and County employees; however, it is listed only in the "total" count of the Cities & Towns category.

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (1,006)

Other Public Agency	Active		Total
	PERF A	PERF C	
Academic Senate for California Community Colleges	—	13	13
Access Services Incorporated	—	67	67
Agoura Hills and Calabasas Community Center	—	—	—
Alameda Alliance for Health	375	—	375
Alameda Corridor Transportation Authority	—	11	11
Alameda County Fire Department	345	81	426
Alameda County Law Library	—	6	6
Alameda County Mosquito Abatement District	—	18	18
Alameda County Schools Insurance Group	—	3	3
Alameda County Transportation Commission	—	38	38
Alameda County Waste Management Authority	—	46	46
Alameda County Water District	222	—	222
Alliance of Schools for Cooperative Insurance Programs	—	47	47
Alpine Fire Protection District	—	19	19
Alpine Springs County Water District	—	5	5
Alta California Regional Center, Inc.	546	—	546
Alta Irrigation District	—	13	13
Altadena Library District	—	23	23
Amador County Transportation Commission	—	4	4
Amador Transit	—	20	20
Amador Water Agency	—	42	42
American Canyon Fire Protection District	—	20	20
American River Flood Control District	—	8	8
Anderson Cemetery District	—	—	—
Anderson Fire Protection District	—	11	11
Angiola Water District	—	4	4
Antelope Valley Mosquito and Vector Control District	—	7	7
Antelope Valley Schools Transportation Agency	169	—	169
Antelope Valley Transit Authority	—	58	58
Apple Valley Fire Protection District	—	52	52
Arbuckle-College City Fire Protection District	—	4	4
Arcade Creek Recreation and Park District	—	3	3
Arcata Fire Protection District	—	17	17
Area 12 Agency on Aging	—	20	20
Aromas Water District	—	6	6
Arrowbear Park County Water District	—	5	5
Arroyo Grande District Cemetery	—	3	3
Associated Students California State University San Bernardino	—	4	4
Associated Students Inc., California State University, Fullerton	—	63	63
Associated Students Incorporated of California State University East Bay	—	6	6
Associated Students Incorporated of California State University Stanislaus	—	5	5

Other Public Agency	Active		Total
	PERF A	PERF C	
Associated Students of California State University, Chico	—	92	92
Association of California Water Agencies	—	42	42
Association of California Water Agencies - Joint Powers Insurance Authority	—	52	52
Association of Monterey Bay Area Governments	—	11	11
Atascadero Cemetery District	—	3	3
Auburn Area Recreation and Park District	—	45	45
Auburn Public Cemetery District	—	6	6
Avila Beach Community Services District	—	1	1
Aztec Shops, Ltd.	—	44	44
Bard Water District	—	18	18
Bardsdale Cemetery District	—	1	1
Barstow Cemetery District	—	7	7
Bay Area Air Quality Management District	407	—	407
Bay Area Water Supply and Conservation Agency	—	9	9
Beach Cities Health District	—	67	67
Bear Mountain Recreation and Park District	—	7	7
Bear Valley Community Services District	—	34	34
Beaumont District Library	—	10	10
Beaumont-Cherry Valley Recreation and Park District	—	18	18
Beaumont-Cherry Valley Water District	—	41	41
Bella Vista Water District	—	25	25
Belmont Fire Protection District	—	—	—
Belmont-San Carlos Fire Department	—	—	—
Belvedere-Tiburon Library Agency	—	12	12
Benicia City Housing Authority	—	9	9
Berkeley Housing Authority	—	12	12
BETA Healthcare Group Risk Management Authority	—	177	177
Big Bear Area Regional Wastewater Agency	—	14	14
Big Bear City Airport District	—	8	8
Big Bear City Community Services District	—	38	38
Big Bear Municipal Water District	—	11	11
Bighorn-Desert View Water Agency	—	8	8
Black Gold Cooperative Library System	—	4	4
Blanchard/Santa Paula Public Library District	—	5	5
Blue Lake Fire Protection District	—	1	1
Bodega Bay Fire Protection District	—	13	13
Bolinas Community Public Utility District	—	6	6
Bolinas Fire Protection District	—	4	4
Bonita-Sunnyside Fire Protection District	—	14	14
Boron Community Services District	—	4	4
Borrego Springs Fire Protection District	—	12	12
Borrego Water District	—	13	13
Boulder Creek Fire Protection District	—	1	1

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Branciforte Fire Protection District	—	4	4
Brannan-Andrus Levee Maintenance District	—	1	1
Broadmoor Police Protection District	—	11	11
Brooktrails Township Community Services District	—	12	12
Browns Valley Irrigation District	—	11	11
Buckingham Park County Water District	—	3	3
Buena Park Library District	—	18	18
Burney Basin Mosquito Abatement District	—	1	1
Burney Fire District	—	—	—
Burney Water District	—	7	7
Butte County Air Quality Management District	—	11	11
Butte County Association of Governments	—	13	13
Butte County Fair Association	—	3	3
Butte County In-Home Supportive Services Public Authority	—	—	—
Butte County Mosquito and Vector Control District	—	18	18
Butte Local Agency Formation Commission	—	3	3
Butte Schools Self-Funded Programs	—	2	2
Butte-Glenn Community College District	—	4	4
Byron-Bethany Irrigation District	—	6	6
Cabrillo College Foundation	—	5	5
Cachuma Operation and Maintenance Board	—	15	15
Cal Poly Corporation	250	—	250
Cal Poly Pomona Foundation, Inc.	—	186	186
Calaveras Council of Governments	—	4	4
Calaveras County Water District	—	70	70
Calaveras Public Utility District	—	11	11
California Association for Park and Recreation Indemnity	—	4	4
California Authority of Racing Fairs	—	4	4
California Bear Credit Union	—	18	18
California Central Valley Flood Control Association	—	2	2
California Fair Services Authority	—	18	18
California Fairs Financing Authority	—	10	10
California Firefighter's Joint Apprenticeship Committee	—	29	29
California Intergovernmental Risk Authority	—	4	4
California Interscholastic Federation, Central Coast Section	—	4	4
California Interscholastic Federation, Central Section	—	3	3
California Interscholastic Federation, North Coast Section	—	6	6
California Interscholastic Federation, Northern Section	—	1	1
California Interscholastic Federation, Sac-Joaquin Section	—	5	5
California Interscholastic Federation, San Diego Section	—	4	4
California Interscholastic Federation, Southern Section	—	16	16
California Interscholastic Federation, State Office	—	9	9
California Joint Powers Insurance Authority	—	33	33
California Joint Powers Risk Management Authority	—	6	6
California Maritime Academy Foundation, Inc.	—	—	—
California Municipal Utilities Association	—	8	8
California Pines Community Services District	—	12	12
California Redevelopment Association Foundation	—	—	—
California School Boards Association	—	110	110
California Special Districts Association	—	28	28
California State University, Bakersfield Foundation	—	1	1
California State University, East Bay Foundation, Inc.	—	—	—
California State University, Fresno Athletic Corporation	—	66	66
California State University, Stanislaus Auxiliary and Business Services	—	—	—
California State University-Fresno Association, Inc.	—	37	37
Callayomi County Water District	—	5	5
Calleguas Municipal Water District	—	70	70
Camarillo Health Care District	—	22	22
Cambria Cemetery District	—	1	1
Cambria Community Healthcare District	—	15	15
Cambria Community Services District	—	38	38
Cameron Park Community Services District	—	17	17
Camrosa Water District	—	23	23
Capitol Area Development Authority	—	43	43
Carmel Area Wastewater District	—	25	25
Carmel Highlands Fire Protection District of Monterey County	—	—	—
Carmichael Water District	—	25	25
Carpinteria Sanitary District	—	15	15
Carpinteria Valley Water District	—	20	20
Casitas Municipal Water District	—	74	74
Castro Valley Sanitary District	—	23	23
Castroville Community Services District	—	6	6
Cawelo Water District	—	14	14
Cayucos Sanitary District	—	8	8
Cayucos-Morro Bay Cemetery District	—	4	4
Centerville Community Services District	—	4	4
Central Basin Municipal Water District	—	10	10
Central Calaveras Fire and Rescue Protection District	—	2	2

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Central Coast Water Authority	—	30	30
Central Contra Costa Solid Waste Authority	—	5	5
Central Contra Costa Transit Authority	217	—	217
Central County Fire Department	—	91	91
Central Fire Protection District of Santa Cruz County	—	105	105
Central Marin Fire Authority	—	41	41
Central Marin Police Authority	—	43	43
Central Marin Sanitation Agency	—	44	44
Central Sierra Child Support Agency	—	27	27
Central Valley Regional Center, Inc.	535	—	535
Central Water District	—	4	4
Channel Islands Beach Community Services District	—	8	8
Chester Public Utility District	—	13	13
Chico Area Recreation and Park District	—	64	64
Children and Families Commission of San Luis Obispo County	—	4	4
Chino Basin Water Conservation District	—	15	15
Chino Basin Watermaster	—	11	11
Chino Valley Independent Fire District	—	140	140
Citrus Heights Water District	—	34	34
City/County Association of Governments of San Mateo County	—	2	2
Clear Creek Community Services District	—	9	9
Clearlake Oaks County Water District	—	17	17
Cloverdale Citrus Fair	—	2	2
Cloverdale Fire Protection District	—	16	16
Clovis Cemetery District	—	10	10
Coachella Valley Association of Governments	—	27	27
Coachella Valley Mosquito and Vector Control District	—	63	63
Coachella Valley Public Cemetery District	—	9	9
Coachella Valley Water District	538	—	538
Coalinga/Huron Unified School District Library District	—	10	10
Coalinga-Huron Cemetery District	—	—	—
Coalinga-Huron Recreation and Park District	—	11	11
Coast Life Support District	—	21	21
Coastal Developmental Services Fdn DBA Westside Regional Center	240	—	240
Coastside County Water District	—	21	21
Coastside Fire Protection District	—	—	—
Colfax Cemetery District	—	2	2
College of The Canyons Foundation	—	—	—
Colusa County One-Stop Partnership	—	7	7
Colusa Mosquito Abatement District	—	3	3
Community College League of California	—	30	30
Community Development Commission of Mendocino County	—	20	20
Compass Community Credit Union	—	21	21
Compton Creek Mosquito Abatement District	—	1	1
Compton Unified School District	—	15	15
Conejo Recreation and Park District	151	—	151
Connecting Point	—	30	30
Consolidated Mosquito Abatement District	—	22	22
Contra Costa Community College District	—	21	21
Contra Costa County Law Library	—	5	5
Contra Costa County Schools Insurance Group	—	34	34
Contra Costa Transportation Authority	—	18	18
Cooperative Organization for the Development of Employee Selection Procedures	—	6	6
Cooperative Personnel Services	125	—	125
Copperopolis Fire Protection District	—	8	8
Cordelia Fire Protection District of Solano County	—	3	3
Cordova Recreation and Park District	—	58	58
Corning Water District	—	2	2
Costa Mesa Sanitary District	—	20	20
Cosumnes Community Services District	377	—	377
Cottonwood Fire Protection District	—	3	3
Cottonwood Water District	—	4	4
CRA/LA, a Designated Local Authority	—	5	5
Crescent City Harbor District	—	15	15
Crescenta Valley Water District	—	28	28
Crestline Lake Arrowhead Water Agency	—	9	9
Crestline Village Water District	—	12	12
Crockett Community Services District	—	5	5
Cucamonga Valley Water District	121	—	121
Cutler Public Utility District	—	5	5
Cutler-Orosi Joint Powers Wastewater Authority	—	4	4
Cuyama Valley Recreation District	—	—	—
Dairy Council of California	—	37	37
Davis Cemetery District	—	6	6
De Luz Community Services District	—	5	5
Del Norte County Library District	—	2	2
Del Paso Manor Water District	—	3	3
Del Puerto Water District	—	6	6
Del Rey Community Services District	—	5	5
Delano Mosquito Abatement District	—	8	8
Delta Diablo	—	66	66
Delta Mosquito and Vector Control District	—	21	21
Denair Community Services District	—	7	7
Desert Water Agency	—	85	85
Diablo Water District	—	19	19
Diamond Springs/El Dorado Fire Protection District	—	15	15
Dixon Public Library District	—	—	—

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Donald P. And Katherine B. Loker University Student Union, Inc.	—	9	9
Dougherty Regional Fire Authority	—	—	—
Dublin San Ramon Services District	—	118	118
Durham Mosquito Abatement District	—	1	1
East Bay Dischargers Authority	—	4	4
East Bay Regional Park District	674	68	742
East Contra Costa Irrigation District	—	19	19
East County Schools Federal Credit Union	—	14	14
East Orange County Water District	—	14	14
East Palo Alto Sanitary District	—	6	6
East Quincy Services District	—	3	3
East Valley Water District	—	64	64
Eastern Municipal Water District	596	—	596
Eastern Sierra Transit Authority	—	47	47
Ebbetts Pass Fire Protection District	—	25	25
Edgemont Community Services District	—	1	1
El Dorado County Fire Protection District	—	74	74
El Dorado County Resource Conservation District	—	5	5
El Dorado County Transit Authority	—	49	49
El Dorado County Transportation Commission	—	5	5
El Dorado County Water Agency	—	3	3
El Dorado Hills Community Services District	—	29	29
El Dorado Hills County Water District	—	72	72
El Dorado Irrigation District	229	—	229
El Dorado Local Agency Formation Commission	—	2	2
Encina Wastewater Authority	—	68	68
Esparto Community Services District	—	7	7
Esparto Fire Protection District	—	3	3
Exeter District Ambulance	—	16	16
Fair Oaks Recreation & Park District	—	20	20
Fair Oaks Water District	—	26	26
Fairfield-Suisun Sewer District	—	59	59
Fall River Valley Community Services District	—	5	5
Fallbrook Public Utility District	—	65	65
Far Northern Coordinating Council on Developmental Disabilities	219	—	219
Feather River Air Quality Management District	—	11	11
Feather River Recreation and Park District	—	14	14
Feather Water District	—	2	2
Felton Fire Protection District	—	5	5
Fern Valley Water District	—	5	5
Florin County Water District	—	10	10
Florin Resource Conservation District Elk Grove Water District	—	30	30
Fontana Unified School District	—	12	12
Foothill Municipal Water District	—	9	9
Foothill-De Anza Community College District	—	9	9
Foresthill Public Utility District	—	9	9
Forestville Water District	—	6	6
Fort Bragg Fire Protection Authority	—	4	4
Foundation for California Community Colleges	—	663	663
Foundation for Grossmont and Cuyamaca Colleges	—	61	61
Fresno City Housing Authority	114	—	114
Fresno County Housing Authority	109	—	109
Fresno County Law Library	—	3	3
Fresno Westside Mosquito Abatement District	—	9	9
Fruitridge Fire Protection District	—	—	—
Fulton-El Camino Recreation and Park District	—	11	11
Garden Valley Fire Protection District	—	11	11
Georgetown Divide Public Utility District	—	22	22
Georgetown Divide Resource Conservation District	—	5	5
Georgetown Fire Protection District	—	16	16
Gilsizer County Drainage District	—	—	—
Glendale College, Associated Students of	—	1	1
Glendale Community College District	—	9	9
Glenn County Mosquito and Vector Control District	—	2	2
Gold Coast Transit	197	—	197
Gold Ridge Fire Protection District	—	19	19
Gold Ridge Resource Conservation District	—	9	9
Golden Gate Bridge Highway and Transportation District	427	—	427
Golden Hills Community Services District	—	11	11
Golden Sierra Job Training Agency	—	15	15
Goleta Sanitary District	—	31	31
Goleta Water District	—	62	62
Goleta West Sanitary District	—	7	7
Granada Community Services District	—	2	2
Graton Community Services District	—	2	2
Graton Fire Protection District	—	6	6
Great Basin Unified Air Pollution Control District	—	23	23
Greater Anaheim Special Education Local Plan Area	—	60	60
Greater Los Angeles County Vector Control District	—	122	122
Greater Vallejo Recreation District	—	64	64
Green Valley County Water District	—	3	3
Gridley Biggs Cemetery District	—	5	5
Grossmont Healthcare District	—	12	12
Groveland Community Services District	—	20	20
Gualala Community Services District	—	4	4
Hacienda La Puente Unified School District	—	4	4
Hamilton Branch Fire Protection District	—	—	—
Happy Camp Sanitary District	—	—	—

