DRAFT

2022-23

Annual Comprehensive Financial Report

Fiscal Year Ended June 30, 2023

California Public Employees' Retirement System A Component Unit of the State of California This page intentionally left blank.

ANNUAL COMPREHENSIVE FINANCIAL REPORT

Fiscal Year Ended June 30, 2023

Prepared through the joint efforts of CalPERS team members.

Available online at www.calpers.ca.gov



California Public Employees' Retirement System A Component Unit of the State of California This page intentionally left blank.

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Introductory Section

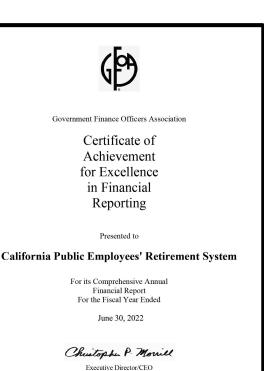
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Introductory Section

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, 2022. This was the 27th 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.



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, 2023. This is the 21st 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.



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2023

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 Huinkle

Introductory Section (continued)

CHIEF EXECUTIVE OFFICER'S LETTER OF TRANSMITTAL





Marcie Frost Chief Executive Officer

November XX, 2023

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, 2023.

This fiscal year our investment portfolio rebounded to a 5.8 percent investment return from the prior fiscal year's negative return, even with the current economic challenges that confront institutional investors. Inflation, volatile financial markets, and slowing economic growth are all a cause for concern, but the leveling out of the stock market at the beginning of the calendar year created a solid base from which to implement our innovative investment approaches.

Public equity investments outpaced all other asset classes with an estimated 14.1 percent investment return. These assets comprise about 44 percent of the Total Fund. Private debt, established as a unique asset class last year, outperformed the policy benchmark and reported a preliminary investment return of 6.5 percent. The Total Fund's second largest component, fixed income assets, finished the fiscal year flat. And two asset classes—private equity and real estate—reported a negative return. We ended the fiscal year with \$464.6 billion in net assets.

During the year, we filled two executive level positions. Stevenson Loveson was selected as our new chief information officer in February 2023 and will oversee the administration and direction of CaIPERS' information technology services, strategy, and security. Additionally, Kim Malm was named deputy executive office for the Customer Services and Support Branch in June 2023. Malm will oversee all aspects of the retirement and benefit services administration that serves more than 2 million active and retired state, school, and public agency members. At the end of the fiscal year, we paid out \$31.1 billion in pension benefits to nearly 800,000 retirees and beneficiaries, an increase of \$2 billion (or 6.8 percent) from the previous year. This increase is primarily due to cost-of-living increases and the rise in the number of retirees and beneficiaries.

The increase in retirement payments also aligns with the growth in retirements over the 2022 calendar year. Overall, retirements were down about 7 percent as compared to 2021. This is mostly attributable to schools and public agency retirements being lower in 2022 than in 2021. Schools were down almost 11 percent, while public agencies went down almost 13 percent. Alternatively, state retirements were up slightly at 3.6 percent. Although we saw an overall increase in retirements in the previous two years during the pandemic, we are seeing current retirements on par with those pre-pandemic trends.

To further focus on quality assurance for our members, our Customer Services and Support team developed a new program for the Refund Election Application process. This program strengthens the integrity of the process, confirms the accuracy of the benefits being paid, and ensures compliance with federal and state guidelines. Additionally, we upgraded our paper-based notification system to an electronic notification system that empowers members to access their myCalPERS account and find their vital information online.

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 2022, showed that in Fiscal Year 2020-21, CalPERS' California-based investments

CHIEF EXECUTIVE OFFICER'S LETTER OF TRANSMITTAL (CONTINUED)

totaled more than \$58 billion or 12 percent of the total fund and supported an estimated 103,000 jobs.

In health care, we continue our focus on providing high quality, affordable care to our members, ensuring access to the services they need. We recognize that the average overall premium increase of 10.95 percent for calendar year 2024 is too high, and we're providing members with choices if they decide to switch plans. The new premiums were approved by the board in July 2023 and will take effect on January 1, 2024. The primary driver for the overall 2024 premium increase is high medical inflation. Medicare plan premiums are going up because health plans expect to receive less revenue from the Centers for Medicare & Medicaid Services in 2024.

The Basic plan premiums include the continuation of the risk adjustment strategy approved by the board in 2020. Starting in 2024, the Basic HMO and PPO plans will begin a three-year transition into a single risk pool. The change is expected to stabilize enrollment across the HMOs and PPOs by pricing the plans based on the value of their benefits and network, instead of the mix of healthy or unhealthy members in a plan.

In long-term care, the program has been suspended since June 2020 due to uncertainty in the long-term care market. We are hopeful that a proposed settlement in a class action lawsuit, approved in Los Angeles County Superior Court in March 2023, will allow us to move forward with serving the members that chose to remain in the program. (An earlier settlement was terminated in April 2022.)

We wrapped up the first year of our 2022-27 Strategic Plan that began on July 1, 2022, which is our blueprint that guides the enterprise to meet the investment, retirement, and health benefit needs of our members and their families. 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.

Look Ahead

As we close out the fiscal year and look ahead, the volatility of the financial landscape remains. The impact of high inflation and high interest rates creates both uncertainty and opportunities for the fund. Nevertheless, it's essential to remember that as a long-term investor we prepare for these market fluctuations over the course of several decades.

To aid in our long-term planning, we will conduct a mid-cycle review as part of our Asset Liability Management (ALM) process, focusing on assessing the pension system's investment portfolio in the first half of the new fiscal year. This evaluation will explore potential adjustments to our strategic asset allocation and policy benchmarks. The ALM process is a thorough, four-year cycle, examination that prioritizes the system's long-term sustainability.

Furthermore, we will continue our efforts to enhance our members' access to behavioral health services and the quality of care. This includes ongoing initiatives related to monitoring, alignment, and member communications. We remain committed to health care cost containment and innovation in wellness, prevention, and disease management.

As we embark on the second year of the 2022-27 Strategic *Plan*, we can collectively take pride in reflecting on the numerous achievements that have enabled us to provide benefits to almost 800,000 retirees and beneficiaries, while also serving the needs of our 2 million public service employees and their families.

Funding

The funded status of the Public Employees' Retirement Fund (PERF) was 70.9 percent as of June 30, 2022, while the estimate for June 30, 2023, is 72 percent using the 6.8 percent discount rate.

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 2022-23. 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 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 reviews the actions of

CHIEF EXECUTIVE OFFICER'S LETTER OF TRANSMITTAL (CONTINUED)

management to implement such recommendations.

Our independent external auditors, BDO USA, 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 This page intentionally left blank.

Introductory Section (continued)

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 \$465 billion as of June 30, 2023.

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 1,446,497 active and inactive members and 791,514 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 longterm 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.

2022-27 STRATEGIC PLAN GOALS AND OBJECTIVES

In 2022, CaIPERS developed and adopted the 2022-27 Strategic Plan through a reflective and collaborative process to establish future-focused strategic goals in alignment with the CaIPERS Mission and Vision. This work included the collection of feedback and observations from external stakeholders, CaIPERS team members and leadership, and the Board of Administration. The prior Strategic Plan (2017-22) was examined including what key business aspects should remain and what gaps needed to be filled. Five key focus areas provide a thoughtful and customer-oriented roadmap to lead our internal and external business partners to success. <u>Member Experience – Ensure member satisfaction through</u> <u>accuracy, responsiveness, and respect</u>

- Deliver accurate benefits to our members and their beneficiaries.
- Ensure that our members and their beneficiaries receive benefit payments on time.
- Provide timely response and appropriate action to inquiries.
- Enhance services, communication, and education tools for our members.

Pension Sustainability – Strengthen the long-term sustainability of the pension fund

- Balance the costs of future pension payments with the expected future investment risks and returns through the Asset Liability Management process.
- Mitigate the risk of significant investment loss while balancing contribution levels and volatility.
- Deliver risk-adjusted investment returns to meet or exceed the expected rate of return.
- Integrate sustainable investment strategies.

Exceptional Health Care – Ensure our members have access to equitable, high-quality, affordable health care

- Ensure our members receive high-quality health care.
- Ensure our members have access to care when and where they need it.
- Ensure the care we provide is affordable.
- Ensure all members receive equitable care.

<u>Stakeholder Engagement – Promote collaboration, support,</u> and transparency

- Educate and engage stakeholders on system impacts including policy and program changes, risks, and mitigations.
- Enhance services, communication, and education tools for our partners.

Organizational Excellence – Cultivate a diverse, riskintelligent, and innovative culture through our team and processes

- Improve processes, operations, and advance technologies to gain efficiencies and effectiveness.
- Cultivate compliance and risk functions throughout the enterprise.
- Recruit and retain diverse talent.
- Enhance team member engagement and employment experience.
- Integrate and sustain leadership competencies to promote behaviors that retain and engage a highperforming workforce.
- Cultivate diversity, equity, and inclusion through culture, talent, investment, health equity, and supplier diversity.

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 CaIPERS (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	Investment Belief 6
Liabilities must influence the asset structure.	Strategic asset allocation is the dominant determinant of
	portfolio risk and return.
Investment Belief 2	
A long time investment horizon is a responsibility and an	Investment Belief 7
advantage.	CaIPERS will take risk only where we have a strong belief we
	will be rewarded for it.
Investment Belief 3	
CalPERS investment decisions may reflect wider stakeholder	Investment Belief 8
views, provided they are consistent with its fiduciary duty to	Costs matter and need to be effectively managed.
members and beneficiaries.	
	Investment Belief 9
Investment Belief 4	Risk to CaIPERS is multi-faceted and not fully captured
Long-term value creation requires effective management of	through measures such as volatility or tracking error.
three forms of capital: financial, physical, and human.	
	Investment Belief 10
Investment Belief 5	Strong processes and teamwork and deep resources are
CalPERS must articulate its investment goals and	needed to achieve CalPERS goals and objectives.
performance measures and ensure clear accountability for	

their execution.

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.

Introductory Section (continued)

BOARD OF ADMINISTRATION¹



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



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



Malia M. Cohen Ex Officio Member California State Controller



Fiona Ma Ex Officio Member California State Treasurer



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



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

Kevin Palkki

School Member Representative Senior Theatre Arts Technical Specialist San Bernardino Community College District Term Ends: January 15, 2027

¹As of June 30, 2023, unless otherwise noted,



BOARD OF ADMINISTRATION (CONTINUED)



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



Yvonne Walker Retired Member Representative Legal Secretary (Retired) California Department of Justice Term Ends: January 15, 2028



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



Vacant Governor Appointee, Insurance Industry Representative

ORGANIZATIONAL CHART – EXECUTIVE TEAM¹



Marcie Frost Chief Executive Officer



Michael Cohen Interim Chief Operating Investment Officer



Douglas Hoffner Chief Operating Officer **Operations & Technology**







Stephenson Loveson **Chief Information Officer** Information Technology



Donald B. Moulds, Ph.D. Chief Health Director Health Policy & Benefits



Kim Malm Deputy Executive Officer Customer Services & Support



Nicole Musicco Chief Investment Officer Investment Office



Michele Nix Acting Chief Financial Officer



Brad W. Pacheco Deputy Executive Officer Communications & Stakeholder Relations



Scott Terando Chief Actuary Actuarial Office



Marlene Timberlake D'Adamo Michelle Tucker Chief Diversity, Equity, and Inclusion Officer



Human Resources Director

¹As of June 30, 2023, unless otherwise noted.

CONSULTANT & PROFESSIONAL SERVICES

Individual or Firm ¹	Individual or Firm ¹
34 Strong, Inc.	Korn Ferry (US)
Advanced Systems Group, LLC	Kronick Moskovitz Tiedemann & Girard
Agility Software Solutions, LLC	Law Office of Chirag Shah
Agreeya Solutions, Inc.	Mellon Bank
Alston & Bird, LLP	Mercer Health & Benefits, LLC
American Unit, Inc.	Michael Scales Consulting, LLC
Anthem Blue Cross	Milliman, Inc.
Aon Consulting, Inc.	Milliman Solutions, LLC
Bates White	Morrison & Foerster, LLP
BDO USA, P.C.	Mulkey Consulting, LLC
Belmonte Enterprises, LLC	Northeast Retirement Services
Blue Shield of California	Nossaman, LLP
BM Associates, Inc.	Office of State Publishing
Buchalter	Oliver Wyman Actuarial Consulting, Inc.
Buck Global, LLC	Olson Remcho, LLP
California Creative Solutions, Inc.	One Ergo Net, Inc.
Capio Group	OptumRx
Cogenttec, LLC	Orrick Herrington & Sutcliffe, LLP
Cooperative Personnel Services	Pasanna Consulting Group, LLC
Cornerstone Fitness, Inc.	Pension Benefit Information, LLC
Covid Clinic, Inc.	Peraton State & Local, Inc.
Delegata Corporation	Peter V Lee
Department of Human Resources	Propio Ls, LLC
Department of Industrial Relations	Qualapps, Inc.
Department of Justice	Randle Communications, LLC
Dore Partnership, LLP	Recon Distribution, Inc.
Downey Brand, LLP	Reed Smith, LLP
Durie Tangri, LLP	Ridgeway Partners, LLC
Eaton Interpreting Services, Inc.	Rs3 Consulting
Elite Tech Solutions	Rsc Insurance Brokerage, Inc.
Elynview Corporation	Sard Verbinnen & Co, LLC
EMC Research, Inc.	Sharp Health Plan
Employee Benefits Law Group PC	Shaw HR Consulting, Inc.
Employee Denenis Law Gloup 1 C	Sophus Consulting
Equanim Technologies	State Controller's Office
Equinix, Inc.	State Personnel Board
Fair Political Practices Commission	State Treasurer's Office
First Data Merchant Services Corporation	Steptoe & Johnson, LLP
•	
Funston Advisory Services, LLC	T5 Consulting, Inc.
Global Governance Advisors, LLC	The Educe Group, Inc.
Government Operations Agency	The Highlands Consulting Group, LLC
Health Net of California	The Rand Corporation
Health Services Advisory Group, Inc.	The Regents of the University of California
Ignatius Bau	Toppan Merrill USA, Inc.
illumifin FKA Long Term Care Group, Inc.	Trinity Technology Group, Inc.
Imagination Specialties, Inc.	UnitedHealthCare
J&K Court Reporting, LLC	Van Dermyden Makus Law Corporation
Jlynn Consulting, Inc.	Vantage Consulting Group
K & H Printers-Lithographers, Inc.	Vasquez Benisek & Lindgren, LLP
K&L Gates, LLP	Voya
KearnFord Application Systems Design	Wellington Gregory, LLP
King & Spalding, LLP	West Advanced Technologies, Inc.
Kong Consulting, 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 114-122. This page intentionally left blank.

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Management's Discussion & Analysis (Unaudited)

INTRODUCTION

This section presents Management's Discussion & Analysis of the California Public Employees' Retirement System's (CalPERS or the System) financial performance during the fiscal year ended June 30, 2023. 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 forwardlooking 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 fund to prefund employer contributions, a post-employment benefit fund for retiree health, and supplemental retirement savings plans.

MANAGEMENT DISCUSSION

Strategic Planning

CalPERS began the first year of its 2022-27 Strategic Plan. This plan is a blueprint that guides the enterprise to meet the investment, retirement, and health benefit needs of our members and their families.

The 2022-27 Strategic Plan development was a multi-year effort by CalPERS Board of Administration 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 strategic plan took effect on July 1, 2022, and has five overarching goals:

- 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, riskintelligent, and innovative culture through our team and processes

The strategic planning framework includes the annual Business Plan Initiatives. The 2022-23 Business Plan Initiatives allowed the organization to set priorities and guided in the allocation of resources. It aligned with the 2022-23 budget cycle to accomplish the goals and objectives of the strategic plan. CalPERS identified 35 initiatives to continue the work needed to support the overall strategic direction of the organization.

Key Initiatives

CalPERS continued to enhance its operations as follows:

- CalPERS team began transitioning to the Strategic Asset Allocation (SAA) approved by the Investment Committee in November 2021, effective July 1, 2022. The new SAA features increased allocation to existing private assets, the introduction of Private Debt and Emerging Market Sovereign Bonds segments, and the introduction of strategic leverage. In Fiscal Year 2023-24, we will conduct a mid-cycle Asset Liability Management (ALM) discussion to review and analyze potential further adjustments to the strategic asset allocation and policy benchmarks.
- The Investment team developed nine strategic initiatives that lay the ground work for a best-in-class investment operations centered around the investment portfolio, processes, people and performance:
 - Total Fund Optimization
 - Private Market Innovation Platform
 - Private Debt Strategies
 - Investment Data & Technology
 - Business Process Optimization
 - Stakeholder Engagement
 - People Strategy
 - Active Risk Innovation
 - Sustainable Investment Strategy
- Our Customer Services & Support team developed and incorporated a formal quality assurance program for the Refund Election Application process. Implementation of quality assurance strengthens the integrity of the process, confirms the accuracy of the benefits being paid, ensures compliance with federal and state guidelines, and provides opportunities to offer feedback to team members. Additionally, they transitioned from a paperbased separation letter to an electronic notification, empowering members to access their myCalPERS account to find vital information online and make informed decisions.

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, 2023. 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 singleemployer 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 6.1 percent and realized a time-weighted rate of return of 5.8 percent in Fiscal Year 2022-23. The investment results reflect a globally diversified portfolio with primary drivers including strong performance from public equity and private debt.
- In July 2022, the CalPERS Board of Administration (the Board) approved health plan premiums for calendar year 2023, at an overall average premium increase of 6.75 percent.
- In Fiscal Year 2020-21, the Board of Administration approved a rate increase for all Long-Term Care (LTC) 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 took 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 2022-23 due to continued uncertainty in the long-term care market.
- 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 2022-23.

- In May 2023, the World Health Organization announced the end to the global pandemic. In the first half of 2022-23, economists anticipated a recession in the United States as the world struggled with the post-pandemic economy. Instead, in the United States, a tight labor market, solid household balance sheets, and the deployment of excess savings accumulated during the pandemic supported robust spending. Expectations for firms' earnings commensurately improved from lows in October 2022, providing a tailwind to CalPERS equity returns through the end of the fiscal year.
- The total pension administration cost in Fiscal Year 2021-22 (most recent available) was \$223 per active member and annuitant, compared with \$202 in Fiscal Year 2020-21.

BASIC FINANCIAL STATEMENTS

The June 30, 2023, financial statements separate the funds administered by CaIPERS into two categories: fiduciary funds and proprietary funds. With the exception of the Old Age and Survivors' Insurance Revolving Fund (OASI), CaIPERS' role as a trustee and monitoring of financial position occur in both categories, and a primary focus of fiduciary funds is CaIPERS' 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, 2023, along with comparative total information as of, and for, fiscal year ended June 30, 2022. 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, 2023, along with comparative total information as of, and for, fiscal year ended June 30, 2022. 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 investment 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 singleemployer 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 CalPERSadministered 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 costsharing multiple-employer plan of school employers consisting of non-teaching and non-certified employees. PERF C is a cost-sharing multiple-employer plan of public agencies with generally fewer than 100 active members. Under applicable law, the Board may terminate, or a public agency may terminate, that agency's plan under either PERF A or PERF C. The terminated agency is liable to the System for all costs to fund all benefits under the agency's contract. An unpaid deficit in funding will result in a commensurate reduction in benefits provided under that agency's contract.

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

The PERF net position increased by \$25.2 billion or 5.7 percent from \$439.4 billion as of June 30, 2022, to \$464.6 billion as of June 30, 2023, mainly due to more favorable investment returns this year. Receivables increased \$5.1 billion or 41.1 percent due to higher outstanding investment sales. Investment balances increased by \$21.9 billion from \$444.0 billion as of June 30, 2022, to \$465.9 billion as of June 30, 2023, due to more favorable market conditions. Securities lending cash collateral decreased \$7.6 billion, which includes a decrease of \$6.7 billion due to these funds being utilized for total fund financing and \$0.9 billion due to decrease in demand to borrow securities at year-end. Securities lending obligations decreased \$0.9 billion, also as a result of an overall decrease in demand to borrow securities at year-end. Capital Assets, Net and Other Assets decreased \$22.5 million or 9.4 percent primarily due to increased cumulative depreciation of buildings and equipment.

Total liabilities decreased \$4.3 billion or 13.2 percent primarily due to lower outstanding investment purchases and securities lending obligations. Total net pension and OPEB liabilities increased by \$133.6 million or 16.5 percent. The net pension liability increased due to lower than projected investment returns in Fiscal Year 2021-22. This was partially offset by a decrease in the net OPEB liability as a result of a higher blended discount rate, along with other favorable assumption changes.

Additions to the PERF net position include member contributions, employer contributions, and investment income. Member contributions increased \$512.8 million or 9.9 percent. Employer contributions increased \$1.5 billion or 6.7 percent. Employer contribution rates increased between 2.8 percent and 17.2 percent for state, 2.5 percent for schools, and between 2.1 percent and 3.6 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 gains were \$27.0 billion in Fiscal Year 2022-23, compared to losses of \$36.2 billion in Fiscal Year 2021-22, an increase of \$63.2 billion or 174.7 percent. The current year returns were driven by gains in public equity and private debt. The PERF recognized a MWRR of 6.1 percent for Fiscal Year 2022-23 compared with -7.5 percent for Fiscal Year 2021-22 due to improved market conditions.

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 2022-23, retirement, death, and survivor benefits payments increased \$2.0 billion or 6.8 percent, primarily due to cost-of-living increases in benefit payments, and an increase in the number of retirees and beneficiaries from 775,285 as of June 30, 2022, to 789,016 as of June 30, 2023. Administrative expenses for CaIPERS personnel increased \$25.6 million or 8.6 percent primarily due to an increase in pension and OPEB expenses.

Fiduciary Net Position – PERF (Dollars in Thousands)

	PERF A	PERF B	PERF C			
	Agent	Cost-Sharing Schools	Cost-Sharing Public Agencies	2023 PERF Total	2022 PERF Total	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	\$1,542,859	\$382,196	\$181,203	\$2,106,258	\$726,324	\$1,379,934
Receivables	12,712,456	3,472,530	1,444,683	17,629,669	12,497,049	5,132,620
Investments	341,461,671	84,271,965	40,150,378	465,884,014	444,024,950	21,859,064
Securities Lending Collateral	4,931,339	1,226,084	578,495	6,735,918	14,303,670	(7,567,752)
Capital Assets, Net & Other Assets	158,265	39,205	18,588	216,058	238,588	(22,530)
Total Assets	\$360,806,590	\$89,391,980	\$42,373,347	\$492,571,917	\$471,790,581	\$20,781,336
Deferred Outflows of Resources	\$160,206	\$39,686	\$18,816	\$218,708	\$117,588	\$101,120
Total Assets and Deferred Outflows of						
Resources	\$360,966,796	\$89,431,666	\$42,392,163	\$492,790,625	\$471,908,169	\$20,882,456
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement Benefits, Investment Settlement & Other	\$10,081,538	\$2,494,055	\$1,181,962	\$13,757,555	\$17,230,062	(\$3,472,507)
Net Pension & OPEB Liabilities	689,812	170,880	81,016	941,708	808,112	133,596
Securities Lending Obligations	9,784,822	2,423,890	1,149,190	13,357,902	14,296,470	(938,568)
Total Liabilities	\$20,556,172	\$5,088,825	\$2,412,168	\$28,057,165	\$32,334,644	(\$4,277,479)
Deferred Inflows of Resources	\$113,760	\$28,180	\$13,361	\$155,301	\$214,499	(\$59,198)
Total Liabilities and Deferred Inflows of						
Resources	\$20,669,932	\$5,117,005	\$2,425,529	\$28,212,466	\$32,549,143	(\$4,336,677)
TOTAL NET POSITION RESTRICTED FOR						
PENSION BENEFITS	\$340,296,864	\$84,314,661	\$39,966,634	\$464,578,159	\$439,359,026	\$25,219,133

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

	PERF A	PERF B	PERF C			
	Agent	Cost-Sharing Schools	Cost-Sharing Public Agencies	2023 PERF Total	2022 PERF Total	Increase/ (Decrease)
ADDITIONS						
Member Contributions	\$3,880,584	\$1,334,265	\$457,581	\$5,672,430	\$5,159,664	\$512,766
Employer Contributions	18,147,073	4,457,043	1,623,130	24,227,246	22,702,547	1,524,699
Net Investment Income (Loss)	19,821,691	4,853,728	2,338,265	27,013,684	(36,182,422)	63,196,106
Securities Lending & Other Income	76,353	18,871	8,919	104,143	101,861	2,282
Plan-to-Plan Resource Movement	351	_	137,005	137,356	8,335	129,021
Total Additions	\$41,926,052	\$10,663,907	\$4,564,900	\$57,154,859	(\$8,210,015)	\$65,364,874
DEDUCTIONS						
Retirement, Death & Survivor Benefits	\$23,034,362	\$5,533,811	\$2,516,070	\$31,084,243	\$29,118,354	\$1,965,889
Refund of Contributions	219,148	142,355	29,610	391,113	329,555	61,558
Administrative Expenses	236,679	58,579	27,756	323,014	297,464	25,550
Plan-to-Plan Resource Movement	136,995	10	351	137,356	8,335	129,021
Total Deductions	\$23,627,184	\$5,734,755	\$2,573,787	\$31,935,726	\$29,753,708	\$2,182,018
INCREASE (DECREASE) IN NET POSITION	\$18,298,868	\$4,929,152	\$1,991,113	\$25,219,133	(\$37,963,723)	\$63,182,856
NET POSITION						
Beginning of Year	\$321,997,996	\$79,385,509	\$37,975,521	\$439,359,026	\$477,322,749	(\$37,963,723)
End of Year	\$340,296,864	\$84,314,661	\$39,966,634	\$464,578,159	\$439,359,026	\$25,219,133

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 2022-23 decreased by \$7.0 million or 6.8 percent from the beginning balance of \$102.6 million to \$95.7 million mainly due to a decrease in investment assets. Investments at fair value decreased by \$7.5 million or 7.3 percent, due to higher cash outflows for benefit payments than inflows from contributions. The total liabilities decreased by \$0.3 million or 14.7 percent, mainly due to a decrease in outstanding retirement benefit claims payable.

Additions to the LRF's net position increased to \$0.7 million as a result of a net investment return of \$0.6 million in Fiscal Year 2022-23, which is 104.8 percent higher than the loss of \$12.5 million in the prior year due to favorable market conditions. The LRF recognized a MWRR of 0.6 percent for Fiscal Year 2022-23 compared with negative 10.3 percent for Fiscal Year 2021-22. Member and employer contributions decreased by a combined 49.1 percent due to the final remaining active members retiring during the fiscal year.

Deductions from the LRF are primarily comprised of benefit payments and administrative expenses. Total deductions increased by \$0.5 million or 7.5 percent due to a slight increase 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 2022-23 decreased by \$2.6 million or 5.2 percent from the beginning balance of \$48.9 million to \$46.3 million mainly due to a decrease in investment assets. Investments decreased by \$3.3 million or 6.3 percent, primarily due to higher cash outflows for benefit payments than inflows from contributions. The total liabilities decreased by \$0.3 million or 4.0 percent, mainly due to a decrease in the payable for unclaimed benefits.

Additions to the JRF come from employer, member, and state balancing contributions from the General Fund. The total additions increased \$16.3 million or 8.2 percent primarily due to an increase 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 increased by \$5.8 million or 2.7 percent, and administrative expenses for CalPERS personnel increased by \$0.3 million or 21.1 percent, primarily due to an increase in the pension expense as a result of higher 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 2022-23 increased by \$194.4 million or 9.1 percent from the beginning net position of \$2.1 billion to \$2.3 billion. Receivables increased by \$0.6 million or 6.4 percent primarily due to increased outstanding employers' contributions owed to the fund as of fiscal year ended June 30, 2023. JRF II investments increased by \$193.8 million or 9.1 percent primarily due to a positive return on investments in Fiscal Year 2022-23. Total liabilities increased by \$1.2 million or 20.9 percent primarily due to an increase in the net pension obligation.

Additions to the JRF II net position include member contributions, employer contributions, and investment income. As a result of an increase in the number of active members (1,624 as of June 30, 2022, and 1,657 as of June 30, 2023), member contributions increased by \$2.1 million or 5.9 percent, while employer contributions decreased by \$2.8 million or 3.0 percent. Net investment income increased by \$476.1 million or 146.8 percent from a loss of \$324.4 million in Fiscal Year 2021-22 to a gain of \$151.7 million in Fiscal Year 2022-23 due to favorable market conditions. The JRF II recognized a MWRR of 7.1 percent for Fiscal Year 2022-23 compared with negative 13.4 percent for Fiscal Year 2021-22. Deductions from the JRF II are comprised of benefit payments, refunds, and administrative expenses. There was an increase in benefit payments of \$17.2 million or 25.9 percent due to an increase in benefit recipients from 471 in Fiscal Year 2021-22 to 570 in Fiscal Year 2022-23. Administrative expenses increased by \$0.3 million or 15.4 percent primarily due to an increase in the pension expense as a result of higher net pension liability.

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

	LRF			JRF			JRF II		
	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES									
Cash & Cash Equivalents	\$1,273	\$1,201	\$72	\$3,377	\$3,440	(\$63)	\$1,157	\$906	\$251
Receivables	55	54	1	1,493	1,837	(344)	10,627	9,985	642
Investments	95,863	103,396	(7,533)	48,818	52,096	(3,278)	2,323,510	2,129,716	193,794
Total Assets	\$97,191	\$104,651	(\$7,460)	\$53,688	\$57,373	(\$3,685)	\$2,335,294	\$2,140,607	\$194,687
Deferred Outflows of Resources	\$314	\$175	\$139	\$1,003	\$493	\$510	\$1,187	\$623	\$564
Total Assets and Deferred									
Outflows of Resources	\$97,505	\$104,826	(\$7,321)	\$54,691	\$57,866	(\$3,175)	\$2,336,481	\$2,141,230	\$195,251
LIABILITIES AND DEFERRED									
INFLOWS OF RESOURCES									
Retirement Benefits, Investment									
Settlement & Other	\$191	\$660	(\$469)	\$3,673	\$4,664	(\$991)	\$1,826	\$1,383	\$443
Net Pension & OPEB Liabilities	1,465	1,281	184	3,984	3,311	673	5,029	4,285	744
Total Liabilities	\$1,656	\$1,941	(\$285)	\$7,657	\$7,975	(\$318)	\$6,855	\$5,668	\$1,187
Deferred Inflows of Resources	\$180	\$261	(\$81)	\$707	\$1,005	(\$298)	\$844	\$1,174	(\$330)
Total Liabilities and Deferred Inflows of Resources	\$1,836	\$2,202	(\$366)	\$8,364	\$8,980	(\$616)	\$7,699	\$6,842	\$857
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	\$95,669	\$102,624	(\$6,955)	\$46,327	\$48,886	(\$2,559)	\$2,328,782	\$2,134,388	\$194,394

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

	LRF		JRF			JRF II			
	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)
ADDITIONS									
Member Contributions	\$11	\$23	(\$12)	\$1,697	\$1,956	(\$259)	\$38,669	\$36,529	\$2,140
Employer Contributions	44	85	(41)	208,785	194,960	13,825	89,970	92,773	(2,803)
Net Investment Income (Loss)	601	(12,450)	13,051	2,233	194	2,039	151,745	(324,365)	476,110
Securities Lending & Other Income	2	1	1	3,028	2,305	723	4	3	1
Total Additions	\$658	(\$12,341)	\$12,999	\$215,743	\$199,415	\$16,328	\$280,388	(\$195,060)	\$475,448
DEDUCTIONS Retirement, Death & Survivor									
Benefits	\$7,088	\$6,647	\$441	\$216,271	\$210,492	\$5,779	\$83,573	\$66,382	\$17,191
Refund of Contributions	_	_	_	_	_	_	295	357	(62)
Administrative Expenses	525	436	89	2,031	1,677	354	2,126	1,842	284
Total Deductions	\$7,613	\$7,083	\$530	\$218,302	\$212,169	\$6,133	\$85,994	\$68,581	\$17,413
INCREASE (DECREASE) IN NET POSITION	(\$6,955)	(\$19,424)	\$12,469	(\$2,559)	(\$12,754)	\$10,195	\$194,394	(\$263,641)	\$458,035
NET POSITION									
Beginning of Year	\$102,624	\$122,048	(\$19,424)	\$48,886	\$61,640	(\$12,754)	\$2,134,388	\$2,398,029	(\$263,641)
End of Year	\$95,669	\$102,624	(\$6,955)	\$46,327	\$48,886	(\$2,559)	\$2,328,782	\$2,134,388	\$194,394

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.

During the most recent ALM cycle review led by CaIPERS' investment, actuarial, and financial offices, the capital market assumptions compared the 10-year 2020 expected returns to the prior four-year ALM period. Additionally, the economic assumptions considered the unprecedented impact caused by COVID-19 which included U.S. unemployment levels, U.S. GDP, U.S. and global responses, and economic uncertainty. The CaIPERS 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.

As a result of this review, in November 2021, the Board selected the portfolio with a new asset allocation mix that included an expected volatility of 12.1 percent and a return of 6.8 percent that will guide the fund's investment portfolio for the next four years. 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 Board also approved adding five percent leverage to increase diversification. The effective date for the new strategic asset allocation was July 1, 2022. The current ALM four-year cycle will include capital market assumptions and economic assumptions updates, along with any Board-approved modifications.

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 CaIPERS. In February 2018, the Board approved modifications to the amortization policy that shortens the period over which actuarial gains and losses are amortized from 30 to 20 years and amortizes 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.

The JRF is not affected by the amortization policy, since it 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 as would a prefunded plan, but conversely the plan sponsor bears no investment risk and is unaffected by changes in the discount rate. Without the State General Fund augmentation, the JRF will not be able to pay the accumulated benefit payments due in Fiscal Year 2023-24.

As of June 30, 2022, the funded ratio of the PERF was 70.9 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, except for the Terminated Agency Pool (TAP), which makes up less than 0.03 percent of the PERF liability. As of June 30, 2022, the funded ratio of the JRF II was 99.2 percent. CalPERS calculated the JRF II funded ratio value using a 6.0 percent discount rate. As of June 30, 2022, the funded ratio of the JRF II funded ratio value using a 6.0 percent discount rate. As of June 30, 2022, the funded ratio of the LRF was 109.8 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 CaIPERS administers retirement benefits.

The GASB 67 financial reporting discount rate for the PERF remained at 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. CaIPERS is required to report Plan Fiduciary Net Position as a percentage of Total Pension Liability for the cost-sharing multiple employer plans (PERF B and PERF C) and for the single-employer pension plans (LRF, JRF, and JRF II). The discount rates used for financial reporting for the PERF B, PERF C, LRF, and JRF II are set equal to the unadjusted long-term expected return assumption for each

plan. The discount rates used for funding are net of administrative expenses. The funding discount rate used in the JRF valuation differs from the financial reporting discount rate which is based on 20-year tax-exempt General Obligation Municipal Bonds. The LRF funding discount rate is 4.50 percent, JRS is 3.00 percent, and JRF II is 6.00 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, 2023:

Fund	Funding Discount Rate	Financial Reporting Discount Rate
LRF	4.50%	4.85%
JRF	3.00%	3.86%
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 increased by \$262.9 million or 13.6 percent from the beginning balance of \$1.9 billion to \$2.2 billion mainly due to positive return on investments. Investment balances increased by \$262.8 million or 13.7 percent from Fiscal Year 2021-22 to Fiscal Year 2022-23 due to favorable market conditions. There was a slight increase of \$1.2 million or 6.6 percent in receivables due to more outstanding contributions at year-end. Total liabilities increased by \$1.9 million or 35.2 percent due to higher amounts of outstanding distributions combined with an increase in the net pension obligation.

Member contributions to the fund increased \$4.0 million or 2.9 percent compared with the prior year primarily due to an increase in members from 33,222 in Fiscal Year 2021-22 to 34,624 in Fiscal Year 2022-23.

Total additions increased by \$504.1 million primarily due to investment gains of \$225.1 million in Fiscal Year 2022-23 compared with \$276.4 million in losses in Fiscal Year 2021-22, resulting in a 181.4 percent increase in investment income.

Total deductions in the DCF decreased by \$12.5 million or 10.3 percent. This was primarily due to a decrease of \$12.8 million in participant withdrawals from the plan from \$116.9 million in Fiscal Year 2021-22 to \$104 million in Fiscal Year 2022-23. Administrative expenses for CalPERS personnel increased \$305 thousand or 6.8 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 2021-22.

SUPPLEMENTAL CONTRIBUTIONS PROGRAM FUND (SCPF)

Established on January 1, 2000, the SCPF is a memberfunded program that provides supplemental retirement benefits to State of California employees who are CalPERS members and active judges who are members of the Judges' Retirement System or Judges' Retirement System II. 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 increased \$3.0 million or 2.7 percent from the beginning balance of \$111.3 million to \$114.3 million mainly due to positive return on investments. Total assets increased by \$2.9 million or 2.6 percent mainly due to a increase in investments, and total liabilities decreased by \$38 thousand or 3.6 percent due to lower amounts of outstanding distributions payables.

Total additions increased \$23.1 million primarily due to an investment gain in Fiscal Year 2022-23. Net investment income increased by \$23 million, from a loss of \$14.4 million in Fiscal Year 2021-22 to a gain of \$8.7 million in Fiscal Year 2022-23 due to favorable market conditions.

The primary deductions in the SCPF reflect withdrawals made by participants. Participant withdrawals increased \$0.6 million or 11.2 percent, from \$5.2 million in Fiscal Year 2021-22 to \$5.8 million in Fiscal Year 2022-23. Administrative expenses for CalPERS personnel increased \$9 thousand or 3.6 percent primarily due to a increase in the pension expense as a result of higher net pension liability.

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

	DCF					
	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						. ,
Cash & Cash Equivalents	\$0	\$1	(\$1)	\$0	\$0	\$0
Receivables	18,982	17,808	1,174	573	653	(80)
Investments	2,179,833	1,916,995	262,838	114,764	111,755	3,009
Total Assets	\$2,198,815	\$1,934,804	\$264,011	\$115,337	\$112,408	\$2,929
Deferred Outflows of Resources	\$971	\$496	\$475	\$75	\$43	\$32
Total Assets and Deferred Outflows of Resources	\$2,199,786	\$1,935,300	\$264,486	\$115,412	\$112,451	\$2,961
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement Benefits, Investment Settlement & Other	\$3,039	\$1,815	\$1,224	\$656	\$736	(\$80)
Net Pension & OPEB Liabilities	4,077	3,449	628	369	327	42
Total Liabilities	\$7,116	\$5,264	\$1,852	\$1,025	\$1,063	(\$38)
Deferred Inflows of Resources	\$649	\$927	(\$278)	\$41	\$60	(\$19)
Total Liabilities and Deferred Inflows of Resources	\$7,765	\$6,191	\$1,574	\$1,066	\$1,123	(\$57)
TOTAL NET POSITION RESTRICTED FOR PENSION BENEFITS	\$2,192,021	\$1,929,109	\$262,912	\$114,346	\$111,328	\$3,018

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

		DCF			SCPF		
	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)	
ADDITIONS							
Member Contributions	\$141,451	\$137,437	\$4,014	\$310	\$243	\$67	
Net Investment Income (Loss)	225,075	(276,428)	501,503	8,655	(14,391)	23,046	
Other Income	5,198	6,608	(1,410)	77	88	(11)	
Total Additions	\$371,724	(\$132,383)	\$504,107	\$9,042	(\$14,060)	\$23,102	
DEDUCTIONS							
Administrative Expenses	\$4,780	\$4,475	\$305	\$259	\$250	\$9	
Participant Withdrawals	104,032	116,874	(12,842)	5,765	5,186	579	
Total Deductions	\$108,812	\$121,349	(\$12,537)	\$6,024	\$5,436	\$588	
INCREASE (DECREASE) IN NET POSITION	\$262,912	(\$253,732)	\$516,644	\$3,018	(\$19,496)	\$22,514	
NET POSITION							
Beginning of Year	\$1,929,109	\$2,182,841	(\$253,732)	\$111,328	\$130,824	(\$19,496)	
End of Year	\$2,192,021	\$1,929,109	\$262,912	\$114,346	\$111,328	\$3,018	

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 \$140.1 million at June 30, 2023, an increase of \$55.1 million or 64.7 percent from the net position of \$85.1 million at June 30, 2022.

Additions to the CEPPTF net position are primarily employer contributions and net investment income. Employer contributions were \$51.7 million, an increase of \$15.2 million or 41.8 percent. Contributions are voluntarily determined by the employer's own funding schedule, and there are no longterm contracts for required contributions to the trust. The fund experienced net investment gains of \$4.8 million, an increase of \$14.4 million or 150.7 percent primarily due to favorable market conditions. The CEPPTF recognized a MWRR of 4.7 percent for Fiscal Year 2022-23 compared with negative 13.9 percent for Fiscal Year 2021-22. Deductions from the CEPPTF are primarily administrative expenses. There were \$1.7 million in employer withdrawals in Fiscal Year 2022-23. Fiduciary Net Position – Pension Prefunding Trust Fund (Dollars in Thousands)

	CEPPTF						
			Increase/				
	2023	2022	(Decrease)				
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES							
Cash & Cash Equivalents	\$0	\$0	\$0				
Receivables	5	1,117	(1,112)				
Investments	140,387	84,038	56,349				
Total Assets	\$140,392	\$85,155	\$55,237				
Deferred Outflows of Resources	\$37	\$19	\$18				
Total Assets and Deferred							
Outflows of Resources	\$140,429	\$85,174	\$55,255				
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES							
Investment Settlement & Other	\$200	\$13	\$187				
Net Pension & OPEB Obligation	31	7	24				
Total Liabilities	\$231	\$20	\$211				
Deferred Inflows of Resources	\$75	\$85	(\$10)				
Total Liabilities and Deferred Inflows of Resources	\$306	\$105	\$201				
TOTAL NET POSITION RESTRICTED FOR PENSION	\$140,123	\$85,069	\$55,054				

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

	CEPPTF		
			Increase/
	2023	2022	(Decrease)
ADDITIONS			
Employer Contributions	\$51,713	\$36,474	\$15,239
Net Investment Income (Loss)	4,843	(9,544)	14,387
Other Income	243	154	89
Total Additions	\$56,799	\$27,084	\$29,715
DEDUCTIONS			
Administrative Expenses	\$64	\$43	\$21
Employer Withdrawals	1,681	_	1,681
Total Deductions	\$1,745	\$43	\$1,702
INCREASE IN NET POSITION	\$55,054	\$27,041	\$28,013
NET POSITION			
Beginning of Year	\$85,069	\$58,028	\$27,041
End of Year	\$140,123	\$85,069	\$55,054

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, 2023, increased \$2.3 billion or 15.2 percent from the prior year mainly due to employer contributions and positive return on investments. Receivables increased \$10.4 million or 8.8 percent primarily due to higher outstanding employer contributions pending at year-end. Investments at fair value increased \$2.3 billion or 15.1 percent primarily due to favorable market conditions and employer contributions in Fiscal Year 2022-23.

Total liabilities increased \$1.4 million or 1.5 percent primarily due to an increase in net pension and OPEB liabilities. Total net pension and OPEB liabilities increased by \$1.8 million or 30.0 percent primarily due to an increase in net pension liability partially offset by a decrease in net OPEB liability. Net OPEB liability decreased primarily due to higher blended discount rate, along with other favorable assumption changes. Net pension liability increased primarily due to lower than projected investment returns in Fiscal Year 2021-22. 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 decreased \$282.3 billion or 5.1 percent primarily due to a decrease in employer contributions made directly to the trust. Net investment income increased \$3.3 billion or 140.3 percent primarily due to favorable market conditions. The CERBTF recognized a MWRR of 6.0 percent in Fiscal Year 2022-23, compared with negative 14.0 percent in Fiscal Year 2021-22.

Deductions from the CERBTF net position restricted for OPEB benefits were primarily made up of administrative expenses, employer withdrawals, and OPEB reimbursements to employers (directly from the trust and outside the trust). Employer withdrawals increased by \$94.0 million or 69.4 percent due to a higher amount of balance transfers out of the plan. The reimbursements made directly by employers to health care providers outside the trust amounted to \$3.4 billion for Fiscal Year 2022-23 compared with \$3.2 billion in Fiscal Year 2021-22. Administrative expenses increased \$0.4 million or 8.7 percent primarily due to an increase in pension and OPEB expenses as a result of higher net pension and net OPEB liabilities in Fiscal Year 2022-23.

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

	CERBTF		
	2023	2022	Increase/(Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES			
Cash & Cash Equivalents	\$0	\$1	(\$1)
Receivables	127,756	117,403	10,353
Investments	17,630,610	15,314,595	2,316,015
Total Assets	\$17,758,366	\$15,431,999	\$2,326,367
Deferred Outflows of Resources	\$2,367	\$1,028	\$1,339
Total Assets and Deferred Outflows of Resources	\$17,760,733	\$15,433,027	\$2,327,706
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES			
Other Post-Employment Benefits, Investment			
Settlement & Other	\$91,627	\$91,956	(\$329)
Net Pension & OPEB Liabilities	7,656	5,888	1,768
Total Liabilities	\$99,283	\$97,844	\$1,439
Deferred Inflows of Resources	\$2,106	\$2,889	(\$783)
Total Liabilities and Deferred Inflows of			· · · · ·
Resources	\$101,389	\$100,733	\$656
TOTAL NET POSITION RESTRICTED FOR OPEB	\$17,659,344	\$15,332,294	\$2,327,050

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

		CERBTF		
	2023	2022	Increase/(Decrease)	
ADDITIONS				
Employer Contributions	\$5,220,760	\$5,503,086	(\$282,326)	
Net Investment Income (Loss)	944,515	(2,346,058)	3,290,573	
Other Income	13,723	14,097	(374)	
Total Additions	\$6,178,998	\$3,171,125	\$3,007,873	
DEDUCTIONS				
Administrative Expenses	\$4,608	\$4,241	\$367	
Employer Withdrawals	229,444	135,440	94,004	
OPEB Reimbursements	3,617,896	3,337,707	280,189	
Total Deductions	\$3,851,948	\$3,477,388	\$374,560	
INCREASE (DECREASE) IN NET POSITION	\$2,327,050	(\$306,263)	\$2,633,313	
NET POSITION				
Beginning of Year	\$15,332,294	\$15,638,557	(\$306,263)	
End of Year	\$17,659,344	\$15,332,294	\$2,327,050	

CUSTODIAL FUNDS

REPLACEMENT BENEFIT FUND (RBF)

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

The net position of the RBF increased by \$0.4 million or 249.3 percent, primarily as a result of an increase in interest rates, along with a full year of administrative fees being collected in Fiscal Year 2022-23, compared with only half of the year in Fiscal Year 2021-22. Total assets decreased \$4.4 million, or 21.0 percent, due to a decrease in investments and lower receivables. Total liabilities decreased by \$4.8 million, or 22.9 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 decreased \$5.3 million or 14.3 percent. Other income increased \$0.4 million or 147.2 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 decreased \$5.3 million or 14.3 percent primarily due to a decrease in program participants in Fiscal Year 2022-23 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 2022-23, 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 \$0.9 million or 29.5 percent primarily due to suspending the collection of fees from the participating agencies. Total assets decreased \$0.9 million or 30.6 percent in Fiscal Year 2022-23 due to decreased investments and lower receivables. Total liabilities increased in Fiscal Year 2022-23 by \$0.3 million or 92.9 percent due to an increase in the net pension liability.