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Happy Homestead Cemetery District	—	2	2
Happy Valley Fire District	—	3	3
Hayward Area Recreation and Park District	113	—	113
Health Plan of San Joaquin	—	437	437
Heartland Communications Facility Authority	—	21	21
Heber Public Utility District	—	14	14
Helendale Community Services District	—	17	17
Helix Water District	146	—	146
Henry Miller Reclamation District No. 2131	—	34	34
Heritage Ranch Community Services District	—	9	9
Herlong Public Utility District	—	3	3
Hesperia Fire Protection District	—	—	—
Hesperia Unified School District	—	8	8
Hesperia Water District	—	55	55
Hidden Valley Lake Community Services District	—	15	15
Hi-Desert Water District	—	45	45
Higgins Area Fire Protection District	—	15	15
Hilton Creek Community Services District	—	1	1
Hopland Public Utility District	—	—	—
Housing Authority of the City of Alameda	—	49	49
Housing Authority of the City of Calexico	—	15	15
Housing Authority of the City of Eureka	—	23	23
Housing Authority of the City of Livermore	—	9	9
Housing Authority of the City of Los Angeles	779	—	779
Housing Authority of the City of Madera	—	21	21
Housing Authority of the City of San Buenaventura	—	68	68
Housing Authority of the City of San Luis Obispo	—	65	65
Housing Authority of the City of South San Francisco	—	2	2
Housing Authority of the County of Butte	—	35	35
Housing Authority of the County of Kern	193	—	193
Housing Authority of the County of Santa Cruz	—	57	57
Hub Cities Consortium	—	22	22
Human Rights/Fair Housing Commission of the City and County of Sacramento	—	1	1
Humboldt Bay Fire Joint Powers Authority	—	58	58
Humboldt Bay Harbor Recreation and Conservation District	—	13	13
Humboldt Bay Municipal Water District	—	28	28
Humboldt Community Services District	—	20	20
Humboldt County Association of Governments	—	4	4
Humboldt Transit Authority	—	50	50
Humboldt Waste Management Authority	—	32	32
Idyllwild Fire Protection District	—	8	8
Independent Cities Association, Inc.	—	—	—
Indian Wells Valley Water District	—	32	32
Inland Counties Regional Center, Inc.	820	—	820
Inland Empire Health Plan	2,921	—	2,921
Inland Empire Resource Conservation District	—	30	30
Inland Empire Utilities Agency	279	—	279
Intergovernmental Training and Development Center	—	7	7
Inverness Public Utility District	—	7	7
Ironhouse Sanitary District	—	25	25
Irvine Ranch Water District	390	—	390
Isla Vista Recreation and Park District	—	10	10
Jackson Valley Irrigation District	—	3	3
Jamestown Sanitary District	—	6	6
Joshua Basin Water District	—	22	22
June Lake Public Utility District	—	7	7
Jurupa Area Recreation and Park District	—	26	26
Jurupa Community Services District	—	161	161
Kaweah Delta Water Conservation District	—	23	23
Kelseyville Fire Protection District	—	15	15
Kensington Community Services District	—	6	6
Kentfield Fire Protection District	—	14	14
Kenwood Fire Protection District	—	6	6
Kern County Council of Governments	—	16	16
Kern County Local Agency Formation Commission	—	3	3
Kern Health Systems	—	475	475
Kern River Valley Cemetery District	—	2	2
Kern-Tulare Water District	—	11	11
Kettleman City Community Services District	—	4	4
Kings County Area Public Transit Agency	—	6	6
Kings County Association of Governments	—	5	5
Kings County In-Home Supportive Services Public Authority	—	—	—
Kings Mosquito Abatement District	—	15	15
Kings Waste and Recycling Authority	—	14	14
Kinneloa Irrigation District	—	8	8
Kirkwood Meadows Public Utility District	—	18	18
Konocti County Water District	—	6	6
La Habra Heights County Water District	—	9	9
La Puente Valley County Water District	—	13	13
Laguna Beach County Water District	—	38	38
Lake Arrowhead Community Services District	—	53	53
Lake County Fire Protection District	—	22	22
Lake County Vector Control District	—	9	9
Lake Don Pedro Community Services District	—	5	5
Lake Hemet Municipal Water District	—	51	51
Lake Oroville Area Public Utility District	—	7	7
Lake Shastina Community Services District	—	16	16
Lake Valley Fire Protection District	—	27	27
Lakeport County Fire Protection District	—	16	16
Lakeside Fire Protection District	—	54	54

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Lakeside Water District	—	13	13
Lamont Public Utility District	—	13	13
Las Gallinas Valley Sanitary District of Marin County	—	26	26
Las Virgenes Municipal Water District	115	—	115
Lassen County Waterworks District No. 1	—	1	1
League of California Cities	—	72	72
Leucadia Wastewater District	—	20	20
Levee District No. 1 of Sutter County	—	3	3
Linda County Water District	—	21	21
Linda Fire Protection District	—	22	22
Linden-Peters Rural County Fire Protection District	—	13	13
Lindsay Strathmore Public Cemetery District	—	5	5
Little Lake Fire Protection District	—	4	4
Littlerock Creek Irrigation District	—	7	7
Live Oak Cemetery District	—	3	3
Livermore/Amador Valley Transit Authority	—	14	14
Local Agency Formation Commission of Monterey County	—	4	4
Local Agency Formation Commission of Solano County	—	2	2
Local Government Services Authority, a Joint Powers Authority	—	—	—
Long Beach City College Associated Student Body Enterprises	—	—	—
Long Beach State University, Associated Students	—	60	60
Long Beach State University, Forty-Niner Shops, Inc.	—	35	35
Los Alamos Community Services District	—	7	7
Los Angeles County Area 'E' Civil Defense and Disaster Board	—	—	—
Los Angeles County Development Authority	561	—	561
Los Angeles County Law Library	—	41	41
Los Angeles County Sanitation District No. 2	1,661	—	1,661
Los Angeles County West Vector Control District	—	39	39
Los Angeles Memorial Coliseum Commission	—	—	—
Los Angeles Regionalized Insurance Services Authority	—	—	—
Los Gatos-Saratoga Department of Community Education and Recreation	—	31	31
Los Osos Community Services District	—	16	16
Lower Lake Cemetery District	—	1	1
Lower Lake County Waterworks District No. 1	—	6	6
Lower Tule River Irrigation District	—	35	35
Madera Cemetery District	—	21	21
Madera County Mosquito and Vector Control District	—	11	11
Main San Gabriel Basin Watermaster	—	7	7
Majestic Pines Community Services District	—	3	3

Other Public Agency	Active PERF A	Active PERF C	Total
Mammoth Lakes Fire District	—	11	11
Mammoth Lakes Mosquito Abatement District	—	—	—
Management of Emeryville Services Authority	—	98	98
March Joint Powers Authority	—	13	13
Marin Children and Families Commission	—	4	4
Marin Community College District	—	6	6
Marin County Housing Authority	—	43	43
Marin County In-Home Supportive Services Public Authority	—	6	6
Marin Municipal Water District	218	—	218
Marina Coast Water District	—	41	41
Marinwood Community Services District	—	18	18
Mariposa Public Utility District	—	6	6
Maxwell Public Utility District	—	3	3
McCloud Community Services District	—	8	8
McFarland Recreation and Park District	—	9	9
McKinleyville Community Services District	—	25	25
Meeks Bay Fire Protection District	—	—	—
Meiners Oaks County Water District	—	6	6
Mendocino City Community Services District	—	5	5
Mendocino County Russian River Flood Control & Water Conservation Improvement District	—	1	1
Mendocino Transit Authority	—	49	49
Menlo Park Fire Protection District	—	146	146
Merced County Housing Authority	—	30	30
Merced County Mosquito Abatement District	—	16	16
Merced Irrigation District	172	—	172
Mesa Water District	—	54	54
Metropolitan Transportation Commission	305	—	305
Metropolitan Water District of Southern California	1,806	—	1,806
Midpeninsula Regional Open Space District	—	168	168
Mid-Peninsula Water District	—	18	18
Mid-Placer Public Schools Transportation Agency	—	25	25
Midway City Sanitary District	—	30	30
Midway Heights County Water District	—	3	3
Millview County Water District	—	—	—
Minter Field Airport District	—	7	7
Mission Springs Water District	—	47	47
Mojave Air and Space Port	—	30	30
Mojave Water Agency	—	39	39
Mokelumne Rural Fire District	—	13	13
Monte Vista County Water District	—	36	36
Montecito Fire Protection District	—	50	50
Montecito Sanitary District of Santa Barbara County	—	15	15
Montecito Water District	—	28	28

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Monterey Bay Unified Air Pollution Control District	—	28	28
Monterey County Regional Fire Protection District	—	64	64
Monterey County Water Resources Agency	—	37	37
Monterey One Water	—	90	90
Monterey Peninsula Airport District	—	24	24
Monterey Peninsula Regional Park District	—	14	14
Monterey Peninsula Water Management District	—	24	24
Monterey Regional Waste Management District	119	—	119
Monterey-Salinas Transit District	227	—	227
Montezuma Fire Protection District	—	12	12
Morongo Basin Transit Authority	—	38	38
Mother Lode Job Training Agency	—	20	20
Moulton-Niguel Water District	—	164	164
Mountains Recreation and Conservation Authority	—	125	125
Mountain-Valley Library System	—	—	—
Mt. San Antonio College Auxiliary Services	—	3	3
MT. View Sanitary District of Contra Costa County	—	18	18
Municipal Pooling Authority	—	20	20
Municipal Water District of Orange County	—	34	34
Murphys Sanitary District	—	4	4
Murrieta Fire Protection District	—	60	60
Murrieta Valley Cemetery District	—	4	4
Napa County Mosquito Abatement District	—	9	9
Napa County Resource Conservation District	—	13	13
Napa Sanitation District	—	49	49
Napa Valley Transportation Authority	—	14	14
National Orange Show	—	20	20
Natomas Fire Protection District	—	—	—
Nevada Cemetery District	—	6	6
Nevada County Consolidated Fire District	—	39	39
Nevada County Local Agency Formation Commission	—	2	2
Nevada County Resource Conservation District	—	1	1
Nevada Irrigation District	191	—	191
Newcastle, Rocklin, Gold Hill Cemetery District	—	10	10
Nipomo Community Services District	—	20	20
North Bay Cooperative Library System	—	—	—
North Bay Regional Center	257	—	257
North Bay Schools Insurance Authority	—	31	31
North Central Counties Consortium	—	5	5
North Coast County Water District	—	20	20
North Coast Railroad Authority	—	1	1
North Coast Unified Air Quality Management District	—	13	13
North County Dispatch Joint Powers Authority	—	31	31
North County Fire Protection District of Monterey County	—	33	33
North County Fire Protection District of San Diego County	—	81	81
North County Transit District	243	—	243
North Delta Water Agency	—	2	2
North Kern Cemetery District	—	9	9
North Kern Water Storage District	—	30	30
North Kern-South Tulare Hospital District	160	—	160
North Los Angeles County Regional Center, Inc.	611	—	611
North Marin Water District	—	51	51
North of the River Municipal Water District	—	—	—
North of the River Recreation and Park District	122	—	122
North State Cooperative Library System	—	—	—
North Tahoe Fire Protection District	—	63	63
North Tahoe Public Utility District	—	50	50
Northern California Power Agency	154	—	154
Northern California Special Districts Insurance Authority	—	—	—
Northern Salinas Valley Mosquito Abatement District	—	4	4
Northern Sierra Air Quality Management District	—	7	7
Northshore Fire Protection District	—	32	32
Northstar Community Services District	—	43	43
Northwest Mosquito and Vector Control District	—	18	18
Novato Sanitary District	—	19	19
Oakdale Irrigation District	—	80	80
Oakdale Rural Fire Protection District	—	—	—
Oakland City Housing Authority	285	27	312
Oceano Community Services District	—	7	7
Ojai Valley Sanitary District	—	21	21
Olcese Water District	—	2	2
Olivenhain Municipal Water District	—	89	89
Olympic Valley Public Service District	—	26	26
Omnitrans	499	—	499
Ophir Hill Fire Protection District	—	6	6
Orange County Health Authority	1,448	—	1,448
Orange County Transportation Authority	—	1	1
Orange County Vector Control District	—	89	89
Orchard Dale Water District	—	9	9
Orland Cemetery District	—	3	3
Oro Loma Sanitary District	—	49	49
Orosi Public Utility District	—	3	3
Oroville Cemetery District	—	7	7
Otay Water District	136	—	136
Oxnard Harbor District	—	39	39
Pacific Fire Protection District	—	—	—
Padre Dam Municipal Water District	129	—	129

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Pajaro Valley Fire Protection Agency	—	—	—
Pajaro Valley Public Cemetery District	—	7	7
Pajaro Valley Water Management Agency	—	14	14
Palm Ranch Irrigation District	—	4	4
Palmdale Water District	—	85	85
Palo Verde Valley District Library	—	4	4
Palos Verdes Library District	—	49	49
Paradise Recreation and Park District	—	25	25
Pasadena City College Bookstore	—	—	—
Paso Robles City Housing Authority	—	8	8
Patterson Irrigation District	—	13	13
Pauma Valley Community Services District	—	17	17
Peardale Chicago Park Fire Protection District	—	7	7
Pebble Beach Community Services District	—	13	13
Peninsula Fire Protection District	—	11	11
Peninsula Health Care District	—	8	8
Peninsula Traffic Congestion Relief Alliance	—	7	7
Penn Valley Fire Protection District	—	14	14
Personal Assistance Services Council	—	49	49
Phelan Pinon Hills Community Services District	—	26	26
Pico Water District	—	9	9
Pine Cove Water District	—	5	5
Pine Grove Mosquito Abatement District	—	1	1
Pinedale County Water District	—	6	6
Pioneer Cemetery District	—	4	4
Pixley Irrigation District	—	3	3
Placer County Cemetery District No. 1	—	7	7
Placer County Resource Conservation District	—	13	13
Placer County Transportation Planning Agency	—	6	6
Placer County Water Agency	224	—	224
Placer Hills Fire Protection District	—	18	18
Placer Mosquito and Vector Control District	—	23	23
Planning and Service Area II Area Agency on Aging	—	13	13
Pleasant Hill Recreation and Park District	—	55	55
Pleasant Valley County Water District	—	4	4
Pleasant Valley Recreation and Park District	—	39	39
Plumas Eureka Community Services District	—	3	3
Plumas Local Agency Formation Commission	—	—	—
Pomerado Cemetery District	—	6	6
Pomona Valley Transportation Authority	—	5	5
Pomona, Calif State Polytechnic University, Associated Students, Inc.	—	62	62
Port San Luis Harbor District	—	28	28
Porter Vista Public Utility District	—	2	2
Porterville Irrigation District	—	4	4
Porterville Public Cemetery District	—	10	10
Public Cemetery District No. 1 of Kern County	—	6	6
Public Entity Risk Management Authority	—	3	3

Other Public Agency	Active PERF A	Active PERF C	Total
Public Risk Innovation, Solutions and Management	—	93	93
Public Transportation Services Corporation	2,502	—	2,502
Pupil Transportation Cooperative	—	1	1
Purissima Hills Water District	—	9	9
Quartz Hill Water District	—	12	12
Quincy Community Services District	—	4	4
Rainbow Municipal Water District	—	56	56
Ramona Municipal Water District	—	47	47
Rancho Adobe Fire Protection District	—	32	32
Rancho California Water District	145	—	145
Rancho Cucamonga Fire Protection District	—	116	116
Rancho Murieta Community Services District	—	32	32
Rancho Santa Fe Fire Protection District	—	63	63
Rancho Santiago Community College Associated Students	—	—	—
Rancho Simi Recreation & Park District	160	—	160
Reclamation District No. 1000	—	12	12
Reclamation District No. 1001	—	8	8
Reclamation District No. 1660	—	—	—
Reclamation District No. 3	—	2	2
Reclamation District No. 833	—	2	2
Reclamation District No. 999	—	4	4
Red Bluff Cemetery District	—	3	3
Redwood Coast Regional Center	—	133	133
Redwood Empire Municipal Insurance Fund	—	3	3
Redwood Empire School Insurance Group	—	24	24
Reedley Cemetery District	—	6	6
Regional Center of Orange County	471	—	471
Regional Center of the East Bay	429	—	429
Regional Housing Authority	—	29	29
Regional Water Authority	—	8	8
Rescue Fire Protection District	—	5	5
Resort Improvement District No. 1	—	14	14
Resource Conservation District of the Santa Monica Mountains	—	10	10
Richardson Bay Sanitary District	—	4	4
Rincon Del Diablo Municipal Water District	—	21	21
Rio Alto Water District	—	7	7
Rio Linda Elverta Community Water District	—	10	10
Rio Vista-Montezuma Cemetery District	—	5	5
Riverbank City Housing Authority	—	—	—
Riverside County Air Pollution Control District	—	—	—
Riverside County Department of Waste Resources	—	9	9
Riverside County Flood Control and Water Conservation District	228	—	228
Riverside County Law Library	—	8	8
Riverside County Regional Park and Open Space District	—	88	88

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Riverside County Transportation Commission	—	71	71
Riverside Transit Agency	416	—	416
Rosamond Community Services District	—	21	21
Rose Bowl Operating Company	—	33	33
Rosedale-Rio Bravo Water Storage District	—	10	10
Roseville Public Cemetery District	—	9	9
Ross Valley Fire Department	—	37	37
Ross Valley Sanitary District	—	33	33
Rowland Water District	—	23	23
Rubidoux Community Services District	—	25	25
Running Springs Water District	—	35	35
Rural County Representatives of California	—	32	32
Sacramento Area Council of Governments	—	51	51
Sacramento Area Flood Control Agency	—	18	18
Sacramento City Housing Authority	266	—	266
Sacramento County Public Law Library	—	16	16
Sacramento Groundwater Authority	—	5	5
Sacramento Metropolitan Air Quality Management District	—	90	90
Sacramento Metropolitan Cable Television Commission	—	5	5
Sacramento Metropolitan Fire District	596	86	682
Sacramento Municipal Utility District	2,169	—	2,169
Sacramento Public Library Authority	302	—	302
Sacramento Regional Fire/EMS Communications Center	—	47	47
Sacramento Suburban Water District	—	65	65
Sacramento Transportation Authority	—	3	3
Sacramento-Yolo Mosquito and Vector Control District	—	69	69
Salida Fire Protection District	—	6	6
Salinas Valley Solid Waste Authority	—	61	61
Salton Community Services District	—	17	17
Samoa Peninsula Fire Protection District	—	—	—
San Andreas Regional Center, Inc.	328	—	328
San Andreas Sanitary District	—	5	5
San Benito County Water District	—	20	20
San Bernardino City Unified School District	—	23	23
San Bernardino County Housing Authority	138	—	138
San Bernardino County Transportation Authority	—	—	—
San Bernardino Valley Municipal Water District	—	31	31
San Bernardino Valley Water Conservation District	—	8	8
San Diego Association of Governments	384	—	384
San Diego Community College District	—	36	36
San Diego County Law Library	—	18	18
San Diego County Water Authority	231	—	231
San Diego Metropolitan Transit System	—	156	156

Other Public Agency	Active PERF A	Active PERF C	Total
San Diego State University Associated Students	—	38	38
San Diego Trolley, Inc.	615	—	615
San Diego Unified School District	—	33	33
San Dieguito Water District	—	22	22
San Elijo Joint Powers Authority	—	24	24
San Francisco Bay Area Rapid Transit District	3,936	—	3,936
San Francisco Bay Area Water Emergency Transportation Authority	—	18	18
San Francisco City and County Housing Authority	—	42	42
San Francisco Community College District Bookstore Auxiliary	—	—	—
San Francisco County Transportation Authority	—	36	36
San Francisco Health Authority	—	347	347
San Francisco Law Library	—	4	4
San Francisquito Creek Joint Powers Authority	—	4	4
San Gabriel County Water District	—	15	15
San Gabriel Valley Council of Governments	—	34	34
San Gabriel Valley Mosquito and Vector Control District	—	36	36
San Gabriel Valley Municipal Water District	—	7	7
San Gorgonio Pass Water Agency	—	5	5
San Jacinto Valley Cemetery District	—	7	7
San Joaquin County Housing Authority	—	77	77
San Joaquin County IHSS Public Authority	—	7	7
San Joaquin Delta Community College District	—	11	11
San Juan Water District	—	46	46
San Lorenzo Valley Water District	—	32	32
San Luis Obispo Cal Poly Associated Students, Inc.	—	68	68
San Luis Obispo Council of Governments	—	17	17
San Luis Water District	—	14	14
San Mateo Consolidated Fire Department	—	154	154
San Mateo County Harbor District	—	36	36
San Mateo County In-Home Supportive Services Public Authority	—	14	14
San Mateo County Law Library	—	2	2
San Mateo County Schools Insurance Group	—	6	6
San Mateo County Transit District	744	—	744
San Miguel Community Services District	—	8	8
San Miguel Consolidated Fire Protection District	—	88	88
San Simeon Community Services District	—	—	—
Sanger Cemetery District	—	7	7
Sanitary District No. 5 of Marin County	—	10	10
Santa Ana River Flood Protection Agency	—	—	—
Santa Ana Unified School District	—	25	25
Santa Ana Watershed Project Authority	—	24	24
Santa Barbara County Law Library	—	2	2

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Santa Barbara County Special Education Local Plan Area	—	8	8
Santa Barbara Regional Health Authority	—	307	307
Santa Clara County Central Fire Protection District	219	74	293
Santa Clara County Health Authority	—	353	353
Santa Clara County Housing Authority	150	—	150
Santa Clara County Law Library	—	3	3
Santa Clara County Schools Insurance Group	—	6	6
Santa Clara Valley Open Space Authority	—	44	44
Santa Clara Valley Transportation Authority	618	—	618
Santa Clara Valley Water District	858	—	858
Santa Clarita Valley School Food Services Agency	—	84	84
Santa Clarita Valley Water Agency	—	209	209
Santa Cruz County Law Library	—	—	—
Santa Cruz County Regional Transportation Commission	—	21	21
Santa Cruz Local Agency Formation Commission	—	1	1
Santa Cruz Metropolitan Transit District	280	—	280
Santa Cruz Port District	—	32	32
Santa Cruz Regional 9-1-1	—	50	50
Santa Fe Irrigation District	—	48	48
Santa Margarita Water District	173	—	173
Santa Maria Public Airport District	—	12	12
Santa Monica Community College District	—	15	15
Santa Nella County Water District	—	7	7
Santa Paula City Housing Authority	—	6	6
Santa Ynez River Water Conservation District, Improvement District No. 1	—	15	15
Santos Manuel Student Union of California State University, San Bernardino	—	36	36
Sausalito-Marin City Sanitary District	—	10	10
Schell Vista Fire Protection District	—	6	6
School Risk And Insurance Management Group	—	11	11
Schools Excess Liability Fund	—	8	8
Schools Insurance Authority	—	83	83
Scotts Valley Fire Protection District	—	32	32
Scotts Valley Water District	—	19	19
Selma Cemetery District	—	7	7
Selma-Kingsburg-Fowler County Sanitation District	—	31	31
Serrano Water District	—	9	9
Sewer Authority Mid-Coastside	—	14	14
Sewerage Commission-Oroville Region	—	10	10
Shafter Wasco Irrigation District	—	10	10
Shasta Area Safety Communications Agency	—	39	39
Shasta Community Services District	—	5	5
Shasta Lake Fire Protection District	—	10	10

Other Public Agency	Active PERF A	Active PERF C	Total
Shasta Mosquito and Vector Control District	—	16	16
Shasta Regional Transportation Agency	—	8	8
Shasta Valley Cemetery District	—	1	1
Shiloh Public Cemetery District	—	4	4
Sierra Lakes County Water District	—	3	3
Sierra-Sacramento Valley Emergency Medical Services Agency	—	12	12
Silicon Valley Animal Control Authority	—	16	16
Silicon Valley Clean Water	—	82	82
Silveyville Cemetery District	—	6	6
Solano Cemetery District	—	10	10
Solano County Mosquito Abatement District	—	9	9
Solano County Water Agency	—	22	22
Solano Irrigation District	—	82	82
Solano Transportation Authority	—	21	21
Sonoma County Fire District	—	90	90
Sonoma County Junior College District	—	10	10
Sonoma County Library	219	—	219
Sonoma Marin Area Rail Transit District	—	127	127
Sonoma State Enterprises, Inc.	—	—	—
Sonoma Student Union Corporation	—	—	—
Soquel Creek Water District	—	49	49
South Bay Regional Public Communications Authority	—	56	56
South Central Los Angeles Regional Center for Developmentally Disabled Persons	352	—	352
South Coast Water District	—	79	79
South County Support Services Agency	—	28	28
South Feather Water and Power Agency	—	57	57
South Kern Cemetery District	—	4	4
South Orange County Wastewater Authority	—	60	60
South Placer Fire District	—	57	57
South Placer Municipal Utility District	—	26	26
South San Joaquin County Fire Authority	—	88	88
South San Joaquin Irrigation District	—	96	96
South San Luis Obispo County Sanitation District	—	10	10
South Tahoe Public Utility District	—	113	113
Southeast Area Social Services Funding Authority	—	36	36
Southern California Association of Governments	180	—	180
Southern California Library Cooperative	—	5	5
Southern California Public Power Authority	—	17	17
Southern California Regional Rail Authority	248	—	248
Southern San Joaquin Municipal Utility District	—	11	11
Southern Sonoma County Resource Conservation District	—	—	—
Southwest Transportation Agency	—	37	37
Special District Risk Management Authority	—	14	14

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Stallion Springs Community Services District	—	13	13
Stanislaus Consolidated Fire Protection District	—	51	51
Stanislaus Regional Housing Authority	—	79	79
State Bar of California	579	—	579
State Center Community College District	—	21	21
State Water Contractors	—	10	10
Stege Sanitary District	—	10	10
Stinson Beach County Water District	—	7	7
Stockton East Water District	—	43	43
Stockton Unified School District	—	30	30
Strawberry Recreation District	—	6	6
Successor Agency to the Redevelopment Agency of the City of Fresno	—	1	1
Successor Agency to the Redevelopment Agy of the City & County of San Francisco	—	37	37
Suisun Fire Protection District	—	2	2
Suisun Resource Conservation District	—	9	9
Summit Cemetery District	—	10	10
Sunnyslope County Water District	—	24	24
Susanville Sanitary District	—	6	6
Sutter Cemetery District	—	12	12
Sweetwater Authority	124	—	124
Sweetwater Springs Water District	—	10	10
Sylvan Cemetery District	—	7	7
Tahoe City Public Utility District	—	61	61
Tahoe Resource Conservation District	—	25	25
Tahoe-Truckee Sanitation Agency	—	50	50
Tehachapi Valley Recreation and Park District	—	15	15
Tehachapi-Cummings County Water District	—	18	18
Tehama County Mosquito Abatement District	—	6	6
Temescal Valley Water District	—	10	10
Templeton Community Services District	—	30	30
Thermalito Water and Sewer District	—	11	11
Three Rivers Community Services District	—	1	1
Three Valleys Municipal Water District	—	24	24
Tiburon Fire Protection District	—	29	29
Trabuco Canyon Water District	—	20	20
Tracy Rural County Fire Protection District	—	—	—
Transbay Joint Powers Authority	—	18	18
Transportation Agency for Monterey County	—	14	14
Transportation Authority of Marin	—	13	13
Treasure Island Development Authority	—	—	—
Tri-City Mental Health Center	—	192	192
Tri-Counties Association for the Developmentally Disabled	357	—	357
Tri-County Schools Insurance Group	—	3	3
Tri-Dam Project	—	26	26
Trindel Insurance Fund	—	13	13
Trinity Public Utilities District	—	24	24

Other Public Agency	Active PERF A	Active PERF C	Total
Truckee Donner Public Utility District	—	75	75
Truckee Fire Protection District	—	54	54
Truckee Sanitary District	—	41	41
Truckee Tahoe Airport District	—	22	22
Tulare Mosquito Abatement District	—	6	6
Tulare Public Cemetery District	—	11	11
Tuolumne City Sanitary District	—	5	5
Tuolumne Fire District	—	2	2
Tuolumne Utilities District	—	75	75
Turlock Mosquito Abatement District	—	12	12
Twain Harte Community Services District	—	17	17
Twentynine Palms Water District	—	21	21
Twin Rivers Unified School District	—	15	15
Ukiah Valley Fire District	—	—	—
Union Public Utility District	—	7	7
Union Sanitary District	137	—	137
United Water Conservation District	—	68	68
University Enterprises Corporation at CSUSB	—	157	157
University Enterprises, Inc.	142	—	142
University Student Center of California State University Stanislaus	—	10	10
Upland City Housing Authority	—	—	—
Upper San Gabriel Valley Municipal Water District	—	9	9
Utica Water and Power Authority	—	10	10
Vacaville Fire Protection District	—	6	6
Vacaville-Elmira Cemetery District	—	6	6
Val Verde Unified School District	—	6	6
Vallecitos Water District	—	104	104
Vallejo Flood and Wastewater District	—	92	92
Valley Center Municipal Water District	—	71	71
Valley County Water District	—	31	31
Valley Mountain Regional Center, Inc.	402	—	402
Valley of the Moon Water District	—	15	15
Valley Sanitary District	—	35	35
Valley Springs Public Utility District	—	3	3
Valley-Wide Recreation and Park District	—	59	59
Vandenberg Village Community Services District	—	9	9
Ventura College Foundation	—	6	6
Ventura County Law Library	—	3	3
Ventura County Schools Business Services Authority	—	11	11
Ventura County Schools Self-Funding Authority	—	7	7
Ventura County Transportation Commission	—	19	19
Ventura Port District	—	40	40
Ventura River Water District	—	6	6
Victor Valley Transit Authority	—	27	27
Victor Valley Wastewater Reclamation Authority	—	42	42

PUBLIC AGENCY EMPLOYERS (CONTINUED)

Other Public Agencies that Contract with CalPERS for Retirement Benefits (continued)

Other Public Agency	Active PERF A	Active PERF C	Total
Visalia Public Cemetery District	—	13	13
Vista Irrigation District	—	84	84
Walnut Valley Water District	—	51	51
Wasco Recreation and Park District	—	5	5
Washington Colony Cemetery District	—	2	2
Water Employee Services Authority	165	—	165
Water Facilities Authority	—	8	8
Water Replenishment District of Southern California	—	42	42
Weaverville Community Services District	—	5	5
Weaverville Sanitary District	—	3	3
West Almanor Community Services District	—	1	1
West Basin Municipal Water District	—	49	49
West Bay Sanitary District	—	30	30
West Cities Communication Center	—	17	17
West Contra Costa Integrated Waste Management Authority	—	4	4
West Contra Costa Transportation Advisory Committee	—	5	5
West County Transportation Agency	—	149	149
West County Wastewater District	—	65	65
West End Communications Authority	—	—	—
West Kern Water District	—	42	42
West Stanislaus Irrigation District	—	14	14
West Valley Mosquito and Vector Control District	—	21	21
West Valley Sanitation District of Santa Clara County	—	27	27
West Valley Water District	—	77	77
West Valley-Mission Community College District	—	9	9
Westborough Water District	—	6	6
Western Contra Costa Transit Authority	—	8	8
Western Municipal Water District	—	155	155
Western Riverside Council of Governments	—	28	28
Westlands Water District	—	110	110
Westwood Community Services District	—	5	5
Wheeler Ridge-Maricopa Water Storage District	—	42	42
Wildomar Cemetery District	—	—	—
Williams Fire Protection Authority	—	9	9
Willow County Water District	—	14	14
Willow Creek Community Services District	—	5	5
Willows Cemetery District	—	3	3
Wilton Fire Protection District	—	1	1
Winterhaven Water District	—	2	2
Winters Cemetery District	—	3	3
Winters Fire Protection District	—	—	—
Winton Water and Sanitary District	—	8	8
Woodbridge Rural County Fire Protection District	—	34	34
Woodlake Fire District	—	9	9
Woodside Fire Protection District	—	56	56
Yolo County Federal Credit Union	—	57	57
Yolo County Housing Authority	—	37	37
Yolo County In-Home Supportive Services Public Authority	—	4	4
Yolo County Public Agency Risk Management Insurance Authority	—	5	5
Yolo County Transportation District	—	11	11
Yolo Emergency Communications Agency	—	44	44
Yolo-Solano Air Quality Management District	—	19	19
Yorba Linda Water District	—	78	78
Yuba Community College District	—	4	4
Yuba County Water Agency	—	86	86
Yuba Sutter Transit Authority	—	5	5
Yucaipa Valley Water District	—	69	69
Yuima Municipal Water District	—	9	9
Total	**41,730**	**23,996**	**65,726**