Additions to the fund include investment income and fees, which increased by \$7 thousand or 14.6 percent in Fiscal Year 2022-23 primarily due to an increase in interest rates. Deductions from the OASI are primarily costs incurred to administer the fund. Administrative expenses for CaIPERS personnel increased \$0.1 million or 16.9 percent in Fiscal Year 2022-23 primarily due to an increase in the pension expense as a result of higher net pension liability.

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

Fiduciary Net Position – Custodial Funds (Dollars in Thousands)

		RBF			OASI	
	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES						
Cash & Cash Equivalents	\$1	\$1	\$0	\$0	\$1	(\$1)
Receivables	307	319	(12)	43	69	(26)
Investments	16,322	20,732	(4,410)	2,067	2,969	(902)
Total Assets	\$16,630	\$21,052	(\$4,422)	\$2,110	\$3,039	(\$929)
Deferred Outflows of Resources	\$0	\$0	\$0	\$254	\$18	\$236
Total Assets and Deferred Outflows of Resources	\$16,630	\$21,052	(\$4,422)	\$2,364	\$3,057	(\$693)
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Due to Other Funds	\$65	\$63	\$2	\$106	\$92	\$14
Net Pension & OPEB Liabilities	_	_	_	(131)	(442)	311
Unearned Replacement Benefits	16,048	20,841	(4,793)	· _	_	_
Total Liabilities	\$16,113	\$20,904	(\$4,791)	(\$25)	(\$350)	\$325
Deferred Inflows of Resources	\$0	\$0	\$0	\$282	\$420	(\$138)
Total Liabilities and Deferred Inflows of Resources	\$16,113	\$20,904	(\$4,791)	\$257	\$70	\$187
TOTAL NET POSITION RESTRICTED FOR REPLACEMENT	A547		^	AO 407	* 0.007	(*****
BENEFITS/PROGRAM ADMINISTRATION	\$517	\$148	\$369	\$2,107	\$2,987	(\$880)

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

		RBF			OASI	
	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)
ADDITIONS						
Replacement Benefits	\$31,783	\$37,072	(\$5,289)	\$0	\$0	\$0
Investment Income	350	74	276	54	12	42
Other Income	608	246	362	1	36	(35)
Total Additions	\$32,741	\$37,392	(\$4,651)	\$55	\$48	\$7
DEDUCTIONS						
Replacement Benefit Payments	\$31,783	\$37,071	(\$5,288)	\$0	\$0	\$0
Administrative Expenses	589	597	(8)	935	800	135
Total Deductions	\$32,372	\$37,668	(\$5,296)	\$935	\$800	\$135
INCREASE (DECREASE) IN NET POSITION	\$369	(\$276)	\$645	(\$880)	(\$752)	(\$128)
NET POSITION						
Beginning of Year	\$148	\$424	(\$276)	\$2,987	\$3,739	(\$752)
End of Year	\$517	\$148	\$369	\$2,107	\$2,987	(\$880)

ENTERPRISE FUNDS

PUBLIC EMPLOYEES' HEALTH CARE FUND (HCF)

The HCF accounts for the activities of the CalPERS self-funded health plans (PERS Platinum and PERS Gold), 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 \$162.2 million at June 30, 2023, a decrease of \$86.9 million or 115.4 percent from the net position of negative \$75.3 million at June 30, 2022.

Total assets decreased by \$166.6 million or 14.7 percent primarily due to a decrease in receivables and investments. Cash and cash equivalents increased by \$77.4 million or 66.3 percent primarily due to timing. Total liabilities decreased by \$62.5 million or 5.5 percent primarily due to a decrease in thirdparty administrator fees liability combined with a decrease in estimated insurance claims due Fiscal Year 2022-23.

Revenues include premiums collected from members and employers, federal subsidies, and investment income (nonoperating revenue). Premiums collected increased by \$377.6 million or 9.1 percent primarily due to an increase in premium rates. The fund had net investment gain of \$6.6 million primarily due to an increase in interest income as a result of higher short-term interest rate.

Expenses are comprised of claims, investment fees, and costs incurred to oversee the plans. Claim expenses increased by \$256.1 million, or 6.3 percent primarily due to an increase in medical claims. Administrative expenses increased by \$6.4 million or 2.1 percent primarily due to an increase in pension and OPEB expenses.

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 \$40.3 million at June 30, 2023, an increase of \$16.1 million or 28.5 percent from the net position of negative \$56.4 million at June 30, 2022.

Cash and cash equivalents decreased by \$35.8 million or 4.7 percent. Total receivables decreased by \$6.0 million or 17.1 percent primarily due to a decrease in risk adjustment allocation due from the Health Care Fund. Total liabilities decreased by \$46.1 million or 5.5 percent primarily due to a decrease in health premiums that need to be transferred to health carriers at the end of Fiscal Year 2022-23.

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 \$10.2 million or 39.0 percent primarily due to an increase in the administrative fee rate from 0.25 percent in Fiscal Year 2021-22 to 0.33 percent in Fiscal Year 2022-23. Investment income increased by \$8.4 million or 574.2 percent due to an increase in interest rates.

Expenses are comprised of costs incurred to administer the CRF. Administrative expenses increased by \$3.0 million or 11.1 percent primarily due to an increase in pension and OPEB expenses.

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

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. illumifin is the third-party administrator (TPA) for the CaIPERS Long-Term Care Program. CaIPERS has suspended open enrollment in the CaIPERS Long-Term Care Program due to current uncertainty in the longterm care market. Therefore, effective June 17, 2020, and until further notice, the CaIPERS Long-Term Care Program will not be accepting new applications for coverage.

Unrestricted net position of the LTCF decreased by \$284.9 million from beginning net position of negative \$399.3 million to negative \$684.2 million, primarily due to an increase in settlement liability Fiscal Year 2022-23. Total assets decreased by \$45.2 million or 0.9 percent primarily due to less investments in Fiscal Year 2022-23. Investments decreased by \$41.5 million or 0.8 percent. Total liabilities increased by \$243.0 million or 4.6 percent primarily due to an increase in the settlement liability. The LTCF revenues include premiums collected from participants and investment income. 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 2022-23 increased by \$505.4 million or 95.1 percent from the prior year due to less 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 2022-23, total expenses decreased by \$46.5 million or 7.2 percent. Administrative expenses increased by \$1.7 million or 7.3 percent primarily due to an increase in pension expense as a result of higher net pension liability. The estimated liabilities for future policy benefits decreased by \$540.1 million and estimated settlement liability increased by \$764.1 million in Fiscal Year 2022-23.

In March 2023, a judge granted preliminary approval to a new, second settlement of the class action lawsuit involving the CaIPERS LTC Program, known as *Wedding, et al. v. CaIPERS*. Settlement expenses and fees with an estimated amount of \$765 million were recognized in the LTCF with an estimated reduction of \$632 million in future policy benefits related to policy terminations resulting from settlement in Fiscal Year 2022-23. Please refer to Notes 15 for and 16 additional information.

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

Net Position - Enterprise Funds (Dollars in Thousands)

		HCF			CRF			LTCF	
			Increase/			Increase/			Increase/
	2023	2022	(Decrease)	2023	2022	(Decrease)	2023	2022	(Decrease)
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES									
Cash & Cash Equivalents	\$194,218	\$116,807	\$77,411	\$720,365	\$756,132	(\$35,767)	\$12,667	\$16,261	(\$3,594)
Receivables	570,932	692,586	(121,654)	28,895	34,857	(5,962)	707	838	(131)
Investments	205,067	327,465	(122,398)	—	—	_	4,845,303	4,886,776	(41,473)
Total Assets	\$970,217	\$1,136,858	(\$166,641)	\$749,260	\$790,989	(\$41,729)	\$4,858,677	\$4,903,875	(\$45,198)
Deferred Outflows of Resources	\$23,198	\$12,312	\$10,886	\$15,712	\$8,362	\$7,350	\$3,189	\$1,132	\$2,057
Total Assets and Deferred									
Outflows of Resources	\$993,415	\$1,149,170	(\$155,755)	\$764,972	\$799,351	(\$34,379)	\$4,861,866	\$4,905,007	(\$43,141)
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES Claims Payable, Unearned Premiums, Estimated Insurance									
Claims Due & Due to Carriers	\$986,417	\$1,010,017	(\$23,600)	\$498,723	\$475,408	\$23,315	\$52,638	\$37,553	\$15,085
Due to Employers	_	_	-	336	238	98	_	_	_
Other Liabilities	54,253	107,487	(53,234)	228,214	307,483	(79,269)	7,636	6,434	1,202
Estimated Settlement Liability	_	_	_	_	_	_	764,100	_	764,100
Estimated Liability for Future Policy Benefits							4,710,298	5.250.421	(540,123)
Net Pension & OPEB Liabilities	98,431	84,048	14,383	66.293	56,582	9,711	4,710,290 9,255	6,537	2,718
Total Liabilities	\$1,139,101	-	(\$62,451)	\$793,566	\$839,711	(\$46,145)	\$5,543,927	\$5,300,945	\$242,982
Deferred Inflows of Resources	\$16,543	\$22,917	(\$6,374)	\$11,716	\$16,019	(\$4,303)	\$2,123	\$3,328	(\$1,205)
Total Liabilities and Deferred	ψ10,0-0	ΨΖΖ,511	(\U0,074)	ψ11,710	ψ10,015	(\$4,505)	ψ2,120	ψ0,020	(\$1,200)
Inflows of Resources	\$1,155,644	\$1,224,469	(\$68,825)	\$805,282	\$855,730	(\$50,448)	\$5,546,050	\$5,304,273	\$241,777
TOTAL UNRESTRICTED NET POSITION (DEFICIT)	(\$162,229)	(\$75,299)	(\$86,930)	(\$40,310)	(\$56,379)	\$16,069	(\$684,184)	(\$399,266)	(\$284,918)

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

		HCF			CRF		LTCF		
	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)	2023	2022	Increase/ (Decrease)
REVENUES									
Premiums	\$4,515,217	\$4,137,604	\$377,613	\$0	\$0	\$0	\$339,755	\$297,388	\$42,367
Federal Government Subsidies	3,981	728	3,253	—	—	—	—	—	—
Non-Operating Revenues (Losses)	6,623	(39,207)	45,830	9,864	1,463	8,401	(25,885)	(531,313)	505,428
Administrative Fees & Other	37	101	(64)	36,334	26,135	10,199	69	271	(202)
Total Revenues	\$4,525,858	\$4,099,226	\$426,632	\$46,198	\$27,598	\$18,600	\$313,939	(\$233,654)	\$547,593
EXPENSES									
Claims Expense	\$4,319,658	\$4,063,516	\$256,142	\$0	\$0	\$0	\$346,573	\$319,122	\$27,451
Increase (Decrease) in Estimated Liabilities	(36,576)	112,696	(149,272)	_	_	_	(540,123)	3,199,129	(3,739,252)
Federal Government Subsidy									
Recapture	13,745	8,267	5,478	_	—	—	—	—	_
Increase (Decrease) in Estimated Settlement Liability	_	_	_	_	_	_	764,100	(2,899,100)	3,663,200
Non-Operating Expenses	98	135	(37)	—	_	_	2,805	2,408	397
Administrative Expenses	315,863	309,473	6,390	30,129	27,124	3,005	25,502	23,763	1,739
Total Expenses	\$4,612,788	\$4,494,087	\$118,701	\$30,129	\$27,124	\$3,005	\$598,857	\$645,322	(\$46,465)
INCREASE (DECREASE) IN									
UNRESTRICTED NET POSITION	(\$86,930)	(\$394,861)	\$307,931	\$16,069	\$474	\$15,595	(\$284,918)	(\$878,976)	\$594,058
UNRESTRICTED NET POSITION (DEFICIT)									
Beginning of Year	(\$75,299)	\$319,562	(\$394,861)	(\$56,379)	(\$56,853)	\$474	(\$399,266)	\$479,710	(\$878,976)
End of Year	(\$162,229)	(\$75,299)	(\$86,930)	(\$40,310)	(\$56,379)	\$16,069	(\$684,184)	(\$399,266)	(\$284,918)

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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). This page intentionally left blank.

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Basic Financial Statements

STATEMENT OF FIDUCIARY NET POSITION - FIDUCIARY FUNDS

As of June 30, 2023, with Comparative Totals as of June 30, 2022 (Dollars in Thousands)

			Pension Tr	ust 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	\$1,542,859	\$382,196	\$181,203	\$1,273	\$3,377	\$1,157
Receivables						
Members	\$341,640	\$89,411	\$32,437	\$52	\$954	\$1,077
Employers	818,492	521,383	55,470	_	214	9,476
Investment Sales & Other	10,388,565	2,573,449	1,220,097	1	_	7
Interest & Dividends	1,083,244	268,341	127,223	2	325	67
Due from Other Funds	10,901	2,701	1,280	_		
Other Program	69,614	17,245	8,176	_		
Total Receivables	\$12,712,456	\$3,472,530	\$1,444,683	\$55	\$1,493	\$10,627
Total Receivables	\$12,712,430	\$3,472,330	φ1,444,00 3	\$00	\$1,495	\$10,02 <i>1</i>
Investments, at Fair Value						
Short-Term Investments	\$1,071,368	\$264,411	\$125,976	\$184	\$48,818	\$4,411
Public Equity	147,217,695	36,332,993	17,310,423	34,379	÷ 10,010	1,738,697
Fixed Income	90,690,487	22,382,206	10,663,737	61,300	_	580,402
Real Assets	50,395,919	12,437,598	5,925,746		_	
Private Equity/Debt	52,086,202	12,854,757	6,124,496	_	_	_
Total Investments	\$341,461,671	\$84,271,965	\$40,150,378	\$95,863	\$48,818	\$2,323,510
Securities Lending Collateral	\$4,931,339	\$1,226,084	\$578,495	\$00,000 \$0	\$0	\$0
Capital Assets, Net & Other Assets	158,265	39,205	18,588	φ υ	φ υ	φ υ
TOTAL ASSETS	\$360,806,590	\$89,391,980	\$42,373,347	\$97,191	\$53,688	\$2,335,294
Deferred Outflows of Resources	\$160,206	\$39,686	\$18,816	\$314	\$1,003	\$1,187
TOTAL ASSETS AND DEFERRED OUTFLOWS OF	¢100,200	400,000	<i>\</i> \\ \\ \\ \		ψ1,000	ψ1,101
RESOURCES	\$360,966,796	\$89,431,666	\$42,392,163	\$97,505	\$54,691	\$2,336,481
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES						
Retirement & Other Benefits	\$65,733	\$15,820	\$7,193	\$19	\$0	\$0
Investment Purchases & Other	9,680,506	2,398,049	1,136,938		·	·
Due to Members & Employers	10,521	· · ·	· · · _	14	67	13
Net Pension & OPEB Liabilities	689,812	170,880	81,016	1,465	3,984	5,029
Securities Lending Obligations	9,784,822	2,423,890	1,149,190			
Due to Other Funds		_,,		69	224	307
Management & Third-Party Administrator Fees	30	8	4	15		343
Unearned Replacement Benefits		- -	_		_	-
Other Program	324,748	80,178	37,827	74	3,382	1,163
	\$20,556,172	\$5,088,825	\$2,412,168	\$1,656	\$7,657	\$6,855
Deferred Inflows of Resources	\$20,556,172	\$28,180	\$2,412,100	\$1,030	\$7,037	\$844
TOTAL LIABILITIES AND DEFERRED INFLOWS	ψ115,700	ψ20,100	ψ10,001	ψισο	φισι	ψυ++
OF RESOURCES	\$20,669,932	\$5,117,005	\$2,425,529	\$1,836	\$8,364	\$7,699
NET POSITION – RESTRICTED FOR PENSION,						
OTHER POST-EMPLOYMENT, REPLACEMENT BENEFITS, AND PROGRAM ADMINISTRATION	\$340,296,864	\$84,314,661	\$39,966,634	\$95,669	\$46,327	\$2,328,782

Pension Tr	rust Funds	Investment Trust Fund	Other Post- Employment Benefit Trust Fund	Custodial Funds	Totals	
DCF	SCPF	CEPPTF	CERBTF	RBF & OASI ¹	2023	2022
\$0	\$0	\$0	\$0	\$1	\$2,112,066	\$731,875
\$5,152	\$546	\$0	\$0	\$46	\$471,315	\$519,793
<i>40,102</i>		÷*	127,532	119	1,532,686	1,212,390
_	_	_		_	14,182,119	9,715,311
45	27	5	224	158	1,479,661	1,077,999
_	_	_	_	_	14,882	13,230
13,785	_	_	_	27	108,847	107,571
\$18,982	\$573	\$5	\$127,756	\$350	\$17,789,510	\$12,646,294
\$196,459	\$15,479	\$298	\$58,101	\$18,389	\$1,803,894	\$16,646,810
1,595,129	61,977	64,017	12,256,248	—	216,611,558	203,028,047
388,245	37,308	76,072	5,316,261	—	130,196,018	117,174,474
-	—	-	—	-	68,759,263	70,674,894
					71,065,455	56,237,017
\$2,179,833	\$114,764	\$140,387	\$17,630,610	\$18,389	\$488,436,188	\$463,761,242
\$0	\$0	\$0	\$0	\$0	\$6,735,918	\$14,303,670
			<u> </u>		216,058	238,588
\$2,198,815	\$115,337	\$140,392	\$17,758,366	\$18,740	\$515,289,740	\$491,681,669
\$971	\$75	\$37	\$2,367	\$254	\$224,916	\$120,483
\$2,199,786	\$115,412	\$140,429	\$17,760,733	\$18,994	\$515,514,656	\$491,802,152
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* •	* •	A 4 T A	* • -------------	* •	A 170.010	A0 574 000
\$0	\$0	\$170	\$87,977	\$0	\$176,912	\$2,574,288
_		—	—	—	13,215,493	14,598,521
1,464	565				12,644	10,673
4,077	369	31	7,656	(131)	964,188	826,218
					13,357,902	14,296,470
573	40	12	1,082	171	2,478	2,329
1,002	51	18	2,568	16.049	4,039	3,326
_	—	_	—	16,048	16,048 447,372	20,841 142,307
\$7,116	\$1,025		\$99,283		\$28,197,076	\$32,474,973
\$649	\$1,023 \$41	\$75	\$2,106	\$10,088	\$160,185	\$221,320
ψ0+3	ψŦΙ	ψιΟ	ψ2,100	ψ202	ψ100,100	ΨΖΖ 1,0ΖΟ
\$7,765	\$1,066	\$306	\$101,389	\$16,370	\$28,357,261	\$32,696,293
\$2,192,021	\$114,346	\$140,123	\$17,659,344	\$2,624	\$487,157,395	\$459,105,859

(1) For a breakout of the Custodial Funds (RBF and OASI), please see the Other Supplementary Information beginning on page 107.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION - FIDUCIARY FUNDS

For the Fiscal Year Ended June 30, 2023, with Comparative Totals for the Fiscal Year Ended June 30, 2022 (Dollars in Thousands)

	Pension Trust Funds					
	PERF A	PERF B	PERF C			
			PERFC			
	Agent	Schools Cost-Sharing	Agency Cost-Sharing	LRF	JRF	JRF II
ADDITIONS						
Retirement and OPEB Contributions						
Members	\$3,880,584	\$1,334,265	\$457,581	\$11	\$1,697	\$38,669
Employers	18,147,073	4,457,043	1,623,130	44	2,372	89,970
Replacement Benefits	—	_		-	—	_
State of California General Fund	—	_		-	206,413	_
Employer Contributions Direct – OPEB	-	—	—	-	—	—
Employer Contributions Outside of Trust – OPEB	—	_	_	-	_	
Total Retirement and OPEB Contribution	\$22,027,657	\$5,791,308	\$2,080,711	\$55	\$210,482	\$128,639
Investment Income						
Net Appreciation/(Depreciation) in Fair Value of						
Investments	\$15,252,991	\$3,721,971	\$1,801,688	\$667	\$0	\$152,253
Interest & Amortization	1,918,032	475,134	225,267	6	2,242	183
Dividends	3,647,112	903,461	428,339		_	_
Other Investment Income/(Loss)	(9,469)	(2,345)	(1,112)	9	—	254
Less Investment Costs:						
Management & Performance Fees	(649,767)	(160,960)	(76,313)	(29)	—	(644)
Other	(337,208)	(83,533)	,	(52)	(9)	(301)
Net Investment Income	\$19,821,691	\$4,853,728	\$2,338,265	\$601	\$2,233	\$151,745
Securities Lending Income	\$415,967	\$103,043	\$48,854	\$0	\$0	\$0
Securities Lending Expense	(346,992)	(85,957)	,	-	_	
Net Securities Lending	\$68,975	\$17,086	\$8,101	\$0	\$0	\$0
Other Income	\$7,378	\$1,785	\$818	\$2	\$3,028	\$4
Plan-to-Plan Resource Movement	351		137,005			
TOTAL ADDITIONS	\$41,926,052	\$10,663,907	\$4,564,900	\$658	\$215,743	\$280,388
DEDUCTIONS						
Retirement, Death & Survivor Benefits	\$23,034,362	\$5,533,811	\$2,516,070	\$7,088	\$216,271	\$83,573
Replacement Benefit Payments	_	_	—	-	—	_
Refund of Contributions	219,148	142,355	29,610	-	—	295
Administrative Expenses	236,679	58,579	27,756	525	2,031	2,126
Plan-to-Plan Resource Movement	136,995	10	351		—	_
Participant & Employer Withdrawals	-	—	—	-	—	—
OPEB Reimbursements Direct	-	—	—	-	—	—
OPEB Reimbursements – Outside Trust	_	_	_	_	_	
TOTAL DEDUCTIONS	\$23,627,184	\$5,734,755	\$2,573,787	\$7,613	\$218,302	\$85,994
INCREASE (DECREASE) IN NET POSITION	\$18,298,868	\$4,929,152	\$1,991,113	(\$6,955)	(\$2,559)	\$194,394
NET POSITION						
Beginning of Year	\$321,997,996	\$79,385,509	\$37,975,521	\$102,624	\$48,886	\$2,134,388
End of year	\$340,296,864	\$84,314,661	\$39,966,634	\$95,669	\$46,327	\$2,328,782

Pension Tr	rust Funds	Investment Trust Fund	Other Post- Employment Benefit Trust Fund	Custodial Funds	Tot	als
DCF	SCPF	CEPPTF	CERBTF	RBF & OASI ¹	2023	2022
DCF	3677	CEPPIF	CERDIF	KDF & UASI	2023	2022
\$141,451	\$310	\$0	\$0	\$0	\$5,854,568	\$5,335,852
· · · –		51,713			24,371,345	22,833,792
_	_	_	_	31,783	31,783	37,072
—	—	—	—	—	206,413	193,047
-	—	—	1,776,322	—	1,776,322	2,344,227
—	—		3,444,438	—	3,444,438	3,158,859
\$141,451	\$310	\$51,713	\$5,220,760	\$31,783	\$35,684,869	\$33,902,849
¢010.077	¢0 077	¢1 0C1	¢047 700	\$0	<u> </u>	(AE 0E4 704)
\$219,977 5,901	\$8,377 332	\$4,861 21	\$947,792 1,367	\$0 404	\$22,110,577 2,628,889	(\$45,854,704) 2,813,185
5,901	552	21	1,307	404	4,978,912	5,174,535
(1)	2	15	2,194	_	(10,453)	46,800
(1)	2	10	2,104		(10,+00)	+0,000
(392)	(21)	(25)	(4,758)	_	(892,909)	(928,708)
(410)	(35)	(29)	(2,080)	—	(463,261)	(416,486)
\$225,075	\$8,655	\$4,843	\$944,515	\$404	\$28,351,755	(\$39,165,378)
\$0	\$0	\$0	\$0	\$0	\$567,864	\$136,077
			_		(473,702)	(42,997)
\$0	\$0	\$0	\$0	\$0	\$94,162	\$93,080
\$5,198	\$77	\$243	\$13,723	\$609	\$32,865	\$32,319
	-				137,356	8,335
\$371,724	\$9,042	\$56,799	\$6,178,998	\$32,796	\$64,301,007	(\$5,128,795)
\$0	\$0	\$0	\$0	\$0	\$31,391,175	\$29,401,875
—	—	_	_	31,783	31,783	37,071
—	—	—	—	—	391,408	329,912
4,780	259	64	4,608	1,524	338,931	311,825
			—	_	137,356	8,335
104,032	5,765	1,681	229,444	_	340,922	257,500
_	—	_	173,458	_	173,458	178,848
	\$6,024	\$1,745	3,444,438 \$3,851,948	\$33,307	3,444,438 \$36,249,471	3,158,859 \$33,684,225
\$262,912	\$3,018	\$55,054	\$2,327,050	(\$511)	\$28,051,536	(\$38,813,020)
.				• • • • •		
\$1,929,109	\$111,328	\$85,069	\$15,332,294	\$3,135	\$459,105,859	\$497,918,879
\$2,192,021	\$114,346	\$140,123	\$17,659,344	\$2,624	\$487,157,395	\$459,105,859

(1) For a breakout of the Custodial Funds (RBF and OASI), please see the Other Supplementary Information beginning on page 107.

STATEMENT OF NET POSITION - PROPRIETARY FUNDS

As of June 30, 2023, with Comparative Totals as of June 30, 2022 (Dollars in Thousands)

	Pro	oprietary Fund	s	Tota	als
	HCF	CRF	LTCF	2023	2022
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES					
Current Assets					
Cash & Cash Equivalents	\$0	\$0	\$12,555	\$12,555	\$16,089
Short-Term Investments	194,218	720,365	112	914,695	873,111
Receivables					
Members & Employers	\$0	\$21,896	\$706	\$22,602	\$21,822
Health Carriers & Pharmacy Benefit Managers	384,197	1,798	_	385,995	402,734
Interest & Dividends	1,355	5,196	1	6,552	1,532
Due from Other Funds	185,369	5	_	185,374	302,182
Other Receivables	11	-		11	11
Total Receivables	\$570,932	\$28,895	\$707	\$600,534	\$728,281
Subtotal Current Assets	\$765,150	\$749,260	\$13,374	\$1,527,784	\$1,617,481
Noncurrent Assets					
Investments, at Fair Value					
Public Equity	\$0	\$0	\$1,674,273	\$1,674,273	\$1,617,307
Fixed Income	₄₀ 205,067	φΟ	3,171,030	3,376,097	3,596,934
Total Investments	\$205,007 \$205,067	\$0	\$4,845,303	\$5,050,370	\$5,214,241
Subtotal Noncurrent Assets	\$205,067	\$0 \$0	\$4,845,303	\$5,050,370	\$5,214,241
TOTAL ASSETS	\$970,217	\$749,260	\$4,858,677	\$6,578,154	\$6,831,722
Deferred Outflows of Resources	\$23,198	\$15,712	\$3,189	\$42,099	\$21,806
Total Assets and Deferred Outflows of Resources	\$993,415	\$764,972	\$4,861,866	\$6,620,253	\$6,853,528
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES					
Current Liabilities					
Claims Payable	\$234,431	\$0	\$27,157	\$261,588	\$268,306
Unearned Premiums	169,882		25,481	195,363	160,584
Due to Employers	_	336	_	336	238
Estimated Insurance Claims Due	582,104	-	—	582,104	618,680
Estimated Liability for Future Policy Benefits Short-Term	—	-	14,555	14,555	—
Due to Carriers	—	498,723	—	498,723	475,408
Due to Other Funds	6,203	188,952	2,624	197,779	313,084
Investment Purchases & Other	<u> </u>	-	7	7	
Estimated Settlement Liability	—	-	764,100	764,100	—
Management & Third-Party Administrator Fees	48,050	-	2,205	50,255	92,866
Other	—	39,262	2,800	42,062	15,454
Total Current Liabilities	\$1,040,670	\$727,273	\$838,929	\$2,606,872	\$1,944,620
Long-Term Liabilities					
Estimated Liability for Future Policy Benefits	\$0	\$0	\$4,695,743	\$4,695,743	\$5,250,421
Net Pension & OPEB Liabilities	98,431	66,293	9,255	173,979	147,167
Total Long-Term Liabilities	\$98,431	\$66,293	\$4,704,998	\$4,869,722	\$5,397,588
TOTAL LIABILITIES	\$1,139,101	\$793,566	\$5,543,927	\$7,476,594	\$7,342,208
Deferred Inflows of Resources	\$16,543	\$11,716	\$2,123	\$30,382	\$42,264
Total Liabilities and Deferred Inflows of Resources	\$1,155,644	\$805,282	\$5,546,050	\$7,506,976	\$7,384,472
TOTAL UNRESTRICTED NET POSITION (DEFICIT)	(\$162,229)	(\$40,310)	(\$684,184)	(\$886,723)	(\$530,944)

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

For the Fiscal Year Ended June 30, 2023, with Comparative Totals for the Fiscal Year Ended June 30, 2022 (Dollars in Thousands)

	P	Proprietary Fund	s	Tot	als
	HCF	CRF	LTCF	2023	2022
Operating Revenues					
Premiums	\$4,515,217	\$0	\$339,755	\$4,854,972	\$4,434,992
Federal Government Subsidies	3,981	—	—	3,981	728
Administrative Fees Earned	—	36,214	—	36,214	26,002
Other	37	120	69	226	505
Total Operating Revenues	\$4,519,235	\$36,334	\$339,824	\$4,895,393	\$4,462,227
Operating Expenses					
Claims Expense	\$4,319,658	\$0	\$346,573	\$4,666,231	\$4,382,638
Increase (Decrease) in Estimated Liabilities	(36,576)	φ υ	(540,123)	(576,699)	3,311,825
Federal Government Subsidy Recapture	13,745	_	(010,120)	13,745	8,267
Increase (Decrease) in Estimated Settlement Liability		_	764,100	764,100	(2,899,100)
Administrative Expenses	315,863	30,129	25,502	371,494	360,360
Total Operating Expenses	\$4,612,690	\$30,129	\$596,052	\$5,238,871	\$5,163,990
OPERATING INCOME (LOSS)	(\$93,455)	\$6,205	(\$256,228)	(\$343,478)	(\$701,763)
Non-Operating Revenues	(0.0.04)	¢0.	(07.045)	(000 700)	(1000)
Net Appreciation/(Depreciation) in Fair Value of Investments Interest, Dividends & Other Investment Income	(\$2,381) 9,004		(\$27,345)	(\$29,726)	(\$572,690)
Total Non-Operating Revenues/Losses	9,004 \$6,623	9,864 \$9,864	1,460 (\$25,885)	20,328 (\$9,398)	3,633 (\$569,057)
	φ0,023	\$ 3,004	(\$23,003)	(49,590)	(\$303,037)
Non-Operating Expenses					
Management Fees	\$35	\$0	\$1,401	\$1,436	\$1,677
Other Investment Expenses	63	—	1,404	1,467	866
Total Non-Operating Expenses	\$98	\$0	\$2,805	\$2,903	\$2,543
NON-OPERATING INCOME (LOSS)	\$6,525	\$9,864	(\$28,690)	(\$12,301)	(\$571,600)
CHANGE IN UNRESTRICTED NET POSITION	(\$86,930)	\$16,069	(\$284,918)	(\$355,779)	(\$1,273,363)
TOTAL UNRESTRICTED NET POSITION (DEFICIT)					
Beginning of Year	(\$75,299)	(\$56,379)	(\$399,266)	(\$530,944)	\$742,419
End of Year	(\$162,229)	(\$40,310)	(\$684,184)	(\$886,723)	(\$530,944)

STATEMENT OF CASH FLOWS – PROPRIETARY FUNDS

For the Fiscal Year Ended June 30, 2023, with Comparative Totals for the Fiscal Year Ended June 30, 2022 (Dollars in Thousands)

	Pro	oprietary Funds		Tota	s
	HCF	CRF	LTCF	2023	2022
Cash Flows From Operating Activities					
Premiums Collected	\$4,649,888	\$0	\$351,556	\$5,001,444	\$4,437,461
Federal Government Subsidies	3,981	-	_	3,981	728
Federal Government Subsidy Recapture	(13,745)		_	(13,745)	(8,267)
Administrative Fees Collected	_	36,334	_	36,334	26,135
Claims Paid	(4,329,874)	-	(342,175)	(4,672,049)	(4,381,391)
Administrative Expenses Paid	(360,839)	(31,890)	(25,550)	(418,279)	(311,682)
Other (Payments) Receipts, Net	37	(46,018)	(526)	(46,507)	32,872
Net Cash Used for Operating Activities	(\$50,552)	(\$41,574)	(\$16,695)	(\$108,821)	(\$204,144)
Cash Flows From Investing Activities					
Net Sales of Investments	\$120,017	\$0	\$14,128	\$134,145	\$207,801
Net Change in Short-Term Investments	(77,412)	35,766	62	(41,584)	6,688
Interest & Dividends Received	8,042	5,807	1,035	14,884	2,363
Other Investment (Payments) Receipts, Net	(96)		(2,062)	(2,158)	(2,061)
Net Cash Provided by Investing Activities	\$50,551	\$41,573	\$13,163	\$105,287	\$214,791
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NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(\$1)	(\$1)	(\$3,532)	(\$3,534)	\$10,647
Cash & Cash Equivalents, Beginning of Year	\$1	\$1	\$16,087	\$16,089	\$5,442
Cash & Cash Equivalents, End of Year	\$0	\$0	\$12,555	\$12,555	\$16,089
Reconciliation of Operating Income (Loss) to Net Cash Used for Operating Activities Operating Income (Loss) Changes in Assets and Liabilities:	(\$93,455)	\$6,205	(\$256,229)	(\$343,479)	(\$701,763)
Receivables:		(0.4.0)	(00	(=00)	
Members & Employers		(912)	132	(780)	3,785
Health Carriers & Pharmacy Benefit Managers	16,945	(206)	—	16,739	(97,737)
Due from Other Funds	105,671	11,137	_	116,808	60,127
Claims Payable	(10,216)	-	3,498	(6,718)	1,246
Unearned Premiums	23,192	_	11,588	34,780	20,180
Due to Employers		98	—	98	(3)
Estimated Insurance Claims Due	(36,576)			(36,576)	112,696
Net Pension & OPEB Liabilities	(2,877)	(1,942)	(544)	(5,363)	(17,633)
Estimated Liability for Future Policy Benefits Short-Term	_		14,555	14,555	(54,879)
Estimated Liability for Future Policy Benefits Long-Term	-	-	(554,678)	(554,678)	3,254,008
Estimated Settlement Liability	_	-	(554,678) 764,100	764,100	(2,900,000)
Estimated Settlement Liability Due to Carriers	_ _ _	 23,315 (105,100)	764,100	764,100 23,315	(2,900,000) 100,411
Estimated Settlement Liability Due to Carriers Due to Other Funds	 (10,325)	 23,315 (105,490)	764,100 — 510	764,100 23,315 (115,305)	(2,900,000) 100,411 (58,199)
Estimated Settlement Liability Due to Carriers Due to Other Funds Management & Third-Party Administrator Fees	 (10,325) (42,911)	(105,490)	764,100 	764,100 23,315 (115,305) (42,925)	(2,900,000) 100,411 (58,199) 64,383
Estimated Settlement Liability Due to Carriers Due to Other Funds Management & Third-Party Administrator Fees Other	(42,911)	(105,490) — 26,221	764,100 — 510 (14) 387	764,100 23,315 (115,305) (42,925) 26,608	(2,900,000) 100,411 (58,199) 64,383 9,234
Estimated Settlement Liability Due to Carriers Due to Other Funds Management & Third-Party Administrator Fees	• • •	(105,490)	764,100 	764,100 23,315 (115,305) (42,925)	(2,900,000) 100,411 (58,199) 64,383
Estimated Settlement Liability Due to Carriers Due to Other Funds Management & Third-Party Administrator Fees Other	(42,911)	(105,490) — 26,221	764,100 — 510 (14) 387	764,100 23,315 (115,305) (42,925) 26,608	(2,900,000) 100,411 (58,199) 64,383 9,234

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 plan)
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 multipleemployer 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, 2023, the PERF had the following participating employers:

Employers for PERF

PERF Employers	2023
PERF A	
State	1
Public Agencies ¹	307
Total	308
PERF B School Districts and Charter Schools	1,332
PERF C	
Public Agencies ¹	1,288
Total Employers	2,928

(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. There are no active members in the fund. 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 shortterm 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 2023-24.

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, 2023, 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	423,937	66,549	505,719	241,788	1,237,993
PERF B					
Schools Cost-					
Sharing	218,292	31,140	365,379	247,905	862,716
PERF C					
Public Agency					
Cost-					
Sharing	43,228	5,870	52,964	31,003	133,065
Total PERF	685,457	103,559	924,062	520,696	2,233,774
LRF	88	101	_	2	191
JRF	1,125	614	80	_	1,819
JRF II	503	67	1,657	_	2,227
Total	687,173	104,341	925,799	520,698	2,238,011

(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, 2023, were as follows:

Required Contribution Rates

	Employee Contribution Rates		Employer - Required Contribution
	Classic	PEPRA	Rates
PERF A – Agent			
State:			
Miscellaneous –		.	•••
First Tier	5% - 11%	6% - 11%	32.00%
Miscellaneous –	0.750/	0.750/	20.000/
Second Tier Industrial – First	3.75%	3.75%	32.00%
Tier	5% - 11%	6% - 11%	21.00%
Industrial –	570-1170	070 - 1170	21.0070
Second Tier	3.75%	3.75%	21.00%
Safety	11% - 11.50%	11% - 11.50%	22.75%
Peace Officers			
and Firefighters	8% - 13%	12% - 13%	50.00%
California			
Highway Patrol	13.50%	13.50%	67.54%
Public Agency:			
Miscellaneous	5% - 8%	5.75% - 8.75%	varies ¹
0.11	70/ 00/		. 1
Safety	7% - 9%	10% - 15.50%	varies ¹
PERF B – Schools			
Cost-Sharing			
Classified School	7%	8%	25.37%
PERF C – Public			
Agency Cost- Sharing			
Public Agency:			
T ublic Agency.			
Miscellaneous	2% - 7.96%	4.50% - 8%	varies ¹
	6.97% -		
Safety	14.25%	10% - 16.50%	varies ¹
LRF	4% or 8%	N/A	31.80 %
JRF	8%	N/A	8% ²
JRF II	8%	16%	23.23 %

(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 2022-23, an additional State contribution of \$198,557,517 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. Participant contributions are made on a before-tax or after-tax basis (depending on agency adoption) and are made voluntarily. Participants may contribute up to the limit established under Internal Revenue Code (IRC) section 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 active judges who are members of the Judges' Retirement System or Judges' Retirement System II, 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, 2023, membership in the defined contribution plans consisted of the following:

Members in DCF and SCPF

Plan	Employers	Members
DCF	843	34,624
SCPF	1	6,091

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 89 participating employers. Of the 89 participating employers, 68 employers have contributed assets in the CEPPTF as of June 30, 2023. 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 606 participating employers. Of the 606 participating employers, 589 employers have contributed assets in the CERBTF as of June 30, 2023. 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, CaIPERS 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, 2023:

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 postemployment 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, 2023:

Target Asset Allocation

Asset Class	PERF A	PERF B	PERF C	LRF	JRF	JRF II
Public Equity	42%	42%	42%	18%	_	51%
Private Equity	13%	13%	13%	—	—	_
Fixed Income	30%	30%	30%	45%	—	21%
Real Assets	15%	15%	15%	—	—	_
Private Debt	5%	5%	5%	—	—	_
Strategic						
Leverage	(5%)	(5%)	(5%)	—	—	—
Liquidity	—	-	—	—	100%	—
Inflation						
Assets	—	-	—	20%	—	5%
REITs	—	-	—	14%	_	20%
Commodities	—	-	_	3%	—	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	49%	34%	23%
Fixed Income	23%	41%	51%
Inflation Assets	5%	5%	9%
REITs	20%	17%	14%
Commodities	3%	3%	3%
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	37%	21%
Fixed Income	44%	61%
Inflation Assets	5%	9%
REITs	14%	9%
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, liquidity, 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, 2022, to conform to the presentation as, of and for, the fiscal year ended June 30, 2023.

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, 2022, 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, 2023, CalPERS has adjusted its proportionate share of the state's net pension and OPEB liabilities totaling approximately \$631 million and \$507 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 \$185 million as of June 30, 2023. 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.

NEW ACCOUNTING PRONOUNCEMENTS

GASB Statement No. 96 Subscription-Based Information Technology Arrangements (SBITA) (GASB 96), was effective in Fiscal Year 2022-23. This statement identifies a SBITA as a contract that conveys control of the right to use another party's (a SBITA vendor's) IT software, alone or in combination with tangible capital assets (the underlying IT assets), as specified in the contract for a period of time (excluding SBITAs that are 12 months or less), in an exchange or exchange-like transaction. GASB 96 establishes that a SBITA results in a right-to-use subscription asset-an intangible asset-and a corresponding subscription liability; provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and requires note disclosures regarding a SBITA. CalPERS has determined GASB 96 will have an immaterial impact to financial reporting. However, CalPERS will continue to track SBITAs with respect to the requirements of GASB 96 for the future.

The objectives of GASB Statement No. 99 *Omnibus 2022* (GASB 99) 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. CalPERS implemented relative portions of GASB 99 in Fiscal Year 2022-23, while continuing to track requirements in GASB 99 deemed not material to financial reporting.

3. CASH AND CASH EQUIVALENTS

Cash and cash equivalents of approximately \$2.1 billion at June 30, 2023, 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 CaIPERS 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, 2023, CaIPERS had no specific plans or intentions to sell investments at amounts different from NAV.

The following table presents a summary of CaIPERS investments by type as of June 30, 2023, at fair value:

CalPERS – Investments at Fair Value¹ (Dollars in Thousands)

	Fair Value June 30, 2023	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	\$122,879,269	\$122,879,269	\$0	\$0
International Equity	77,086,453	77,086,453	_	_
Total Public Equity	\$199,965,722	\$199,965,722	\$0	\$0
Global Debt	*** ***	A A		A
Asset-Backed ²	\$22,993,983	\$0	\$21,961,188	\$1,032,795
Bank Loans	277,002	-	277,002	—
International Debt	7,340,106	-	7,340,106	—
Municipal/Public Bonds	77,547	-	77,547	—
Sovereign Debt	15,478,737	-	15,478,737	—
U.S. Corporate	28,470,484	-	28,470,484	-
U.S. Treasuries, STRIPS and TIPS	14,777,216	_	14,777,216	
Total Global Debt	\$89,415,075	\$0	\$88,382,280	\$1,032,795
Derivatives				
Futures	\$243,234	\$243.234	\$0	\$0
Rights & Warrants	363	· · · · · ·	363	
Forward Contract Assets	1,353,703	_	1,353,703	_
Forward Contract (Liabilities)	(698,760)	_	(698,760)	_
Swap Assets	40,438	_	40,438	_
Swap (Liabilities)	(165,168)	_	(165,168)	_
Total Derivatives	\$773,810	\$243,234	\$530,576	\$0
Other	* 05 000 000	^	A05 000 000	^
Rule 144(a) Securities	\$35,292,860	\$0	\$35,292,860	\$0
Securitized Assets	657,706	-	—	657,706
Private Equity ³	11,950			11,950
Total Other	\$35,962,516	\$0	\$35,292,860	\$669,656
Total Investments by Fair Value Level	\$326,117,123	\$200,208,956	\$124,205,716	\$1,702,451
Investments Measured at NAV				
Commingled/Pooled Funds	\$27,671,598			
Real Assets	68,759,263			
Private Equity ³	60,138,102			
Private Debt	10,915,404			
Other Investments	31,172			

Total Investments Measured at Fair Value

Total Investments Measured at NAV

\$493,632,662

\$167,515,539

(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

(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 guoted 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)

		Unfunded
Asset class	Fair Value	Commitments
Commingled/Pooled Funds	\$27,671,598	\$0
Real Assets	68,759,263	5,225,908
Private Equity	60,138,102	34,629,605
Private Debt/Other		
Investments	10,946,576	18,882,994
Total	\$167,515,539	\$58,738,507

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.

Private Debt strategies include direct lending, specialty lending, real estate financing, liquidity financing, and private structure products.

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.
- 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.