LEGISLATORS' RETIREMENT SYSTEM MEMBERSHIP & RETIREMENT DATA

Legislators' Retirement System – 10-Year Review

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ACTIVE & INACTIVE MEMBERS										
Members of the Legislature	1	2	2	2	4	4	6	6	6	7
Constitutional Officers	3	4	4	5	10	10	13	14	17	17
Legislative Statutory Officers	—	—	—	—	—	—	1	2	4	4
TOTAL ACTIVE & INACTIVE MEMBERS	**4**	**6**	**6**	**7**	**14**	**14**	**20**	**22**	**27**	**28**
BENEFIT RECIPIENTS										
Members of the Legislature										
Service Retirement	163	171	181	198	202	205	215	221	225	226
Disability Retirement	7	7	7	7	7	7	7	8	7	7
Pre-Retirement Option 2	1	1	1	1	1	1	1	1	2	2
Total Members of the Legislature	**171**	**179**	**189**	**206**	**210**	**213**	**223**	**230**	**234**	**235**
Constitutional Officers										
Service Retirement	21	21	20	19	14	14	12	12	11	10
Disability Retirement	1	1	1	1	1	1	1	1	1	1
Pre-Retirement Option 2	—	—	1	1	1	1	1	1	—	1
Total Constitutional Officers	**22**	**22**	**22**	**21**	**16**	**16**	**14**	**14**	**12**	**12**
Legislative Statutory Officers										
Service Retirement	1	1	1	1	1	1	1	1	1	1
Total Legislative Statutory Officers	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
TOTAL BENEFIT RECIPIENTS	**194**	**202**	**212**	**228**	**227**	**230**	**238**	**245**	**247**	**248**
TOTAL MEMBERS	**198**	**208**	**218**	**235**	**241**	**244**	**258**	**267**	**274**	**276**

LEGISLATORS' RETIREMENT SYSTEM PROGRAM DATA

PRIMARY BENEFITS

CalPERS has administered the Legislators' Retirement System (LRS) since its inception in 1947. The duties of the Board with respect to administering the LRS are the same as the PERF on such items as determining membership and benefit rights, making investments, crediting interest, and obtaining information necessary for administration. Benefits payable from the LRS are financed through the state's contributions as an employer, member contributions, and interest earned on investments.

The Board is authorized to establish actuarially determined rates. For Fiscal Year 2021-22, the Board approved an employer contribution rate of 29.38 percent. Effective January 1, 2013, Assembly Bill 340 added Government Code section 7522.52. Section 7522.52 requires that a public employer's contribution to a defined benefit plan, in combination with employee contributions to that defined benefit plan, shall not be less than the normal cost.

Member contributions to the LRS are made by active members based on position and membership date. Active Legislative Members and Constitutional Officers contribute 4 percent of compensation if first elected before March 4, 1972, or 8 percent of compensation if first elected after March 4, 1972. The interest credited to member accounts is the net earnings rate of investments.

ASSEMBLY BILL 340 – PUBLIC EMPLOYEES' PENSION REFORM ACT (PEPRA)

The California Legislature passed and the Governor signed the Public Employees' Pension Reform Act 2013 (PEPRA) on September 12, 2012. PEPRA contained a number of provisions intended to reduce future pension obligations. PEPRA primarily affects new pension plan members who are enrolled for the first time after December 31, 2012. The financial impact will be gradually realized as total pension costs and the employer share of those costs decrease.

PEPRA amended the Legislators' Retirement Law, and permanently closed the LRS to all Constitutional and Legislative Statutory Officers who take office on or after January 1, 2013.

PROPOSITION 140

Proposition 140, the Political Reform Act of 1990, requires that Legislators (Senators and Members of the Assembly) first elected after November 7, 1990, participate in the federal Social Security program and in no other retirement system.

MEMBERSHIP

Members of the Legislature serving prior to November 7, 1990; elected Constitutional Officers; and Legislative Statutory Officers serving prior to January 1, 2013, were eligible for membership.

SERVICE RETIREMENT

Retirement Age

The retirement age is 60, with four or more years of service credit, or any age with 20 or more years. The retirement age for Legislative Statutory Officers is 55, or any age with 20 years or more of service credit.

Members of the Legislature Benefit Formula

The retirement formula consists of three separate formulas that are totaled together to provide the members with their allowance. The first part of the formula consists of 5 percent of the first $500 of salary up to 15 years of service. The second part is 3 percent per year of the same $500 of salary for years in excess of 15 years. And finally, total years of service is multiplied by 3 percent per year of their salary above $500. In no case may members receive more than two-thirds of their salary.

Constitutional Officers' Benefit Formula

Five percent per year of service up to eight years (40 percent) of their highest salary. If the member has 24 or more years of service, the retirement allowance is 60 percent of their final salary.

Statutory Officers' Benefit Formula

Statutory Officers receive 3 percent per year of service, not to exceed 66 2/3 percent of final monthly compensation.

Early Retirement Options for Members of the Legislature & Constitutional Officers

Legislators and Constitutional Officers may retire before age 60 with 15 years of service. However, their retirement allowance is reduced by 2 percent for each year they retire before age 60.

DISABILITY RETIREMENT

Disability retirement uses the same formula as service retirement. There is no reduction if retirement is before age 60 for members of the Legislature.

LEGISLATORS' RETIREMENT SYSTEM PROGRAM DATA (CONTINUED)

DEATH BENEFITS (BEFORE RETIREMENT)

Not Eligible to Retire
One month's salary for each year of service, plus the return of the member's contributions with interest payable to a survivor.

Eligible to Retire
A surviving spouse will receive a monthly allowance equal to the Optional Settlement 2. In lieu of this benefit, a surviving spouse of a Member of the Legislature may receive a monthly allowance equal to one-half of the unmodified allowance, payable for life or until remarriage.

DEATH BENEFITS WHILE IN OFFICE

Beneficiaries receive a lump-sum benefit in an amount equal to the annual compensation of an LRS member during the 12 months preceding the member's death, regardless of whether the member was eligible to retire.

DEATH BENEFITS (AFTER RETIREMENT)

Members choose between one of four options. The level of survivor benefit is based on the option chosen, without a reduction in allowance for members of the Legislature. Constitutional Officers and Statutory Officers receive a reduced allowance based on their age at time of retirement and the option they choose. Beneficiaries also receive a $600 lump-sum payment.

COST-OF-LIVING ADJUSTMENTS (COLA)

The annual COLA is determined by the Consumer Price Index for all Urban Consumers.

LRS Active & Inactive Members

Category	Active	Inactive	Total
Members of the Legislature	1	—	1
Constitutional Officers	1	2	3
Total	**2**	**2**	**4**

LRS Benefit Payments by Type

Category	Amount Paid
Service Retirement	$6,496,763
Disability Retirement	117,225
Beneficiary Death Benefits	10,967
Beneficiary Death Benefits/Allowance	52,362
Adjustments[1]	(30,798)
Total	**$6,646,519**

(1) Adjustments contain manual claims and overpayment recoveries.

LRS Benefit Recipients by Retirement Type

Category	Retired[1]	Survivors & Beneficiaries[1]	Total
Members of Legislature			
Service Retirement	71	100	171
Disability Retirement	—	—	0
Pre-Retirement Option 2	—	—	0
TOTAL MEMBERS OF LEGISLATURE	**71**	**100**	**171**
Constitutional Officers			
Service Retirement	20	2	22
Disability Retirement	—	—	0
Pre-Retirement Option 2	—	—	—
TOTAL CONSTITUTIONAL OFFICERS	**20**	**2**	**22**
Legislative Statutory Officers			
Service Retirement	—	1	1
TOTAL LEGISLATIVE STATUTORY OFFICERS	**—**	**1**	**1**
TOTAL	**91**	**103**	**194**

(1) The actual number of benefit recipients is by the employer category from which they retired, regardless of whether they had service in other employer categories.

LEGISLATORS' RETIREMENT SYSTEM PROGRAM DATA (CONTINUED)

LRS Average Benefit Payments – As of June 30, 2022 – 10-Year Review

	Years of Service Credit						
Retirement Effective Dates	**0 - 5**	**6 - 10**	**11 - 15**	**16 - 20**	**21 - 25**	**26 - 30**	**31+**
2020-22							
Average Monthly Allowance	$0	$3,697	$0	$0	$0	$0	$0
Average Final Compensation	$0	$10,671	$0	$0	$0	$0	$0
Number of Recipients	—	2	—	—	—	—	—
2020-21[1]							
Average Monthly Allowance	$0	$0	$0	$0	$0	$0	$0
Average Final Compensation	$0	$0	$0	$0	$0	$0	$0
Number of Recipients	—	—	—	—	—	—	—
2019-20							
Average Monthly Allowance	$0	$3,064	$0	$0	$0	$0	$0
Average Final Compensation	$0	$8,936	$0	$0	$0	$0	$0
Number of Recipients	—	2	—	—	—	—	—
2018-19							
Average Monthly Allowance	$0	$3,630	$0	$2,670	$0	$0	$0
Average Final Compensation	$0	$10,785	$0	$14,145	$0	$0	$0
Number of Recipients	—	4	—	2	—	—	—
2017-18[1]							
Average Monthly Allowance	$0	$0	$0	$0	$0	$0	$0
Average Final Compensation	$0	$0	$0	$0	$0	$0	$0
Number of Recipients	—	—	—	—	—	—	—
2016-17							
Average Monthly Allowance[2]	$2,353	$3,661	$0	$0	$0	$0	$0
Average Final Compensation	$12,628	$7,802	$0	$0	$0	$0	$0
Number of Recipients[2]	2	2	—	—	—	—	—
2015-16							
Average Monthly Allowance[2]	$1,921	$5,305	$0	$0	$0	$0	$0
Average Final Compensation	$3,542	$13,261	$0	$0	$0	$0	$0
Number of Recipients[2]	1	1	—	—	—	—	—
2014-15							
Average Monthly Allowance[3]	$0	$2,458	$0	$0	$0	$0	$0
Average Final Compensation	$0	$7,921	$0	$0	$0	$0	$0
Number of Recipients[3]	—	1	—	—	—	—	—
2013-14							
Average Monthly Allowance[3]	$1,074	$552	$0	$0	$0	$0	$0
Average Final Compensation	$2,342	$780	$0	$0	$0	$0	$0
Number of Recipients[3]	1	3	—	—	—	—	—
2012-13							
Average Monthly Allowance[3]	$0	$4,479	$2,103	$6,699	$0	$0	$0
Average Final Compensation	$0	$13,008	$4,375	$8,812	$0	$0	$0
Number of Recipients[3]	—	2	1	2	—	—	—

(1) There were no retirements in the fiscal year, thus no benefit amounts to report.
(2) These averages and totals are for retired members only.
(3) These averages and totals are for retired members and community property only.

JUDGES' RETIREMENT SYSTEM MEMBERSHIP & RETIREMENT DATA

Judges' Retirement System – 10-Year Review

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ACTIVE & DEFERRED MEMBERS										
Judges	100	111	131	147	170	201	225	241	285	325
TOTAL ACTIVE & DEFERRED MEMBERS	**100**	**111**	**131**	**147**	**170**	**201**	**225**	**241**	**285**	**325**
BENEFIT RECIPIENTS										
Service Retirement	1,181	1,193	1,197	1,202	1,165	1,171	1,182	1,193	1,157	1,151
Disability Retirement	64	65	69	75	78	85	89	100	100	50
Deferred Retirement	458	481	507	526	534	556	584	594	598	632
Industrial Disability Retired	1	1	1	1	1	1	1	1	1	—
Pre-Retirement Survivor	13	13	12	12	—	—	—	—	—	63
Pre-Retirement Death	36	39	40	42	57	57	61	60	66	—
Extended Service Incentive Program	12	36	166	22	27	18	9	29	—	—
TOTAL BENEFIT RECIPIENTS	**1,765**	**1,828**	**1,992**	**1,880**	**1,862**	**1,888**	**1,926**	**1,977**	**1,922**	**1,896**
TOTAL MEMBERS	**1,865**	**1,939**	**2,123**	**2,027**	**2,032**	**2,089**	**2,151**	**2,218**	**2,207**	**2,221**

JUDGES' RETIREMENT SYSTEM PROGRAM DATA

PRIMARY BENEFITS

The Judges' Retirement System (JRS) was established in 1937. The operational activities of the JRS were transferred from the State Controller's Office to CalPERS in 1979. Benefits payable through the JRS are financed by the General Fund, the payroll contributions of members, and the state's contributions as an employer. Both employer and members contribute at the rate of 8 percent of compensation.

MEMBERSHIP

The Judges' Retirement System provides retirement, disability, death, and survivor benefits for Supreme and Appellate Court Justices and Superior Court Judges elected prior to November 9, 1994, and beneficiaries. Health and dental benefits are provided to eligible retirees and beneficiaries of the JRS under the Public Employees' Medical and Hospital Care Act (PEMHCA).

SERVICE RETIREMENT

Retirement Age

Members must be at least age 60 with 20 years of service, or age 70 with at least 10 years of service.

Retirement Benefit Formula

The retirement allowance is a percentage of the current salary of the last judicial office held and is increased proportionally with active judicial salaries. The allowance is based on a member's age and years of service as follows:

Age	Years of Service	Retirement Allowance
60-70	20	75%
66	18	65%
67	16	65%
68	14	65%
69	12	65%
70	10	65%

Judges can work as long as they want and receive their full pension of either 65 percent or 75 percent (depending on credited service).

Deferred Retirement

Judges are eligible for deferred retirement, provided by Government Code section 75033.5 at any age if they have at least five years of service. However, judges are not paid the allowance until they reach the age they would be eligible for normal retirement if they had remained in office. A judge must be at least age 63, or age 60 with 20 years of service, to receive a retirement allowance. The allowance is based on years of service multiplied by a percentage of the judge's final salary—varying from 2 percent for five years to 3.75 percent for 12 or more years of service. The maximum benefit they can receive is 75 percent of salary.

DISABILITY RETIREMENT

Judges must apply to the Commission on Judicial Performance to receive a disability retirement. Judges receive the same allowance for work-related disability retirement as non-work-related disability retirement. The retirement allowance is 65 percent of the judge's final salary, or 75 percent of their final salary if the judge has 20 or more years of service.

DISABILITY RETIREMENT (NON-WORK RELATED)

There is no age requirement, but there may be a service requirement depending on when the person became a judge. Any person who became a judge prior to January 1, 1980, is not subject to a service requirement. Any person who became a judge between January 1, 1980, and December 31, 1988, must have at least two years of judicial service. Any person who became a judge on or after January 1, 1989, must have at least four years of judicial service.

DISABILITY RETIREMENT (WORK RELATED)

There is no age or service requirement if the disability is a result of injury or disease arising out of and in the course of judicial service.

DEATH BENEFITS (BEFORE RETIREMENT)

Not Eligible to Retire

Spouses or registered domestic partners can receive 25 percent of a current active judge's salary for life or return of contributions plus one month's salary, for each year of service not to exceed six months; or the surviving spouse or registered domestic partner can elect a monthly allowance for life, if the judge had paid an extra $2 per month and had 10 to 20 years of service. This allowance would be equal to 1.625 percent of the salary multiplied by the number of years of service.

Eligible to Retire

Spouses or registered domestic partners receive one-half of what the retirement allowance would have been if the judge had retired on date of death. At any time while in office, a judge may make an irrevocable election for their eligible surviving spouse or registered domestic partner to receive the maximum survivor benefit (Option 2) in the event of the judge's pre-retirement death. This benefit is only payable if a judge dies after 20 or more years of service.

JUDGES' RETIREMENT SYSTEM PROGRAM DATA (CONTINUED)

DEATH BENEFITS (AFTER RETIREMENT)

Spouses or registered domestic partners receive one-half of the unmodified allowance for life, if the member retired with the standard retirement benefit formula, or on disability.

Judges may elect to take a reduced retirement allowance in order to enhance the survivor benefits to their spouse, registered domestic partner, or a designated beneficiary.

COST-OF-LIVING ADJUSTMENTS

The allowance increases are based on the current salary of an active judge. Retirees receive the same increase as active judges.

JRS Active and Deferred Members

Category	Active	Deferred	Total
Judges	99	1	100
TOTAL	**99**	**1**	**100**

JRS Benefit Payments by Type

Category	Amount Paid
Service Retirement	$169,501,415
Disability Retirement	3,935,576
Beneficiary Death Benefits	513,962
Beneficiary Death Benefits/Life Allowance	35,100,525
Extended Service Incentive Program	2,410,470
Adjustments[1]	(970,461)
TOTAL	**$210,491,487**

(1) Adjustments contain manual claims and overpayment recoveries.

JRS Benefit Recipients by Retirement Type

Category	Retired[1]	Survivors & Beneficiaries[1]	Total
Service Retirement	835	346	1,181
Disability Retirement	26	38	64
Deferred Retirement	287	171	458
Industrial Disability Retirement	—	1	1
Pre-Retirement Death	—	36	36
Pre-Retirement Option 2	—	13	13
Extended Service Incentive Program	12	—	12
TOTAL	**1,160**	**605**	**1,765**

(1) The actual number of benefit recipients is by the employer category from which they retired, regardless of whether they had service in other employer categories.

JUDGES' RETIREMENT SYSTEM PROGRAM DATA (CONTINUED)

JRS Average Benefit Payments – As of June 30, 2022 – 10-Year Review

	Years of Service Credit						
Retirement Effective Dates	**0 - 5**	**6 - 10**	**11 - 15**	**16 - 20**	**21 - 25**	**25 - 30**	**31+**
2021-22							
Average Monthly Allowance[1]	$0	$0	$0	$8,544	$8,362	$13,440	$12,617
Average Final Compensation	$0	$0	$0	$18,756	$18,756	$18,756	$20,787
Number of Recipients[1]	—	—	—	1	1	2	4
2020-21							
Average Monthly Allowance[1]	$0	$3,983	$0	$9,351	$0	$12,510	$12,227
Average Final Compensation	$0	$17,883	$0	$17,883	$0	$18,142	$18,699
Number of Recipients[1]	—	1	—	2	—	10	8
2019-20							
Average Monthly Allowance[1]	$1,095	$0	$0	$14,367	$0	$12,309	$13,073
Average Final Compensation	$17,883	$15,753	$0	$20,465	$0	$17,883	$18,314
Number of Recipients[1]	1	—	—	1	—	8	6
2018-19							
Average Monthly Allowance[1]	$429	$5,089	$9,147	$0	$11,877	$12,179	$12,267
Average Final Compensation	$17,285	$17,285	$17,285	$0	$17,285	$17,701	$17,909
Number of Recipients[1]	1	2	1	—	5	6	12
2017-18							
Average Monthly Allowance[1]	$2,928	$4,530	$5,686	$10,504	$11,463	$11,262	$12,639
Average Final Compensation	$16,670	$16,670	$16,670	$19,077	$16,670	$17,732	$18,274
Number of Recipients[1]	1	1	1	1	11	8	6
2016-17							
Average Monthly Allowance[1]	$1,018	$4,340	$6,637	$8,441	$11,109	$11,347	$11,718
Average Final Compensation	$15,968	$15,968	$10,645	$7,984	$9,581	$14,450	$16,544
Number of Recipients[1]	1	1	3	4	5	9	4
2015-16							
Average Monthly Allowance[1]	$2,725	$2,365	$6,962	$0	$10,842	$11,792	$5,284
Average Final Compensation	$15,753	$15,753	$7,877	$0	$11,027	$16,890	$0
Number of Recipients[1]	2	4	2	—	10	2	1
2014-15							
Average Monthly Allowance[2]	$2,165	$2,554	$7,224	$9,556	$10,612	$9,184	$11,749
Average Final Compensation	$15,292	$15,292	$16,516	$15,469	$15,341	$15,746	$16,217
Number of Recipients[2]	3	3	3	16	19	14	5
2013-14							
Average Monthly Allowance[2]	$0	$3,723	$5,343	$7,529	$8,959	$10,439	$9,800
Average Final Compensation	$0	$12,142	$9,432	$10,218	$7,426	$10,581	$3,776
Number of Recipients[2]	—	9	13	12	35	16	4
2012-13							
Average Monthly Allowance[2]	$2,233	$3,325	$4,546	$9,156	$8,434	$8,549	$11,147
Average Final Compensation	$14,899	$7,049	$3,044	$1,752	$974	$1,655	$0
Number of Recipients[2]	2	6	9	17	33	9	4

(1) These averages and totals are for retired members only.
(2) These averages and totals are for retired members and community property only.

JUDGES' RETIREMENT SYSTEM II MEMBERSHIP & RETIREMENT DATA

Judges' Retirement System II – 10-Year Review

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ACTIVE MEMBERS										
Judges II – Classic	1,238	1,283	1,314	1,352	1,326	1,350	1,367	1,385	1,396	1,352
Judges II – PEPRA[1]	386	342	311	293	217	158	124	85	—	—
TOTAL ACTIVE MEMBERS	**1,624**	**1,625**	**1,625**	**1,645**	**1,543**	**1,508**	**1,491**	**1,470**	**1,396**	**1,352**
BENEFIT RECIPIENTS										
Service Retirement	376	316	249	214	172	118	86	68	47	30
Monetary Credit Annuity	10	3	3	2	1	—	—	—	—	—
Disability Retirement	33	19	19	19	18	18	13	10	11	18
Optional Settlement Benefit	—	—	—	—	—	—	—	—	—	—
Pre-Retirement Survivor	—	—	—	—	—	—	—	—	—	2
Industrial Disability Retirement	5	3	4	4	5	5	4	4	3	—
Surviving Spouse 50% Allowance	4	6	7	8	7	6	6	6	6	—
Survivor Continuance	18	28	18	18	9	9	8	5	4	—
Option 2 Survivor Death Benefit	2	1	1	1	1	1	—	—	—	—
36-Month Judge's Salary	1	2	1	1	1	2	2	2	2	2
Monetary Credit	22	28	88	14	17	11	15	11	—	—
TOTAL BENEFIT RECIPIENTS	**471**	**406**	**390**	**281**	**231**	**170**	**134**	**106**	**73**	**52**
TOTAL MEMBERS	**2,095**	**2,031**	**2,015**	**1,926**	**1,774**	**1,678**	**1,625**	**1,576**	**1,469**	**1,404**

(1) Reporting for PEPRA active members began in Fiscal Year 2014-15.

JUDGES' RETIREMENT SYSTEM II PROGRAM DATA

PRIMARY BENEFITS

The Judges' Retirement System II (JRS II) was established in 1994 to create a fully funded, actuarially sound retirement system for judges appointed or elected on or after November 9, 1994. This system provides two different types of retirement benefits: a traditional defined benefit plan or a cash balance (monetary credits) plan. The defined benefit plan provides a lifetime monthly retirement allowance of up to 75 percent of final compensation.

Alternatively, a judge may elect to receive the amount of his or her monetary credits in either a lump sum or an annuity of actuarially equivalent value.

ASSEMBLY BILL 340 – PUBLIC EMPLOYEES' PENSION REFORM ACT (PEPRA)

The California Legislature passed and the Governor signed the Public Employees' Pension Reform Act of 2013 (PEPRA) on September 12, 2012. PEPRA contained a number of provisions intended to reduce future pension obligations. PEPRA primarily affects new pension plan members who are enrolled for the first time after December 31, 2012. The financial impact will be gradually realized as total pension costs and the employer share of those costs decrease.

The law implemented new member contribution requirements for judges who meet the definition of a new member under PEPRA, effective January 1, 2013. The requirements provide that all new PEPRA members must contribute to the JRS II an amount equal to half of the normal cost.

MEMBERSHIP

JRS II provides retirement, disability, death, and survivor benefits for Supreme and Appellate Court Justices, and Superior Court Judges, first appointed or elected on or after November 9, 1994, and their beneficiaries. Health and dental benefits are provided to eligible retirees and beneficiaries of JRS II under PEMHCA.

SERVICE RETIREMENT

Retirement Age

Judges must be at least age 65 with 20 years of service or age 70 with a minimum of five years of service to receive the defined benefit plan. Judges who leave office with five or more years of service but who do not meet the above criteria receive the amount of their monetary credits.

RETIREMENT FORMULA

Defined Benefit Plan

This option provides a defined benefit of 3.75 percent of the judge's final compensation per year of service, up to 75 percent of the judge's final compensation. Optional settlements are available that reduce a judge's retirement allowance to provide a lifetime benefit for a surviving spouse upon death of the judge.

PEPRA also added Government Code section 7522.32, which for the purpose of determining the retirement benefits to be paid to a new member of a public retirement system, defines final compensation as the highest average annual pensionable compensation earned by the member during a period of at least 36 consecutive months.

Monetary Credit Plan

The judge may elect to have his or her monetary credits paid in a single lump sum, as an annuity for his or her lifetime, or pursuant to one of the available optional settlements.

DISABILITY RETIREMENT (NON WORK-RELATED)

Judges who have five years of service and become permanently disabled because of a mental or physical disability may apply to the Commission on Judicial Performance for disability retirement.

A judge who retires for non work-related disability will receive an allowance in an amount equal to the lower of the following:

- 3.75 percent of the judge's final compensation on the effective date of the disability retirement multiplied by the number of years of service the judge would have been credited had the judge continued to work until the age the judge would have first been eligible for service retirement, or
- 65 percent of the judge's final compensation on the effective date of the disability retirement.

DISABILITY RETIREMENT (WORK RELATED)

Judges receive 65 percent of their final compensation on the effective date of the disability retirement, regardless of age or length of service, if the disability is predominantly a result of injury arising out of and in the course of judicial service.

JUDGES' RETIREMENT SYSTEM II PROGRAM DATA (CONTINUED)

DEATH BENEFITS (BEFORE RETIREMENT)

Not Eligible to Retire
Spouses or registered domestic partners receive the judge's monetary credits or three times the judge's annual salary at the time of death, whichever is greater.

Eligible for the Defined Benefit Plan
Spouses or registered domestic partners receive either a monthly retirement allowance equal to one-half of the judge's defined benefit plan allowance or the judge's monetary credits. Or if elected by the judge, the surviving spouse or registered domestic partner of an eligible judge who dies after 20 or more years of service will receive the maximum survivor benefit (Option 2).

JRS II Active Judges

	Active
Judges II - Classic	1,238
Judges II - PEPRA	386
TOTAL	**1,624**

JRS II Benefit Payments by Type

Category	Amount Paid
Service Retirement	$41,890,849
Disability Retirement	2,838,931
Beneficiary Death Benefits	313,933
Beneficiary Death Benefits/Life Allowance	2,355,001
Monetary Credit	19,013,901
Adjustments[1]	326,566
TOTAL	**$66,739,181**

(1) Adjustments contain manual claims and overpayment recoveries.

JRS II Benefit Recipients by Retirement Type

Category	Retired[1]	Survivors & Beneficiaries[1]	Total
Service Retirement	362	14	376
Disability Retirement	19	14	33
Monetary Credit Annuity	10	—	10
Industrial Disability Retirement	4	1	5
Surviving Spouse 50% Allowance	—	4	4
Pre-Retirement Option 2	—	2	2
Survivor Continuance	—	18	18
36-Month Judge's Salary	—	1	1
Monetary Credit	21	1	22
TOTAL	**416**	**55**	**471**

(1) The actual number of benefit recipients is by the employer category from which they retired, regardless of whether they had service in other employer categories.

DEATH BENEFITS (AFTER RETIREMENT)

Defined Benefit Plan
Spouses or registered domestic partners receive one-half of the judge's monthly allowance for life. Judges who retired under a service retirement may also elect an optional settlement to increase the monthly benefits to their eligible surviving spouse or registered domestic partner.

Monetary Credit Plan
If the judge elected to receive his or her monetary credits in a lump sum or as a lifetime annuity for his or her life alone, there are no other benefits payable. If the judge elected one of the available optional settlements, his or her surviving spouse or registered domestic partner will receive benefits based on the optional settlement elected.

COST-OF-LIVING ADJUSTMENTS

The retirement allowance of retired judges who have elected the defined benefit plan will be adjusted every January after the judge has been retired for more than six months. The adjustment is based on the United States city average of the Consumer Price Index for All Urban Consumers, as published by the United States Bureau of Statistics. No adjustment will be made unless the cost-of-living increase equals or exceeds 1 percent, and the allowance cannot be increased more than 3 percent in a single year.

JUDGES' RETIREMENT SYSTEM II PROGRAM DATA (CONTINUED)

JRS II Average Benefit Payments – As of June 30, 2022 – 10-Year Review

	Years of Credited Service						
Retirement Effective Dates	**0-5**	**6 - 10**	**11 - 15**	**16 - 20**	**21 - 25**	**26 - 30**	**31+**
2021-22							
Average Monthly Allowance[1]	$0	$5,070	$8,686	$11,752	$13,977	$15,790	$0
Average Final Compensation	$0	$17,993	$18,253	$18,320	$18,533	$18,851	$0
Number of Recipients[1]	—	6	19	22	14	7	—
2020-21							
Average Monthly Allowance[1]	$0	$5,807	$8,524	$11,950	$12,677	$12,414	$0
Average Final Compensation	$0	$17,845	$17,883	$17,975	$18,000	$17,883	$0
Number of Recipients[1]	—	9	11	28	22	1	—
2019-20							
Average Monthly Allowance[1]	$0	$5,353	$8,092	$11,383	$13,129	$0	$0
Average Final Compensation	$0	$17,390	$17,545	$17,634	$17,566	$0	$0
Number of Recipients[1]	—	3	14	13	8	—	—
2018-19							
Average Monthly Allowance[1]	$3,109	$4,988	$8,165	$11,325	$12,302	$0	$0
Average Final Compensation	$16,495	$16,924	$16,819	$17,059	$16,912	$0	$0
Number of Recipients[1]	2	5	7	16	14	—	—
2017-18							
Average Monthly Allowance[1]	$2,863	$4,964	$7,808	$10,696	$11,923	$0	$0
Average Final Compensation	$16,400	$16,445	$16,278	$16,291	$16,420	$0	$0
Number of Recipients[1]	3	2	7	28	15	—	—
2016-17							
Average Monthly Allowance[1]	$0	$6,761	$8,025	$10,401	$11,114	$0	$0
Average Final Compensation	$0	$15,865	$15,882	$15,889	$15,879	$0	$0
Number of Recipients[1]	—	5	8	21	5	—	—
2015-16							
Average Monthly Allowance[1]	$3,047	$4,774	$7,918	$10,667	$0	$0	$0
Average Final Compensation	$15,638	$15,521	$15,683	$15,710	$0	$0	$0
Number of Recipients[2]	1	3	5	11	—	—	—
2014-15							
Average Monthly Allowance[2]	$0	$5,198	$6,740	$9,637	$0	$0	$0
Average Final Compensation	$0	$15,149	$15,225	$15,253	$0	$0	$0
Number of Recipients[2]	—	1	8	13	—	—	—
2013-14							
Average Monthly Allowance[2]	$0	$4,175	$6,457	$8,991	$11,274	$0	$0
Average Final Compensation	$0	$11,205	$14,949	$14,942	$15,032	$0	$0
Number of Recipients[2]	—	4	12	4	1	—	—
2012-13							
Average Monthly Allowance[2]	$2,024	$7,337	$6,449	$8,691	$10,168	$0	$0
Average Final Compensation	$14,899	$14,899	$14,899	$14,899	$14,899	$0	$0
Number of Recipients[2]	3	5	3	6	1	—	—

(1) These averages and totals are for retired members only.
(2) These averages and totals are for retired members and community property only.