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 CaIPERS and other investors and through the acquisition of debt. Real asset investments of approximately \$68.8 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, 2023:

Money-Weighted Rate of Return

Plan	Rate of Return
PERF A	
Agent	6.1%
PERF B	
Schools Cost-Sharing	6.1%
PERF C	
Public Agency Cost-Sharing	6.1%
LRF	0.6%
JRF	4.5%
JRF II	7.1%
CERBTF	6.0%
CEPPTF	4.7%

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), CaIPERS discloses investments of all CaIPERS-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, 2023, 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 CaIPERS trusts invest in commingled funds, the assets within the fund are held in the name of the trustee of the fund and not in CaIPERS' 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. CaIPERS investment policy and policy-related procedures require the optionadjusted duration of the fixed income segments to stay within specified bands of their respective benchmarks. 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, emerging market sovereign debt, and U.S. Treasuries. The value, liquidity, and related income of these securities are sensitive to changes in economic and market conditions, changes in interest rates, shifts in the market's perception of the issuers, changes in credit quality, supply and demand, and term to maturity. The following table presents the weighted average effective duration for CalPERS investments subject to interest rate risk as of June 30, 2023:

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

Debt Security Type	Portfolio Weighted Average Effective Duration	Fair Value June 30, 2023	Percent of Debt Securities
Corporate	8.21	\$55,036,834	44.48%
U.S. Treasuries and Agencies:			
U.S. Treasury Bonds	16.33	11,818,496	9.55%
U.S. Treasury Notes	7.67	2,897,713	2.34%
U.S. Treasury Strips	9.49	61,007	0.05%
Mortgages	5.11	22,938,777	18.54%
Asset-Backed	0.23	14,151,142	11.43%
Foreign Government	7.02	17,579,271	14.21%
Municipals	11.42	77,547	0.06%
No Effective Duration:			
Asset-Backed	N/A	\$258,955	0.21%
Mortgages	N/A	27,294	0.02%
Corporate	N/A	119,855	0.10%
Swaps	N/A	(1,230,463)	(0.99%)
Total		\$123,736,428	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, 2023, the pooled money investment account with the State Treasury totaled approximately \$1.2 billion. The SSGA STIF totaled approximately \$5.8 billion, and the SSGA GSTIF totaled approximately \$0.8 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, 2023, the weighted average maturity was 260 days for the State Treasury pool, 25 days for the SSGA STIF, and 22 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, 2023:

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

SSGA Fund	Fair Value June 30, 2023	Credit Rating ¹	Weighted Average Maturity ²
Bloomberg Barclays Long Liability			
Index	\$7,962,032	Aa3	14.72
1-10 Year U.S. TIPS Index	8,621	Aaa	4.53
U.S. Aggregate Bond Index	273,548	Aa2	8.79
U.S. Bond Index	399,984	Aa2	8.75
U.S. Short-Term Government/			
Credit Bond Index	37,447	Aa2	1.97
U.S. TIPS Index Non Lending	1,196,436	Aaa	7.22
U.S. TIPS Index Security Lending	133,719	Aaa	7.23
Total	\$10,011,787		

(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, 2023:

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

Security Type	Ju	Fair Value ine 30, 2023	Percent of Securities Lending Collateral
No Effective Duration:			
Money Market Fund ¹		1,065,825	28.7 %
Short-Term Investment Fund ²		2,651,865	71.3 %
Total ³	\$	3,717,690	100.0 %

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

(2) Short-Term Investment Fund has a weighted average maturity (to final maturity) of one day.
 (3) This figure does not include \$3,018,228 in repurchase agreements since those investments are not subject to GASB 40 disclosure. The fair value of the investments in the securities lending collateral portfolio is \$6,735,918 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, 69 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/Fitch, 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, 2023:

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

Moody's Quality Rating	Fair Value June 30, 2023 ¹	Fair Value as a Percent of Debt Security Investments
Aaa	\$23,924,525	19.34%
Aa1	141,588	0.11%
Aa2	1,999,961	1.62%
Aa3	1,963,686	1.59%
A1	5,826,374	4.71%
A2	4,840,313	3.91%
A3	3,753,915	3.03%
Baa1	5,754,840	4.65%
Baa2	12,237,227	9.89%
Baa3	4,249,825	3.44%
Ba1	3,065,676	2.48%
Ba2	5,028,429	4.06%
Ba3	5,099,429	4.12%
B1	5,140,104	4.15%
B2	3,798,354	3.07%
B3	4,713,801	3.81%
Caa1	1,166,211	0.94%
Caa2	423,917	0.34%
Caa3	47,937	0.04%
С		—%
NA ²	9,945,627	8.04%
NR ³	20,208,688	16.33%
N/A	406,002	0.33%
Total	\$123,736,429	100.00%

(1) Certain securities disclosed in this table may be classified as short-term investments 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) NA represents U.S. government securities that are not applicable to the GASB 40 disclosure requirements.

(3) 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}	\$3,717,690	100.00%
Total ³	\$3,717,690	100.00%

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

(2) This figure includes \$1,065,825 invested in a money market fund, \$2,651,865 invested in short-term investment fund.

(3) This figure does not include \$3,018,228 in repurchase agreements since they are not subject to GASB 40 disclosure. The fair value of the investments in the securities lending collateral portfolio is \$6,735,918 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 cash 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 Securities¹ – Fair Value² at June 30, 2023 (U.S. Dollars in Thousands)

Currency	Cash	Equity	Real Assets		Forward Contracts	Total U.S. Dollars
Argentina Peso	\$0	\$0	\$69,481	\$0	\$0	\$69,481
Australian Dollar	124	2,838,071	1,024,900	_	37,157	3,900,252
Bahamian Dollar	—	—	6,980	—	—	6,980
Brazilian Real	1,090	971,391	723,063	_	(65,064)	1,630,480
British Pound	1,470	5,874,271	2,964,449	240,327	174,775	9,255,292
Canadian Dollar	736,211	5,095,597	72,189	54,912	(5,015)	5,953,894
Chilean Peso	1	_	67,917		(17,468)	50,450
Chinese Yuan Renminbi	20,151	1,458,462	970,312	_	36,009	2,484,934
Colombian Peso	_	_			7,835	7,835
Czech Koruna	_	_	_	_	(11,624)	(11,624)
Danish Krone	239	1,451,389	54,337	_	20,224	1,526,189
Egyptian Pound	_	_	_	_	(4,254)	(4,254)
Euro Currency	5,178	13,894,350	3,765,399	6,964,710	255,274	24,884,911
Guatemalan Quetzal	_	_	100,628	_	_	100,628
Hong Kong Dollar	435	6,158,211	5,358	_	32	6,164,036
Hungarian Forint	_	-		_	(21,076)	(21,076)
Indian Rupee	537	2.578.930	40.369	_	1,177	2,621,013
Indonesian Rupiah	320	668,965		_	1,531	670,816
Iragi Dinar	_		13,507	_		13,507
Israeli Shekel	381	373,968	(30,757)	_	18,292	361.884
Japanese Yen	908,108	15,573,812	89,234	_	212,933	16,784,087
Kuwaiti Dinar				_	(136)	(136)
Malaysian Ringgit	559	447,830	35,573	_	()	483,962
Mexican Peso	438	393,410	110,869	_	(5,480)	499,237
New Taiwan Dollar	13,155	5,054,197	(80)	_	(1,028)	5,066,244
New Zealand Dollar	250	179,244	23,514	_	4.837	207,845
Norwegian Krone	1,677	305,630	2,435	_	(4,517)	305,225
Panamanian Balboa	.,		7,876	_	(.,•)	7,876
Peruvian Nuevo Sol	_	_	49.948	_	(681)	49,267
Philippine Peso	231	151,331		_	992	152,554
Polish Zloty			6,631	_	(13,877)	(7,246)
Qatari Riyal	606	282,613		_	(10,011)	283,219
Russian Ruble			120,116	_	12.381	132,497
Saudi Riyal	9,720	1.482.699	26,295	_	(9)	1,518,705
Singapore Dollar	(406)	1,101,582	121,861	_	3,336	1,226,373
South African Rand	151	451.779	121,001	_	(3,094)	448.836
South Korean Won	440	2,542,625	21,751	_	4,987	2,569,803
Swedish Krona	331	1,129,766	123,279	_	2,086	1,255,462
Swiss Franc	673	5,527,928			29,270	5,557,871
Thailand Baht	464	633,309		_	3,298	637,071
Turkish Lira	+0+		70,003	_	(22,506)	47,497
UAE Dirham	242	473.857	5,464		(22,500)	479,565
	242	+10,001	46,340		2	46.340
West African CAF franc						

(1) This table presents investment securities of all CaIPERS 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.

(2) Certain securities disclosed in this table may be classified as short-term investments 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.

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 overcollateralized 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, 2023, the fair value of the securities on loan was approximately \$40.4 billion. The securities on loan remain on CalPERS' Statement of Fiduciary Net Position in their respective investment categories. At June 30, 2023, cash collateral received totaling \$13.4 billion is reported as securities lending obligation, and the fair value of reinvested cash collateral totaling \$6.7 billion is reported as securities lending collateral on the Statement of Fiduciary Net Position. \$6.7 billion of cash collateral was transferred to CalPERS and are recognized as assets on the Ststement of Fiduciary Net Position under the appropriate asset class. All transferred collateral can be available to satisfy securities lending obligation when necessary. 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. INVESTMENT 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, CaIPERS is exposed to counterparty risk. CaIPERS 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, 2023, the aggregate fair value of investment derivatives in an asset position subject to counterparty credit risk was approximately \$1.6 billion. The aggregate amount of cash collateral held by CaIPERS on behalf of over-the-counter derivatives was approximately \$241.8 million.

CalPERS – Derivative Instruments Summary^{1, 2} (Dollars in Thousands)

Investment	Net Appreciation/ (Depreciation) in Fair Value for the Fiscal Year Ended June 30, 2023	Fair value at Jun	e 30, 2023	
Derivatives (by Type)	Amount	Classification	Amount	Notional
Credit Default Swaps Bought	(\$1,887)	Investment Revenue	\$804	\$64,970
Credit Default Swaps Written	7,399	Investment Revenue	(8,369)	379,100
Fixed Income Futures Long	(1,064,305)	Investment Revenue	166,674	1,292,105,259
Fixed Income Futures Short	169,965	Investment Revenue	(3,988)	(245,966,607)
FX Forwards	116,132	Investment Revenue	654,943	49,855,526
Index Futures Long	747,114	Investment Revenue	81,054	7,385,498
Index Futures Short	6,182	Investment Revenue	(506)	(48,866)
Rights ³	(1,507)	Investment Revenue	353	1,046
Total Return Swaps Bond	(908,879)	Investment Revenue	(222,606)	6,368,085
Total Return Swaps Equity	783,459	Investment Revenue	105,441	(7,011,552)
Warrants ³	(21)	Investment Revenue	10	46
Total	(\$146,348)	-	\$773,810	

(1) The information presented in this table is derived from CalPERS' June 30, 2023, 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, 2023		1–5	6–10	10+
Total Return Swaps Equity	\$105,441	\$105,441	_	_	_
Total	\$105,441	\$105,441	\$0	\$0	\$0

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

Investment Type	Reference Rate	Fair Value at June 30, 2023	Notional
Total Return Bond Swaps	Receive Variable 12-month FED funds, Pay Equity	(\$222,606)	\$6,249,988
Total Return Bond Swaps	Receive Variable 12-month FED funds, Pay fixed 0%	_	118,097
Subtotal – Total Return Bond S	Swaps	(\$222,606)	\$6,368,085
TOTAL		(\$222,606)	\$6,368,085

CalPERS - Derivative Instruments Subject to Counterparty Credit Risk

Counterparty	Percentage of Net Exposure	Moody's Ratings
Goldman Sachs International	19.73%	A1
JP Morgan Chase Bank, N.A.	16.30%	Aa2
HSBC Bank USA	9.07%	Aa3
Royal Bank of Canada	7.06%	A1
Societe Generale	6.42%	A1
UBS AG	6.04%	Aa3
Citibank, N.A.	5.82%	Aa3
BNP Paribas, S.A.	5.65%	Aa3
Morgan Stanley Capital Services, Inc.	4.53%	A1
Natwest Markets Plc	3.72%	A1
Standard Chartered Bank	3.03%	A1
Bank of America, N.A.	2.55%	Aa1
Bank of New York	1.74%	A1
UBS AG (Union Bank of Switzerland) Zurch	1.52%	Aa3
Goldman Sachs Bank USA	1.50%	A2
Wells Fargo Bank, N.A.	1.47%	A1
Wells Fargo Bank, N.A.	1.17%	Aa2
Toronto Dominion Bank	1.06%	A1
State Street Bank and Trust Company	0.80%	Aa3
Bank of Montreal	0.24%	Aa2
Bank of America ICE	0.13%	A1
Bank of America Intl NY United States	0.12%	A1
Barclays Bank Plc Wholesale	0.11%	A1
Canadian Imperial Bank of Commerce	0.08%	Aa2
Barclays Bank Plc	0.08%	A1
Citigroup Global Markets ICE	0.05%	NR
Morgan Stanley Co., Incorporated	0.01%	A1
TOTAL	100.00%	

8. EMPLOYERS' NET PENSION LIABILITY/(ASSET)

The components of the net pension liability of the PERF B, PERF C, LRF, JRF, and JRF II as of June 30, 2023, 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	\$120,513,549	\$84,314,661	\$36,198,888	70.0%
PERF C				
Public Agencies Cost-Sharing	52,441,984	39,966,634	12,475,350	76.2%
LRF				
State of California	88,315	95,669	(7,354)	108.3%
JRF				
State of California	2,493,768	46,327	2,447,441	1.9%
JRF II				
State of California	2,293,612	2,328,782	(35,170)	101.5%

The total pension liability for each defined benefit plan was determined by actuarial valuations as of June 30, 2022, which were rolled forward to June 30, 2023, 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%
	Varies by Entry Age and	Varies by Entry Age and			
Salary Increases	Service	Service	2.80%	2.80%	2.80%
Mortality Rate Table ¹		Derived using CalPER	S membership data f	or 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%	3.86%	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%

 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%

 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, 2023, 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, 2023, was 3.86 percent, which differs from the discount rate used as of June 30, 2022, of 3.69 percent. The state funds the JRF benefit obligations using the pay-as-yougo 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	\$120,513,549	\$84,314,661	\$36,198,888	70.0%
PERF C				
Public Agencies Cost-Sharing	52,441,984	39,966,634	12,475,350	76.2%
LRF				
State of California	88,315	95,669	(7,354)	108.3%
JRF				
State of California	2,493,768	46,327	2,447,441	1.9%
JRF II				
State of California	2,293,612	2,328,782	(35,170)	101.5%

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 PERF C	\$107,178,052	\$84,314,661	\$22,863,391	78.7%
Public Agencies Cost-Sharing	46,579,292	39,966,634	6,612,658	85.8%
LRF				
State of California	79,667	95,669	(16,002)	120.1%
JRF				
State of California	2,296,777	46,327	2,250,450	2.0%
JRF II				
State of California	2,070,981	2,328,782	(257,801)	112.4%

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 PERF C	\$136,648,896	\$84,314,661	\$52,334,235	61.7%
Public Agencies Cost-Sharing	59,592,147	39,966,634	19,625,513	67.1%
LRF				
State of California	99,045	95,669	3,376	96.6%
JRF				
State of California	2,720,856	46,327	2,674,529	1.7%
JRF II				
State of California	2,562,875	2,328,782	234,093	90.9%

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, 2023, 89 employers had elected to participate in the fund. Of the 89 participating employers, 68 employers have contributed assets in the CEPPTF as of June 30, 2023. 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 2022-23 employer contributions from participating employers were \$51.7 million. There were five disbursements from the CEPPTF for two participating employers totaling \$1.68 million.

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, 2023. 606 employers had elected to participate in the fund. Of the 606 participating employers, 589 employers have contributed assets in the CERBTF as of June 30, 2023. 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 longterm 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. In Fiscal Year 2022-2023, the City of Bishop terminated its participation in the CERBT.

As of June 30, 2023, there were 510,366 active plan members, 333,349 inactive plan members currently receiving benefit payments, and 14,723 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

Notes to the Basic Financial Statements (continued)

process. CalPERS contracts with a third-party service provider, NRS, to perform recordkeeping for individual CERBTF employer accounts.

The total Fiscal Year 2022-23 actual OPEB employer contributions from participating employers representing 623 OPEB plans were \$5.2 billion. In compliance with GASB 74, this amount includes the \$1.78 billion in contributions made to the CERBTF, plus an additional \$3.44 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 6.0 percent for Fiscal Year 2022-23.

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, 2023, there were 1,250 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 2022-23, 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 PEMHCA as of July 1, 1988. Until December 31, 2021, CalPERS self-funded plan offerings included PERS Choice, PERSCare and PERS Select. Effective January 1, 2022, CalPERS merged the PERSCare and PERS Choice plans and renamed it to PERS Platinum and renamed the PERS Select plan to PERS Gold. These changes did not impact provider networks or benefit designs for the PERSCare and PERS Select plans. 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 health plan carrier. Members are not subject to a supplemental assessment in the event of

Notes to the Basic Financial Statements (continued)

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 2022-23 the Board approved aggregate increases in member premiums to continue to provide health plan benefits for the 2023 plan year.

Public agencies participating in the health plans are required to make monthly payments based on premiums established annually by CaIPERS. 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, 2023, 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, 2023, 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 \$582.1 million is carried at its face amount, and no interest discount is assumed. The IBNR portion of \$496.4 million represents an estimate for claims that have been incurred prior to June 30, 2023, but have not been reported to the HCF. The total of the estimated claims liabilities at the end of the Fiscal Year 2022-23 is \$816.5 million. The year-end amount also includes \$234.4 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 flexfunded 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, 2023, and June 30, 2022.

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

Year Ended June 30	2023	2022
Total Estimated Claims at Beginning of		
Fiscal Year	\$863,327	\$749,956
Total Incurred Claims and Claim Adjustment		
Expenses	4,283,082	4,176,212
Total Payments	(4,329,874)	(4,062,841)
Total Estimated Claims at End of Fiscal Year	\$816,535	\$863,327

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, 2023, was 0.33 percent. Administrative rates are reviewed annually and are adjusted, if needed, to cover budgeted administrative expenses.

As of June 30, 2023, there were 1,168 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, illumifin, the self-insured LTC Program is a voluntary program, funded solely by participant-paid premiums and investment returns.

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 June 2020

As of June 30, 2023, there are 99,755 active participants in the LTC 1, LTC 2, LTC 3, and LTC 4 policy series, of which 6,637 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 2022-23, the actual investment returns were approximately \$258 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, 2022, valuation. The estimated liability for future policy benefits for the June 30, 2023, Annual Comprehensive Financial Report was rolled forward from the June 30, 2022, actuarial valuation using standard actuarial techniques. The estimated liability for future policy benefit as of June 30, 2023 also reflects the updated cashflow projection and actuarial assumptions from the June 30, 2022, 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, 2023, and June 30, 2022. Changes in the Aggregate Estimated Claims Liabilities of the LTCF (Dollars in Thousands)

Year Ended June 30	2023	2022
Total Estimated Future Policy Liabilities at	A- A-A /A/	AA AT / AAA
Beginning of Fiscal Year	\$5,250,421	\$2,051,292
Increase (Decrease) in Liability and Change in		
Estimate	433,752	618,579
Claim Payments	(342,175)	(318,550)
Change related to Estimated Settlement		
Liability	(631,700)	2,899,100
Total Estimated Future Policy Liabilities at		
End of Fiscal Year	\$4,710,298	\$5,250,421

Total LTCF investments as of June 30, 2023, were approximately \$4.8 billion. On June 30, 2023, the LTCF's investment portfolio consisted of approximately 60 percent, 17 percent, 10 percent, 8 percent, and 6 percent of the respective SSGA Funds: Bloomberg Barclays Long Liability Index, MSCI ACWI Investable Market Index, Global Real Estate, S&P GSCI Commodity Index, and U.S. TIPS Index, respectively, with further details in Note 4.

For Fiscal Year 2022-23, the annual premium was \$339.8 million and the total benefits paid out were \$345.9 million. Since the program's inception in 1995 through June 30, 2023, the total benefits paid were approximately \$4.2 billion. In Fall 2022, LTC Program implemented the Board approved 25 percent premium rate increase for all four LTC policy series and offered premium increase mitigation options.

In March 2023, a judge granted preliminary approval to a new, second settlement of the class action lawsuit involving the CalPERS LTC Program, known as Wedding, et al. v. CalPERS. Settlement expenses and fees with an estimated amount of \$765 million and an estimated reduction of \$632 million in future policy benefits related to policy terminations resulting from settlement were recognized in LTC fund in Fiscal Year 2022-23. CalPERS agreed to a proposed settlement in the Long-Term Care Program class action lawsuit that was approved in July 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 parties entered into a second settlement agreement in early 2023. On July 28, 2023, the court approved this agreement, which is now being implemented. Full implementation of the agreement will extend into late 2024.

Approximately 447 policyholders have opted out of the case and are therefore not bound by the settlement. In addition, there is a group of approximately 18,000 policyholders who had "Lifetime Only" policies without Inflation-Protection benefits whose claims were eliminated by the court's ruling after the 2019 trial. Plaintiffs have filed a notice of appeal of that ruling on behalf of one such policyholder, who purports to represent the entire subclass of policyholders.

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 CaIPERS and Anthem improperly reduced the "allowable amount" for "out-of-network" non-emergency medical services. As a result of this ruling, CaIPERS demurred to the remaining causes of action. The court sustained CaIPERS' demurrer and entered judgment in favor of CaIPERS, 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

Notes to the Basic Financial Statements (continued)

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. CalPERS and Anthem demurred to the Third Amended Complaint, and the Court sustained the demurrer without leave to amend and entered judgment on May 31, 2023. Defendants served notice of entry of judgment on June 6, 2023, and Plaintiff's time to appeal has now lapsed. Defendants submitted a memorandum of costs, and Plaintiff filed a motion to tax costs, which remains pending. With the exception of the motion to tax costs, the matter appears to be concluded.

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.

The Third Amended Petition (complaint) was filed and served on August 12, 2021. Plaintiffs are now proceeding on their claims that CalPERS' construction of the regulatory definition of Bonus is unreasonable, and independently, amounts to an underground regulation in violation of the Administrative Procedures Act. The writ hearing is scheduled for November 14, 2023. In early June 2023, some of CaIPERS members' personal information was involved in a worldwide data security incident that impacted one of its contracted third-party vendors, PBI Research Services/Berwyn Group ("PBI"). PBI had been providing services to CaIPERS to identify member deaths. Such services ensure that proper payments are made to retirees and beneficiaries and prevent instances of overpayments or other errors. The security incident did not impact information systems operated by CaIPERS. CaIPERS has not received any regulatory inquiries regarding this incident.

Several putative class action lawsuits have been filed against PBI arising from this incident. On October 27, 2023, one such lawsuit was filed against CaIPERS. CaIPERS has defenses against this action and will vigorously defend it.

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.

17. FUTURE ACCOUNTING PRONOUNCEMENT 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. It 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 and supplementary information. 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. The effective date for GASB Statement No. 101 is December 15th, 2023. CalPERS staff will implement during Fiscal Year 2023-24 and include in the ACFR for 2023-24.

Financial Section Required Supplementary Information

- 76 Schedules of Changes in Net Pension Liability/(Asset) and Related Ratios
- 86 Schedules of Plan Contributions
- 92 Schedule of Investment Returns
- 93 Schedule of Claims Development Information

Required Supplementary Information

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

PERF B - Ten-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018
Discount Rate Assumption	6.90%	6.90%	7.15%	7.15%	7.15%	7.15%
Total Pension Liability:						
Service Cost	\$2,743,978	\$2,485,322	\$2,347,398	\$2,302,877	\$2,226,797	\$2,172,696
Interest	7,873,335	7,435,819	7,216,728	6,904,699	6,563,541	6,165,715
Changes of Assumptions	_	3,423,109	_	_		450,064
Differences Between Expected and Actual Experience	1,777,808	(1,108,386)	(63,915)	452,461	1,398,796	1,852,902
Benefit Payments, Including Refunds of Member						
Contributions	(5,676,166)	(5,298,758)	(4,932,395)	(4,671,357)	(4,347,426)	(4,053,119)
Net Change in Total Pension Liability	\$6,718,955	\$6,937,106	\$4,567,816	\$4,988,680	\$5,841,708	\$6,588,258
Total Pension Liability – Beginning	\$113,794,594	\$106,857,488	\$102,289,672	\$97,300,992	\$91,459,284	\$84,871,026
Total Pension Liability – Ending (a)	\$120,513,549	\$113,794,594	\$106,857,488	\$102,289,672	\$97,300,992	\$91,459,284
Plan Fiduciary Net Position:						
Contributions – Employer	\$4,457,043	\$3,557,108	\$2,972,220	\$2,866,144	\$2,527,726	\$2,070,832
Contributions – Employer						
	1,334,265	1,104,241	1,019,154	1,047,983	1,014,070	952,979
Contributions – Nonemployer	4 070 500	(0.440.440)	45 000 400	904,000	4 040 000	
Total Net Investment Income	4,872,599	(6,446,442)	15,928,499	3,398,535	4,212,090	5,095,064
Benefit Payments, Including Refunds of Member Contributions	(5,676,166)	(5,298,758)	(4,932,395)	(4,671,357)	(4,347,426)	(4,053,119)
Net Plan-to-Plan Resource Movement	(0,070,100) (10)	(3,230,730)	(4,352,535)	(4,071,337) 164	(4,347,420) 304	(4,000,110)
Administrative Expenses	(58,579)	(53,699)	(71,018)	(95,614)	(46,159)	(92,448)
Net Change in Plan Fiduciary Net Position	\$4,929,152	(\$7,137,547)	\$14,916,460	\$3,449,855	\$3,360,605	\$3,973,310
Plan Fiduciary Net Position – Beginning	\$79,385,509	\$86,523,056	\$71,606,596	\$68,156,741	\$64,796,136	\$60,998,387
Adjustments ¹	φ10,000,000	ψ00,020,000	ψη,000,000	φ00,130,7+1	ψ0+,7 50,150	(175,561)
Total Adjusted Plan Fiduciary Net Position – Beginning	79,385,509	86,523,056	71,606,596	68,156,741	64,796,136	60,822,826
Plan Fiduciary Net Position – Ending (b)	84,314,661	79,385,509	86,523,056	71,606,596	68,156,741	64,796,136
Net Pension Liability (a) - (b)	\$36,198,888	\$34,409,085	\$20,334,432	\$30,683,076	\$29,144,251	\$26,663,148
Plan Fiduciary Net Position as a Percentage of the	φ 30,130,000	φ J 4,403,003	φ20,334,432	\$30,003,070	φ 2 3,144,231	\$20,003,140
Total Pension Liability	70.0%	69.8%	81.0%	70.0%	70.0%	70.8%
Covered Payroll	\$16,275,075	\$14,767,213	\$14,885,212	\$14,447,159	\$13,819,881	\$13,252,995
Net Pension Liability as a Percentage of Covered	, ,,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, .,	, ,,,,,,,,,,,,,,	, .,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Payroll	222.4%	233.0%	136.6%	212.4%	210.9%	201.2%

(1) Cumulative effect of CalPERS employer proportionate share of post-employment benefit obligations.

NOTES TO SCHEDULE

Change of Assumptions and Methods

In Fiscal Year 2022-23 there were no changes to actuarial assumptions or methods.

In November 2021, the CaIPERS 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 rampdown on Unfunded Accrued Liability (UAL) bases attributable to assumption changes, investment gains/losses, and noninvestment 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.

2017	2016	2015	2014
7.15 %	7.65%	7.65%	7.50%
\$2,031,914	\$1,716,677	\$1,624,993	\$1,576,667
5,719,835	5,441,918	5,152,519	4,820,116
4,649,299	—	(1,217,974)	—
531,862	400,103	1,119,011	—
(3,724,910)	(3,546,836)	(3,334,081)	(3,139,923)
\$9,208,000	\$4,011,862	\$3,344,468	\$3,256,860
\$75,663,026	\$71,651,164	\$68,306,696	\$65,049,836
\$84,871,026	\$75,663,026	\$71,651,164	\$68,306,696
\$1,783,736	\$1,434,632	\$1,323,090	\$1,203,071
897,438	851,133	773,580	744,437
—	—	—	—
6,211,781	297,514	1,272,365	8,625,601
(3,724,910)	(3,546,836)	(3,334,081)	(3,139,923)
(0,724,010) (134)	(0,040,000)	(71,460)	(0,100,020)
(82,489)	(34,554)	(64,124)	(72,167)
\$5,085,422	(\$998,101)	(\$100,630)	\$7,361,019
\$55,912,965	\$56,911,066	\$57,011,696	\$49,650,677
· · · · _			
55,912,965	56,911,066	57,011,696	49,650,677
60,998,387	55,912,965	56,911,066	57,011,696
\$23,872,639	\$19,750,061	\$14,740,098	\$11,295,000
			aa ==:/
71.9 %	73.9%	79.4%	83.5%
\$12,643,354	\$11,747,602	\$10,964,872	\$10,120,248
188.8 %	168.1%	134.4%	111.6%

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

In December 2017, the CalPERS Board of Administration 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 - Ten-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018
Discount Rate Assumption	6.90%	6.90%	7.15%	7.15%	7.15%	7.15%
Total Pension Liability:						
Service Cost	\$1,096,304	\$1,039,473	\$947,349	\$912,529	\$878,707	\$844,273
Interest	3,431,712	3,239,025	3,123,532	2,954,008	2,798,484	2,629,157
Changes of Benefit Terms	305	4,481	1,390	900	1,283	668
Changes of Assumptions	_	1,606,551	_	_	_	(248,318)
Differences Between Expected and Actual Experience	933,368	(188,502)	615,793	453,273	705,149	313,467
Benefit Payments, Including Refunds of Member						
Contributions ¹	(2,545,680)	(2,349,632)	(2,216,053)	(2,044,232)	(1,902,025)	(1,755,740)
Net Change in Total Pension Liability	\$2,916,009	\$3,351,396	\$2,472,011	\$2,276,478	\$2,481,598	\$1,783,507
Total Pension Liability – Beginning	\$49,526,338	\$46,174,942	\$43,702,931	\$41,426,453	\$38,944,855	\$37,161,348
Adjustment to Beginning Amount	(363)	_	_	_		_
Total Adjusted Pension Liability – Beginning	\$49,525,975	\$46,174,942	\$43,702,931	\$41,426,453	\$38,944,855	\$37,161,348
Total Pension Liability – Ending (a)	\$52,441,984	\$49,526,338	\$46,174,942	\$43,702,931	\$41,426,453	\$38,944,855
Plan Fiduciary Net Position:						
Contributions – Employer ¹	\$1,623,130	\$2,284,579	\$1,921,032	\$1,594,811	\$1,333,559	\$1,182,686
Contributions – Member ¹	457,581	417,129	395,130	381,786	357,159	334,140
Total Net Investment Income ¹	2,347,184	(3,109,188)	7,523,678	1,565,953	1,935,939	2,308,558
Benefit Payments, Including Refunds of Member	,- , -	(-,,,	,- ,	,,	,,	,
Contributions ¹	(2,545,680)	(2,349,632)	(2,210,327)	(2,044,232)	(1,902,025)	(1,755,740)
Net Plan-to-Plan Resource Movement ¹	136,654	(8,335)	348,384	188,629	167,308	116,550
Administrative Expenses	(27,756)	(25,686)	(33,744)	(43,860)	(21,115)	(41,980)
Net Change in Plan Fiduciary Net Position	\$1,991,113	(\$2,791,133)	\$7,944,153	\$1,643,087	\$1,870,825	\$2,144,214
Plan Fiduciary Net Position – Beginning	\$37,975,521	\$40,766,654	\$32,822,501	\$31,179,414	\$29,308,589	\$27,244,095
Adjustments ²	—	_	—	_	—	(79,720)
Total Adjusted Plan Fiduciary Net Position – Beginning	37,975,521	40,766,654	32,822,501	31,179,414	29,308,589	27,164,375
Plan Fiduciary Net Position – Ending (b)	39,966,634	37,975,521	40,766,654	32,822,501	31,179,414	29,308,589
Net Pension Liability (a) - (b)	\$12,475,350	\$11,550,817	\$5,408,288	\$10,880,430	\$10,247,039	\$9,636,266
Plan Fiduciary Net Position as a Percentage of the						
Total Pension Liability	76.2%	76.7%	88.3%	75.1%	75.3%	75.3%
Covered Payroll	\$4,723,688	\$4,428,659	\$4,371,563	\$4,155,772	\$3,949,226	\$3,793,609
Net Pension Liability as a Percentage of Covered						
Payroll	264.1%	260.8%	123.7%	261.8%	259.5%	254.0%

(1) May not agree to the Basic Financial Statements in 2021 and 2020 as a result of adjustments made in both years.

(2) Cumulative effect of CalPERS employer proportionate share of postemployment benefit obligations.

NOTES TO SCHEDULE

Changes in Benefit Terms

In 2022, SB 1168 increased the standard retiree lump sum death benefit from \$500 to \$2,000 for any death occurring on or after July 1, 2023. The impact from this change is deemed to be immaterial and is included in Differences Between Expected and Actual Experience.

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 Fiscal Year 2022-23, there are no changes to the actuarial assumptions or methods in relation to financial reporting.

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

2017	2016	2015	2014
7.15 %	7.65%	7.65%	7.50%
¢000 500	¢740.007	¢000.440	A740 704
\$820,583	\$712,307	\$698,416	\$713,731
2,506,761	2,399,259	2,285,565	2,169,786
2,119 2,122,413	1,478	(543,686)	
(18,554)	(6,333)	(5,678)	_
(10,004)	(0,000)	(0,070)	
(1,630,602)	(1,519,301)	(1,423,756)	(1,335,871)
\$3,802,720	\$1,587,410	\$1,010,861	\$1,547,646
\$33,358,628	\$31,800,055	\$30,789,194	\$29,241,548
—	(28,837)	—	—
\$33,358,628	\$31,771,218	\$30,789,194	\$29,241,548
\$37,161,348	\$33,358,628	\$31,800,055	\$30,789,194
\$980,359	\$882,991	\$859,456	\$747,694
317,024	300,135	278,529	291,772
2,774,321	127,043	548,097	3,770,935
, ,-	,	,	-, -,
(1,630,602)	(1,519,301)	(1,423,756)	(1,335,871)
134,513	22,621	(267,581)	_
(37,052)	(15,263)	(27,967)	(31,550)
\$2,538,563	(\$201,774)	(\$33,222)	\$3,442,980
\$24,705,532	\$24,907,306	\$24,940,528	\$21,497,548
_		_	
24,705,532	24,907,306	24,940,528	21,497,548
27,244,095	24,705,532	24,907,306	24,940,528
\$9,917,253	\$8,653,096	\$6,892,749	\$5,848,666
73.3 %	74.1%	78.3%	81.0%
\$3,631,919	\$3,472,950	\$3,356,312	\$3,248,018
273.1 %	249.2%	205.4%	180.1%

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. 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 – Ten-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018
Discount Rate Assumption	4.85%	4.85%	5.25%	5.25%	5.25%	5.25%
Total Pension Liability:						
Service Cost	\$52	\$108	\$101	\$100	\$268	\$542
Interest	4,248	4,299	4,749	4,885	4,871	4,987
Changes of Assumptions	_	1,024	_	-	_	(2,529)
Differences Between Expected and Actual Experience	1,444	(992)	(732)	2,320	(427)	(2,061)
Benefit Payments, Including Refunds of Member						
Contributions	(7,088)	(6,647)	(6,761)	(6,939)	(7,349)	(6,918)
Net Change in Total Pension Liability	(\$1,344)	(\$2,208)	(\$2,643)	\$366	(\$2,637)	(\$5,979)
Total Pension Liability – Beginning	\$89,659	\$91,867	\$94,510	\$94,144	\$96,781	\$102,760
Adjustment to Beginning Amount	—	-	—	-	—	—
Total Adjusted Pension Liability – Beginning	\$89,659	\$91,867	\$94,510	\$94,144	\$96,781	\$102,760
Total Pension Liability – Ending (a)	\$88,315	\$89,659	\$91,867	\$94,510	\$94,144	\$96,781
Plan Fiduciary Net Position:						
Contributions – Employer	\$44	\$85	\$92	\$98	\$250	\$467
Contributions – Member	11	23	21	22	91	82
Total Net Investment Income	603	(12,449)	15,098	7,013	7,860	5,486
Benefit Payments, Including Refunds of Member		(,)	,	.,	.,	0,100
Contributions	(7,088)	(6,647)	(6,761)	(6,939)	(7,349)	(6,918)
Administrative Expenses	(525)	(436)	(450)	(550)	(324)	(671)
Net Change in Plan Fiduciary Net Position	(\$6,955)	(\$19,424)	\$8,000	(\$356)	\$528	(\$1,554)
Plan Fiduciary Net Position – Beginning	\$102,624	\$122,048	\$114,048	\$114,404	\$113,876	\$116,884
Adjustments ¹	_	-	_	_	_	(1,454)
Total Adjusted Plan Fiduciary Net Position – Beginning	102,624	122,048	114,048	114,404	113,876	115,430
Plan Fiduciary Net Position – Ending (b)	95,669	102,624	122,048	114,048	114,404	113,876
Net Pension Asset (a) - (b)	(\$7,354)	(\$12,965)	(\$30,181)	(\$19,538)	(\$20,260)	(\$17,095)
Plan Fiduciary Net Position as a Percentage of the						·
Total Pension Liability	108.3%	114.5%	132.9%	120.7%	121.5%	117.7%
Covered Payroll	\$138	\$290	\$267	\$278	\$655	\$1,242
Net Pension Asset as a Percentage of Covered Payroll	(5,329.0%)	(4,470.7%)	(11,303.7%)	(7,028.1%)	(3,093.1%)	(1,376.4%)

(1) Cumulative effect of CalPERS employer proportionate share of postemployment benefit obligations.

NOTES TO SCHEDULE

Change of Assumptions and Methods

In Fiscal Year 2022-23, there were no changes to assumptions or methods in relation to financial reporting.

In April 2022, the CaIPERS 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.

2017	2016	2015	2014
5.25%	6.00%	6.00%	5.75%
\$639	\$608	\$769	\$732
5,291	5,978	6,427	6,465
7,857	—	(2,655)	—
(5,998)	(3,530)	(4,246)	—
(7,249)	(7,407)	(9,086)	(7,482)
\$540	(\$4,351)	(\$8,791)	(\$285)
\$102,220	\$106,730	\$115,521	\$115,806
_	(159)	—	_
\$102,220	\$106,571	\$115,521	\$115,806
\$102,760	\$102,220	\$106,730	\$115,521
\$516	\$549	\$590	\$565
94	φ349 97	\$390 105	پ505 113
5,048	4,545	(94)	15,372
3,040	4,040	(34)	10,072
(7,249)	(7,407)	(9,086)	(7,482)
(575)	(203)	(400)	(362)
(\$2,166)	(\$2,419)	(\$8,885)	\$8,206
\$119,050	\$121,469	\$130,354	\$122,148
—	—	—	—
119,050	121,469	130,354	122,148
116,884	119,050	121,469	130,354
(\$14,124)	(\$16,830)	(\$14,739)	(\$14,833)
113.7%	116.5%	113.8%	112.8%
\$1,360	\$1,313	\$1,545	\$1,470
(1,038.5%)	(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 - Ten-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018
Discount Rate Assumption	3.86%	3.69%	1.92%	2.45%	3.13%	3.62%
Total Pension Liability:						
Service Cost	\$9,541	\$10,345	\$17,861	\$17,026	\$20,073	\$19,131
Interest	96,524	93,559	64,480	79,719	99,428	109,395
Changes of Assumptions	(36,907)	(598,096)	179,421	218,683	153,651	(20,879)
Differences Between Expected and Actual Experience	111,908	(92,633)	40,007	(41,794)	86,873	(121,259)
Benefit Payments, Including Refunds of Member						
Contributions	(216,271)	(210,491)	(210,951)	(213,233)	(221,954)	(207,823)
Net Change in Total Pension Liability	(\$35,205)	(\$797,316)	\$90,818	\$60,401	\$138,071	(\$221,435)
Total Pension Liability – Beginning	\$2,528,973	\$3,326,289	\$3,235,471	\$3,175,070	\$3,036,999	\$3,258,434
Adjustment to Beginning Amount	—	—	—	—	—	—
Total Adjusted Pension Liability – Beginning	\$2,528,973	\$3,326,289	\$3,235,471	\$3,175,070	\$3,036,999	\$3,258,434
Total Pension Liability – Ending (a)	\$2,493,768	\$2,528,973	\$3,326,289	\$3,235,471	\$3,175,070	\$3,036,999
Plan Fiduciary Net Position:		* 4 • 4 • • • •	A005 004	*•••••••••••••	\$40 <u>5</u> 000	* 4 * * 4 *
Contributions – Employer and General Fund ¹	\$208,785	\$194,960	\$225,824	\$243,131	\$195,903	\$199,241
Contributions – Member	1,697	1,956	2,146	2,843	2,679	3,062
Total Net Investment Income	5,261	2,499	2,625	3,087	3,942	3,378
Benefit Payments, Including Refunds of Member						/
Contributions	(216,271)	(210,492)	(210,951)	(213,233)	(221,954)	(207,823)
Administrative Expenses	(2,031)	(1,677)	(1,731)	(2,270)	(10,032)	(2,106)
Net Change in Plan Fiduciary Net Position	(\$2,559)	(\$12,754)	\$17,913	\$33,558	(\$29,462)	(\$4,248)
Plan Fiduciary Net Position – Beginning	\$48,886	\$61,640	\$43,727	\$10,169	\$39,631	\$48,275
Adjustments ²	—	_	—	_	_	(4,396)
Total Adjusted Plan Fiduciary Net Position – Beginning	48,886	61,640	43,727	10,169	39,631	43,879
Plan Fiduciary Net Position – Ending (b)	46,327	48,886	61,640	43,727	10,169	39,631
Net Pension Liability (a) - (b)	\$2,447,441	\$2,480,087	\$3,264,649	\$3,191,744	\$3,164,901	\$2,997,368
Plan Fiduciary Net Position as a Percentage of the						
Total Pension Liability	1.9%	1.9%	1.9%	1.4%	0.3%	1.3%
Covered Payroll	\$20,083	\$20,916	\$20,808	\$22,875	\$31,945	\$35,507
Net Pension Liability as a Percentage of Covered						
Payroll	12,186.6%	11,857.4%	15,689.4%	13,953.0%	9,907.3%	8,441.6%

(1) Includes State of California General Fund.

(2) Cumulative effect of CalPERS employer proportionate share of postemployment benefit obligations.

NOTES TO SCHEDULE

Change of Assumptions and Methods

In Fiscal Year 2022-23, the discount rate used to measure the total pension liability was 3.86 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 3.86 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, 2023, was applied to all periods of projected benefit payments to measure the total pension liability.

In Fiscal Year 2021-22, the discount rate used to measure the total pension liability was 3.69 percent. In November 2021 and April 2022, the CaIPERS 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 financial reporting.

2017	2016	2015	2014
3.56 %	2.85%	3.82%	4.25%
\$22,733	\$29,314	\$25,372	\$27,581
115,067	107,515	127,074	140,256
(107,670)	384,306	167,036	—
(366,200)	(59,421)	57,568	—
(000 ((0)	(100.0.10)	(004,000)	(100.005)
(200,440)	(199,349)	(201,868)	(193,935)
(\$536,510)	\$262,365	\$175,182	(\$26,098)
\$3,794,944	\$3,532,394	\$3,357,212	\$3,383,310
	185		
\$3,794,944	\$3,532,579	\$3,357,212	\$3,383,310
\$3,258,434	\$3,794,944	\$3,532,394	\$3,357,212
\$204,475	\$192,287	\$180,910	\$191,148
3,398	3,559	3,877	4,724
2,819	2,762	2,286	2,583
(200,440)	(199,349)	(201,868)	(193,935)
(1,771)	(642)	(1,227)	(1,141)
\$8,481	(\$1,383)	(\$16,022)	\$3,379
\$39,794	\$41,177	\$57,199	\$53,820
_	_	_	—
39,794	41,177	57,199	53,820
48,275	39,794	41,177	57,199
\$3,210,159	\$3,755,150	\$3,491,217	\$3,300,013
1.5 %	1.0%	1.2%	1.7%
\$39,413	\$34,301	\$41,378	\$54,649
ψ00,410	ψ07,001	ψ+1,070	ψ0+,0+0
8,144.9 %	10,947.6%	8,437.4%	6,038.6%

In Fiscal Year 2019-20, the discount rate used to measure the total pension liability was 2.45 percent. There were 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 - Ten-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018
Discount Rate Assumption	6.15%	6.15%	6.65%	6.65%	6.65%	6.65%
Total Pension Liability:						
Service Cost	\$121,141	\$115,808	\$116,782	\$114,486	\$103,791	\$95,843
Interest	131,805	120,585	126,948	115,517	103,889	91,419
Changes of Benefit Terms	(1,452)	_	_	_	_	_
Changes of Assumptions	_	(59,394)	_	_	_	(41,763)
Differences Between Expected and Actual Experience	20,135	(67,751)	(10,975)	(2,797)	30,291	(26,876)
Benefit Payments, Including Refunds of Member						
Contributions	(83,868)	(66,739)	(61,994)	(34,547)	(36,204)	(31,795)
Net Change in Total Pension Liability	\$187,761	\$42,509	\$170,761	\$192,659	\$201,767	\$86,828
Total Pension Liability – Beginning	\$2,105,851	\$2,063,342	\$1,892,581	\$1,699,922	\$1,498,155	\$1,411,327
Adjustment to Beginning Amount	—	—	—	—	—	—
Total Adjusted Pension Liability – Beginning	\$2,105,851	\$2,063,342	\$1,892,581	\$1,699,922	\$1,498,155	\$1,411,327
Total Pension Liability – Ending (a)	\$2,293,612	\$2,105,851	\$2,063,342	\$1,892,581	\$1,699,922	\$1,498,155
Plan Fiduciary Net Position:						
Contributions – Employer and General Fund ¹	\$89,970	\$92,773	\$84,147	\$91,147	\$84,099	\$79,699
Contributions – Member	38,669	36,529	34,094	35,796	31,376	27,513
Total Net Investment Income	151,749	(324,362)	463,478	80,074	106,781	101,820
Benefit Payments, Including Refunds of Member	-, -	(* ,***)	, .	,-	, -	- ,
Contributions	(83,868)	(66,739)	(61,994)	(34,547)	(36,204)	(31,795)
Administrative Expenses	(2,126)	(1,842)	(1,703)	(2,552)	(1,477)	(2,370)
Net Change in Plan Fiduciary Net Position	\$194,394	(\$263,641)	\$518,022	\$169,918	\$184,575	\$174,867
Plan Fiduciary Net Position – Beginning	\$2,134,388	\$2,398,029	\$1,880,007	\$1,710,089	\$1,525,514	\$1,356,099
Adjustments ²	—	—	—	—	—	(5,452)
Total Adjusted Plan Fiduciary Net Position – Beginning	2,134,388	2,398,029	1,880,007	1,710,089	1,525,514	1,350,647
Plan Fiduciary Net Position – Ending (b)	2,328,782	2,134,388	2,398,029	1,880,007	1,710,089	1,525,514
Net Pension Liability/(Asset) (a) - (b)	(\$35,170)	(\$28,537)	(\$334,687)	\$12,574	(\$10,167)	(\$27,359)
Plan Fiduciary Net Position as a Percentage of the						
Total Pension Liability	101.5%	101.4%	116.2%	99.3%	100.6%	101.8%
Covered Payroll	\$378,328	\$360,771	\$361,108	\$352,700	\$318,827	\$299,396
Net Pension Liability/(Asset) as a Percentage of Covered Payroll	(9.3%)	(7.9%)	(92.7%)	3.6%	(3.2%)	(9.1%)

(1) Includes State of California General Fund.