STATISTICAL SECTION
Other Programs

Statistical Section: Other Programs

HEALTH CARE FUND

Expenses & Revenues – 10-Year Review (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
OPERATING REVENUES										
Premiums	$4,137,604	$3,939,906	$3,706,490	$3,681,106	$3,945,826	$3,826,107	$3,741,352	$3,594,279	$2,744,305	$1,921,838
Federal Government Subsidies	728	8,263	12,489	18,753	22,720	29,534	32,539	36,077	43,900	22,375
Federal Government Reimbursements	—	—	—	—	—	—	—	—	—	17
Other	101	—	—	—	—	—	—	—	—	—
Total Operating Revenues	**$4,138,433**	**$3,948,169**	**$3,718,979**	**$3,699,859**	**$3,968,546**	**$3,855,641**	**$3,773,891**	**$3,630,356**	**$2,788,205**	**$1,944,230**
OPERATING EXPENSES										
Claims Expense	$4,063,516	$3,614,513	$3,480,089	$3,548,295	$3,543,962	$3,387,753	$3,404,222	$3,411,618	$2,449,655	$1,824,082
Increase (Decrease) in Estimated Liabilities	112,696	35,438	10,885	14,332	36,609	(14,701)	13,258	20,484	173,796	16,781
Federal Government Subsidy Recapture	8,267	—	—	—	—	—	—	—	—	—
Administrative Expenses	309,473	304,990	331,236	298,887	304,319	312,832	355,702	371,915	192,987	105,154
Total Operating Expenses	**$4,493,952**	**$3,954,941**	**$3,822,210**	**$3,861,514**	**$3,884,890**	**$3,685,884**	**$3,773,182**	**$3,804,017**	**$2,816,438**	**$1,946,017**
OPERATING INCOME (LOSS)	**($355,519)**	**($6,772)**	**($103,231)**	**($161,655)**	**$83,656**	**$169,757**	**$709**	**($173,661)**	**($28,233)**	**($1,787)**
NON-OPERATING REVENUES										
Investment Income/(Loss)	($39,207)	$986	$53,522	$51,547	$16,847	$2,988	$27,374	$11,850	$20,165	$4,260
Total Non-Operating Revenues	**($39,207)**	**$986**	**$53,522**	**$51,547**	**$16,847**	**$2,988**	**$27,374**	**$11,850**	**$20,165**	**$4,260**
NON-OPERATING EXPENSES										
Investment Expenses	$135	$145	$160	$166	$89	$92	$77	$83	$157	$87
Total Non-Operating Expenses	**$135**	**$145**	**$160**	**$166**	**$89**	**$92**	**$77**	**$83**	**$157**	**$87**
Securities Lending Income	$0	$0	$0	$0	$0	$0	$0	$0	$15	$41
Cost of Lending Securities	—	—	—	—	—	—	—	—	(3)	(8)
Net Securities Lending	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$12**	**$33**
NON-OPERATING INCOME (LOSS)	**($39,342)**	**$841**	**$53,362**	**$51,381**	**$16,758**	**$2,896**	**$27,297**	**$11,767**	**$20,020**	**$4,206**
CHANGE IN UNRESTRICTED NET POSITION	**($394,861)**	**($5,931)**	**($49,869)**	**($110,274)**	**$100,414**	**$172,653**	**$28,006**	**($161,894)**	**($8,213)**	**$2,419**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)										
Beginning of Year	**$319,562**	**$325,493**	**$375,362**	**$485,636**	**$385,222[1]**	**$314,274**	**$286,268**	**$448,162**	**$456,375**	**$453,956**
End of Year	**($75,299)**	**$319,562**	**$325,493**	**$375,362**	**$485,636**	**$486,927**	**$314,274**	**$286,268**	**$448,162**	**$456,375**

(1) Due to prior period adjustment, beginning balance was restated.

CONTINGENCY RESERVE FUND

Expenses & Revenues – 10-Year Review (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
OPERATING REVENUES										
Administrative Fees Earned & Other	$26,135	$23,981	$25,817	$22,375	$30,152	$27,487	$27,668	$26,712	$24,899	$17,809
Total Operating Revenues	**$26,135**	**$23,981**	**$25,817**	**$22,375**	**$30,152**	**$27,487**	**$27,668**	**$26,712**	**$24,899**	**$17,809**
OPERATING EXPENSES										
Administrative Expenses	$27,124	$28,414	$37,862	$18,799	$34,763	$27,239	$11,983	$29,735	$28,891	$27,402
Total Operating Expenses	**$27,124**	**$28,414**	**$37,862**	**$18,799**	**$34,763**	**$27,239**	**$11,983**	**$29,735**	**$28,891**	**$27,402**
OPERATING INCOME (LOSS)	**($989)**	**($4,433)**	**($12,045)**	**$3,576**	**($4,611)**	**$248**	**$15,685**	**($3,023)**	**($3,992)**	**($9,593)**
NON-OPERATING REVENUES										
Investment Income	$1,463	$1,829	$6,111	$5,896	$3,165	$2,025	$1,164	$803	$681	$704
Total Non-Operating Revenues	**$1,463**	**$1,829**	**$6,111**	**$5,896**	**$3,165**	**$2,025**	**$1,164**	**$803**	**$681**	**$704**
NON-OPERATING EXPENSES										
Other Investment Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Non-Operating Expenses	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
NON-OPERATING INCOME	**$1,463**	**$1,829**	**$6,111**	**$5,896**	**$3,165**	**$2,025**	**$1,164**	**$803**	**$681**	**$704**
CHANGE IN UNRESTRICTED NET POSITION	**$474**	**($2,604)**	**($5,934)**	**$9,472**	**($1,446)**	**$2,273**	**$16,849**	**($2,220)**	**($3,311)**	**($8,889)**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)										
Beginning of Year	**($56,853)**	**($54,249)**	**($48,315)**	**($57,787)**	**($56,341)**[1]	**$10,025**	**($6,824)**	**($4,604)**	**($1,293)**	**$7,596**
End of Year	**($56,379)**	**($56,853)**	**($54,249)**	**($48,315)**	**($57,787)**	**$12,298**	**$10,025**	**($6,824)**	**($4,604)**	**($1,293)**

(1) Due to prior period adjustment, beginning balance was restated.

LONG-TERM CARE FUND

Expenses & Revenues – 10-Year Review (Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
OPERATING REVENUES										
Premiums	$297,388	$271,766	$278,535	$283,445	$296,323	$306,303	$282,426	$272,362	$286,571	$307,812
Other	271	890	—	—	—	—	—	—	—	—
Total Operating Revenues	**$297,659**	**$272,656**	**$278,535**	**$283,445**	**$296,323**	**$306,303**	**$282,426**	**$272,362**	**$286,571**	**$307,812**
OPERATING EXPENSES										
Claims Expense	$319,122	$308,976	$337,298	$324,841	$306,879	$293,693	$271,742	$248,785	$225,691	$198,185
Increase (Decrease) in Estimated Liabilities	3,199,129	(5,001,779)	2,424,078	80,892	295,142	213,048	376,284	310,565	345,547	(631,804)
Increase (Decrease) in Estimated Settlement Liability	(2,899,100)	2,900,000	—	—	—	—	—	—	—	—
Administrative Expenses	23,763	25,804	27,500	24,300	26,545	25,082	24,999	24,304	22,946	21,819
Total Operating Expenses	**$642,914**	**($1,766,999)**	**$2,788,876**	**$430,033**	**$628,566**	**$531,823**	**$673,025**	**$583,654**	**$594,184**	**($411,800)**
OPERATING INCOME (LOSS)	**($345,255)**	**$2,039,655**	**($2,510,341)**	**($146,588)**	**($332,243)**	**($225,520)**	**($390,599)**	**($311,292)**	**($307,613)**	**$719,612**
NON-OPERATING REVENUES										
Investment Income/(Loss)	($531,313)	$635,250	$224,152	$321,711	$177,562	$68,986	$226,526	($36,550)	$393,354	$119,607
Total Non-Operating Revenues	**($531,313)**	**$635,250**	**$224,152**	**$321,711**	**$177,562**	**$68,986**	**$226,526**	**($36,550)**	**$393,354**	**$119,607**
NON-OPERATING EXPENSES										
Investment Expenses	$2,408	$2,231	$2,547	$2,596	$1,853	$1,816	$1,606	$1,734	$1,615	$1,160
Total Non-Operating Expenses	**$2,408**	**$2,231**	**$2,547**	**$2,596**	**$1,853**	**$1,816**	**$1,606**	**$1,734**	**$1,615**	**$1,160**
Securities Lending Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$909
Cost of Lending Securities	—	—	—	—	—	—	—	—	—	(120)
Net Securities Lending	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$789**
NON-OPERATING INCOME (LOSS)	**($533,721)**	**$633,019**	**$221,605**	**$319,115**	**$175,709**	**$67,170**	**$224,920**	**($38,284)**	**$391,739**	**$119,236**
CHANGE IN UNRESTRICTED NET POSITION	**($878,976)**	**$2,672,674**	**($2,288,736)**	**$172,527**	**($156,534)**	**($158,350)**	**($165,679)**	**($349,576)**	**$84,126**	**$838,848**
TOTAL UNRESTRICTED NET POSITION (DEFICIT)										
Beginning of Year	**$479,710**	**($2,192,964)**	**$95,772**	**($76,755)**	**$79,779[1]**	**$247,993**	**$413,672**	**$763,248**	**$679,122**	**($159,726)**
End of Year	**($399,266)**	**$479,710**	**($2,192,964)**	**$95,772**	**($76,755)**	**$89,643**	**$247,993**	**$413,672**	**$763,248**	**$679,122**

(1) Due to prior period adjustment, beginning balance was restated.

HEALTH BENEFITS PROGRAM DATA

Total Covered Lives by Health Plan as of June 30, 2022

	Basic					Medicare					Total Covered Lives
	State		Public Agency			State		Public Agency			
	Active	Retired	Active	Retired	Total	Active	Retired	Active	Retired	Total	
Health Maintenance Organization (HMO)											
Anthem HMO Select	20,191	3,336	22,416	1,906	47,849	—	631	—	306	937	48,786
Anthem HMO Traditional	1,400	734	7,454	1,513	11,101	—	2,386	1	2,436	4,823	15,924
Blue Shield Access+	36,322	9,694	27,464	4,579	78,059	—	928	1	465	1,394	79,453
Blue Shield EPO	504	204	161	26	895	—	9	—	3	12	907
Blue Shield Trio	9,894	1,415	6,171	510	17,990	—	35	—	15	50	18,040
Health Net Salud y Más	5,143	187	7,080	266	12,676	—	—	—	—	—	12,676
Health Net SmartCare	2,529	532	6,192	1,131	10,384	—	—	—	—	—	10,384
Kaiser	252,270	39,326	239,591	21,951	553,138	4	69,024	2	43,128	112,158	665,296
Kaiser/Out of State	18	519	32	480	1,049	—	1,640	—	1,041	2,681	3,730
Sharp	11,638	1,010	1,867	188	14,703	—	185	—	38	223	14,926
UnitedHealthcare	52,333	9,213	11,710	1,766	75,022	4	29,114	—	17,835	46,953	121,975
UnitedHealthcare Harmony	1,790	213	731	68	2,802	—	17	—	7	24	2,826
Western Health Advantage	6,825	1,320	4,724	587	13,456	—	89	—	43	132	13,588
SUBTOTAL	**400,857**	**67,703**	**335,593**	**34,971**	**839,124**	**8**	**104,058**	**4**	**65,317**	**169,387**	**1,008,511**
Preferred Provider Organization (PPO)											
Anthem EPO Del Norte	48	15	3	—	66	—	—	—	—	—	66
PERS Gold	57,118	4,846	59,370	4,152	125,486	—	1,395	—	2,156	3,551	129,037
PERS Platinum	45,905	34,981	50,412	18,186	149,484	4	97,536	2	50,276	147,818	297,302
SUBTOTAL	**103,071**	**39,842**	**109,785**	**22,338**	**275,036**	**4**	**98,931**	**2**	**52,432**	**151,369**	**426,405**
Association (ASN) Plans											
CAHP	19,804	6,608	—	—	26,412	—	4,613	—	—	4,613	31,025
CCPOA North	4,750	2,287	—	—	7,037	—	777	—	—	777	7,814
CCPOA South	23,832	5,986	—	—	29,818	—	1,037	—	—	1,037	30,855
PORAC	1,746	680	13,851	5,341	21,618	—	236	—	2,726	2,962	24,580
SUBTOTAL	**50,132**	**15,561**	**13,851**	**5,341**	**84,885**	**—**	**6,663**	**—**	**2,726**	**9,389**	**94,274**
TOTAL	**554,060**	**123,106**	**459,229**	**62,650**	**1,199,045**	**12**	**209,652**	**6**	**120,475**	**330,145**	**1,529,190**

10-Year Enrollments

Members	2022	2021	2020	2019	2018	2017	2016	2015	2014[2]	2013[2]
Total Covered Lives[1]	1,529,190	1,530,934	1,512,771	1,479,504	1,462,260	1,442,156	1,424,983	1,400,960	1,390,104	1,382,151
Subscribers[1]	760,538	754,246	738,851	721,321	709,592	697,163	684,436	669,127	658,048	645,697

(1) Total Covered Lives and Subscribers as of June 30 of each reported year.
(2) Corrected figures from previously reported data in 2016.