(2) Cumulative effect of CalPERS employer proportionate share of postemployment benefit obligations.

NOTES TO SCHEDULE

Change of Assumptions and Methods

In Fiscal Year 2022-23, AB 2443 provided judges in JRF II the ability to retire early and elect a deferred retirement allowance. More information can be found in the June 30, 2022 JRF II funding valuation. There were no changes to assumptions or methods in relation to financing reporting.

In April 2022, the CaIPERS 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-

2017	2016	2015	2014
6.65 %	7.15%	7.15%	7.00%
\$97,678	\$86,635	\$81,679	\$78,670
85,654	78,412	70,389	61,044
—	—	—	—
69,233	—	(14,883)	—
(26,382)	(4,546)	(17,319)	_
(22,406)	(21,704)	(14,040)	(8,950)
\$203,777	\$138,797	\$105,826	\$130,764
\$1,207,550	\$1,073,788	\$967,962	\$837,198
—	(5,035)	—	—
\$1,207,550	\$1,068,753	\$967,962	\$837,198
\$1,411,327	\$1,207,550	\$1,073,788	\$967,962
\$67,102	\$65,839	\$65,629	\$57,027
25,076	24,598	22,242	20,413
115,057	20,810	(2,401)	150,168
(22,406)	(21,704)	(14,040)	(8,950)
(1,683)	(732)	(1,127)	(785)
\$183,146	\$88,811	\$70,303	\$217,873
\$1,172,953	\$1,084,142	\$1,013,839	\$795,966
	· ,· · · ·		
1,172,953	1,084,142	1,013,839	795,966
1,356,099	1,172,953	1,084,142	1,013,839
\$55,228	\$34,597	(\$10,354)	(\$45,877)
96.1 %	97.1%	101.0%	104.7%
\$291,097	\$280,879	\$259,133	\$249,248
Q201,001	4200,010	\$200,100	<i></i>
19.0 %	12.3%	(4.0%)	(18.4%)

investment gains/losses. These changes applied only to new UAL bases established on or after June 30, 2019. In Fiscal Year 2019-20, no changes have occurred to the actuarial assumptions in relation to financial reporting.

CalPERS implemented a new actuarial valuation software system for the June 30, 2018, valuation. This 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

Ten-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018
PERF B:						
Actuarially Determined Contribution Contributions in Relation to the Actuarially Determined	\$4,391,877	\$3,511,338	\$2,969,799	\$2,759,835	\$2,501,770	\$2,048,531
Contributions in Relation to the Actualianty Determined	4,391,877	3,511,338	2,969,799	3,663,835	2,501,770	2,048,531
Contribution Excess	\$0	\$0	\$0	\$904,000	\$0	\$0
Covered Payroll	\$16,275,075	\$14,767,213	\$14,885,212	\$14,447,159	\$13,819,881	\$13,252,995
Contributions as a Percentage of Covered Payroll	27.0%	23.8%	20.0%	25.4%	18.1%	15.5%
PERF C:						
Actuarially Determined Contribution	\$1,623,130	\$2,284,579	\$1,921,032	\$1,597,137	\$1,333,559	\$1,182,686
Contributions in Relation to the Actuarially Determined Contribution ¹	1,755,294	3,154,849	2,504,112	1,971,737	1,586,007	1,418,316
Contribution Excess	\$132,164	\$870,270	\$583,080	\$374,600	\$252,448	\$235,630
Covered Payroll	\$4,723,689	\$4,428,659	\$4,371,563	\$4,155,772	\$3,949,226	\$3,793,609
Contributions as a Percentage of Covered Payroll	37.2%	71.2%	57.3%	47.4%	40.2%	37.4%
LRF:						
Actuarially Determined Contribution ²	\$44	\$85	\$78	\$98	\$250	\$20
Contributions in Relation to the Actuarially Determined Contribution ³	44	85	78	98	250	467
Contribution Excess	\$0	\$0	\$0	\$0	\$0	\$447
	¢400	\$290	\$267	¢070	¢ccc	¢4.040
Covered Payroll Contributions as a Percentage of Covered Payroll	\$138 31.9%	\$290 29.3%	\$207 29.2%	\$278 35.3%	\$655 38.2%	\$1,242 37.6%
JRF: Actuarially Determined Contribution ⁴	\$313,118	\$352,881	\$366,446	\$414,849	\$415,110	\$438,156
Contributions in Relation to the Actuarially Determined						
Contribution ⁵ Contribution Deficiency	208,785 \$104,333	194,960 \$157,921	225,824 \$140,622	243,131 \$171,718	195,903 \$219,207	199,241 \$238,915
Contribution Denciency	ψ10 4 ,555	Ψ107, 3 21	φ1 4 0,022	ψ1/1,/10	ψ215,201	ψ230,313
Covered Payroll	\$20,083	\$20,916	\$20,808	\$22,875	\$31,945	\$35,507
Covered Payroll Contributions as a Percentage of Covered Payroll	\$20,083 1,039.6%	\$20,916 932.1%	\$20,808 1,085.3%	\$22,875 1,062.9%	\$31,945 613.3%	\$35,507 561.1%
Contributions as a Percentage of Covered Payroll JRF II:	1,039.6%	932.1%	1,085.3%	1,062.9%	613.3%	561.1%
Contributions as a Percentage of Covered Payroll JRF II: Actuarially Determined Contribution						
Contributions as a Percentage of Covered Payroll JRF II: Actuarially Determined Contribution Contributions in Relation to the Actuarially Determined Contribution	1,039.6% \$89,970 89,970	932.1% \$91,887 92,773	1,085.3% \$84,147 84,147	1,062.9%	613.3% \$84,099 84,099	561.1% \$79,699 79,699
Contributions as a Percentage of Covered Payroll JRF II: Actuarially Determined Contribution Contributions in Relation to the Actuarially Determined	1,039.6% \$89,970	932.1% \$91,887	1,085.3% \$84,147	1,062.9% \$91,147	613.3% \$84,099	561.1% \$79,699
Contributions as a Percentage of Covered Payroll JRF II: Actuarially Determined Contribution Contributions in Relation to the Actuarially Determined Contribution	1,039.6% \$89,970 89,970	932.1% \$91,887 92,773	1,085.3% \$84,147 84,147	1,062.9% \$91,147 91,147	613.3% \$84,099 84,099	561.1% \$79,699 79,699

(1) Additional discretionary contribution payments are not available prior to 2016.

(2) Does not agree to Basic Financial Statements due to an adjustment in 2021.

(3) Because of the provisions of the Public Employees' Pension Reform Act of 2013 (PEPRA), the required employer contribution is the greater of the actuarially determined employer contribution or the employer normal cost.

(4) The 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.

(5) Contributions to the JRF are made on the pay-as-you-go basis.

2017	2016	2015	2014
\$1,767,813	\$1,421,289	\$1,303,162	\$1,201,125
1,767,813	1,421,289	1,303,162	1,201,125
\$0	\$0	\$0	\$0
\$12,643,354 14.0%	\$11,747,602 12.1%	\$10,964,872 11.9%	\$10,120,248 11.8%
\$858,954	\$789,103	\$691,602	\$732,142
956,558	881,767	691,602	732,142
\$97,604	\$92,664	\$0	\$0
\$3,631,919 26.3%	\$3,472,950 25.4%	\$3,356,312 20.6%	\$3,248,018 22.5%
\$0	\$141	\$260	\$33
516	549	590	565
\$516	\$408	\$330	\$532
\$1,360	\$1,313	\$1,545	\$1,470
37.9%	41.8%	38.2%	38.4%
\$448,636	\$463,073	\$1,884,555	\$1,569,630
204,475	192,287	180,910	191,148
\$2 <i>11</i> 161			* * * = * * * *
\$244,161	\$270,786	\$1,703,645	\$1,378,482
\$39,413	\$34,301	\$41,378	\$49,287
\$39,413	\$34,301	\$41,378	\$49,287
\$39,413 518.8% \$67,102 67,102	\$34,301 560.6% \$65,839 65,839	\$41,378 437.2% \$63,193 63,193	\$49,287 387.8% \$55,538 55,538
\$39,413 518.8% \$67,102	\$34,301 560.6% \$65,839	\$41,378 437.2% \$63,193	\$49,287 387.8% \$55,538

Required Supplementary Information (continued)

PERF B and C Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions - Ten-Year Review

	2022-23	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	Individual Entry Age Normal
	Level Percentage of Payroll (pre-2019 bases), Level Dollar (2019 and later bases),	Level Percentage of Payroll (pre-2019 bases), Level Dollar (2019 and later bases),	Level Percentage of Payroll (pre-2019 bases), Level Dollar (2019 and later bases),	Level Percentage of	Level Percentage of
	and Direct Rate	and Direct Rate	and Direct Rate	Payroll and Direct Rate	Payroll and Direct Rate
Amortization Method	Smoothing	Smoothing	Smoothing	Smoothing	Smoothing
Remaining Amortization	0.07	0.00	40.00	11.00	40.00
Periods ¹	8-27 years	9-28 years	10-29 years	11-30 years	12-30 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
Inflation	2.30%	2.50%	2.50%	2.63%	2.75%
0 1 1	Varies, Based on Entry	Varies, Based on Entry	Varies, Based on Entry	Varies, Based on Entry	Varies, Based on Entry
Salary Increases	Age and Service	Age and Service	Age and Service	Age and Service	Age and Service
Investment Rate of	0.000/	7 000/	7.000/	7.05%	7 000/
Return	6.80%	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	Individual Entry Age Normal
	Level Percentage of Payroll (pre-2019 bases), Level Dollar	Level Percentage of Payroll (pre-2019 bases), Level Dollar			
Amortization Method	(2019 and later bases), and Direct Rate Smoothing	(2019 and later bases), and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing	Level Percentage of Payroll and Direct Rate Smoothing
	Differs by employer rate	Differs by employer rate	Differs by employer rate	Differs by employer rate	Differs by employer rate
Remaining Amortization Periods ¹	plan but no more than 28 years	plan but no more than 29 years	plan but no more than 30 years	plan but no more than 30 years	plan but no more than 30 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
Inflation	2.50%	2.50%	2.50%	2.63%	2.75%
	Varies, Based on Entry	Varies, Based on Entry	Varies, Based on Entry	Varies, Based on Entry	Varies, Based on Entry
Salary Increases	Age and Service	Age and Service	Age and Service	Age and Service	Age and Service
Investment Rate of Return	7.00%	7.00%	7.00%	7.25%	7.38%
Netulli	1.00%	7.00%	7.00%	1.23%	1.30%

(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			
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			
7.50%	7.50%	7.50%	7.50%	7.50%
PERF C	1.0070	1.0070	1.0070	1.0070
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			
7.50%	7.50%	7.50%	7.50%	7.50%

Required Supplementary Information (continued)

LRF, JRF, and JRF II Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions – Ten-Year Review

	2022-23	2021-22	2020-21	2019-20	2018-19
LRF					
Actuarial Cost Method	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
				Level Percentage of	Level Percentage of
Amortization Method	Level Dollar and Direct Rate Smoothing	Level Dollar and Direct Rate Smoothing	Level Dollar and Direct Rate Smoothing	Payroll and Direct Rate Smoothing	Payroll and Direct Rate Smoothing
Remaining Amortization	· · · · · · · · · · · · · · · · · · ·				j
Periods ¹	N/A	N/A	N/A	N/A	30 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
Inflation	2.30%	2.50%	2.50%	2.50%	2.50%
Salary Increases	2.80%	2.75%	2.75%	2.75%	2.75%
Investment Rate of Return	4.50%	5.00%	5.00%	5.00%	5.00%
	4.30%	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	Individual Entry Age Normal
Amortization Method	Level Dollar	Level Dollar	Level Dollar	Level Dollar	Level Dollar
Remaining Amortization	Level Dollar	Level Donal	Level Donal	Level Donal	Level Dollar
Periods	10 years	10 years	10 years	10 years	10 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
Inflation	2.30%	2.50%	2.50%	2.50%	2.50%
Salary Increases	2.80%	2.75%	2.75%	2.75%	2.75%
Investment Rate of					
Return	3.00%	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	Individual Entry Age Normal
				Level Percentage of Payroll and Direct Rate	Level Percentage of Payroll and Direct Rate
Amortization Method	Level Dollar	Level Dollar	Level Dollar	Smoothing	Smoothing
Remaining Amortization					
Periods ¹	N/A	20 years	5 years	5-30 years	2-30 years
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
Inflation	2.30%	2.50%	2.50%	2.50%	2.50%
Salary Increases	2.80%	2.75%	2.75%	2.75%	2.75%
Investment Rate of Return	6.00%	6.50%	6.50%	6.50%	6.50%
NewIII	0.00%	0.30%	0.00%	0.30%	0.00%

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

2017-18	2016-17	2015-16	2014-15	2013-14
LRF				
Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal	Individual Entry Age Normal
Lovel Dereentage of Devrell	Lovel Dereentage of Devrall	Lovel Dereentage of Devrell		
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
g				
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%
F 00%	F 7F0/		F 7F0/	F 7F0/
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%
0.05%	4.05%	4.05%	4.05%	4.05%
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
individual Entry Ago Normai	inamadai Enay Ago Normai	individual Entry Age Norman	individual Entry Ago Norman	individual Entry Ago Norman
Level Percentage of Payroll	Level Percentage of Payroll	Level Percentage of Payroll		
and Direct Rate Smoothing	and Direct Rate Smoothing	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%
0.00 %	7.00%	1.0078	1.0078	1.0076

SCHEDULE OF INVESTMENT RETURNS

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

Plan	2023 Rate of Return	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	6.1%	(7.5%)	22.4%	5.0%	6.5%	8.4%	11.2%	0.5%	2.2%	17.7%
PERF B										
Schools Cost-Sharing	6.1%	(7.5%)	22.4%	5.0%	6.5%	8.4%	11.2%	0.5%	2.2%	17.7%
PERF C										
Public Agency Cost-										
Sharing	6.1%	(7.5%)	22.4%	5.0%	6.5%	8.4%	11.2%	0.5%	2.2%	17.7%
LRF	0.6%	(10.3%)	13.4%	6.2%	7.0%	4.8%	4.3%	3.8%	(0.1%)	12.9%
JRF	4.5%	0.3%	0.3%	2.3%	3.2%	1.9%	1.0%	0.5%	0.2%	0.1%
JRF II	7.1%	(13.4%)	24.3%	4.1%	6.9%	7.4%	9.6%	1.9%	(0.2%)	18.3%
CERBTF ¹	6.0%	(14.0%)	25.6%	4.0%	6.5%	7.3%	10.0%	1.6%	—%	%
CEPPTF ²	4.7%	(13.9%)	14.4%	%	%	%	%	%	—%	%

(1) Information in this schedule is not available prior to 2016.

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

PUBLIC EMPLOYEES' HEALTH CARE FUND

Schedule of Claims Development Information (Dollars in Thousands)

	0000	0000	0004	0000	0040	0040	0047	0040	0045	0044
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
1) Net Earned Required Premium and										
Investment Revenues	\$4,525,821	\$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
2) Unallocated Expenses	\$315,863	\$309,473	\$304,990	\$331,235	\$299,053	\$304,408	\$312,924	\$355,779	\$371,916	\$192,987
3) Estimated Incurred										
Claims and Expenses, End of Policy Year	\$4,361,650	\$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
4) Paid (Cumulative) as	φ4,301,030	<i>φ</i> 4,227,734	\$3,750,005	\$3,309,200	\$3,000,390	\$3,370,001	\$3,391,103	φJ,4Z4,147	φ3, 4 32,102	φΖ,140,0ΖΙ
4) Faid (Cumulative) as of:										
End of Policy Year	\$3,789,762	\$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
One Year Later	· · · · —	4,135,075	3,714,863	3,475,051	3,620,210	3,380,649	3,395,673	3,406,016	3,802,277	2,678,906
Two Years Later	_	_	3,728,299	3,482,349	3,627,419	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906
Three Years Later	_	_	_	3,482,349	3,627,419	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906
Four Years Later	_	_	_	_	3,627,419	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906
Five Years Later	_	_	_	_	_	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906
Six Years Later	_	_	_	_	_	_	3,395,673	3,406,016	3,802,277	2,678,906
Seven Years Later	_	_	_	_	_	_	_	3,406,016	3,802,277	2,678,906
Eight Years Later	—	_	—	—	—	—	—	—	3,802,277	2,678,906
Nine Years Later	—	_	—	—	—	—	—	—	—	2,678,906
5) Re-Estimated Incurred Claims Expenses:										
End of Policy Year	\$4,361,650	\$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
One Year Later	_	4,135,075	3,714,863	3,475,051	3,620,210	3,380,649	3,395,673	3,406,016	3,802,277	2,678,906
Two Years Later	_	_	3,728,299	3,482,349	3,627,419	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906
Three Years Later	—	_	—	3,482,349	3,627,419	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906
Four Years Later	—	—	_	—	3,627,419	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906
Five Years Later	-	_	_	—	-	3,386,762	3,395,673	3,406,016	3,802,277	2,678,906
Six Years Later	-	_	_	—	-	—	3,395,673	3,406,016	3,802,277	2,678,906
Seven Years Later	-	_	—	—	—	—	—	3,406,016	3,802,277	2,678,906
Eight Years Later	—	-	—	—	—	—	—	—	3,802,277	2,678,906
Nine Years Later	—	_	—	—	_	—	_	—	_	2,678,906
6) Increase (Decrease) in Estimated Incurred Claims and Expenses From End of Policy		(**********	(*04 704)	(#00.050)	(**************************************	(\$400.040)	¢4.400	(\$40,404)	\$070 475	(\$20.045)
Year	\$—	(\$92,679)	(\$21,764)	(\$86,859)	(\$39,177)	(\$189,319)	\$4,490	(\$18,131)	\$370,175	(\$69,915)

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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- 104 Consultant and Professional Services Expenses All Funds
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Other Supplementary Information

ADMINISTRATIVE EXPENSES - ALL FUNDS (DOLLARS IN THOUSANDS)

	2023
PERSONAL SERVICES	2023
Salaries & Wages	\$206,505
Employee Benefits	110,358
Accrued Pension & OPEB Expense	(32,960)
Total Personal Services	\$283,903
CONSULTANT & PROFESSIONAL SERVICES	
State of California Agencies	\$4,710
External Consultants	25,976
Retiree Benefit Trust Management Fees	90
Pension Prefunding Trust Management Fees	18
Deferred Compensation Management/Custody Fees	3,361
Health Plan Administrator Fees	272,993
Long-Term Care Administrator Fees	18,627
Total Consultant & Professional Services	\$325,775
OPERATING EXPENSES & EQUIPMENT	
General Expense	\$6,498
Software	1,684
Printing	84
Building	22,794
Postage	2,984
Communications	1,212
Data Processing Services	20,474
Travel	760
Training	502
Medical Examiners	2,116
Facilities Operation	2,853
Central Administrative Services	25,115
Administrative Hearings	1,278
Consolidated Data Center	116
CSUS Foundation - Students	216
Equipment	2,214
Total Operating Expenses & Equipment	\$90,900
OTHER EXPENSES & ADJUSTMENTS	
Depreciation Expense	\$16,602
Increase/(Decrease) in Paid Absence Obligation	(5,975)
Amortization	2,245
Miscellaneous	(3,025)
Total Other Expenses & Adjustments	\$9,847
TOTAL ADMINISTRATIVE EXPENSES — ALL FUNDS	\$710,425

The total pension administration cost in Fiscal Year 2021-22 (most recent available) was \$223 per active member and annuitant, compared with \$202 in Fiscal Year 2020-21.

Investment Management Fees^{1, 2} (Dollars in Thousands)

	Fees	
Equity Managers		Blackstone Tactical Opportunities
Arrowstreet Capital, LP	\$25,073	Blackstone Tactical Opportunities
Baillie Gifford Overseas, Ltd.	733	Blackstone Tactical Opportunities
Hamilton Lane Advisors, LLC	318	BOND III, LP
Legato Capital Management Investments, LLC	1,358	Bridgepoint Europe IV 'B', LP
Wellington Management Company, LLP	3,610	Bridgepoint Europe IV 'D', LP
Total Equity Managers	\$31,092	Bridgepoint Europe V
		BRV Lotus Fund III, LP
Fixed Income Managers		Butterfly Fund III, LP
Columbia Management Investment Advisers	(\$208)	CA Co-Investment Limited Partne
Nomura Corporate Research And Asset Mgt.	(23)	California Asia Investors, LP
Total Fixed Income Managers	(\$231)	California Emerging Ventures IV,
		California Mezzanine Investment
Private Equity Managers ^{3, 4}		Capital Link Fund I, LLC
57 Stars Global Opportunities Fund 2 (CalPERS), LLC	\$1,043	Capital Link Fund II, LLC
57 Stars Global Opportunities Fund, LLC	200	CapVest Equity Partners V SCS
Advent Global Technology II Limited Partnership	2,250	Carlyle Asia Partners III, LP
Advent International GPE IX Limited Partnership	6,584	Carlyle Asia Partners V, LP
Advent International GPE V-D, LP	18	Carlyle Europe Partners III, LP
Advent International GPE VI-A, LP	673	Carlyle Europe Partners V, S.C.S
Advent International GPE VII-C, LP	1,742	Carlyle Partners V, LP
Advent International GPE VIII-B Limited Partnership	5,404	Carlyle Partners VI, LP
Advent International GPE X Limited Partnership	8,106	Carlyle Partners VII, LP
AlpInvest Secondaries Fund (onshore) VII, LP	4,085	Carlyle Partners VIII, LP
Apollo Investment Fund IX, LP	2,189	Carlyle Strategic Partners II, LP
Apollo Investment Fund VIII, LP	955	Carlyle Strategic Partners IV, LP
Apollo Special Opportunities Managed Account, LP	766	Carlyle U.S. Equity Opportunities
Ares Corporate Opportunities Fund V, LP	1,667	CDH Fund V, LP
Ares Corporate Opportunities Fund VI, LP	3,250	Centerbridge Capital Partners III,
Arlington Capital Partners VI, LP	2,739	Cerberus CAL II Partners, LP
Arsenal Capital Partners Growth, LP	112	Cerberus CAL III Partners, LP
Arsenal Capital Partners VI, LP	(1,262)	Cerberus CP Partners, LP
ASF VIII B, LP	2,636	Cerberus Institutional Partners V
Asia Alternatives Capital Partners II, LP	9	Clayton, Dubilier & Rice Fund X,
Bain Capital Tech Opportunities Fund II, LP	1,763	Clayton, Dubilier & Rice Fund XI
Bain Capital Venture Fund 2022, LP	938	Clearlake Capital Partners III, LP
Base10 Advancement Initiative II, LP	686	Clearlake Capital Partners IV, LF
Base10 Partners III, LP	1,430	Clearlake Capital Partners V, LP
BDC III C, LP	(661)	Clearlake Capital Partners VII, L
BDC IV D, LP	2,838	Clearlake Opportunities Partners
BE VI 'H', LP	3,544	Crosspoint Capital Fund II, LP
Berkshire Fund X, LP	1,059	CVC Capital Partners Asia V, LP
Beyond SPV I, LP	500	CVC Capital Partners Strategic C
Blackstone Capital Partners VI, LP	(2)	Capital, LP
Blackstone Capital Partners VII, LP	1,851	CVC Capital Partners VI, LP
Blackstone Capital Partners VIII, LP	1,547	CVC Capital Partners VII (A), LP
Blackstone Core Equity Partners II, LP	3,795	CVC Capital Partners VIII (A), LF
	1,283	Dragoneer Opportunities Fund V
Blackstone Tactical Opportunities Fund - C. LP		I BERLEY AND A LOUIS A LOUIS A LOUIS A LOUIS A LOUIS
Blackstone Tactical Opportunities Fund - C, LP Blackstone Tactical Opportunities Fund (KG Co-Invest), LP	263	EMAlternatives Investments, LP EQT IX (No.2) USD SCSp

	Fees
Blackstone Tactical Opportunities Fund II - C, LP	\$1,390
Blackstone Tactical Opportunities Fund III-C (Surge), LP	914
Blackstone Tactical Opportunities Fund III - C, LP	1,234
BOND III, LP	895
Bridgepoint Europe IV 'B', LP	120
Bridgepoint Europe IV 'D', LP	455
Bridgepoint Europe V	683
BRV Lotus Fund III, LP	2,813
Butterfly Fund III, LP	2,546
CA Co-Investment Limited Partnership	70
California Asia Investors, LP	6
California Emerging Ventures IV, LLC	191
California Mezzanine Investment Fund, LP	26
Capital Link Fund I, LLC	477
Capital Link Fund II, LLC	475
CapVest Equity Partners V SCSp	6,392
Carlyle Asia Partners III, LP	91
Carlyle Asia Partners V, LP	1,614
Carlyle Europe Partners III, LP	(14)
Carlyle Europe Partners V, S.C.Sp	1,659
Carlyle Partners V, LP	(94)
Carlyle Partners VI, LP	756
Carlyle Partners VII, LP	3,386
Carlyle Partners VIII, LP	5,217
Carlyle Strategic Partners II, LP	14
Carlyle Strategic Partners IV, LP	1,478
Carlyle U.S. Equity Opportunities II, LP	909
CDH Fund V, LP	2,284
Centerbridge Capital Partners III, LP	1,400
Cerberus CAL II Partners, LP	(200)
Cerberus CAL III Partners, LP	2,874
Cerberus CP Partners, LP	(1,056)
Cerberus Institutional Partners V, LP	121
Clayton, Dubilier & Rice Fund X, LP	382
Clayton, Dubilier & Rice Fund XI, LP	3,857
Clearlake Capital Partners III, LP	107
Clearlake Capital Partners IV, LP	359
Clearlake Capital Partners V, LP	39
Clearlake Capital Partners VII, LP	1,904
Clearlake Opportunities Partners (P), LP	773
Crosspoint Capital Fund II, LP	7,011
CVC Capital Partners Asia V, LP	2,688
CVC Capital Partners Strategic Opportunities Compounding Capital, LP	5,744
CVC Capital Partners VI, LP	3,295
CVC Capital Partners VII (A), LP	5,144
CVC Capital Partners VIII (A), LP	9,988
Dragoneer Opportunities Fund VI, LP	750
EMAlternatives Investments, LP	200
EQT IX (No.2) USD SCSp	8,776

Investment Management Fees^{1, 2} (Dollars in Thousands) (continued)

	Fees		Fees
EQT X (No.2) USD SCSp	\$5,044	Lime Rock Partners V, LP	\$6
EW Healthcare Partners Acquisition Fund, LP	(50)	Lindsay Goldberg IV, LP	518
First Reserve Fund XIII, LP	1,655	Lindsay Goldberg V, LP	3,996
Francisco Partners Agility II, LP	487	LongRange Capital Fund I, LP	10,074
Francisco Partners III, LP	86	Madison Dearborn Capital Partners VIII, LP	5,961
Francisco Partners VI, LP	1,933	New Mountain Partners VI, LP	2,128
GCM Grosvenor DEM II, LP	1,443	Nordic Bear SCSp	872
GCM Grosvenor DEM III, LP	2,656	Oak HC/FT Partners V, LP	3,361
GCM Grosvenor DEM, LP	665	Oaktree Latigo Investment Fund, LP	4,590
General Catalyst Group XI - Health Assurance, LP	70	Oaktree Opportunities Fund VIIIb, LP	413
Genstar X Opportunities Fund I, LP	549	OHA Black Bear Fund, LP	3,042
GPE IX Forescout Co-Investment, LP	66	Onex Partners IV, LP	1,341
GPE IX TKE Co-Investment, LP	11	Onex Partners V (B), LP	8,214
Green Equity Investors V, LP	(14)	Orchard Park, LP	14
Green Equity Investors VIII, LP	1,880	PAG Asia I, LP	270
Greenbriar Equity Fund VI, LP	636	PAG Asia III, LP	4,787
GSO Capital Solutions Fund II, LP	69	Palladium Equity Partners V, LP	1,480
GSO Energy Partners-C II, LP	541	Patient Square Equity Partners, LP	10,632
GSO Energy Partners-C, LP	664	Patria Brazilian Private Equity Fund V, LP	2,531
H&F ARROW 1, LP	26	Permira Growth Opportunities I, LP 1	1,664
HIG Europe Middle Market LBO Fund, LP	1,580	Permira Growth Opportunities II SCSp	2,248
Hellman & Friedman Capital Partners IX, LP	7,204	Permira V, LP	1,557
Hellman & Friedman Capital Partners VII	104	Permira VI, LP 1	3,161
Hellman & Friedman Capital Partners VIII, LP	2,735	Permira VII, LP 1	3,912
Hellman & Friedman Capital Partners X, LP	11,250	Permira VIII-2 SCSp	8,796
Insight Partners XI, LP	6,404	Prysm Capital Fund I, LP	3,977
Insight Partners XII Buyout Annex Fund, LP	1,272	PSG Encore, LP	97
Insight Partners XII, LP	10,433	PSG Europe II, LP	1,734
Insight Venture Partners Growth-Buyout Coinvestment Fund		PSG V, LP	2,493
(B), LP	2,622	Riverstone Global Energy and Power Fund V, LP	2,581
Insight Venture Partners IX, LP	1,459	Riverstone Global Energy and Power Fund VI, LP	4,497
Insight Venture Partners X, LP	3,733	Riverstone/Carlyle Global Energy and Power Fund IV, LP	60
Ithaca, LP	_	Riverstone/Carlyle Renewable & Alternative Energy Fund II,	
Jade Equity Investors, LP	(827)	LP	44
K5 Private Investors, LP	3,016	Riverwood Capital Partners (Parallel - A), LP	24
Karakoram Fund C, LP	773	SAIF Partners III, LP	94
Khosla Ventures III, LP	136	SAIF Partners IV, LP	896
Khosla Ventures Seed, LP	300	Samson Brunello 1, LP	11
KKR Asian Fund II, LP	1,299	Sankaty Managed Account (CalPERS), LP	306
KKR Asian Fund IV SCSp	2,202	Sequoia Capital China Seed Fund III, LP	194
KKR European Fund II, LP	5	Sequoia Capital China Venture Fund IX, LP	425
KKR European Fund III, LP	60	Sierra Partners, LP	87
KKR European Fund V (USD) SCSp	1,750	Silver Lake Partners IV, LP	1,922
KKR North America Fund XIII SCSp	4,441	Silver Lake Partners V, LP	2,729
KM Corporate Partners Fund II, LP	100	Silver Lake Partners VI, LP	9,396
Lightspeed Opportunity Fund II, LP	223	Siris Partners IV, LP	1,499
Lightspeed Venture Partners Select V, LP	2,000	SL SPV-1, LP	381
Lightspeed Venture Partners XIV-A (Inception), LP	900	SL SPV-2, LP	270
Lightspeed Venture Partners XIV-B (Ignite), LP	1,100	Springblue A, LP	1,250
Lime Rock Partners IV AF, LP	96	Springblue B, LP	804

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Investment Management Fees^{1, 2} (Dollars in Thousands) (continued)

	Fees		Fees
SR One Capital Fund II-A, LP	\$2,772	OHA CA Customized Credit Fund, LP - OHA Credit Solutions	¢040
Summit Partners Growth Equity Fund X-A, LP	107	Fund II Other Advisory Client Investment	\$840
TA XIV-A, LP	2,226	OHA CA Customized Credit Fund, LP - OHA Senior Private Lending Fund (CA 3)	1,091
Tailwind Capital Partners II, LP	299	OHA CA Customized Credit Fund, LP - OHA Senior Private	.,
Tailwind Capital Partners III, LP	930	Lending Fund (CA 5)	1,091
TCV X, LP	3,500	Blue Owl Diversified Lending (CP), LP - Blue Owl Diversified	0.40
TCV XI, LP	5,093		218
The Central Valley Fund II SBIC, LP	84	PIMCO DISCO Onshore Fund III, LP	180
The Rise Fund (A), LP	630	Sixth Street Fundamental Strategies Partners (A), LP	1,393
The Veritas Capital Fund VIII, LP	7,322	Sixth Street Mid-Stage Growth Partners (A), LP	55
Tiger Global Private Investment Partners XV, LP	5,466	TSSP Adjacent Opportunities Partners (B), LP	5,640
TowerBrook Investors IV (Onshore), LP	2,286	West Street Co-Investment Partners (C), LP	376
Towerbrook Investors V (Onshore), LP	6,832	West Street Mezzanine Co-Investment Partners (C), LP	167
Towerbrook Structured Opportunities Fund (Onshore), LP	1,469	West Street Mezzanine Partners VIII, LP	2,330
Towerbrook Structured Opportunities Fund II (Onshore), LP	2,889	West Street Strategic Solutions Fund I, LP	7,846
TPG Asia VII (A), LP	1,049	Total Private Debt Managers	\$53,759
TPG Growth IV, LP	688		
TPG Growth V, LP	2,975	Real Asset Managers	
TPG Healthcare Partners, LP	1066	Alinda Infrastructure Fund II, LP	\$54
TPG Partners VIII, LP	2771	ARA China Long Term Hold	3,962
TPG Tech Adjacencies II, LP	1148	Archmore International Infrastructure Fund II (B), LP	287
Trident IX, LP	7,419	Archmore International Infrastructure Fund II (C), LP	610
Trident VI	2,069	Blackstone Mileway Logistics, LP	2,357
Trident VII, LP	3,875	Blackstone Property Partners Europe, LP	8,768
Trident VIII, LP	5,824	Blackstone Property Partners Life Sciences, LP	5,866
Triton Fund IV, LP	856	Brookfield Infrastructure Fund V	4,621
Triton Fund V, LP	3,566	CalEast Solstice, LLC	26,524
Valor Equity Partners IV, LP	1,196	CalWest CalPERS GIP	60
VIP IV, LP	4,685	Canyon Catalyst Fund II, LLC	991
Vista Equity Partners Fund VII-Z, LP	6,000	CCF II Industrial	543
WCAS XIII, LP	5,260	CCF III Industrial	1,104
WCAS XIV, LP	5,121	CCF III, LLC	1,733
Welsh, Carson, Anderson & Stowe XII, LP	1,957	CCP 2020	731
Whitney Global Partners, LP	499	CIM Fund III, LP	3,447
Wigmore Street (BDC III), LP	1	CIM Infrastructure Fund, LP	2,841
Wigmore Street BDC IV Co-Investment No.1, LP	32	Core Property Index Trust	479
Wigmore Street Co-investment No.1, LP	1	DigitalBridge Partners II, LP	4,504
Wigmore Street VI Co-Investment No.1, LP	209	DigitalBridge Strategic Assets Fund, LP	791
Yucaipa Corporate Initiatives Fund II, LP	2,884	DW Life Sciences Partners, LLC	2,812
Total Private Equity Managers	\$463,304	FSP - Base	27,911
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		FSP - DT 2012 and Beyond	5,111
Private Debt Managers		GIP Aquarius Fund, SCSp	3,500
Ares Capital Europe V (D) Levered	\$7,410	Global Infrastructure Partners II, LP (GIP II)	1,262
Ares Senior Direct Lending Fund (Delaware) II, LP	7,795	Global Infrastructure Partners IV-A/B, LP	2,900
Ares SME (Parallel), LP	2,956	Golden Reef Infrastructure Trust	9,380
Blackstone Credit Series Fund-C LP - Series A	229	Gotham Office Realty Partnership	2,638
Blackstone Real Estate Debt Strategies IV-C, LP	10,532	GRI - Base	27,269
Oaktree Gilead Investment Fund, LP - Series A	3,144	GRI - DT 2012 and Beyond	166
OHA CA Customized Credit Fund, LP - OHA Co-Invest	- ,	Harbert Gulf Pacific Power, LLC (HGPP)	6,877
Opportunities Fund (CA)	466	Harbert Infrastructure Fund VI, LP	1,000

Investment Management Fees^{1, 2} (Dollars in Thousands) (continued)

	Fees
Harbert Power Fund V, LP (HPF V)	\$496
HC Green Development Fund, LP	405
HC LTH, LLC	4,212
IFM Global Infrastructure (US), LP	1,446
IIF Hedged, LP	3,560
IMI - Base	23,018
IMP - Base	38,238
IMP - DT 2012 and Beyond	1,345
IMP - ICMI	4,028
IMP Abaca	537
IMP Fairmont Residential Owner, LLC	405
Institutional Logistics Partners, LLC	10,018
KC 2011, LLC	749
Land Management Company Resmark	817
Lincoln Timber, LP	1,683
North Haven Infrastructure Partners II, LP	1,023
ORA Residential Investments I, LP	1,038
Pacific Multifamily Investors, LLC	10,336
PMI Tactical	3,072
Sacramento Venture Hines Base	430
Sacramento Venture Hines DT	442
Stonepeak Infrastructure Fund IV, LP	3,588
Strategic Property Fund Asia SCSP	1,369
Sylvanus, LLC	1,938
TechCore 2019	15,812
Tower Bridge Infrastructure Partners, LP	8,092
Total Real Asset Managers	\$299,196

Other Investment Management Fees

Federated Redwood Trade Finance Fund, LP	4
Total Other Investment Management Fees	<u>\$7,308</u>
Total Management Fees	\$854,428

Performance Fees⁵ (Dollars in Thousands)

	Fees
Real Asset Managers	
Blackstone Property Partners Europe, LP	\$3,790
Blackstone Property Partners Life Sciences, LP	(1,019)
CalEast Canada Limited Partnership	(8)
Canyon Catalyst Fund II, LLC	(9,856)
Canyon Johnson Urban Fund, III	(2)
CCF II Industrial	(3,226)
CCF III Industrial	(7,449)
CCF III, LLC	(16)
CIM Infrastructure Fund, LP	(65,462)
DigitalBridge Partners II, LP	2,860
FSP - Base	4,605
FSP - DT 2012 and Beyond	(547)
GIP Aquarius Fund, SCSp	5,844
Global Infrastructure Partners II, LP (GIP II)	1,336
Gotham Office Realty Partnership	(123)
GRI - Base	8,989
Harbert Gulf Pacific Power, LLC (HGPP)	13,946
Harbert Infrastructure Fund VI, LP	409
Harbert Power Fund V, LP (HPF V)	1,584
IFM Global Infrastructure (US), LP	2,148
IMP - Base	33,089
IMP - DT 2012 and Beyond	880
IMP - ICMI	3,498
IMP Abaca	478
IMP DT 2020	(1,866)
IMP Fairmont Residential Owner, LLC	353
Institutional Logistics Partners, LLC	20,072
KC 2011, LLC	917
Land Management Company Resmark	9,607
ORA Residential Investments I, LP	(3,519)
Pacific Multifamily Investors, LLC	6,796
PMI Tactical	(6,017)
Stonepeak Infrastructure Fund IV, LP	2,013
TechCore 2019	15,812
Total Real Asset Managers	\$39,916
Total Performance Fees	\$39,916
Total Management and Performance Fees	\$894,344

Other Investment Expenses^{1, 5} (Dollars in Thousands)

	Fees		Fees
Advisory Fees	1000	Legal Fees	1003
Goldman Sachs Asset Management, LP	\$216	Berman Tabacco	\$26
Legato Capital Management Investments, LLC	1,438	Buchalter A Professional Corporation	1
Principal Financial Services, Inc.	616	DLA Piper LLP (US)	1,077
Total Advisory Fees	\$2,270	Foster Garvey, PC	500
		Foster Pepper, PLLC	47
Appraisal Fees		Hogan Lovells US, LLP	123
Situsamc Holdings Corporation	\$10,173	K&L Gates, LLP	517
Total Appraisal Fees	\$10,173	Katten Muchin Rosenman, LLP	8
		Lowenstein Sandler, LLP	500
Auditor Fees		Morgan Lewis & Bockius, LLP	439
Conrad, LLP	\$37	Nielsen Merksamer Parrinello Gross & Leoni, LLP	15
KPM & Associates, LLP	13	Nixon Peabody, LLP	2
Total Auditor Fees	\$50	Norton Rose Fulbright US, LLP	1
		Pillsbury Winthrop Shaw Pittman, LLP	957
Company Expense		Seward & Kissel, LLP	1
Federated Redwood Trade Finance Fund, LP	\$134	Steptoe & Johnson, LLP	112
Legato Capital Management Investments, LLC	171	Wellington Gregory, LLP	8
Total Company Expense	\$305	Total Legal Fees	\$4,334
		•	
Fund Administration Fees		Master Custodian Fees	
State Street Bank and Trust Company	\$3,576	State Street Bank and Trust Company	\$10,056
Total Fund Administration Fees	\$3,576	Total Master Custodian Fees	\$10,056
Investment Consultant Fees		Tax Advisory Fees	
AKSIA CA, LLC	\$140	Ernst & Young, LLP	\$823
AON Risk Insurance Services West, Inc.	34	Total Tax Advisory Fees	\$823
Bard Consulting, LLC	178		
Callan, LLC	1,944	Technology Expenses	
D2 Alternative Investments Limited	9	A.M. Best Company, Inc.	\$4
Eigen 10 Advisors, LLC	71	Ablegov, Inc.	1
Funston Advisory Services, LLC	189	Acadiasoft, Inc.	75
Hhs Technology Group, LLC	296	Acuity Technical Solutions, LLC	30
Imp Partners, LLC	353	Aletheia Analyst Network Limited	15
Lenox Park Solutions, Inc.	75	Alphasense, Inc.	57
Loop Capital Financial Consulting	59	Altus Group, Inc.	340
Mckinsey & Company, Inc., Washington DC	980	Axioma, Inc.	505
Mercer Investments, LLC	74	Barra, LLC	713
Msys, Inc.	188	Bca Research, Inc.	219
Nxtis, Inc.	269	Black Knight Technologies, LLC	10
Propoint Technology, Inc.	2,793	Blackrock Financial Management, Inc.	12,350
Pyramid Technical Consultants, Inc.	156	Bloomberg Index Services Limited	219
R V Kuhns & Associates, Inc.	85	Bloomberg LP DBA Bloomberg Sef, LLC	3,536
Rclco Fund Advisors, LLC	479	Broadridge Investor Communications	5
Sps Consulting Services, LLC	534	Cambridge Associates, LLC	20
Sri Infotech, Inc.	240	Carahsoft Technology Corp.	882
Technology Crest Corporation	200	Cassini Systems, Inc.	140
The Spaulding Group, Inc.	82	Cb Information Services, Inc.	51
The Trustees of Columbia Univ New York	97	CEM Benchmarking, Inc.	45
Trinity Technology Group, Inc.	311		
minity recimology Group, inc.	311		

Other Investment Expenses^{1, 5} (Dollars in Thousands) (continued)

	Fees		Fees
CEPRES GmbH	\$100	Options Price Reporting Authority	\$1
CFA Institute	45	Ortec Finance BV	55
Charles River Systems, Inc.	3,880	Ortec Finance US BV	190
Clarity Solutions Group, LLC	65	Oxford Economics USA, Inc.	142
Consensus Economics, Inc.	49	PGM Global, Inc	16
Convergence, Inc.	25	Pitchbook Data, Inc.	104
Copyright Clearance Center, Inc.	53	PremiaLab HK Limited	100
Costar Realty Information, Inc.	186	Pregin Limited	68
Curex FX, LLC	15	Real Capital Analytics, Inc.	110
Delinian Trading Limited	21	Refinitiv US, LLC	125
DTCC ITP, LLC	162	RIMES Technologies Corporation	300
Efront Financial Solutions, Inc.	1,501	Ryedale Europe Limited	783
Empirical Research Partners, LLC	550	S & P Global Market Intelligence, LLC	1,108
Equilar, Inc.	34	S&P Dow Jones Indices, LLC	67
Eurasia Group, Ltd.	140	SWIFT	15
Evestment Alliance	43	Situsamc Holding Corporation	10
Factset Research Systems, Inc.	2,649	Solutions Simplified	138
Fitch Solutions, Inc.	654	State Street Bank and Trust Company	1,906
Fixed Income Clearing Corporation	21	StepStone Group, LP	289
Frank Russell Company	38	STOXX Ltd.	16
FTSE International Limited	1,345	Tegus, Inc.	50
Gartner, Inc.	393	The Burgiss Group, LLC	77
•	47	The Mathworks, Inc.	84
Gavekal USA, Inc. Glass Lewis & Co, LLC	631	The Statestore, Inc.	8
		The Yield Book, Inc.	281
GLMX Technologies, LLC			
Global Investor Collaboration Services, LLC	6	Tideline Advisors, LLC	131
Green Street Topco, LLC	175	Tradeweb, LLC	170
Haver Analytics, Inc.	137	Trend Macrolytics, LLC	17
Hawking, LLC	4	TRGRP, Inc.	178
Ice Benchmark Administration Limited	32	TriOptima AB	34
Ice Data Derivatives Uk Limited	4	TSX, Inc.	41
IHS Global, Inc.	22	Wood Mackenzie, Inc.	245
Insight Public Sector, Inc.	60	Workato Inc.	60
Institutional Shareholder Services, Inc.	121	Yardeni Research, Inc.	19
Intercontinental Exchange Holdings, Inc.	11	Total Technology Expenses	\$48,607
Intex Solutions, Inc.	251	Internal Investment Personnel and Administrative	
Investment Property Databank	80	Expenses	
IPC Systems, Inc.	280	Internal Investment Personnel and Administrative Expenses	\$105,153
J.P. Morgan Securities, LLC	11	Total Internal Investment Personnel and Administrative	÷,
Jpx Market Innovation & Research, Inc.	13	Expenses	\$105,153
Kyriba Corp	48		
London Stock Exchange, PLC	44	Miscellaneous Investment Expense Fees	
Markit Group Limited	27	Miscellaneous Investment Expense Fees	\$220
Markit Indices GmbH	33	Transaction Fees	269,326
Markit North America, Inc.	58	Total Miscellaneous Investment Expense Fees	\$269,546
Microsoft Corporation	1	Total Other Investment Fees and Expenses	\$464,729
Moodys Analytics, Inc.	803	Total Investment Expenses - All Funds	\$1,359,073
Morningstar, Inc.	11	(1) Expenses and fees less than one thousand dollars are indicated by a dash.	
Mri Intermediate Holdings, LLC	200	(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
MSCI, Inc.	1,199	fees are net of management fee offsets. For more detail, review the Private Equity Manag	
MUFG Capital Analytics, LLC	6,160	Sharing table in the Investment Section.	ets. and/or carried
Mythics, Inc.	2	(4) Investments listed reflect only those investments with management fees, rebates, offse interest incurred within the fiscal reporting period. (5) Negative performance fees are due to the reversal of accruals caused by the fluctuation	

CONSULTANT AND PROFESSIONAL SERVICES EXPENSES¹ – ALL FUNDS (DOLLARS IN THOUSANDS)

Individual or Firm	Fees	Nature of Services
34 Strong, Inc.	\$29	Talent Management and Employee Development
Advanced Systems Group, LLC		Production Equipment Maintenance Services
	()	Application Development Information Technology Service Management Infrastructure and Personal
Agility Software Solutions, LLC	58	Productivity Services
Agreeya Solutions, Inc.	34	Information Technology Consulting and Support Services
Alston & Bird, LLP	727	Legal Services
American Unit, Inc.	44	Information Technology Consulting and Support Services
Anthem Blue Cross	126,181	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Aon Consulting, Inc.	50	Consulting for Salary Surveys Executive Compensation Recommendations and Advice for the Compensation Program
Bates White	425	Health Plan Strategy
BDO USA, P.C.		Auditor Services
Belmonte Enterprises, LLC		Application Development
Blue Shield of California	61,087	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
BM Associates, Inc.	,	Network Architecture Services
Buchalter		Legal Services
Buck Global, LLC		Actuarial Services
California Creative Solutions, Inc.		IT Consulting
Capio Group	841	Application Development
Cogenttec, LLC		Consulting Services for myCalPERS Support
Cooperative Personnel Services		Organizational and Leadership Development
Cornerstone Fitness, Inc.		Employee Training and Development
Covid Clinic, Inc.		On-Site Mobile COVID-19 Testing
Delegata Corporation	, ,	Application Development
Department of Human Resources		Legal Services Selection Services Online System Costs Administrative Fees
Department of Industrial Relations	41	Interagency
Department of Justice	222	Legal and Paralegal Services External Investigative Services
Dore Partnership, LLP		Executive Search and Advisory
Downey Brand, LLP		Legal Counsel
Durie Tangri, LLP	. ,	Legal Services
Eaton Interpreting Services, Inc.		Interpreting Services
Elite Tech Solutions		Actuarial Valuation Systems Support
Elynview Corporation		Data Base Administration Systems Analysis Design Implementation Maintenance and Support
EMC Research. Inc.		PR Marketing
Employee Benefits Law Group PC		Legal Services
Employee Benefits Law Gloup 1 C		Printing
Equanim Technologies	311	Business Process Re-engineering Project Management Services Technical Writing
Equinix, Inc.		Health Consulting
Fair Political Practices Commission		Assessment Services
First Data Merchant Services Corporation	151	Banking Services
Funston Advisory Services, LLC		Board Governance Services
Global Governance Advisors, LLC		Board Compensation Consultant
Government Operations Agency		Operations and Strategic Business Planning
Health Net of California	11,976	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Health Services Advisory Group, Inc.		Health Care Survey Services
Ignatius Bau		Health Consulting
	41	•
illumifin FKA Long Term Care Group, Inc.	18,092	Billing, Banking, Claims Administration, Care Advisory, Enrollment, Customer and Specialist, Reporting, Data Feed Services, IT Services, Marketing Consultant Exhibition Management
Imagination Specialties, Inc.		•
J&K Court Reporting, LLC	38	Legal Services

CONSULTANT AND PROFESSIONAL SERVICES EXPENSES¹ – ALL FUNDS (DOLLARS IN THOUSANDS) (CONTINUED)

Individual or Firm	Fees	Nature of Services
Jlynn Consulting, Inc.		Information Services
K & H Printers-Lithographers, Inc.		Board Election Services
K&L Gates, LLP	•	Legal Services
KearnFord Application Systems Design	225	Configuration Management
King & Spalding, LLP		Legal Services
Kong Consulting, Inc.	· · /	Systems Analysis Design Implementation Maintenance and Support
Korn Ferry (US)		Executive Search and Advisory
Kronick Moskovitz Tiedemann & Girard		Legal Services
Law Office of Chirag Shah		Advice and Representation to The Board on Procedural and Substantive Legal Issues
Mellon Bank	374	Banking Services
Mercer Health & Benefits, LLC		Health Consulting
Michael Scales Consulting, LLC		Application Development
Milliman, Inc.		Project Management Services
Milliman Solutions, LLC		Health Consulting
Morrison & Foerster, LLP		Legal Services
Mulkey Consulting, LLC		Health Care Training Academy
Northeast Retirement Services		Third-Party Member Record Keeper
Nossaman, LLP		Legal Services
Office of State Publishing		Print Services 1099R Production
Oliver Wyman Actuarial Consulting, Inc.		Long Term Care Program Valuation and Actuarial Services
Olson Remcho, LLP	. ,	Election Services
One Ergo Net, Inc.		Ergonomic Services
5		Pharmacy Claims Administration, Account Management, Eligibility, Retail and Other Reporting
OptumRx	13,581	
Orrick Herrington & Sutcliffe, LLP	222	Legal Services
Pasanna Consulting Group, LLC	1,763	Application Development Data Base Administration IT Architecture Systems Analysis Design Implementation Maintenance and Support
Pension Benefit Information, LLC	518	Death Audit Service
Peraton State & Local, Inc.	268	Information Technology Consulting and Support Services
Peter V Lee	230	Health Consulting
Propio Ls, LLC	30	Telephonic Interpreter
Qualapps, Inc.	905	Application Development IT Architecture
Randle Communications, LLC	160	Media Training Writing Editorial Marketing and Crisis Communication Services
Recon Distribution, Inc.	(23)	Exhibition Management
Reed Smith, LLP	49	Legal Services
Ridgeway Partners, LLC	175	Search Firm Services
Rs3 Consulting	448	Information Services Application Development
Rsc Insurance Brokerage, Inc.		Actuarial Consulting Services
Sard Verbinnen & Co, LLC	210	Communication Consulting Services
Sharp Health Plan	8,391	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Shaw HR Consulting, Inc.	25	HR Consulting
Sophus Consulting	292	Legal Services
State Controller's Office	6,262	MIRS Services
State Personnel Board	34	Compliance Review Audit and Processing of Appeals and Complaints
State Treasurer's Office		Wiring of Funds
Steptoe & Johnson, LLP		Legal Services
T5 Consulting, Inc.		Application Development Information Services IT Architecture
The Educe Group, Inc.		IT Consulting
The Highlands Consulting Group, LLC		IT Consulting
The Rand Corporation		IT Consulting
•	100	
The Regents of the University of California		LEADER Training
Toppan Merrill USA, Inc.	(123)	Printing of Open Enrollment Materials and Dissemination

CONSULTANT AND PROFESSIONAL SERVICES EXPENSES ¹ – ALL FUNDS (dollars in thousands) (continued)

Individual or Firm	Fees	Nature of Services
Trinity Technology Group, Inc.	\$263	Application Development Business Intelligence and Reporting Information Services
UnitedHealthCare	42,185	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Van Dermyden Makus Law Corporation	37	Legal Services
Vantage Consulting Group	255	IT Consulting
Vasquez Benisek & Lindgren, LLP	67	Legal Services
Voya	3,361	Third-Party Member Record Keeper
Wellington Gregory, LLP	54	Legal Service on Tax and Employee Benefits Law Issues
West Advanced Technologies, Inc.	298	Information Technology Systems Analysis Design Implementation Consulting and Support Services
Western Health Advantage	6,925	Medical Claims Administration, Account Management, Behavioral, Provider Network, Audit, Innovation and Development, Wellness, Prevention and Disease Management Services
Various	183	
Total Consultant and Professional	\$005 775	

Services Expenses \$325,775

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

STATEMENT OF FIDUCIARY NET POSITION - CUSTODIAL FUNDS

As of June 30, 2023 (Dollars in Thousands)

	Custodial Funds				
	RBF	OASI	Total		
ASSETS AND DEFERRED OUTFLOWS OF		UA0	Total		
RESOURCES					
Cash & Cash Equivalents	\$1	\$0	\$1		
Receivables					
Members	\$46	\$0	\$46		
Employers	119		119		
Interest & Dividends	142	16	158		
Other Program	_	27	27		
Total Receivables	\$307	\$43	\$350		
Investments, at Fair Value					
Short-Term Investments	\$16,322	\$2,067	\$18,389		
Total Investments	\$16,322	\$2,067	\$18,389		
Securities Lending Collateral	\$0	\$0	\$0		
TOTAL ASSETS	\$16,630	\$2,110	\$18,740		
Deferred Outflows of Resources	\$0	\$254	\$254		
TOTAL ASSETS AND DEFERRED OUTFLOWS OF		r -			
RESOURCES	\$16,630	\$2,364	\$18,994		
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES					
Net Pension & OPEB Liabilities	\$0	(\$131)	(\$131)		
Due to Other Funds	پ ن 65	(\$131)	(\$131)		
Unearned Replacement Benefits	16,048	100	16,048		
TOTAL LIABILITIES	\$16,113	(\$25)	\$16,088		
Deferred Inflows of Resources	\$0	\$282	\$282		
TOTAL LIABILITIES AND DEFERRED INFLOWS	φ0	ψ202	ψ202		
OF RESOURCES	\$16,113	\$257	\$16,370		
NET POSITION – RESTRICTED FOR PENSION, OTHER POST-EMPLOYMENT, REPLACEMENT					
BENEFITS, AND PROGRAM ADMINISTRATION	\$517	\$2,107	\$2,624		

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION - CUSTODIAL FUNDS

For the Fiscal Year Ended June 30, 2023 (Dollars in Thousands)

		Custodial Funds				
	RBF	OASI	Total			
		0.101				
ADDITIONS						
Retirement and OPEB Contributions						
Members	\$0	\$0	\$0			
Replacement Benefits	31,783	_	31,783			
Total Retirement and OPEB Contribution	\$31,783	\$0	\$31,783			
Investment Income						
Interest & Amortization	\$350	\$54	\$404			
Net Investment Income	\$350	\$54	\$404			
Other Income	\$608	\$1	\$609			
TOTAL ADDITIONS	\$32,741	\$55	\$32,796			
DEDUCTIONS						
Replacement Benefit Payments	\$31,783	\$0	\$31,783			
Administrative Expenses	589	935	1,524			
TOTAL DEDUCTIONS	\$32,372	\$935	\$33,307			
INCREASE (DECREASE) IN NET POSITION	\$369	(\$880)	(\$511)			
NET POSITION						
Beginning of Year	\$148	\$2,987	\$3,135			
End of year	\$517	\$2,107	\$2,624			

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CHIEF INVESTMENT OFFICER'S LETTER

November XX, 2023

On behalf of the CalPERS Investment Office, I am pleased to report on CalPERS' investment performance, operations, and initiatives for the one-year period ending on June 30, 2023. The CalPERS Public Employees' Retirement Fund (PERF) earned a time-weighted net rate of return of 5.8 percent this fiscal year, with the ending fair value of investments at \$459.2 billion.

Despite not reaching our 6.8 percent expected rate of return, we were able to outperform our total fund benchmark by 25 basis points. While a single year's investment returns are an important marker, long-term return rates provide a more comprehensive look at efforts to secure lifetime benefits for our retirees and beneficiaries. The returns for the 10-year and 20year periods were at and above a 7.0 percent investment return.

Public equity investments outpaced all other asset classes for the fiscal year with a 14.1 percent investment return, while our private debt asset class inaugural investment return was 6.5 percent and 280 basis points of excess returns. The total fund's second largest component, fixed income assets, finished the fiscal year flat. And two asset classes—private equity and real estate—reported a negative return.

The PERF also saw material changes in our new strategic asset allocation that was approved by the CalPERS Board of Administration in 2021. The new asset allocation provides more liquidity and takes a more defensive position in the public markets with a prudent amount of leverage to increase diversification. This asset allocation transition moves us to a more actively managed portfolio that focuses on our ongoing emphasis to expand private market programs.

In our capital market allocations, the public portfolio was reoriented to improve diversification, which increased the PERF net asset value by more than \$25 billion, most of which was driven by public equities. While the emerging market debt active management deployed \$22 billion of capital over the course of this fiscal year, the total unfunded commitments to private assets increased \$15.5 billion from the prior fiscal year. Investment Office highlights for the year include deploying the nine strategic initiatives, refining our Strategy 2030 plan, and introducing an active risk budgeting framework. The nine initiatives align with the Investment Office's four pillars that lay the groundwork for a best-in-class Investment Office, while our Strategy 2030 plan refines the Investment Office's mission and vision, outlines goals and investment strategies, and creates a 2030 roadmap. The introduction of the new active risk budgeting framework will also help manage internal investment processes, focusing on improving benchmark-relative performance.

During the year, we also rounded out several key senior investment positions. Daniel Booth was selected as our new deputy chief investment officer of Private Markets. The newly created position is responsible for all private market investment strategies, including asset allocation. We also selected Anton Orlich as our managing investment director for the Private Equity team. This position was consolidated with the recently created Growth and Innovation program. The consolidation of the private equity asset class with the Growth and Innovation program will allow for greater private market coordination in developing strategies and investment deals focused on higher growth, higher risk and reward opportunities that might not fit within traditional private equity deals. Additionally, we hired Peter Cashion as the managing investment director for Sustainable Investments. Cashion's role is to set the vision, strategy, and governance for CalPERS' sustainability work and be responsible for leading all aspects of the fund's efforts to develop and implement an economics-based research and data framework to support environmental, social, and governance (ESG) integration into the investment decision-making process.

To help place greater emphasis on inclusivity in our investment portfolios, we held an event at the end of the fiscal year with the California State Teachers' Retirement System (CalSTRS) that brought together institutional investors and other global allocators to engage with diverse investor entrepreneurs and general partners (GPs). The Catalyst event brought together 272 investment entrepreneurs and GPs, 112 other institutional investors and allocators, and 94 industry partners to forge a new path in leadership and growth. The event helped share insights and lessons learned from other investor entrepreneurs and GPs who overcame funding obstacles.

To further expand into the private markets, we also announced a \$1 billion commitment aimed at identifying the next generation of investor entrepreneurs. We partnered with two of our longstanding asset managers, TPG and GCM Grosvenor, with each firm receiving a \$500 million allocation from the pension fund. This initiative is part of a larger effort underway, including the development of a start-up investors manual and the Catalyst event.

The Investment Office worked diligently to set the foundation to articulate our Strategy 2030, and 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 be a best-in-class global pension fund manager with a mission to generate risk-adjusted returns that pays pension benefits to our retirees and beneficiaries now and into the future.

Our Investment Office team members, 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

INVESTMENT PERFORMANCE - PUBLIC EMPLOYEES' RETIREMENT FUND (PERF)

Summary of Investments - PERF - As of June 30, 2023 (Dollars in Thousands)

			% of Investments
Category	Book Value	Fair Value	at Fair Value
Short-Term Investments	\$1,526,160	\$1,461,755	1%
Public Equity	157,334,897	200,861,111	42%
Fixed Income	133,404,647	123,736,430	27%
Real Assets	50,961,135	68,759,263	15%
Private Equity	53,056,187	60,150,051	13%
Private Debt	10,168,278	10,915,404	2%
TOTAL INVESTMENT VALUE	\$406,451,304	\$465,884,014	100%

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

	1-Year	3-Year	5-Year	10-Year		1-Year	3-Year	5-Year	10-Year
Category	Return	Return	Return	Return	Benchmark/Peer Universe	Return	Return	Return	Return
Total Fund	5.8%	6.4%	6.1%	7.1%	Total Fund Policy Benchmark ¹	5.6%	6.1%	5.9%	7.0%
					Trust Universe Comparison Service (TUCS)				
					Public Fund Median	7.8%	6.9%	6.2%	7.0%
					Wilshire Large Fund Universe Median	7.7%	9.7%	7.8%	8.1%
Public Equity ²	14.1%	10.6%	7.6%	8.9%	CalPERS Custom Public Equity Benchmark	14.1%	10.4%	7.5%	8.8%
3	(0.00()				Custom FTSE All World, All Cap Equity	(= 00()	10.001	a - a(
Private Equity ³	(2.3%)	19.5%	11.8%	11.8%	+150bps, Quarter Lag	(5.9%)	18.0%	8.7%	11.4%
Income ²	(0.0%)	(5.1%)	1.0%	2.4%	CalPERS Custom Global Fixed Income	(0.0%)	(5.3%)	0.8%	2.0%
IIICOIIIE	(0.070)	(3.170)	1.0 /0	Z.4 /0	Benchmark S&P/LSTA U.S. Leverage Loan 100 Index +	(0.0 %)	(0.070)	0.070	2.0 /0
Private Debt ³	6.5%	%	—%	_%	125 bps, Quarter Lag	3.7%	—%	—%	%
					MSCI/PREA U.S. ACOE Quarterly Property				
Real Assets ³	(3.1%)	7.2%	6.0%	7.7%	Fund Index (Unfrozen) Quarter Lag	(4.1%)	7.4%	6.5%	8.0%
Total Fund	、 ,					、 ,			
Opportunistic	(1.6%)	6.5%	%	—%	Absolute 7.0%	7.0%	7.0%	—%	—%
Low Liquidity Enhanced	()								
Return	6.5%	3.1%	2.7%	%	LIBOR 1 Month Rate	4.1%	1.5%	1.7%	—%
Other	%	%	%	%					
Total Fund Financing									
· ·					ICE BofA US 3-Month Treasury Bill Index +				
Strategic	%	%	—%	%	50bps	%	%	—%	%
Active	%	%	%	%		%	%	%	%

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

(2) Public Equity and Income includes exposure from derivatives and repo borrowing used for Total Fund Financing.

(3) Private assets reflect valuations as of March 31, 2023 and are cash adjusted through June 30, 2023.

PUBLIC EMPLOYEES' RETIREMENT FUND (CONTINUED)

Asset Allocation - PERF

		Interim Policy Target Weight		Prior Policy Target Weight
Asset Class	Current Allocation	(as of 6/30/2023)	Asset Class	(as of 6/30/2022)
Public Equity ¹	45.1%	48.8%	Public Equity	50.0%
Private Equity	12.9%	10.0%	Private Equity	8.0%
Income ¹	26.4%	27.4%	Income	28.0%
Real Assets	15.2%	13.8%	Real Assets	13.0%
Private Debt	2.2%	2.0%		
Total Fund			Total Fund	
Opportunistic	0.1%			
Low Liquidity Enhanced Return	3.0%			
Other	0.3%			
Total Fund Financing			Financing & Liquidty	
Active	(3.4%)		Trust Level Financing	
Strategic	(1.9%)	(2.0%)	Liquidity	1.0%
TOTAL FUND	100.0%	100.0%		100.0%

(1) Public Equity and Income includes exposure from derivatives.

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

California Investments	Fair Value	Cost
Public Equity ¹	\$17,992,290	\$12,479,149
Global Fixed Income ²	6,282,531	7,085,832
Real Assets ³	20,028,226	13,544,510
Private Equity ³	3,057,540	2,607,455
Private Debt ³	1,527,504	1,499,922
TOTAL CALIFORNIA INVESTMENTS	\$48,888,091	\$37,216,868

(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, 2023.

PUBLIC EMPLOYEES' RETIREMENT FUND (CONTINUED)

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

Rank	Security Name	Shares	Fair Value
1	Apple Incorporated	39,836,477	\$7,727,081
2	Microsoft Corporation	21,007,989	7,154,061
3	Amazon.com Incorporated	16,987,395	2,214,477
4	NVIDIA Corporation	4,349,657	1,839,992
5	Berkshire Hathaway Incorporated Class B	5,330,678	1,817,761
6	Tesla Incorporated	6,738,863	1,764,032
7	Johnson & Johnson	10,357,122	1,714,311
8	Alphabet Incorporated Class C	14,167,797	1,695,885
9	PepsiCo Incorporated	8,893,628	1,647,278
10	Meta Platforms Incorporated Class A	5,493,708	1,576,584

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

Rank	Bond	Interest Rate	Maturity Date	Par Value	Fair Value
1	United States Treasury	3.875%	5/15/2043	\$615,100	\$600,299
2	United States Treasury	3.625%	2/15/2053	617,700	593,282
3	United States Treasury	3.625%	5/15/2053	576,500	554,341
4	United States Treasury	3.375%	5/15/2033	507,900	489,885
5	United States Treasury	1.375%	11/15/2040	694,500	464,881
6	United States Treasury	3.875%	2/15/2043	420,500	410,119
7	United States Treasury	2.250%	5/15/2041	515,310	396,950
8	United States Treasury	1.125%	8/15/2040	591,700	380,630
9	United States Treasury	1.875%	2/15/2041	499,745	363,018
10	United States Treasury	1.250%	8/15/2031	412,300	338,408

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	Average Commission Per Share
ABN Amro Clearing Bank N.V.	7,122,664	\$32	\$0.004
Argaam Securities LLC	4,856,990	12	0.003
Banco Pactual S.A.	10,186,184	20	0.002
Bank of America Securities, Inc.	38,801,394	1588	0.041
Banque Saudi Fransi	4,712,818	50	0.011
Barclays Capital	57,932,505	87	0.001
Barclays Capital Inc./LE	36,851,697	212	0.006
Bernstein Autonomous, LLP	5,513,436	32	0.006
BMO Capital Markets	5,673,653	104	0.018
BMO Nesbitt Burns Inc.	2,089,028	11	0.005
BNP Paribas Securities Services	15,666,080	29	0.002
Bradesco S.A CTVM	14,102,649	27	0.002
Broadcort Capital Corporation	1,588,259	16	0.010
BTIG, LLC	68,186,416	341	0.005
Citigroup Global Markets Europe AG	35,846,842	200	0.006
Citigroup Global Markets India	2,712,066	21	0.008
Citigroup Global Markets Taiwan	41,412,000	28	0.001
Citigroup Global Markets, Inc.	917,992,048	2363	0.003
Citigroup Global Markets, Inc. Salomon Brothers	114,959	175	1.522
Citigroup Global Markets, Ltd.	43,068,575	165	0.004
Capital Institutional Services, Inc.	27,284,780	136	0.005
CLSA Australia Pty., Ltd.	16,861,999	32	0.002
CLSA Singapore Pte., Ltd.	297,288,045	534	0.002
CLSA (UK), Ltd.	1,164,842	8	0.002
Commercial Bank of Qatar, Ltd.	8,077,913	19	0.002
Cowen and Company, LLC	15,146,500	92	0.006
Credit Lyonnais Securities (Asia)	990,046,039	382	0.000
Credit Suisse First Boston SA CTVM	9,640,308	18	0.002
Credit Suisse International	83,960,267	310	0.002
Credit Suisse Securities India Pte., Ltd.	4,470,922	65	0.014
Credit Suisse Securities (USA), LLC	213,402,750	394	0.002
Daiwa Securities SB Capital Markets	8,222,698	32	0.002
Exane S.A	22,974,249	77	0.003
Financial Brokerage Group	3,714,152	49	0.013
Flow Corretora de Mercadorias Ltda.	5,776,733	10	0.002
Goldman Sachs (Asia) LLC	24,007,129	43	0.002
Goldman Sachs (India)	3,030,811	24	0.002
Goldman Sachs and Company, LLC	652,528,264	646	0.000
Goldman Sachs Do Brasil Corretora	16,932,762	30	0.001
Goldman Sachs International	26,951,229	235	0.002
Guzman and Company	48,345,387	253	0.005
HSBC Bank, PLC	119,006,261	480	0.003
HSBC Brokerage (USA), Inc.	10,704,023	97	0.004
HSBC Securities (USA), Inc.	983,721,409	352	0.009
HSBC Securities India Holdings	21,039,129	58	0.000
Hyundai Securities Co., Ltd.	4,702,111	45	0.003
Instinet	35,680,184	259	0.010
Instinet Australia Clearing Services Private, Ltd.	17,832,212	259	0.007
Instinet Europe, Ltd.	3,589,357	107	0.002
Instinet Europe, Ltd.	435,632,932	257	0.030
Instinet Facilic, Ed. Instinet Singapore Services Pte Ltd.	13,393,200	13	0.001
institute onlyapore oervices Fle Llu.	13,393,200	13	0.001

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

Broker	Number of Shares Traded	Base Commission & Fees Amount	Average Commission Per Share
Instinet U.K., Ltd.	143,363,190	\$615	\$0.004
Instinet, LLC	7,112,172	21	0.003
ITG Australia, Ltd.	40,323,592	79	0.002
ITG Canada	896,944	11	0.013
JP Morgan India Private, Ltd.	7,157,699	21	0.003
JP Morgan Securities Asia Pacific, Ltd.	292,649,557	158	0.001
JP Morgan Securities Australia, Ltd.	5,754,456	19	0.003
JP Morgan Securities, Inc.	9,906,143	11	0.001
JP Morgan Securities, LLC	41,196,540	200	0.005
JP Morgan Securities, Ltd.	49,510,942	422	0.009
JP Morgan Securities (Far East) Ltd., Seoul	974,229	19	0.019
JP Morgan Securities, PLC	372,567,854	964	0.003
Jefferies Hong Kong, Ltd.	153,366,105	81	0.001
Jefferies India Private, Ltd.	16,235,950	60	0.004
Jefferies International, Ltd.	76,497,694	74	0.001
Jefferies, LLC	340,498,340	740	0.002
Joh Berenberg Gossler and Company, KG	14,814,618	31	0.002
Jones Trading Institutional Services, LLC	29,498,106	195	0.007
Leerink Partners LLC	1,173,581	42	0.036
Liquidnet, Inc.	20,237,623	102	0.005
Loop Capital Markets	24,435,138	123	0.005
Macquarie Bank, Ltd.	28,537,930	58	0.002
Macquarie Capital (Europe), Ltd.	30,165,930	176	0.006
Macquarie Capital (USA) Inc.	2,600,233	18	0.007
Macquarie Capital Securities	2,471,923,259	658	0.000
Macquarie Securities (India) Private, Inc.	126,795,230	186	0.001
Macquarie Securities (Korea), Ltd.	2,390,851	21	0.009
Macquarie Securities Ltd.	6,961,764	8	0.001
Merrill Lynch International	594,388,863	444	0.001
Merrill Lynch Pierce Fenner & Smith Inc.	20,802	28	1.334
Morgan Stanley and Company International, PLC	14,144,525	13	0.001
Morgan Stanley and Company, Inc.	340,031,105	546	0.001
Morgan Stanley DW, Inc.	936,008	43	0.046
Morgan Stanley Taiwan Ltd.	34,413,700	40	0.001
North South Capital LLC	25,847,621	135	0.005
Penserra Securities, LLC	26,465,421	133	0.005
Pershing, LLC	2,864,903	17	0.005
Piper, Jaffray and Company	40,611,443	260	0.006
Raymond James & Associates, Inc.	732,615	200	0.000
RBC Capital Markets, LLC	11,522,101	81	0.033
RBC Dominion Securities, Inc.	7,431,403	80	0.007
Redburn (Europe) Ltd.	266,435	11	0.011
Rosenblatt Securities, Inc.	29,316,900	158	0.040
Royal Bank of Canada Europe, Ltd.	124,557,984	557	0.004
Sanford C Bernstein and Company, LLC	12,248,056	105	0.009
Saudi British Bank	942,839	16	0.017
SG Americas Securities, LLC	20,440,912	64	0.003
SG Asia Securities (India) Pvt, Ltd.	12,957,016	34	0.003
SG Securities Hong Kong, Ltd.	678,224,199	202	0.000
Societe Generale	257,173,687	555	0.002
Standard Chartered Bank	3,872,998	10	0.003
UBS Ag	95,719,900	257	0.003

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

Broker	Number of Shares Traded	Base Commission & Fees Amount	Average Commission Per Share
UBS Ag London Branch	2,361,626	\$27	\$0.011
UBS Securities Asia, Ltd.	767,742,221	442	0.001
UBS Securities Canada, Inc.	7,808,972	27	0.003
UBS Securities India Pvt., Ltd.	16,243,597	138	0.008
UBS Securities, LLC	25,209,758	154	0.006
UBS Securities Pte. Ltd	112,073,698	46	0.000
UBS Securities Pte. Ltd., Seoul	5,556,342	34	0.006
UBS Switzerland AG	2,519,410	11	0.005
Virtu Americas, LLC	23,803,026	120	0.005
Virtu ITG Europe, Ltd.	38,977,420	118	0.003
Xp Investimentos CCTVM S.A.	7,477,503	12	0.002
Various ¹	53,637,499	112	0.002
TOTAL	13,155,647,038	\$20,778	\$0.002

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

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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	\$1,058	(\$15)	\$1,043	\$0	
57 Stars Global Opportunities Fund, LLC	200	_	200	_	
Advent Global Technology II Limited Partnership	2,250	_	2,250	_	
Advent International GPE IX Limited Partnership	6,646	(62)	6,584	_	
Advent International GPE V-D, LP	18	_	18	_	
Advent International GPE VI-A, LP	673	_	673	_	
Advent International GPE VII-C, LP	1,779	(37)	1,742	_	
Advent International GPE VIII-B Limited Partnership	5,439	(35)	5,404	7,897	
Advent International GPE X Limited Partnership	8,116	(10)	8,106	_	
AHVF II Rand Warrant Co-Invest, LP	_	_	_	113	
AlpInvest Secondaries Fund (onshore) VII, LP	4,085	_	4,085	336	
Apollo Investment Fund IX, LP	5,170	(2,981)	2,189	6,837	
Apollo Investment Fund VIII, LP	1,090	(135)	955	2,967	
Apollo Special Opportunities Managed Account, LP	766	_	766	_	
Ares Corporate Opportunities Fund II, LP	_	_	_	25	
Ares Corporate Opportunities Fund V, LP	1,703	(36)	1,667	_	
Ares Corporate Opportunities Fund VI, LP	3,250	_	3,250	_	
Arlington Capital Partners VI, LP	2,739	_	2,739	_	
Arsenal Capital Partners Growth, LP	1,000	(888)	112	—	
Arsenal Capital Partners VI, LP	3,000	(4,262)	(1,262)	_	
ASF VIII B, LP	2,636	_	2,636	_	
Asia Alternatives Capital Partners II, LP	9	_	9	823	
Asia Alternatives Capital Partners, LP	_	_	_	59	
Bain Capital Tech Opportunities Fund II, LP	1,763	_	1,763	_	
Bain Capital Venture Fund 2022, LP	938	_	938	_	
Base10 Advancement Initiative II, LP	686	_	686	_	
Base10 Partners III, LP	1,597	(167)	1,430	_	
BDC III C, LP	(414)	(247)	(661)	12,260	
BDC IV D, LP	3,920	(1,082)	2,838	_	
BE VI 'H', LP	4,263	(719)	3,544	_	
Berkshire Fund X, LP	7,500	(6,441)	1,059	_	
Beyond SPV I, LP	500	_	500	_	
Birch Hill Equity Partners (US) III, LP	_	_	_	627	
Birch Hill Equity Partners (US) IV, LP	_	_	_	14,432	
Blackstone Capital Partners VI, LP	(2)	_	(2)	6,117	
Blackstone Capital Partners VII, LP	1,851	_	1,851	7,566	
Blackstone Capital Partners VIII, LP	1,547	_	1,547	615	
Blackstone Core Equity Partners II, LP	3,795	_	3,795	610	
Blackstone Tactical Opportunities Fund - C, LP	1,283	_	1,283	_	
Blackstone Tactical Opportunities Fund (KG Co-Invest), LP	263	_	263	5,429	
Blackstone Tactical Opportunities Fund (T4U Co-Invest), LP	(21)	_	(21)	_	
Blackstone Tactical Opportunities Fund II - C, LP	1,390	_	1,390	808	
Blackstone Tactical Opportunities Fund III-C (Surge), LP	914	_	914	468	
Blackstone Tactical Opportunities Fund III - C, LP	1,235	(1)	1,234	1,262	
BOND III, LP	1,326	(431)	895	—	
Bridgepoint Europe IV 'B', LP	131	(11)	120	_	
Bridgepoint Europe IV 'D', LP	498	(43)	455	_	
Bridgepoint Europe V	656	27	683	_	
BRV Lotus Fund III, LP	2,813	_	2,813	_	
Butterfly Fund III, LP	3,848	(1,302)	2,546	—	
CA Co-Investment Limited Partnership	70	_	70	_	

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Fund Name	Gross Management Fees	Net Offsets, Waivers, and Rebates ^{2, 3}	Net Management Fees	Profit Sharing Paid ^{4, 5}	
California Asia Investors, LP	\$6	\$0	\$6	\$1,454	
California Emerging Ventures IV, LLC	191		191	528	
California Mezzanine Investment Fund, LP	26	_	26	_	
Capital Link Fund I, LLC	477	_	477	66	
Capital Link Fund II, LLC	475	_	475	1,638	
CapVest Equity Partners V SCSp	6,392	_	6,392	1,000	
Carlyle Asia Partners II, LP		_		(61)	
Carlyle Asia Partners III, LP	91	_	91	2,567	
Carlyle Asia Partners V, LP	1,636	(22)	1,614	2,007	
Carlyle Europe Partners II, LP	1,000	(22)		56	
Carlyle Europe Partners III, LP	_	(14)	(14)	169	
Carlyle Europe Partners V, S.C.Sp	1,984	(325)	1,659		
Carlyle Partners V, LP	1,504	(92)	(94)	8,013	
Carlyle Partners VI, LP	1,090	(34)	756	8,455	
Carlyle Partners VII, LP	3,904	(518)	3,386	0,400	
Carlyle Partners VII, LP	5,250	(318)	5,217	_	
Carlyle Strategic Partners II, LP	5,250	(33)	14		
	1,478		1,478	_	
Carlyle Strategic Partners IV, LP Carlyle U.S. Equity Opportunities II, LP			909	12 520	
	2,198	(1,289)	909	12,529	
CD&R Value Building Partners I, LP		—		2,286	
CDH Fund V, LP	2,284	(000)	2,284		
Centerbridge Capital Partners III, LP	1,628	(228)	1,400	2,363	
Cerberus CAL II Partners, LP	1,675	(1,875)	(200)	_	
Cerberus CAL III Partners, LP	3,750	(876)	2,874	—	
Cerberus CP Partners, LP	1,044	(2,100)	(1,056)	_	
Cerberus Institutional Partners V, LP	150	(29)	121	_	
Clayton, Dubilier & Rice Fund X, LP	182	200	382	2,290	
Clayton, Dubilier & Rice Fund XI, LP	9,375	(5,518)	3,857	—	
Clearlake Capital Partners III, LP	116	(9)	107	2,713	
Clearlake Capital Partners IV, LP	540	(181)	359	3,165	
Clearlake Capital Partners V, LP	1,312	(1,273)	39	1,177	
Clearlake Capital Partners VII, LP	8,917	(7,013)	1,904	—	
Clearlake Opportunities Partners (P), LP	793	(20)	773	_	
Coller International Partners V-A, LP	_	_	_	550	
Crosspoint Capital Fund II, LP	7,011	_	7,011	—	
CVC Capital Partners Asia V, LP	3,000	(312)	2,688	—	
CVC Capital Partners Strategic Opportunities Compounding Capital, LP	5,744	_	5,744	—	
CVC Capital Partners VI, LP	3,447	(152)	3,295	50,266	
CVC Capital Partners VII (A), LP	5,150	(6)	5,144	—	
CVC Capital Partners VIII (A), LP	11,750	(1,762)	9,988	—	
CVC European Equity Partners V (B), LP	_	—	_	196	
Dragoneer Opportunities Fund VI, LP	750	_	750	—	
EMAlternatives Investments, LP	200	_	200	_	
EQT IX (No.2) USD SCSp	10,069	(1,293)	8,776	—	
EQT X (No.2) USD SCSp	5,044	_	5,044	_	
EW Healthcare Partners Acquisition Fund, LP	(50)	_	(50)	—	
First Reserve Fund XIII, LP	1,782	(127)	1,655	_	
Francisco Partners Agility II, LP	938	(451)	487	—	
Francisco Partners III, LP	111	(25)	86	_	
Francisco Partners VI, LP	4,631	(2,698)	1,933	_	
GCM Grosvenor DEM II, LP	1,443	(_,)	1,443	642	
GCM Grosvenor DEM III, LP	2,656	_	2,656	-	
	2,000		2,000		

Thrate Equity and Bost Management Food at Four charing TER		(continued)		
Fund Name	Gross Management Fees	Net Offsets, Waivers, and Rebates ^{2, 3}	Net Management Fees	Profit Sharing Paid ^{4, 5}
GCM Grosvenor DEM, LP	\$665	\$0	\$665	\$0
General Catalyst Group XI - Health Assurance, LP	70	_	70	
Genstar Capital Partners X, LP	1,750	(1,750)	_	_
Genstar X Opportunities Fund I, LP	549	(,) 	549	_
GPE IX Forescout Co-Investment, LP	66	_	66	_
GPE IX TKE Co-Investment, LP	11	_	11	_
Green Equity Investors CF, LP	_	_	_	748
Green Equity Investors V, LP	_	(14)	(14)	_
Green Equity Investors VIII, LP	12,605	(10,725)	1,880	_
Greenbriar Equity Fund VI, LP	636		636	_
GSO Capital Solutions Fund II, LP	69	_	69	-
GSO Energy Partners-C II, LP	541	_	541	_
GSO Energy Partners-C, LP	664	_	664	_
H&F ARROW 1, LP	26	_	26	_
HIG Europe Middle Market LBO Fund, LP	1,580	_	1,580	_
Hellman & Friedman Capital Partners IX, LP	7,214	(10)	7,204	_
Hellman & Friedman Capital Partners VI	.,	(10)		(1,060)
Hellman & Friedman Capital Partners VII	104	_	104	(1,000)
Hellman & Friedman Capital Partners VIII, LP	2,735	_	2,735	1,019
Hellman & Friedman Capital Partners X, LP	15,000	(3,750)	11,250	
Insight Partners XI, LP	6,441	(37)	6,404	
Insight Partners XII Buyout Annex Fund, LP	1,277	(5)	1,272	
Insight Partners XII, LP	10,507	(74)	10,433	_
Insight Venture Partners Growth-Buyout Coinvestment Fund (B), LP	2,997	(375)	2,622	535
Insight Venture Partners IX, LP	1,516	(57)	1,459	11,527
Insight Venture Partners X, LP	3,733	(07)	3,733	1,836
Ithaca, LP	0,700	_	0,700	1,000
Jade Equity Investors, LP	639	(1,466)	(827)	397
K5 Private Investors, LP	3,000	(1,+00)	3,016	
Karakoram Fund C, LP	773	10	773	_
Khosla Ventures III, LP	136		136	_
Khosla Ventures Seed, LP	300		300	_
KKR 2006 Fund, LP	500		500	3,856
KKR Asian Fund II, LP	1,299	_	1,299	3,030
KKR Asian Fund IV SCSp	4,185	(1,983)	2,202	_
KKR European Fund II, LP	4,105	(1,903)	2,202	—
KKR European Fund III, LP	60	_	60	_
	3,317	(1 567)	1,750	_
KKR European Fund V (USD) SCSp KKR North America Fund XIII SCSp		(1,567)	4,441	_
•	8,449	(4,008)		
KM Corporate Partners Fund II, LP	100	_	100	(407)
KPS Special Situations Fund III, LP		—		297
Lightspeed Opportunity Fund II, LP	223	_	223	_
Lightspeed Venture Partners Select V, LP	2,000	—	2,000	—
Lightspeed Venture Partners XIV-A (Inception), LP	900	_	900	_
Lightspeed Venture Partners XIV-B (Ignite), LP	1,100		1,100	_
Lime Rock Partners IV AF, LP	117	(21)	96	_
Lime Rock Partners V, LP	6		6	-
Lindsay Goldberg IV, LP	963	(445)	518	1,873
Lindsay Goldberg V, LP	4,375	(379)	3,996	207
LongRange Capital Fund I, LP	10,074	_	10,074	
Madison Dearborn Capital Partners V, LP	<u> </u>	—	—	174

r invale Equity and Debt Management rees & riolit Shanny – r Er	(Dollars in Thousand	s) (continued)		
Fund Name	Gross Management Fees	Net Offsets, Waivers, and Rebates ^{2, 3}	Net Management Fees	Profit Sharing Paid ^{4, 5}
Madison Dearborn Capital Partners VIII, LP	\$5,997	(\$36)	\$5,961	\$0
New Mountain Partners II, LP	_	_	_	112
New Mountain Partners III, LP	_	_	_	12
New Mountain Partners VI, LP	9,459	(7,331)	2,128	_
Newbridge Asia IV, LP		(.,)	_,	185
NMP III Continuation Fund, LP	484	(484)	_	2,142
Nordic Bear SCSp	872	()	872	_,
Oak HC/FT Partners V, LP	3,519	(158)	3,361	_
Oaktree Latigo Investment Fund, LP	4,590	(100)	4,590	_
Oaktree Opportunities Fund VIIIb, LP	419	(6)	413	-
OHA Black Bear Fund, LP	3,087	(45)	3,042	_
Onex Partners IV, LP	1,521	(180)	1,341	_
Onex Partners V (B), LP	8,256	(100)	8,214	3,414
Orchard Park, LP	14	(42)	14	5,414
PAG Asia I, LP	270		270	684
	4,787	_	4,787	004
PAG Asia III, LP	4,707	_	4,707	98
Palladium Equity Partners III, LP	1 070	(200)	1 490	
Palladium Equity Partners V, LP	1,870	(390)	1,480	_
Patient Square Equity Partners, LP	10,632	_	10,632	_
Patria Brazilian Private Equity Fund V, LP	2,531	—	2,531	-
Permira Europe III		_		27
Permira Growth Opportunities I, LP 1	1,664	—	1,664	_
Permira Growth Opportunities II SCSp	2,248	_	2,248	_
Permira V, LP	1,557	_	1,557	10,580
Permira VI, LP 1	3,732	(571)	3,161	44
Permira VII, LP 1	4,395	(483)	3,912	—
Permira VIII-2 SCSp	8,828	(32)	8,796	_
Prysm Capital Fund I, LP	3,977	—	3,977	—
PSG Encore, LP	260	(163)	97	_
PSG Europe II, LP	1,734	—	1,734	—
PSG V, LP	2,493	_	2,493	_
Riverstone Global Energy and Power Fund V, LP	2,625	(44)	2,581	(1,639)
Riverstone Global Energy and Power Fund VI, LP	4,650	(153)	4,497	—
Riverstone/Carlyle Global Energy and Power Fund IV, LP	68	(8)	60	—
Riverstone/Carlyle Renewable & Alternative Energy Fund II, LP	44	_	44	—
Riverwood Capital Partners (Parallel - A), LP	24	_	24	_
Sacramento Private Equity Partners, LP	_	_	_	1,523
SAIF Partners III, LP	94	_	94	_
SAIF Partners IV, LP	896	_	896	_
Samson Brunello 1, LP	11	_	11	_
Sankaty Managed Account (CalPERS), LP	306	_	306	_
Sequoia Capital China Seed Fund III, LP	194	_	194	_
Seguoia Capital China Venture Fund IX, LP	425	_	425	_
Sierra Partners, LP	87	_	87	_
Silver Lake Partners III, LP	_	_	_	74
Silver Lake Partners IV, LP	1,937	(15)	1,922	544
Silver Lake Partners V, LP	2,909	(13)	2,729	2,929
Silver Lake Partners VI, LP	11,000	(1,604)	9,396	
Siris Partners III, LP	227	(1,004)	9,090	_
Siris Partners IV, LP	2,188	. ,	1,499	
		(689)		
SL SPV-1, LP	381	—	381	—

	Gross	Net Offsets,	Net	
Fund Name	Management Fees	Waivers, and Rebates ^{2, 3}	Management Fees	Profit Sharing Paid ^{4, 5}
SL SPV-2, LP	\$270	\$0	\$270	\$0
Springblue A, LP	1,250	_	1,250	
Springblue B, LP	804	_	804	_
SR One Capital Fund II-A, LP	2,772	_	2,772	_
Summit Partners Growth Equity Fund X-A, LP	6,000	(5,893)	107	_
Summit Partners Growth Equity Fund XI-A, LP	4,824	(4,824)	_	_
TA XIV-A, LP	2,332	(106)	2,226	_
Tailwind Capital Partners II, LP	606	(307)	299	_
Tailwind Capital Partners III, LP	3,125	(2,195)	930	_
TCV X, LP	3,500	(2,100)	3,500	_
TCV XI, LP	5,250	(157)	5,093	—
The Central Valley Fund II SBIC, LP	90	(137)	84	
The Rise Fund (A), LP	630	(0)	630	317
The Veritas Capital Fund VIII, LP	8,437	(1,115)		517
Thoma Bravo Fund XIV, LP		, ,	7,322	_
· ·	8,341	(8,341)	_	—
Thoma Bravo Fund XV, LP	8,827	(8,827)		_
Tiger Global Private Investment Partners XV, LP	5,466	—	5,466	-
Top Castle Sidecar VII, LP	_	_	_	1,370
TowerBrook Investors IV (Onshore), LP	2,303	(17)	2,286	7,853
Towerbrook Investors V (Onshore), LP	8,445	(1,613)	6,832	
Towerbrook Structured Opportunities Fund (Onshore), LP	1,480	(11)	1,469	—
Towerbrook Structured Opportunities Fund II (Onshore), LP	3,389	(500)	2,889	_
TPG Asia V, LP	—	_	_	1,612
TPG Asia VII (A), LP	1,049	_	1,049	_
TPG Biotechnology Partners II, LP	_	—	—	37
TPG Biotechnology Partners III, LP	69	(69)	_	201
TPG Growth IV, LP	705	(17)	688	515
TPG Growth V, LP	2,975	_	2,975	_
TPG Healthcare Partners, LP	1,066	_	1,066	_
TPG Partners VIII, LP	2,770	1	2,771	1,002
TPG Tech Adjacencies II, LP	1,148	_	1,148	_
Trident IX, LP	7,500	(81)	7,419	_
Trident VI	2,700	(631)	2,069	7,557
Trident VII, LP	5,018	(1,143)	3,875	,
Trident VIII, LP	5,844	(20)	5,824	_
Triton Fund IV, LP	856	(20)	856	_
Triton Fund V, LP	4,466	(900)	3,566	_
Valor Equity Partners IV, LP	1,219	(300)	1,196	
VIP IV, LP	5,307	(622)	4,685	_
Vista Equity Partners Fund VII-Z, LP	6,000		4,005	_
WCAS XIII, LP		(14)		11 565
	5,274	(14)	5,260	11,565
WCAS XIV, LP	5,308	(187)	5,121	
Welsh, Carson, Anderson & Stowe XII, LP	1,993	(36)	1,957	13,628
Whitney Global Partners, LP	499	_	499	_
Wigmore Street (BDC III), LP	1	—	1	_
Wigmore Street BDC IV Co-Investment No.1, LP	32	-	32	_
Wigmore Street Co-investment No.1, LP	1	—	1	—
Wigmore Street VI Co-Investment No.1, LP	209	_	209	
Yucaipa American Alliance Fund II, LP	_	_	_	376
Yucaipa Corporate Initiatives Fund II, LP	2,884		2,884	
Private Equity Total	\$587,704	(\$124,400)	\$463,304	\$258,077