Total Covered Lives Summary as of June 30, 2022

	State	Public Agency	Total
Total Covered Lives	886,830	642,360	1,529,190

HEALTH BENEFITS PROGRAM DATA (CONTINUED)

State HMO Total Covered Lives by County as of June 30, 2022

County	Anthem HMO Select	Anthem HMO Traditional	Blue Shield Access+	Blue Shield EPO	Blue Shield Trio	Health Net Salud y Más	Health Net SmartCare	Kaiser	Kaiser/ Out of State	Sharp	United Healthcare Alliance	United Healthcare Harmony	Western Health Advantage	Total
Alameda	589	208	220	—	—	—	377	11,909	—	—	2,500	—	—	15,803
Alpine	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Amador	—	1	1	—	—	—	—	1,996	—	—	34	—	—	2,032
Butte	—	74	2,779	—	—	—	—	9	—	—	500	—	—	3,362
Calaveras	4	—	—	—	—	—	—	17	—	—	14	—	—	35
Colusa	—	—	—	57	—	—	—	—	—	—	21	—	9	87
Contra Costa	304	185	336	—	—	—	608	8,434	—	—	1,257	—	—	11,124
Del Norte	—	1	—	—	—	—	—	—	—	—	3	—	—	4
El Dorado	498	161	551	—	356	—	—	5,514	—	—	311	—	338	7,729
Fresno	263	100	2,095	—	—	—	102	12,384	—	—	9,833	—	—	24,777
Glenn	—	5	161	—	—	—	—	—	—	—	44	—	—	210
Humboldt	2	155	2,145	2	—	—	—	1	—	—	276	—	112	2,693
Imperial	1,298	47	526	—	—	—	—	6	—	—	112	—	—	1,989
Inyo	—	—	—	—	—	—	—	—	—	—	2	—	—	2
Kern	318	52	1,199	—	—	286	121	10,379	—	—	1,160	—	—	13,515
Kings	12	57	1,003	—	—	—	50	1,007	—	—	4,660	—	—	6,789
Lake	—	—	—	—	—	—	—	1	—	—	12	—	—	13
Lassen	—	—	—	13	—	—	—	—	—	—	8	—	—	21
Los Angeles	1,644	352	4,217	—	1,919	2,062	172	41,005	—	1	4,036	777	—	56,185
Madera	1	19	333	—	—	—	—	2,601	—	—	1,022	—	—	3,976
Marin	—	54	41	—	—	—	94	1,442	—	—	219	—	86	1,936
Mariposa	—	2	109	—	—	—	—	13	—	—	31	—	—	155
Mendocino	—	20	9	567	—	—	—	2	—	—	152	—	—	750
Merced	671	27	469	—	—	—	—	14	—	—	258	—	—	1,439
Modoc	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mono	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Monterey	2,069	—	4	—	—	—	—	5	—	—	42	—	—	2,120
Napa	4	19	—	—	—	—	31	4,271	—	—	24	—	72	4,421
Nevada	145	47	222	—	300	—	—	76	—	—	244	—	—	1,034
Orange	515	184	2,595	—	486	725	30	12,594	—	1	2,269	358	—	19,757
Placer	716	148	1,325	—	444	—	—	15,391	—	—	4,095	—	373	22,492
Plumas	—	—	—	—	2	—	—	1	—	—	8	—	—	11
Riverside	521	143	2,816	—	1	427	51	17,453	—	1	2,328	242	—	23,983
Sacramento	6,205	1,039	11,246	—	5,457	1	—	113,166	—	1	23,329	—	5,927	166,371
San Benito	3	20	—	—	—	—	—	3	—	—	5	—	—	31
San Bernardino	671	133	2,021	—	1	976	72	21,656	—	—	3,117	429	—	29,076
San Diego	556	4	1,753	—	—	847	57	12,412	—	12,825	3,333	214	—	32,001
San Francisco	102	149	196	—	—	—	291	4,292	—	—	2,099	—	—	7,129
San Joaquin	918	136	1,232	—	—	—	105	11,187	—	—	2,363	—	—	15,941
San Luis Obispo	1	160	1,570	—	1,389	—	—	—	—	—	7,329	—	—	10,449
San Mateo	—	93	84	—	—	—	121	3,089	—	—	1,578	—	—	4,965
Santa Barbara	—	64	558	—	71	—	—	—	—	—	224	—	—	917
Santa Clara	523	97	100	—	—	—	79	8,503	—	—	1,437	—	—	10,739
Santa Cruz	78	30	349	—	61	—	10	493	—	—	702	—	—	1,723
Shasta	—	1	3	52	—	—	—	2	—	—	32	—	—	90
Sierra	—	1	—	24	—	—	—	—	—	—	15	—	—	40
Siskiyou	—	—	—	—	—	—	—	3	—	—	10	—	—	13

HEALTH BENEFITS PROGRAM DATA (CONTINUED)

State HMO Total Covered Lives by County as of June 30, 2022 (continued)

County	Anthem HMO Select	Anthem HMO Traditional	Blue Shield Access+	Blue Shield EPO	Blue Shield Trio	Health Net Salud y Más	Health Net SmartCare	Kaiser	Kaiser/ Out of State	Sharp	United Healthcare Alliance	United Healthcare Harmony	Western Health Advantage	Total
Solano	5	99	92	—	—	—	233	15,911	—	—	1,293	—	270	17,903
Sonoma	—	118	84	—	—	—	226	6,949	—	—	967	—	414	8,758
Stanislaus	355	46	604	—	118	—	—	3,850	—	—	1,340	—	—	6,313
Sutter	1	—	—	2	—	—	—	150	—	—	29	—	—	182
Tehama	—	—	—	—	—	—	—	2	—	—	13	—	—	15
Trinity	—	—	—	—	—	—	—	—	—	—	2	—	—	2
Tulare	4,065	15	2,111	—	—	—	231	131	—	—	419	—	—	6,972
Tuolumne	7	7	—	—	—	—	—	7	—	—	10	—	—	31
Ventura	415	74	418	—	242	—	—	3,345	—	—	556	—	—	5,050
Yolo	667	168	1,283	—	480	—	—	7,592	—	1	2,764	—	633	13,588
Yuba	2	—	5	—	2	—	—	1,215	—	—	17	—	—	1,241
Out of State	10	5	79	—	15	6	—	138	2,177	—	2,203	—	—	4,633
Out of Country/ Unknown	—	—	—	—	—	—	—	2	—	3	2	—	—	7
Total Covered Lives	**24,158**	**4,520**	**46,944**	**717**	**11,344**	**5,330**	**3,061**	**360,624**	**2,177**	**12,833**	**90,664**	**2,020**	**8,234**	**572,626**

State PPO Total Covered Lives by County as of June 30, 2022

County	Anthem EPO Del Norte	PERS Gold	PERS Platinum	Total
Alameda	—	507	2,286	2,793
Alpine	—	25	19	44
Amador	—	198	1,090	1,288
Butte	—	2,722	3,437	6,159
Calaveras	—	299	1,005	1,304
Colusa	—	23	66	89
Contra Costa	—	332	1,635	1,967
Del Norte	63	2,967	1,512	4,542
El Dorado	—	831	2,184	3,015
Fresno	—	2,014	5,180	7,194
Glenn	—	115	139	254
Humboldt	—	1,734	2,503	4,237
Imperial	—	856	1,057	1,913
Inyo	—	491	383	874
Kern	—	2,492	3,231	5,723
Kings	—	877	1,043	1,920
Lake	—	166	444	610
Lassen	—	4,492	2,044	6,536
Los Angeles	—	5,302	15,177	20,479
Madera	—	568	738	1,306
Marin	—	122	799	921
Mariposa	—	78	231	309
Mendocino	—	325	453	778
Merced	—	707	827	1,534
Modoc	—	97	183	280
Mono	—	86	123	209
Monterey	—	3,753	4,724	8,477

HEALTH BENEFITS PROGRAM DATA (CONTINUED)

State PPO Total Covered Lives by County as of June 30, 2022 (continued)

County	Anthem EPO Del Norte	PERS Gold	PERS Platinum	Total
Napa	—	116	702	818
Nevada	—	322	836	1,158
Orange	—	2,559	7,150	9,709
Placer	—	688	2,906	3,594
Plumas	—	207	316	523
Riverside	—	2,141	3,762	5,903
Sacramento	—	4,205	12,688	16,893
San Benito	—	193	297	490
San Bernardino	—	1,554	3,133	4,687
San Diego	—	1,006	5,340	6,346
San Francisco	—	349	1,493	1,842
San Joaquin	—	541	1,749	2,290
San Luis Obispo	—	4,468	8,654	13,122
San Mateo	—	215	949	1,164
Santa Barbara	—	579	1,055	1,634
Santa Clara	—	455	2,157	2,612
Santa Cruz	—	224	762	986
Shasta	—	3,467	2,852	6,319
Sierra	—	17	43	60
Siskiyou	—	665	734	1,399
Solano	—	197	939	1,136
Sonoma	—	235	1,737	1,972
Stanislaus	—	371	1,187	1,558
Sutter	—	426	1,359	1,785
Tehama	—	852	795	1,647
Trinity	—	164	171	335
Tulare	—	2,566	4,025	6,591
Tuolumne	—	773	1,556	2,329
Ventura	—	872	2,717	3,589
Yolo	—	471	1,556	2,027
Yuba	—	248	694	942
Out of State	—	33	51,240	51,273
Out of Country/ Unknown	—	1	359	360
Total Covered Lives	**63**	**63,359**	**178,426**	**241,848**

HEALTH BENEFITS PROGRAM DATA (CONTINUED)

State ASN Total Covered Lives by County as of June 30, 2022

County	CAHP	CCPOA North	CCPOA South	PORAC	Total
Alameda	306	30	—	6	342
Alpine	4	—	—	—	4
Amador	129	—	—	6	135
Butte	434	57	—	68	559
Calaveras	152	4	—	27	183
Colusa	49	—	—	4	53
Contra Costa	499	80	—	11	590
Del Norte	114	—	—	9	123
El Dorado	714	131	4	25	874
Fresno	1,068	838	—	148	2,054
Glenn	71	—	—	—	71
Humboldt	313	—	—	96	409
Imperial	300	—	5,177	9	5,486
Inyo	112	—	—	15	127
Kern	1,361	—	9,983	55	11,399
Kings	272	859	2	5	1,138
Lake	153	—	—	22	175
Lassen	116	—	5	22	143
Los Angeles	2,271	—	1,979	181	4,431
Madera	351	203	—	22	576
Marin	107	32	—	—	139
Mariposa	61	—	—	5	66
Mendocino	161	—	—	8	169
Merced	364	206	4	46	620
Modoc	106	—	—	14	120
Mono	30	—	—	2	32
Monterey	318	—	—	111	429
Napa	151	—	—	11	162
Nevada	311	30	—	32	373
Orange	1,239	—	348	124	1,711
Placer	1,778	262	—	39	2,079
Plumas	155	—	—	5	160
Riverside	2,777	—	4,617	208	7,602
Sacramento	1,385	1,025	—	48	2,458
San Benito	97	—	—	34	131
San Bernardino	1,754	—	2,785	42	4,581
San Diego	1,608	—	2,255	84	3,947
San Francisco	69	21	—	4	94
San Joaquin	630	950	1	4	1,585
San Luis Obispo	847	1	2,732	180	3,760
San Mateo	127	10	—	1	138
Santa Barbara	382	—	559	20	961
Santa Clara	314	22	—	18	354
Santa Cruz	195	23	—	37	255
Shasta	1,052	—	—	112	1,164
Sierra	7	—	—	—	7
Siskiyou	366	—	—	141	507
Solano	651	255	—	3	909
Sonoma	472	54	—	20	546
Stanislaus	569	356	—	15	940
Sutter	225	—	—	11	236
Tehama	228	—	—	25	253
Trinity	30	—	—	3	33
Tulare	741	2,246	22	57	3,066
Tuolumne	148	—	—	37	185
Ventura	901	—	369	73	1,343
Yolo	237	116	—	3	356
Yuba	113	—	—	1	114
Out of State	1,526	3	13	353	1,895
Out of Country/ Unknown	4	—	—	—	4
Total Covered Lives	**31,025**	**7,814**	**30,855**	**2,662**	**72,356**

HEALTH BENEFITS PROGRAM DATA (CONTINUED)

Public Agency HMO Total Covered Lives by County as of June 30, 2022

County	Anthem HMO Select	Anthem HMO Traditional	Blue Shield Access+	Blue Shield EPO	Blue Shield Trio	Health Net Salud y Más	Health Net SmartCare	Kaiser	Kaiser/ Out of State	Sharp	United Healthcare Alliance	United Healthcare Harmony	Western Health Advantage	Total
Alameda	1,395	1,131	492	—	—	—	635	30,095	—	—	1,155	—	—	34,903
Amador	—	—	—	—	—	—	—	148	—	—	10	—	—	158
Butte	—	38	393	—	—	—	—	8	—	—	221	—	—	660
Calaveras	—	—	—	—	—	—	—	—	—	—	21	—	—	21
Colusa	—	—	2	100	—	—	—	—	—	—	67	—	29	198
Contra Costa	1,279	1,003	642	—	—	—	2,125	33,717	—	—	1,167	—	1	39,934
Del Norte	—	—	—	—	—	—	—	—	—	—	2	—	—	2
El Dorado	153	49	253	—	84	—	—	2,575	—	—	102	—	296	3,512
Fresno	50	22	62	—	—	—	4	1,258	—	—	1,259	—	—	2,655
Glenn	—	15	235	—	—	—	—	—	—	—	83	—	—	333
Humboldt	—	17	78	—	—	—	—	1	—	—	113	—	67	276
Imperial	124	3	30	—	—	—	—	—	—	—	11	—	—	168
Inyo	—	—	2	—	—	—	—	—	—	—	2	—	—	4
Kern	73	24	90	—	—	107	36	787	—	—	109	—	—	1,226
Kings	—	1	—	—	—	—	5	18	—	—	39	—	—	63
Lake	—	—	—	—	—	—	1	—	—	—	9	—	—	10
Lassen	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Los Angeles	5,331	2,036	11,783	—	3,482	3,476	1,996	50,724	—	—	4,239	463	—	83,530
Madera	5	13	72	—	—	—	—	1,578	—	—	1,035	—	—	2,703
Marin	—	117	23	—	—	—	88	3,447	—	—	168	—	157	4,000
Mariposa	1	2	15	—	—	—	—	6	—	—	35	—	—	59
Mendocino	—	7	—	22	—	—	—	—	—	—	27	—	—	56
Merced	299	12	85	—	—	—	—	5	—	—	91	—	—	492
Mono	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Monterey	1,426	1	5	—	—	—	—	23	—	—	98	—	—	1,553
Napa	—	36	—	—	—	—	7	6,435	—	—	18	—	188	6,684
Nevada	611	109	188	—	504	—	—	35	—	—	621	—	—	2,068
Orange	1,631	489	2,637	—	534	708	85	13,351	—	—	2,236	48	—	21,719
Placer	313	222	1,218	—	246	—	4	10,218	—	—	1,980	—	605	14,806
Plumas	—	—	—	—	—	—	—	—	—	—	6	—	—	6
Riverside	3,503	523	3,449	—	—	1,084	481	23,361	—	4	3,402	173	—	35,980
Sacramento	362	145	1,090	—	265	—	—	13,288	—	—	1,216	—	1,134	17,500
San Benito	4	89	4	—	—	—	—	17	—	—	20	—	—	134
San Bernardino	1,834	320	2,383	—	—	735	518	15,068	—	—	1,498	104	—	22,460
San Diego	468	1	517	—	—	1,231	61	2,925	—	2,089	1,420	18	—	8,730
Francisco	98	325	159	—	—	—	146	2,719	—	—	155	—	—	3,602
San Joaquin	1,407	222	934	—	—	—	171	14,294	—	—	398	—	—	17,426
San Luis Obispo	—	63	207	—	172	—	—	—	—	—	1,468	—	—	1,910
San Mateo	4	1,845	488	—	—	—	308	11,351	—	—	886	—	—	14,882
Santa Barbara	2	169	759	—	136	—	—	—	—	—	124	—	—	1,190
Santa Clara	971	967	254	—	—	—	127	21,953	—	—	614	—	—	24,886
Santa Cruz	1,120	342	2,324	—	888	—	75	3,662	—	—	953	—	—	9,364
Shasta	—	—	1	13	—	—	—	6	—	—	21	—	—	41
Sierra	—	—	—	55	—	—	—	—	—	—	—	—	—	55
Siskiyou	2	1	—	—	—	—	—	—	—	—	11	—	—	14
Solano	3	500	110	—	1	—	274	20,705	—	—	395	—	697	22,685

HEALTH BENEFITS PROGRAM DATA (CONTINUED)

Public Agency HMO Total Covered Lives by County as of June 30, 2022 (continued)

County	Anthem HMO Select	Anthem HMO Traditional	Blue Shield Access+	Blue Shield EPO	Blue Shield Trio	Health Net Salud y Más	Health Net SmartCare	Kaiser	Kaiser/ Out of State	Sharp	United Healthcare Alliance	United Healthcare Harmony	Western Health Advantage	Total
Sonoma	—	120	29	—	—	—	98	7,261	—	—	187	—	501	8,196
Stanislaus	532	97	294	—	159	—	—	5,099	—	—	189	—	—	6,370
Sutter	—	—	—	—	—	—	—	22	—	—	13	—	—	35
Tehama	—	—	—	—	—	—	—	—	—	—	7	—	—	7
Trinity	—	—	—	—	—	—	—	—	—	—	2	—	—	2
Tulare	139	—	36	—	—	—	74	13	—	—	30	—	—	292
Tuolumne	—	—	—	—	—	—	—	—	—	—	8	—	—	8
Ventura	1,347	255	822	—	148	—	—	4,541	—	—	507	—	—	7,620
Yolo	134	70	243	—	74	—	—	3,529	—	—	988	—	1,679	6,717
Yuba	3	—	3	—	—	—	—	336	—	—	16	—	—	358
Out of State	4	3	98	—	3	5	4	91	1,553	—	1,855	—	—	3,616
Out of Country/ Unknown	—	—	—	—	—	—	—	2	—	—	2	—	—	4
Total Covered Lives	**24,628**	**11,404**	**32,509**	**190**	**6,696**	**7,346**	**7,323**	**304,672**	**1,553**	**2,093**	**31,311**	**806**	**5,354**	**435,885**