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

Thrate Equity and Debt Management Pees & Plont Channy TER	(Dollars III Thousands			
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	\$4,439	(\$4,439)	\$0	\$0
Antares Credit Opportunities CA, LLC - Series 2	4,467	(4,467)	—	_
Antares Credit Opportunities CA, LLC - Series 3	3,011	(3,011)	—	—
Antares Credit Opportunities CA, LLC - Series 4	2,637	(2,637)	—	_
Ares Capital Europe V (D) Levered	10,699	(3,289)	7,410	—
Ares Senior Direct Lending Fund (Delaware) II, LP	7,795	—	7,795	—
Ares SME (Parallel), LP	2,968	(12)	2,956	—
Blackstone Credit Series Fund-C LP - Series A	229	—	229	—
Blackstone Real Estate Debt Strategies IV-C, LP	10,556	(24)	10,532	1,240
Oaktree Gilead Investment Fund, LP - Series A	3,144	—	3,144	2,568
OHA CA Customized Credit Fund, LP - OHA Co-Invest Opportunities Fund (CA)	655	(189)	466	—
OHA CA Customized Credit Fund, LP - OHA Credit Solutions Fund II Other Advisory				
Client Investment	840	_	840	486
OHA CA Customized Credit Fund, LP - OHA Senior Private Lending Fund (CA 3)	1,267	(176)	1,091	510
OHA CA Customized Credit Fund, LP - OHA Senior Private Lending Fund (CA 5)	1,267	(176)	1,091	746
Blue Owl Diversified Lending (CP), LP - Blue Owl Diversified Lending	218	—	218	—
PIMCO DISCO Onshore Fund III, LP	180	_	180	4,317
Sixth Street Fundamental Strategies Partners (A), LP	1,393	—	1,393	456
Sixth Street Mid-Stage Growth Partners (A), LP	55	_	55	_
TSSP Adjacent Opportunities Partners (B), LP	5,640	_	5,640	2,595
West Street Co-Investment Partners (C), LP	376	_	376	_
West Street Mezzanine Co-Investment Partners (C), LP	167	_	167	—
West Street Mezzanine Partners VIII, LP	2,330	_	2,330	_
West Street Strategic Solutions Fund I, LP	7,846	—	7,846	—
Private Debt Total	\$72,179	(\$18,420)	\$53,759	\$12,918
TOTAL	\$659,883	(\$142,820)	\$517,063	\$270,995

Amounts less than \$500 are indicated by a dash.
 Amounts include management fee waivers that may be paid in a subsequent period.
 Positive amounts are reflective of timing differences between when a waiver is used compared with when the fee is called.
 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.
 Negative amounts are reflective of decreased investment value resulting in the return of realized profit.
 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	0.8%	0.7%	3.1%	Total Fund Policy Benchmark	0.7%	0.6%	3.0%
Public Equity	16.6%	11.4%	8.1%	MSCI All Country World Index IMI (Net)	16.1%	11.0%	7.6%
Fixed Income	(2.1%)	(6.5%)	0.4%	Bloomberg Long Liability Index	(2.0%)	(6.5%)	0.4%
TIPS	(1.4%)	(0.1%)	2.5%	Bloomberg U.S. TIPS Index, Series L	(1.4%)	(0.1%)	2.5%
REITs	(3.9%)	4.1%	0.8%	FTSE EPRA/NAREIT Developed Index	(4.6%)	3.3%	0.0%
Commodities	(14.5%)	24.8%	2.9%	S&P GSCI Total Return Daily	(14.2%)	25.1%	2.8%

LRF Asset Allocation

Asset Class	Current Allocation	Policy Target Weight
Public Equity	18.2%	18.0%
Fixed Income	44.7%	45.0%
TIPS	19.9%	20.0%
REITs	14.2%	14.0%
Commodities	3.0%	3.0%
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	7.1%	4.9%	5.2%	Total Fund Policy Benchmark	6.7%	4.7%	4.9%
Public Equity	16.6%	11.4%	8.1%	MSCI All Country World Index IMI (Net)	16.1%	11.0%	7.6%
Fixed Income	(1.9%)	(6.4%)	0.4%	Bloomberg Long Liability Index	(2.0%)	(6.5%)	0.4%
TIPS	(1.4%)	(0.1%)	2.5%	Bloomberg U.S. TIPS Index, Series L	(1.4%)	(0.1%)	2.5%
REITs	(3.9%)	4.1%	0.8%	FTSE EPRA/NAREIT Developed Index	(4.6%)	3.3%	0.0%
Commodities	(14.5%)	24.8%	2.7%	S&P GSCI Total Return Daily	(14.2%)	25.1%	2.8%

JRF II Asset Allocation

Asset Class	Current Allocation	Policy Target Weight
Public Equity	51.2%	51.0%
Fixed Income	20.7%	21.0%
TIPS	4.9%	5.0%
REITs	20.1%	20.0%
Commodities	3.0%	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 Comparisons¹ (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return		1-Year Return	3-Year Return
Total Fund	5.2%	2.9%	CEPPT Strategy 1 Policy Index	5.1%	2.7%
Public Equity	16.4%	11.2%	MSCI All Country World Index IMI (Net)	16.1%	11.0%
Fixed Income	(0.9%)	(4.0%)	Bloomberg U.S. Aggregate Bond Index	(0.9%)	(4.0%)
TIPS	(1.4%)	(0.2%)	Bloomberg U.S. TIPS Index, Series L	(1.4%)	(0.1%)
REITs	(3.9%)	4.1%	FTSE EPRA/NAREIT Developed Index	(4.6%)	3.3%

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

CEPPTF Strategy 2 Portfolio Comparisons¹ (Time-Weighted Rates of Return)

Category	1-Year Return	3-Year Return		1-Year Return	3-Year Return
Total Fund	2.3%	(0.6%)	CEPPT Strategy 2 Policy Index	2.4%	(0.6%)
Public Equity	16.4%	11.2%	MSCI All Country World Index IMI (Net)	16.1%	11.0%
Fixed Income	(0.9%)	(4.0%)	Bloomberg U.S. Aggregate Bond Index	(0.9%)	(4.0%)
TIPS	(1.4%)	(0.1%)	Bloomberg U.S. TIPS Index, Series L	(1.4%)	(0.1%)
REITs	(3.9%)	4.1%	FTSE EPRA/NAREIT Developed Index	(4.6%)	3.3%

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

CEPPTF Asset Allocation¹

	Strate	gy 1	Strategy 2		
Asset Class	Current Allocation	Policy Target Weight	Current Allocation	Policy Target Weight	
Public Equity	37.3%	37.0%	21.3%	21.0%	
Fixed Income	43.6%	44.0%	60.6%	61.0%	
TIPS	5.0%	5.0%	9.0%	9.0%	
REITs	14.1%	14.0%	9.1%	9.0%	
Liquidity	—%	—%	—%	—%	
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	6.4%	5.5%	5.3%	CERBT Strategy 1 Policy Index	6.3%	5.4%	5.0%
Public Equity	16.4%	11.3%	8.0%	MSCI All Country World Index IMI (Net)	16.1%	11.0%	7.6%
Fixed Income	(2.1%)	(6.5%)	0.4%	Bloomberg Long Liability Index	(2.0%)	(6.5%)	0.4%
TIPS	(1.4%)	(0.1%)	2.5%	Bloomberg U.S. TIPS Index, Series L	(1.4%)	(0.1%)	2.5%
REITs	(3.8%)	4.2%	0.8%	FTSE EPRA/NAREIT Developed Index	(4.6%)	3.3%	0.0%
Commodities	(14.5%)	24.8%	2.7%	S&P GSCI Total Return Daily	(14.2%)	25.1%	2.8%

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	3.6%	2.7%	4.1%	CERBT Strategy 2 Policy Index	3.5%	2.6%	4.0%
Public Equity	16.4%	11.3%	7.9%	MSCI All Country World Index IMI (Net)	16.1%	11.0%	7.6%
Fixed Income	(2.1%)	(6.5%)	0.4%	Bloomberg Long Liability Index	(2.0%)	(6.5%)	0.4%
TIPS	(1.4%)	(0.1%)	2.5%	Bloomberg U.S. TIPS Index, Series L	(1.4%)	(0.1%)	2.5%
REITs	(3.8%)	4.1%	0.8%	FTSE EPRA/NAREIT Developed Index	(4.6%)	3.3%	0.0%
Commodities	(14.5%)	24.8%	2.8%	S&P GSCI Total Return Daily	(14.2%)	25.1%	2.8%

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	1.6%	1.0%	3.3%	CERBT Strategy 3 Policy Index	1.5%	0.9%	3.2%
Public Equity	16.4%	11.3%	7.9%	MSCI All Country World Index IMI (Net)	16.1%	11.0%	7.6%
Fixed Income	(2.1%)	(6.5%)	0.4%	Bloomberg Long Liability Index	(2.0%)	(6.5%)	0.4%
TIPS	(1.4%)	(0.1%)	2.5%	Bloomberg U.S. TIPS Index, Series L	(1.4%)	(0.1%)	2.5%
REITs	(3.8%)	4.1%	0.9%	FTSE EPRA/NAREIT Developed Index	(4.6%)	3.3%	0.0%
Commodities	(14.5%)	24.8%	2.9%	S&P GSCI Total Return Daily	(14.2%)	25.1%	2.8%

CERBTF Asset Allocation

	Strate	egy 1	Strate	egy 2	Strategy 3		
Asset Class	Current Allocation	Policy Target Weight	Current Allocation	Policy Target Weight		Policy Target Weight	
Public Equity	49.2%	49.0%	34.1%	34.0%	23.2%	23.0%	
Fixed Income	22.7%	23.0%	41.0%	41.0%	50.6%	51.0%	
TIPS	4.9%	5.0%	4.9%	5.0%	9.0%	9.0%	
REITs	20.1%	20.0%	17.0%	17.0%	14.1%	14.0%	
Commodities	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Liquidity	0.1%	_	—%	_	0.1%	_	
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		3-Year Return		Benchmark	1-Year Return	3-Year Return	
Total Fund	(1.0%)	(4.0%)	0.8%	Bloomberg U.S. Aggregate Bond Index	(0.9%)	(4.0%)	0.8%

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	(0.6%)	0.4%	2.6%	Total Fund Policy Benchmark	(0.7%)	0.2%	2.5%
Public Equity	16.5%	11.3%	8.0%	MSCI All Country World Index IMI (Net)	16.1%	11.0%	7.6%
Fixed Income	(2.1%)	(6.5%)	0.4%	Bloomberg Long Liability Index	(2.0%)	(6.5%)	0.4%
TIPS	(1.4%)	(0.1%)	2.5%	Bloomberg U.S. TIPS Index, Series L	(1.4%)	(0.1%)	2.5%
REITs	(3.8%)	4.1%	0.8%	FTSE EPRA/NAREIT Developed Index	(4.6%)	3.3%	0.0%
Commodities	(14.5%)	24.8%	2.7%	S&P GSCI Total Return Daily	(14.2%)	25.1%	2.8%

LTCF Asset Allocation

Asset Class	Current Allocation	Policy Target Weight
Public Equity	16.9%	15.0%
Fixed Income	59.4%	60.0%
TIPS	5.9%	6.0%
REITs	10.2%	11.0%
Commodities	7.6%	8.0%
Total Fund	100.0%	100.0%

Actuarial Section

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Actuarial Section

ACTUARIAL CERTIFICATIONS

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

July 2023

It is my 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. It is my opionion that the assumptions and methods are internally consistent and reasonable for each plan.

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, 2022.

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 the following exhibits in the Actuarial Section of the Annual Comprehensive Financial Report (ACFR):

- Exhibit A: Funding Progress Unfunded Liability & Funded Ratios
- · Exhibit B: Funding Progress Solvency Test
- Exhibit C: Sample Pay Increase Assumptions for Individual Members
- · Exhibit D: Sample Non-Economic Assumptions
- Exhibit E: Single Life Retirement Values

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

LEGISLATORS' RETIREMENT SYSTEM

February 2023

To the best of our knowledge, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Legislators' Retirement System. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CaIPERS databases and the benefits under the Legislators' Retirement Law as of the date this report was produced.

It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with the standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods, as prescribed by the CalPERS Board of Administration, are internally consistent and reasonable for this plan.

The undersigned are actuaries who satisfy the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States with regard to pensions.

Further, we have provided information for the completion of the following exhibits in the Actuarial Section of the Annual Comprehensive Financial Report (ACFR):

 Exhibit A: Funding Progress - Unfunded Liability & Funded	 Exhibit H: Schedule of Retirees & Beneficiaries Added to
Ratios	and Removed from Rolls
Exhibit B: Funding Progress - Solvency Test	Exhibit I: Analysis of Financial Experience

Alex Grunder, ASA, MAAA Senior Pension Actuary, CalPERS Julian Robinson, FSA, EA, MAAA Senior 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**.

- Exhibit F: Schedule of Active Member Valuation Data
- Exhibit G: Members in Valuation
- Exhibit H: Schedule of Retirees & Beneficiaries Added to and Removed from Rolls
- Exhibit I: Analysis of Financial Experience

ACTUARIAL CERTIFICATIONS

JUDGES' RETIREMENT SYSTEM

February 2023

To the best of our knowledge, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the actuarial funded condition of the Judges' Retirement System. This valuation and related validation work was performed by the CalPERS Actuarial Office and is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under the Judges' Retirement Law as of the date this report was produced.

It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods, as prescribed by the CalPERS Board of Administration, are internally consistent and reasonable for this plan.

Tony Cuny, ASA, MAAA

Senior Pension Actuary, CalPERS

The undersigned are actuaries for CaIPERS, who satisfies the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States with regard to pensions.

Further, we have provided information for the completion of the following exhibits in the Actuarial Section of the Annual Comprehensive Financial Report (ACFR):

- · Exhibit A: Funding Progress Unfunded Liability & Funded Ratios
- · Exhibit H: Schedule of Retirees & Beneficiaries Added to and Removed from Rolls
- Exhibit B: Funding Progress Solvency Test
- Exhibit I: Analysis of Financial Experience

May Shuang Yu, ASA, MAAA Senior Pension Actuary, CalPERS

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

JUDGES' RETIREMENT SYSTEM II

March 2023

To the best of our knowledge, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the actuarial funded condition of the Judges' Retirement System II. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CaIPERS databases and the benefits under the Judges' Retirement System II Law as of the date this report was produced.

It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with the standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods, as prescribed by the CalPERS Board of Administration, are internally consistent and reasonable for this plan.

The undersigned are actuaries who satisfies the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States with regard to pensions.

Further, we have provided information for the completion of the following exhibits in the Actuarial Section of the Annual Comprehensive Financial Report (ACFR):

- Exhibit A: Funding Progress Unfunded Liability & Funded Ratios
- · Exhibit H: Schedule of Retirees & Beneficiaries Added to and Removed from Rolls
- Exhibit B: Funding Progress Solvency Test

· Exhibit I: Analysis of Financial Experience

David Clement, ASA, MAAA, EA 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 CaIPERS 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 payrelated plans administered by CalPERS, including the Public Employees' Retirement System, 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 present value of projected benefits minus the present value of future normal cost. 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 for prefunded plans 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 Create	ed June 30, 201	9 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 prefunded, and the amortization policy described above does not apply. The June 30, 2021, actuarial valuation provides a hypothetical contribution if the state were to begin prefunding. This hypothetical 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, 2022, (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 0.50 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 137 in Exhibit C. The following is a summary of economic assumptions:

Economic Assumptions	Public Agencies	State	Schools		
June 30, 2022 Fundin	ng Valuations				
Contribution Year	2024-25	2023-24	2023-24		
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 2022-23	- inancial Reportin	g			
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, 2022 Fundi	ng Valuations		
Contribution Year	2023-24	2023-24	2023-24
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 2022-23 I	Financial Reportin	g	
Discount Rate	3.86%	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 147 in Exhibit E.

CHANGES SINCE PRIOR VALUATION

Changes in Actuarial Assumptions

There were no changes in the actuarial methods for the PERF. With regard to the LRF, JRF, and JRF II, the only assumption change was a change to the discount rate for financial reporting purposes for JRF from 3.69 percent to 3.86 percent for Fiscal Year 2022-23.

Assumptions			<u> </u>
Changes	Public Agencies	State	Schools
June 30, 2022 Fundi	ng Valuations		
Contribution Year	2024-25	2023-24	2023-24
Discount Rate/ Investment Return			
(net of expenses)	No Change	No Change	No Change
Administrative			
Expenses	No Change	No Change	No Change
Price Inflation	No Change	No Change	No Change
Wage Inflation	No Change	No Change	No Change
Demographic			
Assumptions	No Change	No Change	No Change
Fiscal Year 2022-23 I	Financial Reporting	g	
Discount Rate	No Change	No Change	No Change
Price Inflation	No Change	No Change	No Change
Wage Inflation Demographic	No Change	No Change	No Change
Assumptions	No Change	No Change	No Change

Assumptions Changes	JRF	JRF II	LRF
June 30, 2022 Fundi	ng Valuations		
Contribution Year	2023-24	2023-24	2023-24
Discount Rate/			
Investment Return			
(net of expenses)	No Change	No Change	No Change
Administrative			
Expenses	No Change	No Change	No Change
Price Inflation	No Change	No Change	No Change
Wage Inflation	No Change	No Change	No Change
Demographic			
Assumptions	No Change	No Change	No Change
Fiscal Year 2022-23 I	Financial Reporting	g	
Discount Rate	3.86%	No Change	No Change
Price Inflation	No Change	No Change	No Change
Wage Inflation Demographic	No Change	No Change	No Change
Assumptions	No Change	No Change	No Change

Changes in Plan Provisions

There were no changes in the plan provisions for the state plans, schools pool, LRF, and JRF. In 2022, AB 2443 provided judges in JRF II the ability to retire early and elect a deferred retirement allowance. More information can be found in the June 30, 2022 JRF II funding valuation. Also in 2022, SB 1168 increased the standard retiree lump sum death benefit from \$500 to \$2,000 for any death occurring on or after July 1, 2023. This change affects non-pooled public agency plans that have the standard provision as well as all pooled public agency plans. In addition, 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 administered by CaIPERS, unfunded actuarial accrued liabilities are the difference between entry age accrued liabilities and the assets of the fund. With the exception of JRS, 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 134 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 136 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 RATIOS¹

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL) (Entry Age)	Unfunded AAL (UAAL)/ Surplus (AVA Basis)	Funded Ratio (Actuarial Value of Assets Basis)	Annual Covered Payroll	UAAL/ Surplus as a % of Covered Payroll	Market Value of Assets (MVA)	Unfunded AAL (UAAL)/ Surplus (MVA Basis)	Funded Ratio (Market Value of Assets Basis)
DEDE (D. II	(1)	(2)	(3) = (2) - (1)	(4) = (1) / (2)	(5)	(6) = (3) / (5)	(7)	(8) = (2) - (7)	(9) = (7) / (2)
PERF (Dollars	,	¢C40.000	¢470.044	70.00/	¢00.000	000 50/	¢ 400 000	¢470.044	70.00/
06/30/22	\$439,388	\$619,329	\$179,941	70.9%	\$62,363	288.5%	\$439,388	\$179,941	70.9%
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%
LRF (Dollars in	,	* • • • • • -		100.001	* ***	(0.4 = 0. = 0.1)	* (2 2 2 3 ((*** *** *	100 001
06/30/22	\$103,991	\$94,697	(\$9,294)	109.8%	\$295	(3,150.5%)	\$103,991	(\$9,294)	109.8%
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%
JRF (Dollars in	,								
06/30/22	\$52,709	\$2,805,416	\$2,752,707	1.9%	\$23,354	11,786.9%	\$52,709	\$2,752,707	1.9%
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%
JRF II (Dollars	in Thousands)								
06/30/22	\$2,139,224	\$2,157,506	\$18,282	99.2%	\$368,023	5.0%	\$2,139,224	\$18,282	99.2%
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%

(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 contributions on deposit (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 136 for solvency test related to PERF, LRF, JRF, and JRF II.

EXHIBIT B: FUNDING PROGRESS - SOLVENCY TEST (CONTINUED)

		Accrue	ed Liability			Portion of Liabilities	of Actuarial Covered by Assets	Accrued Valuation
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)								
6/30/22	\$66,030	\$388,417	\$164,882	\$619,329	\$439,388	100.0%	96.1%	0.0%
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%
LRF (Dollars in Thousands)								
6/30/22	\$234	\$92,977	\$1,486	\$94,697	\$103,991	100.0%	100.0%	725.4%
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%
JRF (Dollars in Thousands)								
6/30/22	\$40,812	\$2,649,930	\$114,674	\$2,805,416	\$52,709	100.0%	0.4%	0.0%
6/30/21	43,348	2,634,542	125,340	2,803,230	65,882	100.0%	0.9	_
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%	—	_
JRF II (Dollars in Thousands)							
6/30/22	\$568,327	\$706,696	\$882,483	\$2,157,506	\$2,139,224	100.0%	100.0%	97.9%
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%

(1) Includes accrued interest on member contributions.

EXHIBIT C: SAMPLE PAY INCREASE ASSUMPTIONS FOR INDIVIDUAL MEMBERS

Annual Percentage Increases by Duration of Service¹

Duration of	State Miscell	aneous First &	Second Tier	State Indu	strial First & So	econd Tier		State Safety		
Services	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40	Entry Age 20	Entry Age 30	Entry Age 40	
0	9.14%	6.89%	6.38%	8.75%	8.50%	8.50%	8.05%	8.05%	8.05%	
3	8.11%	6.23%	5.45%	7.64%	6.83%	6.83%	6.20%	6.20%	6.20%	
5	7.52%	5.86%	4.96%	7.01%	5.99%	5.99%	5.21%	5.21%	5.21%	
10	5.45%	4.38%	3.84%	5.57%	4.43%	4.43%	3.93%	3.93%	3.93%	
15	4.68%	4.01%	3.64%	4.62%	3.98%	3.98%	3.82%	3.82%	3.82%	
20	4.13%	3.72%	3.48%	3.99%	3.66%	3.66%	3.73%	3.73%	3.73%	
25	3.74%	3.50%	3.35%	3.58%	3.42%	3.42%	3.64%	3.64%	3.64%	
30	3.47%	3.34%	3.25%	3.32%	3.25%	3.25%	3.56%	3.56%	3.56%	
Duration of	State Pe	eace Officer/Fir	efighter	Califo	ornia Highway I	Patrol		School		
Services	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	14.62%	14.62%	14.62%	15.10%	15.10%	15.10%	5.63%	5.63%	4.86%	
3	9.61%	9.61%	9.61%	8.14%	8.14%	8.14%	7.14%	6.63%	5.86%	
5	7.17%	7.17%	7.17%	5.42%	5.42%	5.42%	5.96%	5.26%	4.64%	
10	4.24%	4.24%	4.24%	4.05%	4.05%	4.05%	5.22%	4.44%	4.04%	
15	3.95%	3.95%	3.95%	4.21%	4.21%	4.21%	4.67%	4.19%	3.85%	
20	4.02%	4.02%	4.02%	5.11%	5.11%	5.11%	4.29%	3.92%	3.67%	
25	4.10%	4.10%	4.10%	5.11%	5.11%	5.11%	4.08%	3.85%	3.40%	
30	4.18%	4.18%	4.18%	4.34%	4.34%	4.34%	3.57%	3.34%	3.00%	
Duration of	Public	Agency Miscell	aneous	Public Agency Fire			Public Agency Police			
Services	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	10.65%	9.18%	8.16%	18.39%	18.72%	9.29%	14.94%	13.60%	9.52%	
3	7.95%	6.72%	5.69%	10.35%	9.11%	6.36%	8.80%	7.79%	6.43%	
5	6.68%	5.63%	4.72%	7.46%	6.20%	5.19%	6.55%	5.78%	5.21%	
10	4.87%	4.09%	3.91%	4.73%	4.27%	3.59%	4.70%	4.39%	4.01%	
15	4.39%	3.85%	3.53%	4.49%	4.08%	3.70%	4.68%	4.34%	4.15%	
20	4.02%	3.65%	3.28%	4.29%	3.91%	3.84%	4.66%	4.29%	4.29%	
25	3.74%	3.49%	3.12%	4.11%	3.77%	3.99%	4.64%	4.24%	4.45%	
30	3.52%	3.36%	3.01%	3.95%	3.64%	4.16%	4.63%	4.20%	4.63%	
Duration of	Public Age	ncy County Pe	ace Officer							
Services	Entry Age 20	Entry Age 30	Entry Age 40							
0	15.53%	13.62%	11.95%							
3	8.39%	7.64%	6.77%							

3	8.39%	7.64%	6.77%
5	6.03%	5.63%	5.08%
10	4.69%	4.26%	3.54%
15	4.58%	4.07%	3.55%
20	4.49%	3.91%	3.56%
25	4.40%	3.77%	3.57%
30	4.31%	3.65%	3.59%

(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:

	Termin	Termination with Termination with Termination with Vested Deferred Refund Benefits Service Retirement ³		Nor	n-Industrial Disability	Industrial Death	Industrial Disability					
	5 Yea	I rs ²	5 Yea	ars²							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 Termination with Refund Benefits		0				Non- Industrial			Industrial
	5 Yea		5 Yea		Service	Retirement	Non-Indust	trial Death	Disability Male &			Disability Male &
AGE ¹				-	10 Vaara ²	25 Vaara ²	Mala	Fomolo		Mala	Fomolo	
-	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.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED) California Highway Patrol – Probability of an active member leaving due to:

	Termin	ation with Refund	Vestee	ation with d Deferred Benefits	Service	Retirement	Non-Indust	Non- Industrial n-Industrial Death ³ Disability Industrial Deat		trial Death	Industrial Disability	
	5 Yea	rs ²	5 Yea	rs ²					Male &			Male &
AGE ¹	Male	Female	Male	Female	10 Years	25 Years	Male	Female	Female	Male	Female	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:

	Termination with Refund				Service Retirement Non-Industrial Death ³			Non-Industrial Disability		Industrial Death ³	Industrial Disability	
	5 Yea	I rS ²	5 Yea	ars ²							Male &	Male &
AGE ¹	Male	Female	Male	Female	10 Years ²	25 Years ²	Male	Female	Male	Female	Female	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:

	Termination with Refund				Service Retirement		Non-Industrial Death ³		Non- Industrial Disability	Industrial Death ³		Industrial Disability
	5 Yea	Irs ²	5 Yea	I rs ²					Male &			Male &
AGE ¹	Male	Female	Male	Female	10 Years ²	25 Years ²	Male	Female	Female	Male	Female	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:

	Termination with Refund				Service Retirement		Non-Industrial Death ³		Non- Industrial Disability Industr		rial Death ³	Industrial Disability
	5 Yea	nrs²	5 Yea	nrs²					Male &			Male &
AGE ¹	Male	Female	Male	Female	10 Years ²	25 Years ²	Male	Female	Female	Male	Female	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) 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 55 Miscellaneous – Probability of an active member leaving due to:

	Termination with Refund				Service Retirement		Non-Industrial Death ³		Non-Industrial Disability		Industrial Death ³	Industrial Disability
	5 Yea	Irs ²	5 Yea	ars 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				Service Retirement		Non-Industrial Death ³		Non-Industrial Disability		Industrial Death ³	Industrial Disability
	5 Yea	rs ²	5 Yea	ars 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:

	Termin	ation with Refund		ation with d Deferred Benefits	Service	Retirement	Non-Indust	trial Death ³	Nor	n-Industrial Disability	Industrial Death ³	Industrial Disability
	5 Yea	ars ²	5 Yea	ars 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	0.01700	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:

	Termin	ation with Refund		ation with d Deferred Benefits	Sorvico	Retirement	Non-Indust	rial Dooth ³	Nor	n-Industrial Disability	Industrial Death ³	Industrial Disability
	5 Yea		5 Yea		Service	Ketirement	Non-muusi			Disability	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	0.01600	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.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED)

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

	Termin	ation with		ation with d Deferred	Comico	Defirement	Nen Induc	wiel Deeth ³	Nor	n-Industrial Disability	Industrial Death ³	Industrial Disability
	5 Yea	Refund	5 Yea	Benefits ars ²	Service	Retirement	Non-Indust	inal Death		DISADIIILY	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	0.04023	0.05303	0.03808	0.05235	N/A	N/A	0.00033	0.00014	0.00007	0.00004	N/A N/A	N/A N/A
30	0.03576	0.04607	0.03576	0.03233	N/A	N/A	0.00033	0.00013	0.00017	0.00033	N/A	N/A N/A
35	0.02921	0.04044	0.03344	0.04042	N/A	N/A	0.00044	0.00019	0.00035	0.00065	N/A N/A	N/A N/A
40	0.02921	0.04044	0.03007	0.04048	N/A	N/A N/A	0.00038	0.00029	0.00033	0.00003		
40 45	0.02011	0.03301	0.03007	0.03545	N/A	N/A N/A	0.00073	0.00059	0.00091	0.00119	N/A	N/A N/A
43 50	0.02301	0.02937	0.02070	0.03343	0.02000	0.04000	0.00093	0.00034	0.00149	0.00183	N/A	
50 55	0.02387	0.02944	0.02221	0.02800		0.04000	0.00134	0.00081	0.00134		N/A	N/A
					0.04300					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:

	Termin	ation with Refund		nation with d Deferred Benefits	Service	Retirement	Non-Indust	trial Death ³	Non- Industrial Disability	Indust	rial Death ³	Industrial Disability
	5 Yea	rs ²	5 Yea	ars ²					Male &			Male &
AGE ¹	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.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED) Public Agency 2% at 50 Fire – Probability of an active member leaving due to:

	Termination with Refund 5 Years ²	ation with Refund		ation with d Deferred Benefits	Service	Retirement	Non-Indust	trial Death ³	Non- Industrial Disability	Indust	rial Death ³	Industrial Disability
	5 Yea	Irs ²	5 Yea	I rs 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	0.05400	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:

	Termin	ation with Refund		nation with d Deferred Benefits	Service	Retirement	Non-Indus	trial Death ³	Non- Industrial Disability	Indust	rial Death ³	Industrial Disability
	5 Yea	rS ²	5 Yea	ars ²					Male &			Male &
AGE ¹	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	0.10300	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.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED) Public Agency 3% at 50 Fire – Probability of an active member leaving due to:

	Refund	Termination with Refund 5 Years ² Termination with Vested Deferred Benefits		d Deferred			Non-Indus	trial Death ³	Non- Industrial Disability	Indust	rial Death ³	Industrial Disability
	5 Yea	Irs ²	5 Yea	Irs 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	0.04800	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:

	Termin	ation with Refund		nation with d Deferred Benefits	Service	Retirement	Non-Indust	trial Death ³	Non- Industrial Disability	Indust	rial Death ³	Industrial Disability
	5 Yea	I rs ²	5 Yea	ars ²					Male &			Male &
AGE ¹	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	0.05300	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.

EXHIBIT D: SAMPLE NON-ECONOMIC ASSUMPTIONS (CONTINUED) Public Agency 3% at 55 Fire – Probability of an active member leaving due to:

	Termin	ation with Refund		ation with d Deferred Benefits	Service	Retirement	Non-Indust	trial Death ³	Non- Industrial Disability	Industi	rial Death ³	Industrial Disability
	5 Yea	rS ²	5 Yea	ars 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 Re	ecipients ¹	Non-Industria (Not Job		Industrially (Job Re	Disabled ¹ lated)
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

EXHIBIT E: SINGLE LIFE RETIREMENT VALUES

Present value of \$1 monthly increase 2 percent annually after two-year waiting period. Discount rate of 6.8 percent used for all plans.

		Scho	ols				Pu	Iblic Agenci	es and Sta	ite	
	Service Re	tirement	Non-Ind Disab Retirei	ility		Service R	etirement	Non-Ind Disat Retire	oility	Industrial Retire	
AGE	Male	Female	Male	Female	AGE	Male	Female	Male	Female	Male	Female
50	195.057	200.872	154.568	166.900	50	195.057	200.872	154.568	166.900	185.315	189.738
51	192.678	198.649	152.287	164.886	51	192.678	198.649	152.287	164.886	182.711	187.108
52	190.201	196.338	150.009	162.794	52	190.201	196.338	150.009	162.794	180.011	184.405
53	187.622	193.943	147.708	160.650	53	187.622	193.943	147.708	160.650	177.219	181.632
54	184.946	191.483	145.348	158.489	54	184.946	191.483	145.348	158.489	174.331	178.801
55	182.184	188.950	142.963	156.300	55	182.184	188.950	142.963	156.300	171.352	175.909
56	179.336	186.351	140.543	154.080	56	179.336	186.351	140.543	154.080	168.288	172.966
57	176.403	183.641	138.081	151.813	57	176.403	183.641	138.081	151.813	165.150	169.974
58	173.362	180.800	135.605	149.491	58	173.362	180.800	135.605	149.491	161.935	166.945
59	170.208	177.848	133.068	147.091	59	170.208	177.848	133.068	147.091	158.651	163.864
60	166.960	174.820	130.497	144.635	60	166.960	174.820	130.497	144.635	155.307	160.739
61	163.641	171.744	127.935	142.109	61	163.641	171.744	127.935	142.109	151.891	157.542
62	160.238	168.582	125.333	139.479	62	160.238	168.582	125.333	139.479	148.412	154.270
63	156.747	165.287	122.729	136.770	63	156.747	165.287	122.729	136.770	144.868	150.913
64	153.171	161.849	120.107	133.962	64	153.171	161.849	120.107	133.962	141.249	147.453
65	149.477	158.283	117.477	131.047	65	149.477	158.283	117.477	131.047	137.566	143.901
70	129.429	138.749	103.452	115.144	70	129.429	138.749	103.452	115.144	118.266	124.825
75	107.299	116.923	87.215	97.392	75	107.299	116.923	87.215	97.392	97.692	104.513
80	84.453	93.610	70.752	79.440	80	84.453	93.610	70.752	79.440	76.849	84.812
85	62.774	71.220	55.862	62.229	85	62.774	71.220	55.862	62.229	57.803	66.647
90	44.270	51.203	42.722	47.995	90	44.270	51.203	42.722	47.995	42.628	50.027
95	31.349	35.377	31.349	35.377	95	31.349	35.377	31.349	35.377	31.349	35.377
100	21.710	24.910	21.710	24.910	100	21.710	24.910	21.710	24.910	21.710	24.910

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
6/30/2022	867,496	\$62,363	\$71,889	3.4%	2,892
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

EXHIBIT G: MEMBERS IN VALUATION

State Miscellaneous First & Second Tier - By Attained Age & Years of Service - June 30, 2022

Attained		Distribution of Active Members by Age & Service Years of Service at Valuation Date ¹						
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up	Total	Total Valuation Payroll ²
15-24	2,861	7	_	_	_	_	2,868	\$132,322,423
25-29	11,120	1,395	2	—	—	—	12,517	705,171,459
30-34	12,783	6,995	807	13	—	—	20,598	1,369,041,551
35-39	10,164	8,435	4,261	786	94	2	23,742	1,813,613,901
40-44	7,686	6,953	4,910	3,007	1,310	80	23,946	1,971,975,677
45-49	5,762	5,066	4,082	3,454	3,889	830	23,083	1,995,162,480
50-54	4,759	4,402	3,736	3,719	5,156	3,819	25,591	2,281,534,461
55-59	3,532	3,521	3,147	2,878	4,274	5,527	22,879	2,057,271,373
60-64	2,232	2,720	2,377	2,097	2,996	3,771	16,193	1,434,215,557
65 & up	1,208	1,630	1,489	1,288	1,511	1,940	9,066	798,978,653
Total	62,107	41,124	24,811	17,242	19,230	15,969	180,483	\$14,559,287,535

(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, 2022

Attained			Total Valuation					
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up	Total	Payroll
15-24	256	_	_	_	_	_	256	\$10,400,787
25-29	760	123	—	—	—	—	883	42,747,895
30-34	885	476	72	4	1	—	1,438	83,463,323
35-39	654	587	323	51	1	—	1,616	112,343,088
40-44	492	438	393	185	61	_	1,569	114,940,477
45-49	408	391	334	206	146	40	1,525	119,937,495
50-54	339	339	329	229	197	171	1,604	126,076,520
55-59	242	284	271	213	149	159	1,318	103,482,429
60-64	118	188	164	131	90	84	775	57,249,166
65 & up	40	93	84	61	36	31	345	26,808,682
Total	4,194	2,919	1,970	1,080	681	485	11,329	\$797,449,862

(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, 2022

Attained	Distribution of Active Members by Age & Service Years of Service at Valuation Date ¹							Total Valuation
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up	Total	Payroll ²
15-24	326	1	_	_	_	_	327	\$15,073,820
25-29	1,293	172	1	—	—	—	1,466	90,434,713
30-34	1,880	952	95	2	—	—	2,929	215,926,575
35-39	1,759	1,394	497	124	1	_	3,775	311,449,954
40-44	1,359	1,238	812	452	51	—	3,912	335,101,176
45-49	1,146	1,125	763	726	171	8	3,939	360,088,204
50-54	959	1,067	768	790	327	106	4,017	379,236,522
55-59	736	871	603	678	241	89	3,218	294,692,556
60-64	410	635	508	476	189	80	2,298	214,307,965
65 & up	143	356	305	307	154	65	1,330	144,228,867
Total	10,011	7,811	4,352	3,555	1,134	348	27,211	\$2,360,540,352

(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, 2022

Attained	Distribution of Active Members by Age & Service Years of Service at Valuation Date ¹							Total Valuation
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up	Total	Payroll ²
15-24	79	_	_	_	_	_	79	\$6,579,204
25-29	442	157	—	—	—	—	599	67,526,990
30-34	358	424	61	—	—	—	843	104,651,054
35-39	174	372	555	190	—	_	1,291	171,353,363
40-44	32	167	462	458	229	—	1,348	189,110,198
45-49	2	37	263	356	599	268	1,525	226,071,288
50-54	—	—	27	151	355	293	826	127,115,169
55-59	_	1	_	16	25	90	132	21,539,494
60-64	—	—	—	—	—	—	—	—
65 & up		_		_			_	_
Total	1,087	1,158	1,368	1,171	1,208	651	6,643	\$913,946,760

(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, 2022

Attained				Total Valuation				
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up	Total	Payroll ²
15-24	1,855	1	—	_	_	_	1,856	\$95,933,781
25-29	3,963	902	—	—	_	—	4,865	343,748,123
30-34	3,042	3,426	201	1	—	—	6,670	569,303,403
35-39	1,576	2,400	1,774	774	2	—	6,526	629,585,992
40-44	678	1,215	1,656	2,461	692	1	6,703	702,949,839
45-49	355	629	1,089	1,974	2,329	581	6,957	776,796,382
50-54	226	353	660	1,177	1,244	930	4,590	521,333,239
55-59	105	177	348	590	468	412	2,100	233,199,667
60-64	35	71	131	238	193	190	858	93,990,193
65 & up	11	23	36	56	51	64	241	26,406,817
Total	11,846	9,197	5,895	7,271	4,979	2,178	41,366	\$3,993,247,436

(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, 2022

Attained				Total Valuation				
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up	Total	Payroll ¹
15-24	13,430	58	_	_	_	_	13,488	\$412,692,851
25-29	25,146	3,054	10	—	—	—	28,210	1,031,328,929
30-34	23,975	10,280	1,244	52	1	—	35,552	1,522,525,889
35-39	19,875	11,154	4,828	1,769	60	2	37,688	1,798,731,235
40-44	18,335	10,059	5,770	4,926	1,751	55	40,896	2,051,217,429
45-49	15,883	9,398	5,797	5,542	4,252	1,049	41,921	2,137,987,605
50-54	13,771	9,776	6,795	6,131	5,054	3,245	44,772	2,296,054,132
55-59	10,025	8,790	7,335	6,759	5,522	4,923	43,354	2,230,848,203
60-64	6,179	6,097	5,551	5,738	4,522	3,948	32,035	1,624,979,454
65 & up	3,475	2,945	2,795	2,749	2,008	1,896	15,868	725,419,093
Total	150,094	71,611	40,125	33,666	23,170	15,118	333,784	\$15,831,784,820

(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, 2022

Attained	Distribution of Active Members by Age & Service Years of Service at Valuation Date ¹							Total Valuation
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up	Total	Payroll
15-24	5,759	30	_	—	_	_	5,789	\$259,297,603
25-29	16,333	1,743	12	—	_	_	18,088	1,056,356,419
30-34	18,445	7,899	960	68	3	—	27,375	1,878,211,444
35-39	14,960	9,677	3,693	1,902	90	2	30,324	2,379,018,898
40-44	11,590	8,358	4,435	4,866	1,705	98	31,052	2,694,938,830
45-49	8,699	6,323	3,746	5,127	4,040	1,018	28,953	2,671,251,527
50-54	7,009	5,349	3,526	4,910	4,664	3,214	28,672	2,729,715,670
55-59	5,110	4,345	2,936	3,852	3,764	3,816	23,823	2,243,340,718
60-64	2,951	2,951	1,991	2,748	2,504	2,683	15,828	1,451,024,934
65 & up	1,382	1,494	973	1,269	1,121	1,353	7,592	660,507,666
Total	92,238	48,169	22,272	24,742	17,891	12,184	217,496	\$18,023,663,709

(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, 2022

Attained	Distribution of Active Members by Age & Service Years of Service at Valuation Date ¹							Total Valuation
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & up	Total	Payroll
15-24	1,559	4	_	_	_	_	1,563	\$108,785,787
25-29	5,648	864	4	_	_	_	6,516	585,887,392
30-34	4,706	3,718	385	8	—	—	8,817	910,856,332
35-39	2,441	3,067	2,085	989	11	_	8,593	1,004,767,472
40-44	1,126	1,554	1,788	3,223	769	5	8,465	1,109,305,740
45-49	527	652	963	2,347	2,612	553	7,654	1,075,995,580
50-54	333	302	437	1,182	1,747	1,148	5,149	750,753,532
55-59	171	113	136	334	479	523	1,756	249,438,587
60-64	49	54	45	64	128	180	520	69,282,422
65 & up	25	17	21	18	28	42	151	18,232,523
Total	16,585	10,345	5,864	8,165	5,774	2,451	49,184	\$5,883,305,367

(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		ded to Rolls	Remo	ved from Rolls	Rolls	– End of Year	% Increase/ (Decrease)	Average
Year Ended	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	in Annual Allowances	Annual Allowance
PERF								
6/30/23	46,625	\$1,826,475,085	25,930	\$735,819,162	807,879	\$28,030,703,455	4.0%	\$34,697
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
LRF								
6/30/23	9	\$254,162	12	\$322,488	160	\$5,851,834	(1.2%)	\$36,574
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
JRF								
6/30/23	72	\$6,502,730	109	\$13,000,328	1,648	\$148,581,548	(4.2%)	\$90,159
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
JRF II								
6/30/23	106	\$14,819,634	11	\$1,508,563	540	\$59,301,923	28.9%	\$109,818
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

(1) These total counts and allowances account for all payment types with the exception of one-time lump-sum payments.

EXHIBIT I: ANALYSIS OF FINANCIAL EXPERIENCE

$PERF \; B^1 \; (\text{Dollars in Millions})$

	2022	2021
1) Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of June 30	\$23,988	\$32,662
b) Expected Payment on the UAL	1,871	1,696
c) Interest	1,568	2,228
d) Expected UAL Before Other Changes [1a - 1b + 1c]	\$23,685	\$33,194
e) Change Due to Plan Changes	_	_
f) Change Due to Assumption Changes	_	260
g) Change Due to Risk Mitigation	_	2,610
h) Expected UAL After All Changes	\$23,685	\$36,064
i) Actual UAL as of June 30	\$37,596	\$23,988
j) Total (Gain)/Loss [1i - 1h]	\$13,911	(\$12,076)
2) Contribution (Opin)// control for the Very		
2) Contribution (Gain)/Loss for the Year a) Expected Contributions	\$4,565	\$4,265
b) Actual Contributions	4,799	4,114
c) Contributions (Gain)/Loss [2a - 2b]	(\$234)	\$151
c) contributions (Gam)/Loss [za - zb]	(\$234)	ונוק
3) Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of June 30	\$86,519	\$71,400
b) Prior Fiscal Year Receivables	(92)	(105)
c) Current Fiscal Year Receivables	82	92
d) Contributions Received	4,644	3,977
e) Benefits and Refunds Paid	(5,299)	(4,932)
f) Transfers and Miscellaneous Adjustments	29	28
g) Expected Interest	5,855	4,958
h) Expected Assets as of June 30 [3a + 3b + 3c + 3d + 3e + 3f + 3g]	\$91,738	\$75,418
i) Market Value of Assets as of June 30	\$79,386	\$86,519
j) Asset (Gain)/Loss [3h - 3i]	\$12,352	(\$11,101)
A) Liskility (Coin)/Loss for the Veer		
4) Liability (Gain)/Loss for the Year	¢12 011	(\$12.076)
a) Total (Gain)/Loss (1j)	\$13,911	(\$12,076) 151
b) Contribution (Gain)/Loss (2c)	(234)	
c) Asset (Gain)/Loss (3j)	12,352	(11,101)
d) Liability (Gain)/Loss [4a - 4b - 4c]	\$1,793	(\$1,126)

EXHIBIT I: ANALYSIS OF FINANCIAL EXPERIENCE (CONTINUED)

PERF C^1 (Dollars in Millions)

	2022	2021
1) Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of June 30	\$7,431	\$12,060
b) Expected Payment on the UAL	1,629	1,343
c) Interest	451	798
d) Expected UAL Before Other Changes [1a - 1b + 1c]	\$6,253	\$11,515
e) Change Due to Plan Amendments	_	_
f) Change Due to Plan Golden Handshakes and Service Purchases	_	4
g) Transfers Out of Risk Pool	(1)	-
h) Transfers Into Risk Pool	44	-
i) Change Due to Assumption Change	-	205
i) Change Due to Method Change	—	_
k) Change Due to Funding Risk Mitigation	_	1,157
) Change Due to Excessive Liability	_	-
m) Expected UAL After All Other Changes [1d + 1e + 1f + 1g + 1h + 1i + 1j + 1k + 1l]	\$6,296	\$12,881
n) Actual UAL as of June 30	\$12,974	\$7,431
o) Total (Gain)/Loss [1n-1m]	\$6,678	(\$5,450)
2) Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of June 30	\$40,762	\$33,075
b) Transfers Out of Pool	_	_
c) Transfers Into Pool	153	_
d) Adjusted MVA at Beginning of Year [2a + 2b + 2c]	\$40,915	\$33,075
e) Receivables Prior Year	(\$34)	(\$39)
) Receivables Current Year	30	34
g) Contributions Received	2,703	2,311
n) Benefits and Refunds Paid	(2,360)	(2,210)
) Transfers and Miscellaneous Adjustments	3	12
) Expected Interest	2,792	2,316
k) Expected Assets as of June 30 [2d + 2e + 2f + 2g + 2h + 2i + 2j]	\$44,049	\$35,499
) Market Value of Assets as of June 30	\$38,112	\$40,762
m) Asset (Gain)/Loss [2k - 2l]	\$5,937	(\$5,263)
) Liability (Gain)/Loss for the Year		
a) Total (Gain)/Loss (10)	\$6,678	(\$5,450)
b) Asset (Gain)/Loss (2m)	5,937	(5,263)
c) Liability (Gain)/Loss [3a - 3b]	\$741	(\$187)
) Gains and losses in actuarial accrued liability resulting from differences between assumed and actual experience.		(\$107)

EXHIBIT I: ANALYSIS OF FINANCIAL EXPERIENCE (CONTINUED)

LRF¹ (Dollars in Thousands)

	2022	2021
1) Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of June 30	(\$27,963)	(\$19,190)
b) Expected Payment on the UAL	(7)	_
c) Interest	(1,258)	(959)
d) Expected UAL Before All Other Changes [1a - 1b + 1c]	(\$29,214)	(\$20,149)
e) Change Due to Revised Actuarial Methods	_	_
f) Change Due to New Actuarial Assumptions	_	2,222
g) Expected UAL After All Changes [1d + 1e + 1f]	(\$29,214)	(\$17,927)
h) Actual UAL as of June 30	(\$9,294)	(\$27,963)
i) Total (Gain)/Loss [1h - 1g]	\$19,920	(\$10,036)
2) Contribution (Coin)// coo for the Veen		
2) Contribution (Gain)/Loss for the Year	\$108	\$108
a) Expected Contributions	\$100 2	
b) Interest on Expected Contributions	—	3
c) Actual Contributions	108	100
d) Interest on Actual Contributions	2	2
e) Contributions (Gain)/Loss [(2a + 2b) - (2c + 2d)]	\$0	\$9
3) Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of June 30	\$123,525	\$115,538
b) Contributions Received	108	100
c) Benefits and Refunds Paid and Administrative Costs	(6,646)	(6,761)
d) Transfers, SCP Payments and Interest, and Miscellaneous		
Adjustments	1	12
e) Expected Interest	5,413	5,613
f) Expected Assets as of June 30 [3a + 3b + 3c + 3d + 3e]	\$122,401	\$114,502
g) Market Value of Assets as of June 30	\$103,991	\$123,525
h) Asset (Gain)/Loss [3f - 3g]	\$18,410	(\$9,023)
4) Liability (Gain)/Loss for the Year		
	\$19,920	(\$10,036)
a) Total (Gain)/Loss (1i)	φ19,920	(\$10,036) 9
b) Contribution (Gain)/Loss (2e)		
c) Asset (Gain)/Loss (3h) d) Liability (Gain)/Loss [4a - 4b - 4c]	\$1,510	(9,023)
 (1) Gains and losses in actuarial accrued liability resulting from differences between 		(\$1,022)

EXHIBIT I: ANALYSIS OF FINANCIAL EXPERIENCE (CONTINUED)

$JRF^1 \ (\text{Dollars in Thousands})$

	2022	2021
1) Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of June 30	\$2,737,347	\$3,056,981
 b) Expected Pay as You Go Excluding Normal Cost 	186,336	197,118
c) Interest	68,404	91,437
d) Expected UAL Before All Other Changes [1a - 1b + 1c]	\$2,619,415	\$2,951,300
e) Change Due to Revised Actuarial Methods	_	
f) Change Due to New Actuarial Assumptions	_	(111,491)
g) Expected UAL After All Changes [1d + 1e + 1f]	\$2,619,415	\$2,839,809
h) Actual UAL as of June 30	\$2,752,706	\$2,737,347
i) Total (Gain)/Loss [1h - 1g]	\$133,291	(\$102,462)
2) Contribution (Gain)/Loss for the Year		
a) Expected Contributions	\$198,558	\$210,757
b) Interest on Expected Contributions	2,956	3,138
c) Actual Contributions	196,916	227,970
d) Interest on Actual Contributions	2,932	3,394
e) Contributions (Gain)/Loss [(2a + 2b) - (2c + 2d)]	\$1,666	(\$17,469)
3) Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of June 30	\$65,882	\$48,020
b) Contributions Received	196,916	227,970
c) Benefits and Refunds Paid and Administrative Costs	(210,491)	(210,951)
d) Transfers, SCP, and Miscellaneous Adjustments	2,305	2,462
e) Expected Interest	1,809	1,731
f) Expected Assets as of June 30 [3a + 3b + 3c + 3d + 3e]	\$56,421	\$69,232
g) Market Value of Assets as of June 30	\$52,709	\$65,882
h) Asset (Gain)/Loss [3f - 3g]	\$3,712	\$3,350
4) Liability (Gain)/Loss for the Year		
a) Total (Gain)/Loss (1i)	\$133,291	(\$102,462)
b) Contribution (Gain)/Loss (1)	1,666	(\$102,402) (17,469)
c) Asset (Gain)/Loss (3h)	3,712	3,350
d) Liability (Gain)/Loss [4a - 4b - 4c]	\$127,913	(\$88,343)
a) Liability (Dalli)/LUSS [4a - 4b - 40]	φ127,913	(400,343)

EXHIBIT I: ANALYSIS OF FINANCIAL EXPERIENCE (CONTINUED)

$\mathsf{JRF}\ \mathsf{II}^1$ (Dollars in Thousands)

	2022	2021
1) Total (Gain)/Loss for the Year		
a) Unfunded Accrued Liability (UAL) as of June 30	(\$438,523)	\$27,684
b) Expected Payment on the UAL	3,283	2,419
c) Interest	(26,408)	1,722
d) Expected UAL Before All Other Changes [1a - 1b + 1c]	(\$468,214)	\$26,987
e) Change Due to Plan Changes	(\$1,075)	\$0
f) Change Due to New Actuarial Assumptions	_	(63,261)
g) Expected UAL After All Changes [1d + 1e + 1f]	(\$469,289)	(\$36,274)
h) Actual UAL as of June 30	\$18,283	(\$438,523)
i) Total (Gain)/Loss [1h - 1g]	\$487,572	(\$402,249)
2) Contribution (Gain)/Loss for the Year		
a) Expected Contributions	\$123,043	\$122,379
b) Interest on Expected Contributions	3,638	3,915
c) Actual Contributions	129,302	118,241
d) Interest on Actual Contributions	3,823	3,782
e) Contributions (Gain)/Loss [(2a + 2b) - (2c + 2d)]	(\$6,444)	\$4,271
3) Asset (Gain)/Loss for the Year		
a) Market Value of Assets as of June 30	\$2,403,366	\$1,885,404
b) Contributions Received	129,302	118,241
c) Benefits and Refunds Paid and Administrative Costs	(66,739)	(61,994)
d) Transfers, SCP, and Miscellaneous Adjustments	(00,100)	(01,001)
e) Expected Interest	146,052	124,350
f) Expected Assets as of June 30 [3a + 3b + 3c + 3d + 3e]	\$2,611,984	\$2,066,001
g) Market Value of Assets as of June 30	\$2,139,224	\$2,403,366
h) Asset (Gain)/Loss [3f - 3g]	\$472,760	(\$337,365)
4) Liability (Gain)/Loss for the Year		
a) Total (Gain)/Loss (1i)	\$487,572	(\$402,249)
b) Contribution (Gain)/Loss (2e)	(6,444)	4,271
c) Asset (Gain)/Loss (3h)	472,760	(337,365)
d) Liability (Gain)/Loss [4a - 4b - 4c]	\$21,256	(\$69,155)

Statistical Section

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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, 2023 – 10-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ADDITIONS										
Member	\$5,672,430	\$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
Employer	24,227,246	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
Nonemployer Contribution	_	_	_	904,000	_	_	_	_	_	_
Investment Income/(Loss)	27,013,684	(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
Plan-to-Plan Resource Movement	137.356	8,335	348,384	185,907	167,612	116.552	134.661	49,803	469,688	_
Miscellaneous	107,000	0,000	540,504	105,507	107,012	110,002	104,001	43,005	403,000	
Income	104,143	101,861	113,411	109,104	111,079	121,573	153,008	149,494	123,978	126,223
TOTAL ADDITIONS	\$57,154,859		\$113,313,461	\$46,656,566	\$43,525,651	\$52,019,148	\$49,809,104	\$16,506,467	\$20,976,462	\$58,150,684
DEDUCTIONS										
Benefit Payments	\$31,084,243	\$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
Refund of Contributions	391,113	329,555	287,556	323,180	280,266	286,979	222,275	238,821	240,623	236,968
Administrative Expenses	323,014	297,464	392,119	524,451	252,558	505,513	441,283	184,426	340,880	381,497
Plan-to-Plan Resource										
Movement	137,356	8,335	348,384	185,907	167,612	116,552	134,661	49,803	469,688	
TOTAL DEDUCTIONS	\$31,935,726	\$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
CHANGE IN NET POSITION	\$25,219,133	(\$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
NET POSITION										
Beginning of Year	\$439,359,026	\$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
End of Year	\$464,578,159	\$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

Statistical Section (continued)

CHANGES IN FIDUCIARY NET POSITION - RETIREMENT PROGRAMS (CONTINUED)

LRF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2023 – 10-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ADDITIONS										
Member	\$11	\$23	\$21	\$22	\$91	\$82	\$94	\$97	\$105	\$113
Employer	44	85	92	98	250	467	516	549	590	565
Investment Income/(Loss)	601	(12,450)	15,098	7,011	7,860	5,458	5,006	4,511	(125)	15,332
Miscellaneous Income	2	1	—	2	—	28	42	34	31	40
TOTAL ADDITIONS	\$658	(\$12,341)	\$15,211	\$7,133	\$8,201	\$6,035	\$5,658	\$5,191	\$601	\$16,050
DEDUCTIONS										
Benefit Payments	\$7,088	\$6,647	\$6,761	\$6,939	\$7,005	\$6,918	\$6,960	\$7.028	\$7,393	\$7,482
Refund of Contributions	φ1,000	ψ0,047	φ0,701	ψ0,000	344 ⁽¹⁾	φ0,010	¢0,000 289	379 ⁽¹⁾	1,693	ψι,το2
Administrative Expenses	525	436	450	550	324	671	575	203	400	362
TOTAL DEDUCTIONS	\$7,613	\$7,083	\$7,211	\$7,489	\$7,673	\$7,589	\$7,824	\$7,610	\$9,486	\$7,844
CHANGE IN NET POSITION	(\$6,955)	(\$19,424)	\$8,000	(\$356)	\$528	(\$1,554)	(\$2,166)	(\$2,419)	(\$8,885)	\$8,206
NET POSITION										
Beginning of Year	\$102,624	\$122,048	\$114,048	\$114,404	\$113,876	\$115,430 ¹	\$119,050	\$121,469	\$130,354	\$122,148
End of Year	\$95,669	\$102,624	\$122,048	\$114,048	\$114,404	\$113,876	\$116,884	\$119,050	\$121,469	\$130,354

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

JRF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2023 – 10-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ADDITIONS										
Member	\$1,697	\$1,956	\$2,146	\$2,843	\$2,679	\$3,062	\$3,398	\$3,559	\$3,877	\$4,724
Employer	208,785	194,960	225,824	243,131	195,903	199,241	204,475	192,287	180,910	191,148
Investment Income	2,233	194	163	885	1,166	845	424	194	88	54
Miscellaneous Income	3,028	2,305	2,462	2,202	2,776	2,533	2,395	2,568	2,198	2,529
TOTAL ADDITIONS	\$215,743	\$199,415	\$230,595	\$249,061	\$202,524	\$205,681	\$210,692	\$198,608	\$187,073	\$198,455
DEDUCTIONS										
	¢046 074	¢010 400	¢010.0E1	¢010 775	¢004 0E4	\$207.815	¢000 440	\$199.271	¢001 701	¢102.005
Benefit Payments	\$216,271	\$210,492	\$210,951	\$212,775	\$221,954	, . ,	\$200,440	,,	\$201,734	\$193,925
Refund of Contributions	—	-	—	458	—	8	—	78	134	10
Administrative Expenses	2,031	1,677	1,731	2,270	10,032	2,106	1,771	642	1,227	1,141
TOTAL DEDUCTIONS	\$218,302	\$212,169	\$212,682	\$215,503	\$231,986	\$209,929	\$202,211	\$199,991	\$203,095	\$195,076
CHANGE IN NET POSITION	(\$2,559)	(\$12,754)	\$17,913	\$33,558	(\$29,462)	(\$4,248)	\$8,481	(\$1,383)	(\$16,022)	\$3,379
NET POSITION										
Beginning of Year	\$48,886	\$61,640	\$43,727	\$10,169	\$39,631	\$43,879 ¹	\$39,794	\$41,177	\$57,199	\$53,820
End of Year	\$46,327	\$48,886	\$61,640	\$43,727	\$10,169	\$39,631	\$48,275	\$39,794	\$41,177	\$57,199

Statistical Section (continued)

CHANGES IN FIDUCIARY NET POSITION - RETIREMENT PROGRAMS (CONTINUED)

JRF II Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2023 – 10-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ADDITIONS										
Member	\$38,669	\$36,529	\$34,094	\$35,796	\$31,376	\$27,513	\$25,076	\$24,598	\$22,242	\$20,413
Employer	89,970	92,773	84,147	91,147	84,099	79,699	67,102	65,839	65,629	57,027
Investment Income/										
(Loss)	151,745	(324,365)	463,478	80,074	106,781	101,244	114,331	20,213	(2,863)	149,679
Miscellaneous Income	4	3	—	_	_	576	726	597	462	489
TOTAL ADDITIONS	\$280,388	(\$195,060)	\$581,719	\$207,017	\$222,256	\$209,032	\$207,235	\$111,247	\$85,470	\$227,608
DEDUCTIONS										
Benefit Payments	\$83,573	\$66,382	\$61,613	\$34,547	\$36,045	\$31,745	\$22,326	\$21,549	\$14,024	\$8,865
Refund of Contributions	295	357	381	—	159	50	80	155	16	85
Administrative Expenses	2,126	1,842	1,703	2,552	1,477	2,370	1,683	732	1,127	785
TOTAL DEDUCTIONS	\$85,994	\$68,581	\$63,697	\$37,099	\$37,681	\$34,165	\$24,089	\$22,436	\$15,167	\$9,735
CHANGE IN NET										
POSITION	\$194,394	(\$263,641)	\$518,022	\$169,918	\$184,575	\$174,867	\$183,146	\$88,811	\$70,303	\$217,873
NET POSITION										
Beginning of Year	\$2,134,388	\$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
End of Year	\$2,328,782	\$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

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

DCF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2023 - 10-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ADDITIONS										
Member	\$141,451	\$137,437	\$127,135	\$150,108	\$251,102	\$112,586	\$110,258	\$106,072	\$106,272	\$131,900
Employer	_	_	—	—	—	977	962	909	783	698
Investment Income/										
(Loss)	225,075	(276,428)	479,324	71,266	92,546	108,821	132,305	7,541	32,735	164,384
Miscellaneous Income	5,198	6,608	6,212	7,192	6,590	6,306	5,583	5,354	6,260	5,258
TOTAL ADDITIONS	\$371,724	(\$132,383)	\$612,671	\$228,566	\$350,238	\$228,690	\$249,108	\$119,876	\$146,050	\$302,240
DEDUCTIONS										
Participant										
Withdrawals	\$104,032	\$116,874	\$205,540	\$128,159	\$156,796	\$168,064	\$90,333	\$164,362	\$88,973	\$97,388
Administrative	4 700	4 475	4 400	E 047	4 000	F 000	4 570	4 677	4 220	4 101
Expenses	4,780	4,475	4,466	5,217	4,202	5,296	4,576	4,677	4,320	4,101
TOTAL DEDUCTIONS	\$108,812	\$121,349	\$210,006	\$133,376	\$160,998	\$173,360	\$94,909	\$169,039	\$93,293	\$101,489
CHANGE IN NET POSITION	\$262,912	(\$253,732)	\$402,665	\$95,190	\$189,240	\$55.330	\$154,199	(\$49,163)	\$52,757	\$200,751
	WEDE, OTE	(\$200,102)	ψ+0 2 ,000	<i>\\</i> 00,100	ψ100, 2 40	<i>\\</i> 00,000	ψ10-1,100	(\$40,100)	ψ 0 Σ,101	<i>\</i> 200,101
NET POSITION										
Beginning of Year	\$1,929,109	\$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
End of Year	\$2,192,021	\$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

Statistical Section (continued)

CHANGES IN FIDUCIARY NET POSITION - RETIREMENT PROGRAMS (CONTINUED)

SCPF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2023 - 10-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ADDITIONS										
Member	\$310	\$243	\$343	\$254	\$251	\$252	\$246	\$269	\$127,833	\$160
Investment Income/(Loss)	8,655	(14,391)	22,713	5,495	5,360	4,362	6,890	416	1,058	2,077
Miscellaneous Income	77	88	87	93	337	619	628	668	305	111
TOTAL ADDITIONS	\$9,042	(\$14,060)	\$23,143	\$5,842	\$5,948	\$5,233	\$7,764	\$1,353	\$129,196	\$2,348
DEDUCTIONS										
Participant Withdrawals	\$5,765	\$5,186	\$5,484	\$6,137	\$7,749	\$9,046	\$11,041	\$16,130	\$15,751	\$1,013
Administrative Expenses	259	250	264	327	283	398	373	330	135	62
TOTAL DEDUCTIONS	\$6,024	\$5,436	\$5,748	\$6,464	\$8,032	\$9,444	\$11,414	\$16,460	\$15,886	\$1,075
Interfund Transfer In	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,582	\$0	\$0
CHANGE IN NET POSITION	\$3,018	(\$19,496)	\$17,395	(\$622)	(\$2,084)	(\$4,211)	(\$3,650)	(\$15,107)	\$113,310	\$1,273
NET POSITION										
Beginning of Year	\$111,328	\$130,824	\$113,429	\$114,051	\$116,135	\$120,346 ¹	\$124,354	\$133,879	\$20,569	\$19,296
End of Year	\$114,346	\$111,328	\$130,824	\$113,429	\$114,051	\$116,135	\$120,704	\$124,354	\$133,879	\$20,569

CHANGES IN FIDUCIARY NET POSITION – PENSION PREFUNDING PLAN

CEPPTF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2023 – 4-Year Review¹ (Dollars in Thousands)

	2023	2022	2021	2020
ADDITIONS				
Employer	\$51,713	\$36,474	\$45,764	\$10,523
Investment Income/(Loss)	4,843	(9,544)	2,995	502
Miscellaneous Income	243	154	53	10
TOTAL ADDITIONS	\$56,799	\$27,084	\$48,812	\$11,035
DEDUCTIONS				
Employer Withdrawals	\$1,681	\$0	\$1,707	\$0
Administrative Expenses	64	43	16	96
TOTAL DEDUCTIONS	\$1,745	\$43	\$1,723	\$96
CHANGE IN NET				
POSITION	\$55,054	\$27,041	\$47,089	\$10,939
NET POSITION				
Beginning of Year	\$85,069	\$58,028	\$10,939	\$0
End of Year	\$140,123	\$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, 2023 - 10-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ADDITIONS										
Employer	\$5,220,760	\$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
Investment Income/										
(Loss)	944,515	(2,346,058)	3,091,811	402,609	568,801	530,189	559,967	76,638	(13,988)	515,507
Miscellaneous	10 700	44.007		0.004		0.005	00	4.040	4 000	4 400
Income	13,723	14,097	11,704	9,094	7,490	6,985	5,599	4,048	4,932	4,483
TOTAL ADDITIONS	\$6,178,998	\$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
DEDUCTIONS										
OPEB										
Reimbursements &										
Employer Withdrawals	\$3,847,340	\$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
Administrative	φ3,047,340	φ3,473,147	φJ,Z44,ZJ7	φ3,132,337	φ3,001,217	φ2,957,415	φ2,040,100	φ1,229,323	φ1,099,570	φ1,020,924
Expenses	4,608	4,241	4,544	5,161	1,882	3,862	3,014	1,559	2,044	1,786
TOTAL DEDUCTIONS	\$3,851,948	\$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
CHANGE IN NET	.,,,	.,,,			. , ,	.,,,	.,,,		.,,,	
POSITION	\$2,327,050	(\$306,263)	\$3,934,618	\$1,888,634	\$1,521,133	\$1,511,868	\$1,669,101	\$629,844	\$603,584	\$1,178,333
NET POSITION										
Beginning of Year	\$15,332,294	\$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
End of Year	\$17,659,344	\$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

CHANGES IN FIDUCIARY NET POSITION – CUSTODIAL FUNDS

RBF Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2023 – 7-Year Review¹ (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017
ADDITIONS							
Replacement Benefits	\$31,783	\$37,072	\$35,594	\$29,125	\$25,756	\$22,487	\$20,573
Investment Income	350	74	85	276	301	163	168
Miscellaneous Income	608	246	_	256	482	444	239
TOTAL ADDITIONS	\$32,741	\$37,392	\$35,679	\$29,657	\$26,539	\$23,094	\$20,980
DEDUCTIONS							
Replacement Benefit Payments	\$31,783	\$37,071	\$35,594	\$29,125	\$25,756	\$22,487	\$20,573
Administrative Expenses	589	597	605	246	450	450	239
TOTAL DEDUCTIONS	\$32,372	\$37,668	\$36,199	\$29,371	\$26,206	\$22,937	\$20,812
CHANGE IN NET POSITION	\$369	(\$276)	(\$520)	\$286	\$333	\$157	\$168
NET POSITION							
Beginning of Year	\$148	\$424	\$944	\$658	\$325	\$168	\$0 ²
End of Year	\$517	\$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, 2023 – 5-Year Review¹ (Dollars in Thousands)

	2023	2022	2021	2020	2019
ADDITIONS					
Investment Income	\$54	\$12	\$11	\$21	\$1
Other Income	1	36	2,344	2,012	_
TOTAL ADDITIONS	\$55	\$48	\$2,355	\$2,033	\$1
DEDUCTIONS					
Administrative Expenses	\$935	\$800	\$508	\$1,178	\$667
TOTAL DEDUCTIONS	\$935	\$800	\$508	\$1,178	\$667
CHANGE IN NET POSITION	(\$880)	(\$752)	\$1,847	\$855	(\$666)
NET POSITION					
Beginning of Year	\$2,987	\$3,739	\$1,892	\$1,037	\$0
Adjustments	\$0	\$0	\$0	\$0	\$1,703
End of Year	\$2,107	\$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 - Nine-Year Review

	2023	2022	2021	2020	2019	2018	2017	2016	2015
ACTIVE & INACTIVE MEMBERS									
STATE MEMBERS									
State Miscellaneous – Classic	155,345	163,920	172,118	181,136	189,514	200,645	216,008	216,647	233,574
State Miscellaneous – PEPRA	147,755	131,867	117,158	104,049	90,313	76,222	59,617	44,057	29,009
State Safety – Classic	45,976	49,903	53,433	57,897	60,807	64,165	68,086	68,020	64,167
State Safety – PEPRA	48,144	43,945	39,870	35,783	30,786	26,540	22,051	16,991	11,054
Total State Members	397,220	389,635	382,579	378,865	371,420	367,572	365,762	345,715	337,804
PUBLIC AGENCY MEMBERS									
School – Miscellaneous –									
Classic	273,774	287,474	302,943	318,039	332,074	348,372	376,546	396,832	422,114
School – Miscellaneous –									
PEPRA Dublic Assessor Missellessore	339,510	288,453	240,629	224,606	200,455	167,654	137,356	102,550	67,363
Public Agency – Miscellaneous – Classic	164,262	173,484	183,830	194,781	204,679	216,445	231,458	241,605	269,528
Public Agency – Miscellaneous	104,202	175,404	105,050	194,701	204,079	210,445	231,430	241,005	209,520
– PEPRA	205,960	178,520	154,258	140,641	123,966	103,226	84,913	64,234	46,091
Public Agency – Safety –	,			,	,	,	,		,
Classic	33,765	36,008	38,575	41,121	43,263	45,704	48,596	50,372	54,825
Public Agency – Safety –									
PEPRA	30,267	27,037	23,863	21,500	18,397	15,345	12,769	9,601	6,896
Total Public Agency Members	1,047,538	990,976	944,098	940,688	922,834	896,746	891,638	865,194	866,817
TOTAL ACTIVE & INACTIVE									
MEMBERS ¹	1,444,758	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	676,864	664,141	648,773	631,344	614,257	595,483	576,228	557,679	530,725
PEPRA	8,593	5,735	3,530	2,125	1,145	534	284	166	90
Survivors and Beneficiaries	- ,	-,	-,	, -	, -				
Classic	103,065	104,971	98,045	98,897	96,570	98,457	91,488	90,774	80,250
PEPRA	494	438	270	163	143	96	59	26	13
TOTAL BENEFIT RECIPIENTS ²	789,016	775,285	750,618	732,529	712,115	694,570	668,059	648,645	611,078
TOTAL MEMBERS AND									
BENEFIT RECIPIENTS	2,233,774	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 - One-Year Review¹

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	2014
ACTIVE & INACTIVE MEMBERS	
STATE MEMBERS	
Miscellaneous	236,552
University of California	44
Industrial	13,669
Alternative Retirement Plan	7,407
Highway Patrol	7,479
Safety	31,150
Peace Officer/Firefighter	45,346
Total State Members	341,647
PUBLIC AGENCY MEMBERS	
Schools	442,088
Cities	160,127
Counties	97,780
Districts & Other Public Agencies	87,372
Total Public Agency Members	787,367
TOTAL ACTIVE & INACTIVE	
MEMBERS	1,129,014
BENEFIT RECIPIENTS	
Service Retirement	505,031
Disability Retirement	44,242
Industrial Disability Retirement	37,686
Industrial Death	891
1957 Survivor Benefit	3,775
1959 Survivor Benefit	3,217
TOTAL BENEFIT RECIPIENTS ¹	594,842
TOTAL MEMBERS	1,723,856

(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:

- **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 who 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.

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.

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 benefit 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 the member's earnable pay for the 12 months prior to the member's death).

STATE MEMBERS - MONTHLY

Alternate Death Benefit¹ – 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 amount of the 1957 Survivor Benefit for an eligible child. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the amount of the Pre-Retirement Option 2W Benefit for themselves.

Pre-Retirement Option 2W Benefit¹ – 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 the member's surviving children.

1957 Survivor Benefit¹ – 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 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 Benefit¹ – Survivors of State, State Industrial, State Peace Officer/Firefighter Members, State Miscellaneous²

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 Benefit³ – 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 a benefit equal to one month's compensation earnable for each year of current service to a maximum of six months.

SCHOOL MEMBERS - MONTHLY

1957 Survivor Benefit¹ – 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 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 the member's surviving children.

(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.

⁽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 amount of the 1957 Survivor Benefit for an eligible child. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the amount of the Pre-Retirement Option 2W Benefit for themselves.

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 a 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 Benefit¹ – 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 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 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 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 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 amount of the 1957 Survivor Benefit for an eligible child. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the amount of the Pre-Retirement Option 2W Benefit for themselves.

Special Death Benefit¹ – Survivors of Patrol, Local Safety & Local Miscellaneous by Contract Amendment²

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 Benefit³ – 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 retirement⁴ 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 amount of the 1957 Survivor Benefit for an eligible child. The surviving spouse or registered domestic partner of a state member may elect the Basic Death Benefit or the amount of the Pre-Retirement Option 2W Benefit for themselves.

(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 CalPERScovered employment to obtain the minimum service credit required to be eligible for retirement.

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 multipleemployer 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 CaIPERS 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, 2023

					Survivors &	
Employer/Category	Plan Type	Active ¹	Inactive	Retired ²	Beneficiaries ³	Total
STATE						
Miscellaneous – Classic ⁴	PERF A	89,916	65,429	162,937	28,354	346,636
Miscellaneous – PEPRA ⁴	PERF A	112,698	35,057	2,040	34	149,829
Safety – Classic⁵	PERF A	36,492	9,484	71,694	9,153	126,823
Safety – PEPRA⁵	PERF A	39,611	8,533	744	18	48,906
Pre-Retirement Death – Classic	PERF A	_	_	_	3,103	3,103
Pre-Retirement Death – PEPRA	PERF A	_	_	_	90	90
TOTAL STATE		278,717	118,503	237,415	40,752	675,387
SCHOOL						
Miscellaneous – Classic	PERF B	136,497	137,277	215,732	29,655	519,161
Miscellaneous – PEPRA	PERF B	228,882	110,628	2,560	41	342,111
Pre-Retirement Death – Classic	PERF B		-	_	1,301	1,301
Pre-Retirement Death – PEPRA	PERF B	_	—	—	143	143
TOTAL SCHOOL		365,379	247,905	218,292	31,140	862,716
PUBLIC AGENCY		74 540	~~~~~	440.045	40.000	000.050
Miscellaneous – Classic	PERF A	74,519	62,926	143,845	18,663	299,953
Miscellaneous – PEPRA	PERF A	118,440	52,116	2,110	23	172,689
Safety – Classic	PERF A	18,009	4,902	40,348	5,495	68,754
Safety – PEPRA	PERF A	16,034	3,341	219	2	19,596
Pre-Retirement Death – Classic	PERF A	-	—	—	1,515	1,515
Pre-Retirement Death – PEPRA	PERF A	-	—	—	99	99
Miscellaneous – Classic	PERF C	13,147	13,670	24,147	2,982	53,946
Miscellaneous – PEPRA	PERF C	23,890	11,514	751	11	36,166
Safety – Classic	PERF C	7,325	3,529	18,161	2,428	31,443
Safety – PEPRA	PERF C	8,602	2,290	169	—	11,061
Pre-Retirement Death – Classic	PERF C	_	—	—	416	416
Pre-Retirement Death – PEPRA	PERF C		_		33	33
TOTAL PUBLIC AGENCY		279,966	154,288	229,750	31,667	695,671
TOTAL BENEFIT RECIPIENTS AND MEMBER	S	924,062	520,696	685,457	103,559	2,233,774

(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.

Category	2023	2022	2021	2020	2019	2018
Service Retirement	\$27,682,307,763	\$25,874,123,203	\$24,292,900,750	\$22,753,798,454	\$21,288,786,325	\$19,851,652,792
Disability Retirement	658,093,233	650,551,499	648,971,739	647,385,586	640,390,289	629,909,937
Industrial Disability Retirement	2,489,555,397	2,355,505,597	2,249,389,340	2,148,950,254	2,044,665,647	1,946,751,674
PPPA Payments ¹	9,055,102	8,590,146	9,799,332	11,482,597	12,956,146	14,739,908
Total	\$30,839,011,495	\$28,888,770,445	\$27,201,061,161	\$25,561,616,891	\$23,986,798,407	\$22,443,054,311
Basic Death Benefit/Group Term						
Life Insurance	\$44,241,869	\$51,802,816	\$42,764,996	\$41,489,834	\$42,184,086	\$45,353,650
1957 Survivor Benefit	128,214,796	120,878,557	115,198,670	111,565,097	107,503,062	103,212,410
1959 Survivor Benefit	34,819,620	34,013,184	33,923,153	34,472,004	33,431,530	33,515,158
Industrial Death Allowance	66,928,420	61,637,532	58,226,946	55,500,395	53,295,292	50,041,476
Option 1, Temporary Annuity,						
Other Lump-Sum Death						
Benefits & Other Prior-Year						
Adjustments	46,887,505	50,957,228	37,997,957	40,068,528	41,755,031	44,705,434
Adjustments ²	(75,860,323)	(89,706,213)	(73,978,940)	(62,792,096)	(55,684,211)	(65,438,104)
Total	\$245,231,887	\$229,583,104	\$214,132,782	\$220,303,762	\$222,484,790	\$211,390,024
Total Retirement and Death						
Payments	\$31,084,243,382	\$29,118,353,549	\$27,415,193,943	\$25,781,920,653	\$24,209,283,197	\$22,654,444,335
Refunds	391,113,306	329,554,169	287,555,810	323,180,050	280,265,587	286,978,986
GRAND TOTAL	\$31,475,356,688	\$29,447,907,718	\$27,702,749,753	\$26,105,100,703	\$24,489,548,784	\$22,941,423,321

(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.

2017	2016	2015
\$18,537,701,906	\$17,482,814,843	\$16,399,932,312
621,706,049	614,204,683	599,845,301
1,867,178,738	1,784,205,878	1,695,674,147
17,399,875	21,742,842	25,792,689
\$21,043,986,568	\$19,902,968,246	\$18,721,244,449
\$36,354,849	\$37,528,299	\$25,652,204
99,140,672	95,869,358	92,157,432
33,448,316	33,770,778	33,886,098
48,682,349	47,735,846	45,653,060
30,796,681	36,775,082	55,058,746
(76,521,097)	(60,714,425)	(51,360,036)
\$171,901,770	\$190,964,938	\$201,047,504
\$21,215,888,338	\$20,093,933,184	\$18,922,291,953
222,274,594	238,821,624	240,623,206
\$21,438,162,932	\$20,332,754,808	\$19,162,915,159

Program Data - PERF - Average Benefit Payments - As of June 30, 2023 - 10-Year Review

	Years of Service Credit						
Retirement Effective Dates	0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31+
2022-23							
Average Monthly Allowance ¹	\$688	\$1,104	\$2,010	\$2,952	\$4,336	\$6,373	\$6,961
Average Final Compensation	\$7,111	\$5,772	\$6,433	\$6,935	\$7,988	\$9,414	\$9,160
Number of Recipients ¹	1,570	5,116	¢0,400 5,325	¢0,360 5,859	6,822	5,195	5,131
	1,010	0,110	0,020	0,000	0,022	0,100	0,101
2021-22	* 700	A 4 070	A 4 004	* 0.050	A 4 4 A 4	A F 000	AA 4 AA
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
	1,001	1,002	0,000	0,000	0,011	0,100	0,011
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	¢=11	¢1 0E2	¢1 6 / 1	¢0.000	¢2 442	¢5 000	¢E 7//
Average Monthly Allowance ¹	\$541	\$1,053 \$5,120	\$1,641 \$5,000	\$2,392	\$3,443	\$5,223	\$5,744 ©7.207
Average Final Compensation Number of Recipients ¹	\$5,942	\$5,130	\$5,282	\$5,728	\$6,361	\$7,565 5 500	\$7,307 5.057
	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
	000	0,020	5,101	т,000	5,015	0,000	5,000

(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, 2023, 1,556 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 1,005 districts and other public agencies. The 57 county offices of education contracts provide benefits for 1,332 school districts and charter schools, bringing the total number of public agency employers to 2,888.

During Fiscal Year 2022-23, one additional agency contracted with CalPERS for retirement, death, and survivor benefits.

New Contracts

Effective Date	Public Agency	Misc. Member Formula	Safety Member Formula
7/16/2022	Penryn Fire Protection District	N/A	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 2022-23, 51 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	26
Add / Remove Exclusion	12
Death / Survivor Benefit	1
Section 20903 - Two Years Additional Service Credit	1
Member Reclass - Local Safety	1
Add new category - Safety Police	2
Terminate Portion of the Contract	1
Others	6

Mergers

The following mergers occurred in Fiscal Year 2022-23:

 Bodega Bay Fire Protection District merged into Sonoma County Fire District – Effective Date July 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 2022-23:

 Samoa Peninsula Fire Protection District, Effective Date April 29, 2023

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
- FresnoImperial

San BernardinoSan Diego

Sacramento

- San Joaquin
- San Mateo

Santa Barbara

- Los Angeles
- Marin

Kern

- Mendocino
- Merced
- StanislausTulare
- Orange

Ventura

Sonoma

The University of California Retirement Plan (UCRP)

Reciprocal Public Retirement Systems

- · Concord, City of
- Contra Costa Water District
- · Costa Mesa, City of (safety only)
- · Delano, City of
- 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 nonteaching and non-certified employees. PERF C is a costsharing 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

		2023	% of
Rank	Employer	Number of Employees ¹	Total System
1	State of California	278,717	30.16%
2	Los Angeles County Schools	48,912	5.29%
3	Los Angeles Unified School District	29,665	3.21%
4	San Diego County Schools	29,001	3.14%
5	Orange County Schools	28,026	3.03%
6	Riverside County Schools	25,630	2.78%
7	County of Riverside	22,997	2.49%
	All Other	461,114	49.90%
	Total Covered Employees	924,062	100.00%

(1) Number of Employees includes only active members.

Largest Participating Employers – Nine Years Prior

		2014	% of
Rank	Employer	Number of Employees ¹	Total System
1	State of California	334,242	27.95%
2	Los Angeles County Schools	105,254	8.80%
3	Los Angeles Unified School District	41,221	3.45%
4	San Diego County Schools	37,698	3.15%
5	Orange County Schools	33,454	2.80%
6	County of Riverside	26,640	2.23%
7	San Bernardino County Schools	25,035	2.09%
	All Other	592,302	49.53%
	Total Covered Employees	1,195,846	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	11,656	Orange	28,002
Alpine	29	Placer	3,676
Amador	309	Plumas	320
Butte	2,789	Riverside	25,624
Calaveras	476	Sacramento	13,671
Colusa	423	San Benito	644
Contra Costa	8,061	San Bernardino	22,947
Del Norte	410	San Diego	28,950
El Dorado	1,718	San Joaquin	8,709
Fresno	13,597	San Luis Obispo	2,497
Glenn	539	San Mateo	5,470
Humboldt	2,074	Santa Barbara	4,925
Imperial	3,045	Santa Clara	13,883
Inyo	251	Santa Cruz	2,417
Kern	14,838	Shasta	2,569
Kings	1,871	Sierra	35
Lake	781	Siskiyou	761
Lassen	422	Solano	3,664
Los Angeles	48,871	Sonoma	4,264
Madera	2,058	Stanislaus	8,253
Marin	1,761	Sutter	1,288
Mariposa	159	Tehama	1,067
Mendocino	1,496	Trinity	223
Merced	4,433	Tulare	7,631
Modoc	192	Tuolumne	519
Mono	169	Ventura	8,278
Monterey	5,457	Yolo	1,965
Napa	1,270	Yuba	1,342
Nevada	716	Total	333,465

School District Offices¹ (4)

	Active				
	PERF A	PERF B	Total		
Los Angeles Unified School District	228	29,437	29,665		
Los Angeles Community College District	_	2,477	2,477		
Los Angeles County Office of Education	1,124	_	1,124		
San Diego County Office of Education	775	_	775		
Total	2,127	31,914	34,041		

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

Counties (37 total)

	Act		
	PERF A	PERF C	Total
Alpine	_	88	88
Amador	300	100	400
Butte	2,167	_	2,167
Calaveras	520	93	613
Colusa	318	57	375
Del Norte	358	49	407
El Dorado	1,846	_	1,846
Glenn	476	25	501
Humboldt	2,066	_	2,066
Inyo	369	38	407
Kings	1,543	_	1,543
Lake	928	_	928
Lassen	309	48	357
Madera	1,576	_	1,576
Mariposa	382	79	461
Modoc	195	21	216
Mono	238	81	319
Monterey	5,376	_	5,376
Napa	1,373	111	1,484
Nevada	769	71	840
Placer	2,767	_	2,767
Plumas	296	32	328
Riverside	22,997	_	22,997
San Benito	435	87	522
San Joaquin	_	_	_
Santa Clara	20,902	_	20,902
Santa Cruz	2,580	_	2,580
Shasta	2,010	_	2,010
Sierra	_	116	116
Siskiyou	537	87	624
Solano	3,066	_	3,066
Sutter	1,002	_	1,002
Tehama	711	_	711
Trinity	259	59	318
Tuolumne	549	131	680
Yolo	1,714	_	1,714
Yuba	881	_	881
Total	81,815	1,373	83,188

Cities & Towns (452)

	Act	tive			Active				Act	tive	
City/Town	PERF A	PERF C	Total	City/Town	PERF A	PERF C	Total	City/Town	PERF A	PERF C	Total
Adelanto	_	26	26	Calabasas	_	78	78	Del Mar	_	58	58
Agoura Hills	_	37	37	Calexico	_	146	146	Del Rey Oaks	_	13	13
Alameda	527	_	527	California City	_	103	103	Delano	_	51	51
Albany	_	111	111	Calimesa	_	14	14	Desert Hot Springs	_	117	117
Alhambra	387	_	387	Calipatria	_	12	12	Diamond Bar	_	62	62
Aliso Viejo	_	31	31	Calistoga	_	66	66	Dinuba	_	143	143
Alturas	_	20	20	Camarillo	149	_	149	Dixon	_	134	134
American Canyon	_	70	70	Campbell	119	39	158	Dos Palos	_	27	27
Anaheim	2,383	_	2,383	Canyon Lake	_	14	14	Downey	402	_	402
Anderson	_	74	74	Capitola	_	72	72	Duarte	_	50	50
Angels	_	36	36	Carlsbad	814	_	814	Dublin	_	107	107
Antioch	236	96	332	Carmel-By-The-Sea	_	72	72	Dunsmuir	_	13	13
Apple Valley	_	148	148	Carpinteria	_	40	40	East Palo Alto	_	101	101
Arcadia	292	_	292	Carson	392	_	392	Eastvale	_	49	49
Arcata	_	118	118	Cathedral City	_	203	203	El Cajon	403	_	403
Arroyo Grande	_	102	102	Cerritos	243		243	El Centro	193	84	277
Artesia	_	37	37	Chico	394	_	394	El Cerrito		158	158
Arvin	_	54	54	Chino	382	115	497	El Monte	297		297
Atascadero	_	141	141	Chowchilla		88	88	El Segundo	176	91	267
Atherton	_	44	44	Chula Vista	1,127		1,127	Elk Grove		399	399
Atwater	_	95	95	Citrus Heights	1,121	197	197	Emeryville	_	38	38
Auburn	_	85	85	Claremont	131	41	172	Encinitas	179	76	255
Avalon	_	59	59	Clayton	101	24	24	Escalon	175	40	40
Avenal	_	51	51	Clearlake	_	58	58	Escondido	821	40 —	821
Azusa	236	54	290	Cloverdale	_	44	44	Etna	021	10	10
Bakersfield	1,811		1,811	Clovis	724	44	724	Eureka	201	38	239
Baldwin Park	164	61	225	Coachella City	124	82	82	Exeter	201	40	40
	162	32	194	•	_	100	100	Fairfax	_	40 35	40 35
Banning Barstow		52 151	194	Coalinga Colfax	_	100	100	Fairfield	572		572
Beaumont	—	193	193	Colma	_	48	48	Farmersville	572		38
Bell	_	195	193		201	40 87			_	30 39	39
Bell Gardens	_	169		Colton	201	87 32	288 32	Fillmore	_	39 38	39
	_	85	169	Colusa Commerce	150			Firebaugh	462		463
Bellflower	_	00 127	85		150 225	 52	150 277	Folsom Fontana	463 766	-	463 766
Belmont	_		127	Compton		52			700		
Belvedere Benicia	174	20	20	Concord	383		383	Fort Bragg	_	61	61
Berkeley	174	63	237	Corcoran Corning	_	40	67	Fortuna	105	74 36	74 161
•	1,425	_	1,425	Ū			40	Foster City	125		161
Beverly Hills	877		877	Corona	599	110	709	Fountain Valley	_	212	212
Biggs	_	8	8	Coronado	176	78	254	Fowler		34	34
Bishop	—	38	38	Corte Madera		45	45	Fremont	912	-	912
Blue Lake	_	13	13	Costa Mesa	530	83	613	Fullerton	486		486
Blythe	-	60	60	Cotati		39	39	Galt	132	32	164
Bradbury	_	3	3	Covina	123	58	181	Garden Grove	573	_	573
Brawley		131	131	Crescent City	_	63	63	Gardena	301	89	390
Brea	187	93	280	Cudahy	_	48	48	Gilroy	137	99	236
Brentwood	251	62	313	Culver City	651	—	651	Glendale	1,780	_	1,780
Brisbane	—	100	100	Cupertino	200		200	Glendora	158	52	210
Buellton	_	23	23	Cypress	—	130	130	Goleta	—	101	101
Buena Park	187	81	268	Daly City	447	_	447	Gonzales	—	51	51
Burbank	1,299	—	1,299	Dana Point	—	65	65	Grand Terrace	_	18	18
Burlingame	201	34	235	Davis	252	102	354	Grass Valley	_	106	106

Cities & Towns (continued)