Public Agency PPO Total Covered Lives by County as of June 30, 2022

County	Anthem EPO Del Norte	PERS Gold	PERS Platinum	Total
Alameda	—	1,210	3,433	4,643
Alpine	—	—	1	1
Amador	—	79	279	358
Butte	—	2,072	775	2,847
Calaveras	—	261	665	926
Colusa	—	387	155	542
Contra Costa	—	1,063	3,690	4,753
Del Norte	3	105	75	183
El Dorado	—	579	855	1,434
Fresno	—	289	483	772
Glenn	—	474	216	690
Humboldt	—	2,613	730	3,343
Imperial	—	37	51	88
Inyo	—	322	1,271	1,593
Kern	—	373	321	694
Kings	—	15	40	55
Lake	—	65	212	277
Lassen	—	254	116	370
Los Angeles	—	9,301	23,589	32,890
Madera	—	364	364	728
Marin	—	311	791	1,102
Mariposa	—	39	151	190
Mendocino	—	36	131	167
Merced	—	367	369	736
Modoc	—	30	19	49
Mono	—	407	291	698
Monterey	—	6,790	6,317	13,107
Napa	—	416	795	1,211
Nevada	—	1,588	879	2,467
Orange	—	3,643	6,557	10,200

HEALTH BENEFITS PROGRAM DATA (CONTINUED)

Public Agency PPO Total Covered Lives by County as of June 30, 2022 (continued)

County	Anthem EPO Del Norte	PERS Gold	PERS Platinum	Total
Placer	—	1,050	1,964	3,014
Plumas	—	386	226	612
Riverside	—	2,779	4,210	6,989
Sacramento	—	758	1,130	1,888
San Benito	—	793	563	1,356
San Bernardino	—	1,974	2,579	4,553
San Diego	—	589	1,381	1,970
San Francisco	—	259	644	903
San Joaquin	—	1,289	1,835	3,124
San Luis Obispo	—	2,542	1,439	3,981
San Mateo	—	671	3,202	3,873
Santa Barbara	—	2,806	1,402	4,208
Santa Clara	—	1,680	5,013	6,693
Santa Cruz	—	803	2,471	3,274
Shasta	—	3,968	1,466	5,434
Sierra	—	30	45	75
Siskiyou	—	1,471	473	1,944
Solano	—	483	1,022	1,505
Sonoma	—	591	1,057	1,648
Stanislaus	—	1,887	1,278	3,165
Sutter	—	379	447	826
Tehama	—	579	188	767
Trinity	—	241	324	565
Tulare	—	135	245	380
Tuolumne	—	229	589	818
Ventura	—	2,910	4,436	7,346
Yolo	—	406	567	973
Yuba	—	478	602	1,080
Out of State	—	21	24,356	24,377
Unknown	—	1	101	102
Total Covered Lives	**3**	**65,678**	**118,876**	**184,557**

Public Agency ASN Total Covered Lives by County as of June 30, 2022

County	CAHP	CCPOA North	CCPOA South	PORAC	Total
Alameda	—	—	—	572	572
Amador	—	—	—	163	163
Butte	—	—	—	305	305
Calaveras	—	—	—	44	44
Colusa	—	—	—	34	34
Contra Costa	—	—	—	724	724
Del Norte	—	—	—	1	1
El Dorado	—	—	—	239	239
Fresno	—	—	—	43	43
Glenn	—	—	—	108	108
Humboldt	—	—	—	55	55
Imperial	—	—	—	46	46
Inyo	—	—	—	199	199
Kern	—	—	—	39	39
Placer	—	—	—	527	527
Plumas	—	—	—	95	95
Riverside	—	—	—	1,233	1,233
Sacramento	—	—	—	239	239
San Benito	—	—	—	531	531
San Bernardino	—	—	—	907	907
San Diego	—	—	—	212	212
San Francisco	—	—	—	39	39
San Joaquin	—	—	—	303	303
San Luis Obispo	—	—	—	209	209
San Mateo	—	—	—	235	235
Santa Barbara	—	—	—	206	206
Santa Clara	—	—	—	528	528
Santa Cruz	—	—	—	761	761
Shasta	—	—	—	420	420
Kings	—	—	—	5	5

HEALTH BENEFITS PROGRAM DATA (CONTINUED)

Public Agency ASN Total Covered Lives by County as of June 30, 2022 (continued)

County	CAHP	CCPOA North	CCPOA South	PORAC	Total
Lake	—	—	—	121	121
Lassen	—	—	—	14	14
Los Angeles	—	—	—	2,702	2,702
Madera	—	—	—	23	23
Marin	—	—	—	50	50
Mariposa	—	—	—	22	22
Mendocino	—	—	—	21	21
Merced	—	—	—	159	159
Modoc	—	—	—	9	9
Mono	—	—	—	137	137
Monterey	—	—	—	2,216	2,216
Napa	—	—	—	64	64
Nevada	—	—	—	277	277
Orange	—	—	—	2,468	2,468
Sierra	—	—	—	6	6
Siskiyou	—	—	—	136	136
Solano	—	—	—	101	101
Sonoma	—	—	—	97	97
Stanislaus	—	—	—	56	56
Sutter	—	—	—	354	354
Tehama	—	—	—	38	38
Trinity	—	—	—	30	30
Tulare	—	—	—	6	6
Tuolumne	—	—	—	60	60
Ventura	—	—	—	832	832
Yolo	—	—	—	65	65
Yuba	—	—	—	266	266
Out of State	—	—	—	2,565	2,565
Out of Country/ Unknown	—	—	—	1	1
Total Covered Lives	**—**	**—**	**—**	**21,918**	**21,918**

DEFINED CONTRIBUTION PLANS

California Public Employees' Retirement System (CalPERS) administers a defined contribution plan and a deferred compensation plan to certain members to save for retirement.

These plans include:

- Deferred Compensation Program
- Supplemental Contributions Program

DEFERRED COMPENSATION PROGRAM

The Deferred Compensation Program is a way for participants to defer a portion of pre-tax salary into investments of an individual's choosing. It allows both the amount deferred and the amount earned on the investment to be protected from income tax until the money is distributed. In addition, participating agencies have the option to add a Roth provision and/or a loan provision to their 457 Plan. The plan is intended to provide for supplemental savings to CalPERS or other defined benefit plans. Eligible public agencies and school employers may elect to offer the Deferred Compensation Program to their employees.

The CalPERS Board of Administration (the Board) designates the investment fund options made available to participants and provides the administrative functions of the program. Assets are held in trust by the Board for the exclusive benefit of participating employees.

As of June 30, 2022, the Deferred Compensation Program was adopted by 829 California public agencies and school districts. For a full listing of the program's participating public agencies, please visit our **Deferred Compensation** page at **www.calpers.ca.gov.**

SUPPLEMENTAL CONTRIBUTIONS PROGRAM

The Supplemental Contributions Program is available to State of California employees who are members of CalPERS, and active judges who are members of the Judges' Retirement System or Judges' Retirement System II. Participants may invest after-tax contributions through payroll deductions or cash contributions by check. Participant earnings grow tax-deferred until the program participants begin to take withdrawals in retirement or upon separation from state employment.

INVESTMENT FUND LINEUP

The Deferred Compensation Program and Supplemental Contributions Program for the Fiscal Year 2021-22 investment lineup allows participants to choose from 11 target retirement date funds and six core funds.

The investment fund lineup includes:

Eleven Target Retirement Date Funds

- Are structured with five-year increments to allow participants to target their retirement date.
- Utilize glide path strategy intended to reduce volatility risk as the member approaches retirement.

Six Core Funds

- Provide a broad range of asset class coverage to create a portfolio consistent with the participants' individual investment goals, time horizons, and risk tolerance.
- Span the risk-return spectrum, without duplication.

LONG-TERM CARE PROGRAM DATA

As of June 30, 2022, the total Long-Term Care (LTC) participant count decreased 5.5 percent to 105,370. This decrease may be attributable to the LTC program stabilization and sustainability measures and realized participant population attrition. Premiums collected in Fiscal Year 2021-22 were $297.4 million.

Long-Term Care Program Data – Comprehensive Plans

	LTC 1 (1995-2002)		LTC 2 (2003-2004)		LTC 3 (2005-2008)		
Benefit Period	With Inflation	No Inflation	With Inflation	No Inflation	With Inflation	No Inflation	Total
Lifetime	12,619	5,369	716	567	800	901	20,972
10 Year	—	10,253	—	1,021	—	5	11,279
6 Year	1,926	17,798	12	1,378	1,805	2,990	25,909
3 Year	2,483	9,418	223	1,286	1,549	1,267	16,226
2 Year	352	5,700	29	683	532	762	8,058
In-Nonforfeiture	10	3	—	—	—	78	91
TOTAL	**17,390**	**48,541**	**980**	**4,935**	**4,686**	**6,003**	**82,535**

Long-Term Care Program Data – Facility Only Plans

	LTC 1 (1995-2002)		LTC 2 (2003-2004)		LTC 3 (2005-2008)		
Benefit Period	With Inflation	No Inflation	With Inflation	No Inflation	With Inflation	No Inflation	Total
Lifetime	1,522	887	75	43	105	128	2,760
10 Year	—	2,168	—	156	—	—	2,324
6 Year	190	3,469	7	197	128	425	4,416
3 Year	689	3,623	24	265	303	290	5,194
2 Year	75	1,904	5	121	93	179	2,377
In-Nonforfeiture	1	3	—	—	—	8	12
TOTAL	**2,477**	**12,054**	**111**	**782**	**629**	**1,030**	**17,083**

Partnership Plans with Inflation

	LTC 1 (1995-2002)		LTC 2 (2003-2004)		LTC 3 (2005-2008)		
Benefit Period	5% Inflation	3% Inflation	5% Inflation	3% Inflation	5% Inflation	3% Inflation	Total
2 Year	1,670	84	82	6	46	5	1,893
1 Year	818	259	38	41	25	6	1,187
6 Month	33	160	1	31	0	6	231
In-Nonforfeiture	128	—	—	—	—	—	128
TOTAL	**2,649**	**503**	**121**	**78**	**71**	**17**	**3,439**

LTC 4[1] Comprehensive and Partnership Plans

Benefit Period	5% Compound Inflation	3% Compound Inflation	5% Simple Inflation	3% Simple Inflation	Benefit Increase Offer	No Inflation	Total
10 Year	12	39	3	220	38	92	404
6 Year	28	85	13	357	33	127	643
3 Year	32	143	5	459	54	290	983
2 Year	35	43	—	137	20	28	263
1 Year	3	8	—	—	—	—	11
6 Month	—	6	—	—	—	—	6
In-Nonforfeiture	—	—	—	—	—	3	3
TOTAL	**110**	**324**	**21**	**1,173**	**145**	**540**	**2,313**

(1) LTC 4 opened for enrollment in December 2013.

Ten-Year Historical Participant Counts

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Total Covered Lives	105,370	111,518	116,832	120,632	124,472	128,276	132,274	136,253	139,947	144,933

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Tables, Charts and Lists

Index of Tables, Charts & Lists

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GLOSSARY OF ACRONYMS

AAL: Actuarial Accrued Liability
ACFR: Annual Comprehensive Financial Report
ALM: Asset Liability Management
CalPERS: California Public Employees' Retirement System
CEPPTF: California Employers' Pension Prefunding Trust Fund
CERBTF: California Employers' Retiree Benefit Trust Fund
COLA: Cost-of-Living Adjustments
CRF: Contingency Reserve Fund
DCF: Public Agency Deferred Compensation Fund
EGWP: Federal Employer Group Waiver Plan
eSec: ESecLending LLC
ESG: Environmental, Social, and Governance
GASB: Governmental Accounting Standards Board
GASB 28: GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions
GASB 34: GASB Statement No. 34, Basic Financial Statements– and Management's Discussion and Analysis–for State and Local Governments
GASB 40: GASB Statement No. 40, Deposit and Investment Risk Disclosures—an amendment of GASB Statement No. 3
GASB 67: GASB Statement No. 67, Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25
GASB 68: GASB Statement No. 68, Accounting and Financial Reporting for Pensions, an amendment of GASB Statement No. 27
GASB 72: GASB Statement No. 72, Fair Value Measurement and Application
GASB 74: GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans
GASB 75: GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions
GASB 84: GASB Statement No. 84, Fiduciary Activities
HCF: Health Care Fund
HMO: Health Maintenance Organization
IBNR: Incurred But Not Reported
IRC: Internal Revenue Code
IRS: Internal Revenue Service
JRF: Judges' Retirement Fund
JRF II: Judges' Retirement Fund II
JRS: Judges' Retirement System
JRS II: Judges' Retirement System II
LRF: Legislators' Retirement Fund
LRS: Legislators' Retirement System
LTC: Long-Term Care
LTCF: Long-Term Care Fund
MWRR: Money-Weighted Rate of Return
NAV: Net Asset Value
OASI: Old Age & Survivors' Insurance Revolving Fund
OCC: Options Clearing Corporation
OPEB: Other Post-Employment Benefits
PEMHCA: Public Employees' Medical and Hospital Care Act
PEPRA: Public Employees' Pension Reform Act
PERF: Public Employees' Retirement Fund
PERL: Public Employees' Retirement Law
PERS: Public Employees' Retirement System
RBF: Replacement Benefit Fund
REIT: Real Estate Investment Trusts
SCPF: Supplemental Contributions Program Fund
SSB: State Street Bank
SSGA: State Street Bank Global Advisors
STIF: Short-Term Investment Fund
System: The California Public Employees' Retirement System

LEGISLATIVE REPORTS

In accordance with Government Code Section 20232, California Public Employees' Retirement System (CalPERS) provides the following information to the Governor and Legislature. The following table provides guidance on where these items are located within the Annual Comprehensive Financial Report.

Government Code	Section	Sub-Section
(a) A copy of the annual audit performed pursuant to Section 20228.	Financial Section	Independent Auditor's Report
(b) A review of the system's asset mix strategy, a market review of the economic and financial environment in which investments were made, and a summary of the system's general investment strategy.	Financial Section Financial Section Investment Section Investment Section	Notes to the Basic Financial Statements – Target Asset Allocation Notes to the Basic Financial Statements – Notes 4-7 Chief Investment Officer's Letter Asset Allocation – PERF
(c) A description of the investments currently held by this system at cost and market value. The description of investments shall include, but not be limited to, the asset classes reported pursuant to Section 20235. The report shall also include a list of all investment holdings at the close of the fiscal year, including any major divestitures taken during the fiscal year.	Financial Section Investment Section	Notes to the Basic Financial Statements – CalPERS Investments at Fair Value Summary of Investments – PERF
(d) The following information regarding the rate of return of this system by asset type:		
(1) Time-weighted market value rate of return on a five-year, three-year, and one-year basis.	Investment Section	Portfolio Comparisons – PERF, LRF, JRF II, CERBTF, HCF, and LTCF
(2) Portfolio return comparisons by asset class that compare investment returns with an alternative theoretical portfolio of comparable funds, universes, and indexes.	Investment Section	Portfolio Comparisons – PERF, LRF, JRF II, CERBTF, HCF, and LTCF
(e) The use of outside investment advisers and managers, including costs and fees.	Financial Section	Other Supplementary Information – Investment Expense – All Funds Investment Management Fees Performance Fees Other Investment Expenses
(f) A description of the system's investments at cost and market value held in the state.	Investment Section	Portfolio of California Investments at Fair Value – PERF

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