	Active				Active				Act	ive	
City/Town	PERF A	PERF C	Total	City/Town	PERF A	PERF C	Total	City/Town	PERF A	PERF C	Total
Greenfield	_	84	84	Lakewood	295	_	295	Moreno Valley	344	_	344
Gridley	_	47	47	Lancaster	324	_	324	Morgan Hill	166	42	208
Grover Beach	_	66	66	Larkspur	_	37	37	Morro Bay	_	96	96
Guadalupe	_	39	39	Lathrop	_	144	144	Mountain View	643	_	643
Gustine	_	34	34	Lawndale	_	51	51	Mt. Shasta	_	42	42
Half Moon Bay	_	42	42	Lemon Grove	_	53	53	Murrieta	_	334	334
Hanford	200	91	291	Lemoore	_	103	103	Napa	474	_	474
Hawaiian Gardens		65	65	Lincoln	_	191	191	National City	321	_	321
Hawthorne	180	82	262	Lindsay	_	50	50	Needles	_	57	57
Hayward	825	_	825	Live Oak	_	27	27	Nevada City	_	32	32
Healdsburg	_	143	143	Livermore	306	88	394	Newark	131	43	174
Hemet	291	_	291	Livingston	_	69	69	Newman	_	45	45
Hercules		74	74	Lodi	422		422	Newport Beach	826		826
Hermosa Beach	_	144	144	Loma Linda		85	85	Norco	-020	86	86
Hesperia	_	116	116	Lomita	_	49	49	Norwalk	268		268
Hidden Hills	_	4	4	Lompoc	285	68	353	Novato	136	52	188
Highland	_	38	38	Long Beach	4,971		4,971	Oakdale	100	99	99
Hillsborough		85	85	Loomis	4,571	14	4,571	Oakland	4,097		4,097
Hollister	_	195	195	Los Alamitos		56	56	Oakley	4,037	91	4,0 <i>91</i>
Hughson	_	18	18	Los Altos	_	135	135	Oceanside	956		956
Huntington Beach	999		999	Los Altos Hills	_	26	26	Ojai	900	 35	35
-		 159	159	Los Banos	_	177	177	Ontario	1,258		1,258
Huntington Park	_	92	92	Los Gatos	 116	35	151		658	_	658
Imperial	_	92 92	92		103			Orange	000	 39	39
Imperial Beach	_	92 31	92 31	Lynwood	183		103 243	Orange Cove Orland	_	39 42	39 42
Indian Wells	 193	64		Madera Malibu	103	88	243 88	Oraville	_	42 103	42 103
Indio		04 25	257 25	Mammoth Lakes	_	00 87	00 87	Oroville Oxnard	1 107	103	1,332
Industry	627		25 627		266	89		Pacific Grove	1,197	89	1,332 89
Inglewood				Manhattan Beach			355		400		
lone	1 100	22	22	Manteca	308	122	430	Pacifica	133	52	185
Irvine	1,109	100	1,109	Marina	_	99 125	99 125	Palm Desert	128	_	128
Irwindale	_	106	106	Martinez	_	135	135	Palm Springs	514	_	514
Jackson	_	34	34	Marysville	_	79 22	79	Palmdale	253	_	253
Kerman King City	_	76	76	Maywood	_	23	23	Palo Alto	923	_	923
King City	_	38	38	Mendota	_	49	49	Palos Verdes		40	40
Kingsburg	_	75	75	Menifee Marila Bada		302	302	Estates	_	46	46
La Canada Flintridge		42	42	Menlo Park	217	40	257	Paradise	_	83	83
La Habra	230	71	301	Merced	465		465	Paramount	_	92	92
La Habra Heights		16	16	Mill Valley	_	152	152	Parlier	4 005	57	57
La Mesa	251		251	Millbrae		87	87	Pasadena	1,825		1,825
La Mirada	_	84	84	Milpitas	408	—	408	Paso Robles	157	81	238
La Palma	_	50	50	Mission Viejo	155	_	155	Patterson	_	154	154
La Puente	_	61	61	Modesto	1,186		1,186	Perris		127	127
La Quinta	-	95	95	Monrovia	153	87	240	Petaluma	362	_	362
La Verne		174	174	Montague	_	7	7	Pico Rivera	147		147
Laguna Beach	185	111	296	Montclair	_	166	166	Piedmont	—	108	108
Laguna Hills	—	34	34	Monte Sereno		9	9	Pinole	_	100	100
Laguna Niguel	—	79	79	Montebello	453		453	Pismo Beach		102	102
Laguna Woods	—	8	8	Monterey	266	126	392	Pittsburg	215	79	294
Lake Elsinore	—	134	134	Monterey Park	304	_	304	Placentia	_	158	158
Lake Forest	—	81	81	Moorpark	_	65	65	Placerville	_	83	83
Lakeport	_	46	46	Moraga	_	38	38	Pleasant Hill	—	106	106

Cities & Towns (continued)

	Active				Act	Active		Active			Act	ive	
City/Town	PERF A	PERF C	Total	City/Town	PERF A	PERF C	Total	City/Town	PERF A	PERF C	Total		
Pleasanton	412	77	489	San Leandro	263	65	328	Temecula	214	_	214		
Pomona	544	_	544	San Luis Obispo	350	102	452	Temple City		47	47		
Port Hueneme	_	124	124	San Marcos	186	68	254	Thousand Oaks	350	_	350		
Porterville	204	116	320	San Marino	_	116	116	Tiburon	_	40	40		
Portola	_	13	13	San Mateo	463	_	463	Torrance	1,248	_	1,248		
Portola Valley	_	16	16	San Pablo	_	163	163	Tracy	466	_	466		
Poway	176	51	227	San Ramon	219	65	284	Truckee		142	142		
Rancho Cordova	_	101	101	Sand City	_	19	19	Tulare	248	108	356		
Rancho				Sanger	_	111	111	Tulelake	_	10	10		
Cucamonga	399	_	399	Santa Ana	1,228	_	1,228	Turlock	250	122	372		
Rancho Mirage	_	88	88	Santa Barbara	918	94	1,012	Tustin	223	95	318		
Rancho Palos				Santa Clara	1,033	_	1,033	Twentynine Palms	_	43	43		
Verdes	_	92	92		493	_	493	Ukiah	180	53	233		
Rancho Santa		02	02	Santa Cruz	720	138	858	Union City	181	74	255		
Margarita	_	27	27	Santa Fe Springs	136	48	184	Upland	159	70	229		
Red Bluff	_	117	117	Santa Maria	444	182	626	Vacaville	586		586		
Redding	895		895	Santa Monica	1,937		1,937	Vallejo	488	_	488		
Redlands	369	135	504	Santa Paula	1,337	101	1,337	Vernon	174	40	214		
Redondo Beach	448	100	448	Santa Rosa	1,183		1,183	Victorville	404	40 60	464		
Redwood City	590	_	590	Santee	1,105	141	1,105	Villa Park	404	8	404		
•		116			_	61	61	Visalia	610				
Reedley			116	Saratoga	_	67	67	Vista	619		619		
Rialto	364	_	364	Sausalito	_	67 54	67 54	Walnut	222	85	307		
Richmond	616		616	Scotts Valley	_	• ·	• ·			46	46		
Ridgecrest	_	113	113	Seal Beach	_	105	105	Walnut Creek	318	74	392		
Rio Vista	_	38	38	Seaside	_	172	172	Wasco	_	70	70		
Ripon	_	23	23	Sebastopol	_	40	40	Waterford	_	17	17		
Riverbank		60	60	Selma	_	132	132	Watsonville	318	99	417		
Riverside	2,218	_	2,218	Shafter	-	107	107	Weed		31	31		
Rocklin	144	98	242	Shasta Lake	-	55	55	West Covina	295	—	295		
Rohnert Park	158	71	229	Sierra Madre	-	93	93	West Hollywood	236	_	236		
Rolling Hills	—	4	4	Signal Hill	_	93	93	West Sacramento	312	123	435		
Rolling Hills				Simi Valley	490	_	490	Westlake Village		18	18		
Estates	—	23	23	Solana Beach	—	73	73	Westminster	150	91	241		
Rosemead		63	63	Soledad	—	72	72	Whittier	365	_	365		
Roseville	1,444	_	1,444	Solvang	—	24	24	Wildomar	—	35	35		
Ross		21	21		—	41	41	Williams	—	38	38		
Sacramento	4,014	_	4,014	Sonora	—	41	41	Willits	—	53	53		
Salinas	470	95	565	South El Monte	—	54	54	Willows	—	18	18		
San Anselmo	—	40	40	South Gate	268	72	340	Windsor	—	112	112		
San Bernardino	989	_	989	South Lake Tahoe	120	77	197	Winters	—	43	43		
San Bruno	162	84	246	South Pasadena	—	157	157	Woodlake	—	34	34		
San Buenaventura	659	—	659	South San Francisco	457	—	457	Woodland	307	—	307		
San Carlos	—	100	100	St. Helena	—	79	79	Woodside	—	19	19		
San Clemente	168	5	173	Stanton	—	43	43	Yorba Linda	131	—	131		
San Dimas	—	88	88	Stockton	1,524	—	1,524	Yountville	_	34	34		
San Fernando	—	107	107	Suisun City	—	105	105	Yreka	—	71	71		
San Francisco ¹	538	—	538	Sunnyvale	899	—	899	Yuba City	198	126	324		
San Gabriel	—	180	180	Susanville	_	64	64	Yucaipa	_	77	77		
San Jacinto	—	71	71	Sutter Creek	—	12	12	Yucca Valley	_	48	48		
San Joaquin	_	14	14	Taft	_	52	52	Total	98,650	26,540	125,190		
San Jose	_	13	13	Tehachapi	_	72	72	(1) San Francisco has both it is listed only in the "total"	City and Cou count of the C	nty employee Cities & Towns	s; however, s category.		

Other Public Agencies that Contract with CalPERS for Retirement Benefits $\left(1,005\right)$

	Act	tive		
Other Public Agency	PERF A	PERF C	Total	Other Public Agency
Academic Senate for California Community				Associated Students of California State
Colleges	_	15	15	University, Chico
Access Services Incorporated	_	78	78	Association of Bay Area Governments
Agoura Hills and Calabasas Community Center	-	—	—	Association of California Water Agencie
Alameda Alliance for Health	477	—	477	Association of California Water Agencie
Alameda Corridor Transportation Authority	-	11	11	Joint Powers Insurance Authority
Alameda County Fire Department	337	80	417	Association of Monterey Bay Area
Alameda County Law Library	-	6	6	Governments
Alameda County Mosquito Abatement District	-	18	18	Atascadero Cemetery District
Alameda County Schools Insurance Group	—	3	3	Auburn Area Recreation and Park Distr
Alameda County Transportation Commission	—	39	39	Auburn Public Cemetery District
Alameda County Waste Management Authority	—	47	47	Avila Beach Community Services Distri
Alameda County Water District	220	—	220	Aztec Shops, Ltd.
Alliance of Schools for Cooperative Insurance				Bard Water District
Programs	-	49	49	Bardsdale Cemetery District
Alpine Fire Protection District	-	19	19	Barstow Cemetery District
Alpine Springs County Water District	—	5	5	Bay Area Air Quality Management Distr
Alta California Regional Center, Inc.	617	—	617	Bay Area Water Supply and Conservation
Alta Irrigation District	—	13	13	Agency
Altadena Library District	—	21	21	Beach Cities Health District
Amador County Transportation Commission	—	4	4	Bear Mountain Recreation and Park Dis
Amador Transit	—	21	21	Bear Valley Community Services Distric
Amador Water Agency	—	47	47	Beaumont District Library
American Canyon Fire Protection District	-	22	22	Beaumont-Cherry Valley Recreation an
American River Flood Control District	—	10	10	District
Anderson Cemetery District	—	—	_	Beaumont-Cherry Valley Water District
Anderson Fire Protection District	—	13	13	Bella Vista Water District
Angiola Water District	—	4	4	Belmont Fire Protection District
Antelope Valley Mosquito and Vector Control				Belmont-San Carlos Fire Department
District	—	7	7	Belvedere-Tiburon Library Agency
Antelope Valley Schools Transportation				Benicia City Housing Authority
Agency	169	—	169	Berkeley Housing Authority
Antelope Valley Transit Authority	-	53	53	BETA Healthcare Group Risk Manager
Apple Valley Fire Protection District	-	56	56	Authority
Arbuckle-College City Fire Protection District	—	3	3	Big Bear Area Regional Wastewater Ag
Arcade Creek Recreation and Park District	—	3	3	Big Bear City Airport District
Arcata Fire Protection District	—	22	22	Big Bear City Community Services Dist
Area 12 Agency on Aging	—	24	24	Big Bear Municipal Water District
Aromas Water District	—	6	6	Bighorn-Desert View Water Agency
Arrowbear Park County Water District	—	5	5	Black Gold Cooperative Library System
Arroyo Grande District Cemetery	—	3	3	Blanchard/Santa Paula Public Library D
Associated Students California State University				Blue Lake Fire Protection District
San Bernardino	—	4	4	Bolinas Community Public Utility Distric
Associated Students Inc., California State				Bolinas Fire Protection District
University, Fullerton	—	68	68	Bonita-Sunnyside Fire Protection Distri
Associated Students Incorporated of California		-	_	Boron Community Services District
State University East Bay	_	5	5	Borrego Springs Fire Protection District
Associated Students Incorporated of California		0	0	Borrego Water District
State University Stanislaus	_	8	8	Boulder Creek Fire Protection District

	Ac	tive	
Other Public Agency	PERF A	PERF C	Total
Associated Students of California State			
University, Chico	_	104	104
Association of Bay Area Governments	_	-	
Association of California Water Agencies		42	42
Association of California Water Agencies - Joint Powers Insurance Authority	_	55	55
Association of Monterey Bay Area Governments	_	11	11
Atascadero Cemetery District	—	3	3
Auburn Area Recreation and Park District	-	49	49
Auburn Public Cemetery District	-	5	5
Avila Beach Community Services District	-	1	1
Aztec Shops, Ltd.	—	51	51
Bard Water District	—	17	17
Bardsdale Cemetery District	—	-	—
Barstow Cemetery District	—	4	4
Bay Area Air Quality Management District	406	-	406
Bay Area Water Supply and Conservation			
Agency	-	9	9
Beach Cities Health District	_	71	71
Bear Mountain Recreation and Park District	_	6	6
Bear Valley Community Services District	_	39	39
Beaumont District Library	_	10	10
Beaumont-Cherry Valley Recreation and Park District	_	23	23
Beaumont-Cherry Valley Water District	—	42	42
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	—	10	10
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	—	39	39
Big Bear Municipal Water District	-	11	11
Bighorn-Desert View Water Agency	-	9	9
Black Gold Cooperative Library System	-	4	4
Blanchard/Santa Paula Public Library District	—	5	5
Blue Lake Fire Protection District	—	1	1
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	—	14	14
Porrogo Water District		10	10

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Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

	Ac	tive		
Other Public Agency	PERF A	PERF C	Total	Other Public
Branciforte Fire Protection District	_	6	6	California Int
Brannan-Andrus Levee Maintenance District	_	2	2	Diego Secti
Broadmoor Police Protection District Brooktrails Township Community Services	-	10	10	California Int Section
District	_	13	13	California Int
Browns Valley Irrigation District	_	11	11	Office
Buckingham Park Water District	_	4	4	California Jo
Buena Park Library District	_	19	19	California Jo
Burney Basin Mosquito Abatement District	_	1	1	Authority
Burney Fire District	_	_	_	California Ma
Burney Water District	_	7	7	California Mu
Butte County Air Quality Management District	_	11	11	California Pi
Butte County Association of Governments	_	13	13	California Re Foundation
Butte County Fair Association	_	3	3	California Sc
Butte County In-Home Supportive Services				California Sp
Public Authority	-	—	_	California St
Butte County Mosquito and Vector Control				Foundation
District	-	18	18	California St
Butte Local Agency Formation Commission	—	3	3	Foundation,
Butte Schools Self-Funded Programs	—	13	13	California Sta Corporation
Butte-Glenn Community College District	-	4	4	California St
Byron-Bethany Irrigation District	-	13	13	and Busines
Cabrillo College Foundation	-	5	5	California St
Cachuma Operation and Maintenance Board		14	14	Inc.
Cal Poly Corporation	276		276	Callayomi Co
Cal Poly Pomona Foundation, Inc.	_	201	201	Calleguas M
Calaveras Council of Governments	_	3	3	Camarillo He Cambria Cer
Calaveras County Water District	_	73	73	Cambria Cer
Calaveras Public Utility District California Association for Park and Recreation	_	9	9	Cambria Cor
Indemnity	_	4	4	Cameron Pa
California Authority of Racing Fairs		4	4	Camrosa Wa
California Central Valley Flood Control		-	7	Capitol Area
Association	_	2	2	Carmel Area
California Fair Services Authority	_	21	21	Carmel High
California Fairs Financing Authority	_	10	10	Monterey C
California Firefighter's Joint Apprenticeship				Carmichael
Committee	_	28	28	Carpinteria S
California Intergovernmental Risk Authority	_	7	7	Carpinteria \
California Interscholastic Federation, Central				Casitas Mun
Coast Section	—	5	5	Castro Valle
California Interscholastic Federation, Central				Castroville C
Section	—	3	3	Cawelo Wate
California Interscholastic Federation, North		0	0	Cayucos Sar
Coast Section	_	6	6	Cayucos-Mo
California Interscholastic Federation, Northern Section		1	1	Centerville C
California Interscholastic Federation, Sac-		1		Central Basi
Joaquin Section	_	6	6	Central Cala
· · · · · · · · · · · · · · · · · · ·		3	5	District

	Act	tive	
Other Public Agency	PERF A	PERF C	Total
California Interscholastic Federation, San Diego Section	_	4	4
California Interscholastic Federation, Southern			
Section California Interscholastic Federation, State	_	17	17
Office	-	9 32	9
California Joint Powers Insurance Authority	_	32	32
California Joint Powers Risk Management Authority	_	6	6
California Maritime Academy Foundation, Inc.	—	—	—
California Municipal Utilities Association	—	8	8
California Pines Community Services District	—	9	9
California Redevelopment Association Foundation	_	_	_
California School Boards Association	_	112	112
California Special Districts Association	_	29	29
California State University, Bakersfield		4	
Foundation California State University, East Bay	_	1	1
Foundation, Inc.	-	—	—
California State University, Fresno Athletic Corporation	-	73	73
California State University, Stanislaus Auxiliary and Business Services	_	_	_
California State University-Fresno Association, Inc.	_	38	38
Callayomi County Water District	_	5	5
Calleguas Municipal Water District	_	76	76
Camarillo Health Care District	_	26	26
Cambria Cemetery District	_	1	1
Cambria Community Healthcare District	_	17	17
Cambria Community Services District	_	35	35
Cameron Park Community Services District	_	18	18
Camrosa Water District	_	26	26
Capitol Area Development Authority	_	41	41
Carmel Area Wastewater District	_	27	27
Carmel Highlands Fire Protection District of Monterey County	_	_	_
Carmichael Water District	_	23	23
Carpinteria Sanitary District	_	15	15
Carpinteria Valley Water District	_	21	21
Casitas Municipal Water District	_	77	77
Castro Valley Sanitary District	_	23	23
Castroville Community Services District	_	6	6
Cawelo Water District	_	15	15
Cayucos Sanitary District	_	8	8
Cayucos-Morro Bay Cemetery District	_	4	4
Centerville Community Services District	_	5	5
Central Basin Municipal Water District	_	9	9
Central Calaveras Fire and Rescue Protection		3	3

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Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

	Act	ive		
Other Public Agency	PERF A	PERF C	Total	Other Public Agency
Central Coast Water Authority	_	30	30	Conejo Recreation and Park District
Central Contra Costa Solid Waste Authority	_	6	6	Connecting Point
Central Contra Costa Transit Authority	224	_	224	Consolidated Mosquito Abatement Dis
Central County Fire Department	_	91	91	Contra Costa Community College Dis
Central Fire Protection District of Santa Cruz				Contra Costa County Law Library
County	—	106	106	Contra Costa County Schools Insurar
Central Marin Fire Authority	-	37	37	Contra Costa Transportation Authority
Central Marin Police Authority	_	45	45	Cooperative Organization for the Dev
Central Marin Sanitation Agency	—	46	46	of Employee Selection Procedures
Central Sierra Child Support Agency	—	24	24	Cooperative Personnel Services
Central Valley Regional Center, Inc.	617	—	617	Copperopolis Fire Protection District
Central Water District	_	5	5	Cordelia Fire Protection District of Sol
Channel Islands Beach Community Services District	_	7	7	County Cordova Recreation and Park District
Chester Public Utility District	_	15	15	Corning Water District
Chico Area Recreation and Park District	_	77	77	Costa Mesa Sanitary District
Children and Families Commission of San Luis				Cosumnes Community Services Distr
Obispo County	—	4	4	Cottonwood Fire Protection District
Chino Basin Water Conservation District	—	17	17	Cottonwood Water District
Chino Basin Watermaster	—	11	11	CRA/LA, a Designated Local Authorit
Chino Valley Independent Fire District	_	142	142	Crescent City Harbor District
Citrus Heights Water District	_	34	34	Crescenta Valley Water District
City/County Association of Governments of San Mateo County	_	2	2	Crestline Lake Arrowhead Water Age
Clear Creek Community Services District	_	10	10	Crestline Village Water District
Clearlake Oaks County Water District	_	17	17	Crockett Community Services District
Cloverdale Citrus Fair	_	4	4	Cucamonga Valley Water District
Cloverdale Fire Protection District	_	19	19	Cutler Public Utility District
Clovis Cemetery District	_	8	8	Cutler-Orosi Joint Powers Wastewate
Coachella Valley Association of Governments	_	31	31	Authority
Coachella Valley Mosquito and Vector Control District	_	65	65	Cuyama Valley Recreation District Dairy Council of California
Coachella Valley Public Cemetery District	_	11	11	Davis Cemetery District
Coachella Valley Water District	547		547	De Luz Community Services District
Coalinga/Huron Unified School District Library	547	_	547	Del Norte County Library District
District	_	9	9	Del Paso Manor Water District
Coalinga-Huron Recreation and Park District	_	12	12	Del Puerto Water District
Coast Life Support District	_	24	24	Del Rey Community Services District
Coastal Developmental Services Fdn DBA	050			Delano Mosquito Abatement District
Westside Regional Center	253		253	Delta Diablo
Coastside County Water District	_	20	20	Delta Mosquito and Vector Control Dis
Coastside Fire Protection District	_	_	_	Denair Community Services District
Colfax Cemetery District	—	2	2	Desert Water Agency
Colusa County One-Stop Partnership	—	8	8	Diablo Water District
Colusa Mosquito Abatement District	—	3	3	Diamond Springs/El Dorado Fire Prote
Community College League of California	—	33	33	District
Community Development Commission of Mendocino County	_	21	21	Dixon Public Library District Donald P. And Katherine B. Loker Un
· · · · · · · · · · · · · · · · · · ·				Dunaiu I. Anu Nathenne D. LUKEI UII
Compass Community Credit Union	_	23	23	Student Union, Inc.
Compass Community Credit Union Compton Creek Mosquito Abatement District	_	23 1	23 1	Student Union, Inc. Dougherty Regional Fire Authority

	Act		
Other Public Agency	PERF A	PERF C	Total
Conejo Recreation and Park District	151	—	151
Connecting Point	—	42	42
Consolidated Mosquito Abatement District	—	20	20
Contra Costa Community College District	—	21	21
Contra Costa County Law Library	—	5	5
Contra Costa County Schools Insurance Group	—	36	36
Contra Costa Transportation Authority	-	18	18
Cooperative Organization for the Development of Employee Selection Procedures	_	6	6
Cooperative Personnel Services	133	—	133
Copperopolis Fire Protection District	—	9	9
Cordelia Fire Protection District of Solano County	_	_	_
Cordova Recreation and Park District	_	65	65
Corning Water District	_	3	3
Costa Mesa Sanitary District	_	23	23
Cosumnes Community Services District	416	—	416
Cottonwood Fire Protection District	_	3	3
Cottonwood Water District	_	3	3
CRA/LA, a Designated Local Authority	_	5	5
Crescent City Harbor District	_	13	13
Crescenta Valley Water District	_	27	27
Crestline Lake Arrowhead Water Agency	_	9	9
Crestline Village Water District	_	13	13
Crockett Community Services District	_	5	5
Cucamonga Valley Water District	125	_	125
Cutler Public Utility District	_	5	5
Cutler-Orosi Joint Powers Wastewater Authority	_	3	3
Cuyama Valley Recreation District	_	_	_
Dairy Council of California	_	41	41
Davis Cemetery District	_	4	4
De Luz Community Services District	_	7	7
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	_	4	4
Delano Mosquito Abatement District	_	7	7
Delta Diablo	_	69	69
Delta Mosquito and Vector Control District	_	19	19
Denair Community Services District	_	8	8
Desert Water Agency	_	87	87
Diablo Water District	_	23	23
Diamond Springs/El Dorado Fire Protection District	_	12	12
Dixon Public Library District	_	_	_
Donald P. And Katherine B. Loker University Student Union, Inc.	_	13	13
Dougherty Regional Fire Authority	_		_
Dublin San Paman Sanvisas District		107	107

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Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

	Act			
Other Public Agency	PERF A	PERF C	Total	Other Public Agency
Durham Mosquito Abatement District	—	1	1	Foundation for California Community College
East Bay Dischargers Authority	—	4	4	Foundation for Grossmont and Cuyamaca
East Bay Regional Park District	700	72	772	Colleges
East Contra Costa Irrigation District	—	18	18	Fresno City Housing Authority
East County Schools Federal Credit Union	—	16	16	Fresno County Housing Authority
East Orange County Water District	—	15	15	Fresno County Law Library
East Palo Alto Sanitary District	—	7	7	Fresno Westside Mosquito Abatement Distric
East Quincy Services District	—	3	3	Fruitridge Fire Protection District
East Valley Water District	—	68	68	Fulton-El Camino Recreation and Park Distri
Eastern Municipal Water District	606	—	606	Garden Valley Fire Protection District
Eastern Sierra Transit Authority	—	46	46	Georgetown Divide Public Utility District
Ebbetts Pass Fire Protection District	—	26	26	Georgetown Divide Resource Conservation District
Edgemont Community Services District	—	1	1	Georgetown Fire Protection District
El Dorado County Fire Protection District	—	81	81	Gilsizer County Drainage District
El Dorado County Resource Conservation			•	Glendale College, Associated Students of
District	_	6	6	Glendale Community College District
El Dorado County Transit Authority	_	58	58	Glenn County Mosquito and Vector Control
El Dorado County Transportation Commission	_	5	5	District
El Dorado County Water Agency	_	4	4	Gold Coast Transit
El Dorado Hills Community Services District	_	27	27	Gold Ridge Fire Protection District
El Dorado Hills County Water District	_	80	80	Gold Ridge Resource Conservation District
El Dorado Irrigation District	237	—	237	Golden Gate Bridge Highway and Transportation District
El Dorado Local Agency Formation Commission		2	2	
Encina Wastewater Authority		71	71	Golden Hills Community Services District
Esparto Community Services District		7	7	Golden Sierra Job Training Agency
Esparto Fire Protection District		4	4	Goleta Sanitary District
Experie District Ambulance		14	14	Goleta Water District
Fair Oaks Recreation & Park District		17	17	Goleta West Sanitary District
Fair Oaks Water District		26	26	Granada Community Services District
Fairfield-Suisun Sewer District		63	63	Graton Community Services District
Fall River Valley Community Services District	_	4	4	Graton Fire Protection District
Fallbrook Public Utility District	_	4 67	67	Great Basin Unified Air Pollution Control
Far Northern Coordinating Council on	_	07	07	District
Developmental Disabilities	235	_	235	Greater Anaheim Special Education Local Pl Area
Feather River Air Quality Management District	_	11	11	Greater Los Angeles County Vector Control
Feather River Recreation and Park District	_	12	12	District
Feather Water District	_	2	2	Greater Vallejo Recreation District
Felton Fire Protection District	_	9	9	Green Valley County Water District
Fern Valley Water District	_	5	5	Gridley Biggs Cemetery District
Florin County Water District	_	10	10	Grossmont Healthcare District
Florin Resource Conservation District Elk				Groveland Community Services District
Grove Water District	—	30	30	Gualala Community Services District
Fontana Unified School District	—	16	16	Hacienda La Puente Unified School District
Foothill Municipal Water District	—	9	9	Hamilton Branch Fire Protection District
Foothill-De Anza Community College District	_	10	10	Happy Camp Sanitary District
Foresthill Public Utility District	_	5	5	Happy Homestead Cemetery District
Forestville Water District	_	6	6	Happy Valley Fire District
Fort Bragg Fire Protection Authority	_	4	4	Hayward Area Recreation and Park District

	Act	ivo	
Other Public Agency	PERF A	PERF C	Total
Foundation for California Community Colleges		806	806
Foundation for Grossmont and Cuyamaca Colleges		64	64
-	112	04	112
Fresno City Housing Authority Fresno County Housing Authority	117	_	112
Fresho County Housing Authony Fresho County Law Library	117	3	3
Fresho Westside Mosquito Abatement District	_	3 8	8
Fruitridge Fire Protection District	_	0	0
Fulton-El Camino Recreation and Park District	_		11
Garden Valley Fire Protection District		10	10
Georgetown Divide Public Utility District		24	24
Georgetown Divide Resource Conservation	_	24	24
District	_	6	6
Georgetown Fire Protection District	_	17	17
Gilsizer County Drainage District	_	_	_
Glendale College, Associated Students of	_	1	1
Glendale Community College District	_	8	8
Glenn County Mosquito and Vector Control			
District	—	2	2
Gold Coast Transit	193	—	193
Gold Ridge Fire Protection District	—	22	22
Gold Ridge Resource Conservation District	—	9	9
Golden Gate Bridge Highway and Transportation District	443	_	443
Golden Hills Community Services District	—	12	12
Golden Sierra Job Training Agency	_	16	16
Goleta Sanitary District	_	31	31
Goleta Water District	—	67	67
Goleta West Sanitary District	—	7	7
Granada Community Services District	—	3	3
Graton Community Services District	—	2	2
Graton Fire Protection District	-	6	6
Great Basin Unified Air Pollution Control District	_	24	24
Greater Anaheim Special Education Local Plan Area	_	70	70
Greater Los Angeles County Vector Control District	_	119	119
Greater Vallejo Recreation District	-	61	61
Green Valley County Water District	-	2	2
Gridley Biggs Cemetery District	—	5	5
Grossmont Healthcare District	-	11	11
Groveland Community Services District	—	20	20
Gualala Community Services District	—	4	4
Hacienda La Puente Unified School District	—	6	6
Hamilton Branch Fire Protection District	—	_	_
Happy Camp Sanitary District	—	_	_
Happy Homestead Cemetery District	—	2	2
Happy Valley Fire District	—	3	3
Hereine Bernetting D. D. (1)	101		101

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Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

PERF A	PERF C	Total	Other Dublie Agenov
			Other Public Agency
—	479	479	Inland Empire Health Plan
—	22	22	Inland Empire Resource Conservation Di
—	14	14	Inland Empire Utilities Agency
—	17	17	Intergovernmental Training and Developr
142	-	142	Center
—	35	35	Inverness Public Utility District
—	8	8	Ironhouse Sanitary District
—	5	5	Irvine Ranch Water District
—	-	—	Isla Vista Recreation and Park District
—	9	9	Jackson Valley Irrigation District
_	59	59	Jamestown Sanitary District
			Joshua Basin Water District
—			June Lake Public Utility District
—			Jurupa Area Recreation and Park District
—			Jurupa Community Services District
—	1	1	Kaweah Delta Water Conservation Distric
—	-	-	Kelseyville Fire Protection District
—			Kensington Community Services District
—			Kentfield Fire Protection District
—	23	23	Kenwood Fire Protection District
—	9	9	Kern County Council of Governments
838	—	838	Kern County Law Library
—	20	20	Kern County Local Agency Formation Commission
_	75	75	Kern Health Systems
			Kern River Valley Cemetery District
—	73	73	Kern-Tulare Water District
—	8	8	Kettleman City Community Services Dist
	2	2	Kings County Area Public Transit Agency
_			Kings County Association of Government
105	30		Kings County In-Home Supportive Service
195			Public Authority
_			Kings Mosquito Abatement District
_	24	24	Kings Waste and Recycling Authority
_	1	1	Kinneloa Irrigation District
			Kirkwood Meadows Public Utility District
	00	00	Konocti County Water District
_	15	15	La Habra Heights County Water District
_	27	27	La Puente Valley County Water District
_	19	19	Laguna Beach County Water District
_	5	5	Lake Arrowhead Community Services Dis
_	_	_	Lake County Fire Protection District
	50	50	Lake County Vector Control District
			Lake Don Pedro Community Services Dis
			Lake Hemet Municipal Water District
	11	11	Lake Oroville Area Public Utility District
	_	_	Lake Shastina Community Services Distr
	31	31	Lake Valley Fire Protection District
		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

		Active	
Other Public Agency	PERF A	PERF C	Total
Inland Empire Health Plan	3,310	—	3,310
Inland Empire Resource Conservation District	—	29	29
Inland Empire Utilities Agency	303	—	303
Intergovernmental Training and Development Center	_	9	9
Inverness Public Utility District	—	9	9
Ironhouse Sanitary District	-	27	27
Irvine Ranch Water District	394	—	394
Isla Vista Recreation and Park District	—	10	10
Jackson Valley Irrigation District	—	3	3
Jamestown Sanitary District	—	5	5
Joshua Basin Water District	—	25	25
June Lake Public Utility District	—	7	7
Jurupa Area Recreation and Park District	—	28	28
Jurupa Community Services District	—	169	169
Kaweah Delta Water Conservation District	—	23	23
Kelseyville Fire Protection District	—	16	16
Kensington Community Services District	—	8	8
Kentfield Fire Protection District	—	15	15
Kenwood Fire Protection District	—	5	5
Kern County Council of Governments	—	18	18
Kern County Law Library	—	—	
Kern County Local Agency Formation Commission	_	3	3
Kern Health Systems	_	530	530
Kern River Valley Cemetery District	_	2	2
Kern-Tulare Water District	_	10	10
Kettleman City Community Services District	_	4	4
Kings County Area Public Transit Agency	_	7	7
Kings County Association of Governments	_	5	5
Kings County In-Home Supportive Services Public Authority	_		
Kings Mosquito Abatement District		16	16
Kings Waste and Recycling Authority		16	16
Kings waste and Necycling Adhony		8	8
Kirkwood Meadows Public Utility District		19	19
Konocti County Water District		7	7
La Habra Heights County Water District		10	, 10
La Puente Valley County Water District		15	15
Laguna Beach County Water District		41	41
Lake Arrowhead Community Services District		55	55
Lake County Fire Protection District		26	26
Lake County Vector Control District		8	8
Lake Don Pedro Community Services District		7	7
Lake Hemet Municipal Water District		49	49
Lake Hemet Municipal Water District		49	49
Lake Oroville Area Public Litility District		0	
Lake Oroville Area Public Utility District		12	10
Lake Oroville Area Public Utility District Lake Shastina Community Services District Lake Valley Fire Protection District	_	13 28	13 28

Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

	Act	tive		
Other Public Agency	PERF A	PERF C	Total	Other P
Lakeside Fire Protection District	—	62	62	Majestic
Lakeside Water District	-	13	13	Mammo
Lamont Public Utility District	-	11	11	Mammo
Las Gallinas Valley Sanitary District of Marin		00		Manage
County		29	29	March J
Las Virgenes Municipal Water District	114		114	Marin C
Lassen County Waterworks District No. 1	_	1	1	Marin C
League of California Cities	_	72	72	Marin C
Leucadia Wastewater District	_	20 4	20	Marin C
Levee District No. 1 of Sutter County	_	4 19	4	Public /
Linda County Water District Linda Fire Protection District	_	22	19	Marin M
	_	22	22	Marina (
Linden-Peters Rural County Fire Protection District	_	13	13	Marinwo
Lindsay Strathmore Public Cemetery District	_	6	6	Maripos Maxwell
Little Lake Fire Protection District	_	4	4	McClou
Littlerock Creek Irrigation District	_	7	7	McCiou
Live Oak Cemetery District	_	3	3	McKinle
Livermore/Amador Valley Transit Authority	_	15	15	Meeks E
Local Agency Formation Commission of				Meiners
Monterey County	—	4	4	Mendoc
Local Agency Formation Commission of Solano County	_	4	4	Mendoc
Local Government Services Authority, a Joint Powers Authority	_	_	_	Control Dt
Long Beach City College Associated Student				Mendoc
Body Enterprises	-	_	—	Menlo F
Long Beach State University, Associated Students	_	63	63	Merced
Long Beach State University, Forty-Niner		00	00	Merced
Shops, Inc.	_	40	40	Merced Mesa W
Los Alamos Community Services District	_	6	6	
Los Angeles County Area 'E' Civil Defense and				Metropo Metropo
Disaster Board		_		Californ
Los Angeles County Development Authority	547		547	Midpeni
Los Angeles County Law Library		44	44	Mid-Per
Los Angeles County Sanitation District No. 2	1,725	—	1,725	Mid-Pla
Los Angeles County West Vector Control District	_	35	35	Agency
Los Angeles Memorial Coliseum Commission			- 55	Midway
Los Angeles Regionalized Insurance Services				Midway
Authority	_	—	_	Millview
Los Gatos-Saratoga Department of Community				Minter F
Education and Recreation	—	32	32	Mission
Los Osos Community Services District	—	15	15	Mojave
Lower Lake Cemetery District		1	1	Mojave
Lower Lake County Waterworks District No. 1	—	7	7	Mokelur
Lower Tule River Irrigation District	—	35	35	Monte V
Madera Cemetery District	—	21	21	Monteci
				Monteci
Madera County Mosquito and Vector Control District	_	12	12	County

	Act		
Other Public Agency	PERF A	PERF C	Total
Majestic Pines Community Services District	_	3	3
Mammoth Lakes Fire District	_	15	15
Mammoth Lakes Mosquito Abatement District	_	_	_
Management of Emeryville Services Authority	_	96	96
March Joint Powers Authority	_	13	13
Marin Children and Families Commission	_	3	3
Marin Community College District	_	6	6
Marin County Housing Authority	_	49	49
Marin County In-Home Supportive Services Public Authority	_	6	6
Marin Municipal Water District	212	_	212
Marina Coast Water District	_	41	41
Marinwood Community Services District	_	17	17
Mariposa Public Utility District	_	8	8
Maxwell Public Utility District		3	3
McCloud Community Services District	_	9	9
McFarland Recreation and Park District	_	9	9
McKinleyville Community Services District		27	27
Meeks Bay Fire Protection District		21	21
Meiners Oaks County Water District	_	6	6
Mendocino City Community Services District	_	4	4
Mendocino County Community Services District Mendocino County Russian River Flood Control & Water Conservation Improvement	_	4	4
Dt	-	2	2
Mendocino Transit Authority	—	53	53
Menlo Park Fire Protection District	—	142	142
Merced County Housing Authority	—	32	32
Merced County Mosquito Abatement District	—	16	16
Merced Irrigation District	187	-	187
Mesa Water District	-	54	54
Metropolitan Transportation Commission	334	—	334
Metropolitan Water District of Southern California	1,819	_	1,819
Midpeninsula Regional Open Space District	—	176	176
Mid-Peninsula Water District	—	18	18
Mid-Placer Public Schools Transportation Agency	_	26	26
Midway City Sanitary District	—	32	32
Midway Heights County Water District	—	3	3
Millview County Water District	—	_	—
Minter Field Airport District	_	6	6
Mission Springs Water District	_	53	53
Mojave Air and Space Port	_	32	32
Mojave Water Agency	_	42	42
Mokelumne Rural Fire District	_	10	10
Monte Vista County Water District	_	36	36
Montecito Fire Protection District	_	46	46
Montecito Sanitary District of Santa Barbara			
County	—	17	17
Montecito Water District	_	28	28

Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

		tive		
Other Public Agency	PERF A	PERF C	Total	Oth
Monterey Bay Unified Air Pollution Control District	_	30	30	No No
Monterey County Mosquito Abatement District	-	6	6	M
Monterey County Regional Fire Protection District	_	68	68	No Di
Monterey County Water Resources Agency	_	34	34	No
Monterey One Water	—	87	87	No
Monterey Peninsula Airport District	—	25	25	No
Monterey Peninsula Regional Park District	_	15	15	No
Monterey Peninsula Water Management District	_	25	25	No No
Monterey Regional Waste Management District	122	_	122	In
Monterey-Salinas Transit District	230	_	230	No
Montezuma Fire Protection District	_	13	13	No
Morongo Basin Transit Authority	_	44	44	No
Mother Lode Job Training Agency	_	22	22	No
Moulton-Niguel Water District	_	172	172	No
Mountains Recreation and Conservation Authority	_	139	139	No No
Mountain-Valley Library System	_	_	_	No
Mt. San Antonio College Auxiliary Services	_	3	3	AL
Mt. View Sanitary District of Contra Costa County	_	19	19	No Di
Municipal Pooling Authority	_	21	21	No
Municipal Water District of Orange County	_	38	38	No
Murphys Sanitary District	_	5	5	No
Murrieta Fire Protection District	_	63	63	No
Murrieta Valley Cemetery District	_	4	4	Oa
Napa County Mosquito Abatement District	_	8	8	Oa
Napa County Resource Conservation District	_	13	13	Oa
Napa Sanitation District	_	49	49	Oc
Napa Valley Transportation Authority	_	13	13	Oja
National Orange Show	_	20	20	Old
Natomas Fire Protection District	_	_	_	Oli
Nevada Cemetery District	_	3	3	Oly
Nevada County Consolidated Fire District	_	44	44	Orr
Nevada County Local Agency Formation				Ор
Commission	-	2	2	Ora
Nevada County Resource Conservation District	-	2	2	Ora
Nevada Irrigation District	192	—	192	Ora
Newcastle, Rocklin, Gold Hill Cemetery District	-	10	10	Ord
Nipomo Community Services District	-	20	20	Orl
North Bay Cooperative Library System	-	—	—	Ord
North Bay Regional Center	286	—	286	Ord
North Bay Schools Insurance Authority	-	30	30	Ord
North Central Counties Consortium	-	5	5	Ota
North Coast County Water District	—	20	20	Ox
North Coast Railroad Authority	—	1	1	Pa
North Coast Unified Air Quality Management District	_	13	13	Pa

	Act	tive	
Other Public Agency	PERF A	PERF C	Total
North County Dispatch Joint Powers Authority	_	33	33
North County Fire Protection District of Monterey County	_	34	34
North County Fire Protection District of San Diego County	_	90	90
North County Transit District	283	—	283
North Delta Water Agency	-	2	2
North Kern Cemetery District	-	10	10
North Kern Water Storage District	-	30	30
North Kern-South Tulare Hospital District	174	_	174
North Los Angeles County Regional Center, Inc.	649	_	649
North Marin Water District	-	55	55
North of the River Municipal Water District	-	—	—
North of the River Recreation and Park District	170	—	170
North State Cooperative Library System	-	—	_
North Tahoe Fire Protection District	—	62	62
North Tahoe Public Utility District	-	50	50
Northern California Power Agency	159	—	159
Northern California Special Districts Insurance Authority	_	_	_
Northern Sierra Air Quality Management District	_	7	7
Northshore Fire Protection District	—	29	29
Northstar Community Services District	—	39	39
Northwest Mosquito and Vector Control District	_	23	23
Novato Sanitary District	—	18	18
Oakdale Irrigation District	_	76	76
Oakdale Rural Fire Protection District	_	_	_
Oakland City Housing Authority	284	27	311
Oceano Community Services District	_	8	8
Ojai Valley Sanitary District	—	20	20
Olcese Water District	—	2	2
Olivenhain Municipal Water District	—	91	91
Olympic Valley Public Service District	-	29	29
Omnitrans	491	_	491
Ophir Hill Fire Protection District	-	4	4
Orange County Health Authority	1,577	_	1,577
Orange County Transportation Authority	-	1	1
Orange County Vector Control District	-	78	78
Orchard Dale Water District	-	9	9
Orland Cemetery District	-	4	4
Oro Loma Sanitary District	-	45	45
Orosi Public Utility District	—	3	3
Oroville Cemetery District	—	8	8
Otay Water District	137	—	137
Oxnard Harbor District	—	41	41
Pacific Fire Protection District	—	—	_
Padre Dam Municipal Water District	139	—	139
Pajaro Valley Fire Protection Agency	—	—	—

Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

	Active		
Other Public Agency	PERF A	PERF C	Total
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	_	50	50
Paradise Recreation and Park District	_	26	26
Pasadena City College Bookstore	_	_	_
Paso Robles City Housing Authority	_	8	8
Patterson Irrigation District	_	15	15
Pauma Valley Community Services District	_	15	15
Peardale Chicago Park Fire Protection District	_	5	5
Pebble Beach Community Services District	_	14	14
Peninsula Fire Protection District	_	12	12
Peninsula Health Care District	_	7	7
Peninsula Traffic Congestion Relief Alliance	_	6	6
Penn Valley Fire Protection District	_	15	15
Penryn Fire Protection District	_	6	6
Personal Assistance Services Council	_	46	46
Phelan Pinon Hills Community Services District	_	26	26
Pico Water District	_	11	11
Pine Cove Water District	_	6	6
Pine Grove Mosquito Abatement District	_	1	1
Pinedale County Water District	_	6	6
Pioneer Cemetery District	_	3	3
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	—	7	7
Placer County Water Agency	228	_	228
Placer Hills Fire Protection District	—	20	20
Placer Mosquito and Vector Control District	-	25	25
Planning and Service Area II Area Agency on Aging	_	11	11
Pleasant Hill Recreation and Park District		57	57
Pleasant Valley County Water District	_	4	4
Pleasant Valley Recreation and Park District	_	41	41
Plumas Eureka Community Services District	_	4	4
Plumas Local Agency Formation Commission	_	_	_
Pomerado Cemetery District		5	5
Pomona Valley Transportation Authority	_	4	4
Pomona, Calif State Polytechnic University,		т	т
Associated Students, Inc.	_	61	61
Port San Luis Harbor District	_	26	26
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		7	7

	Active		
Other Public Agency	PERF A	PERF C	Total
Public Entity Risk Management Authority	_	3	3
Public Risk Innovation, Solutions and Management	_	91	91
Public Transportation Services Corporation	2,641	31	2,641
Public Transportation Cooperative	2,041	1	
Pupir Transportation Cooperative Purissima Hills Water District	_		1
Quartz Hill Water District	_	8	8
	_	12	12
Quincy Community Services District	_	4	4
Rainbow Municipal Water District	_	55	55
Ramona Municipal Water District	—	48	48
Rancho Adobe Fire Protection District		32	32
Rancho California Water District	153	_	153
Rancho Cucamonga Fire Protection District	—	121	121
Rancho Murieta Community Services District	—	31	31
Rancho Santa Fe Fire Protection District	—	70	70
Rancho Santiago Community College Associated Students	_	_	_
Rancho Simi Recreation & Park District	173	_	173
Reclamation District No. 1000	_	12	12
Reclamation District No. 1001	_	7	7
Reclamation District No. 1660	_	_	_
Reclamation District No. 3	_	2	2
Reclamation District No. 833	_	2	2
Reclamation District No. 999	_	6	6
Red Bluff Cemetery District	_	3	3
Redwood Coast Regional Center	_	150	150
Redwood Empire School Insurance Group	_	24	24
Reedley Cemetery District	_	6	6
Regional Center of Orange County	525	_	525
Regional Center of the East Bay	460	_	460
Regional Housing Authority	-00+	27	27
Regional Water Authority		8	8
Rescue Fire Protection District	_	8	8
Resort Improvement District No. 1	_	13	13
Resource Conservation District of the Santa	_	15	15
Monica Mountains	—	13	13
Richardson Bay Sanitary District	—	4	4
Rincon Del Diablo Municipal Water District	—	24	24
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	234		234
Riverside County Law Library	204		
Riverside County Regional Park and Open		8	8
Space District	_	103	103

Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

	Act	tive		
Other Public Agency	PERF A	PERF C	Total	c
Riverside County Transportation Commission	_	76	76	S
Riverside Transit Agency	411	—	411	S
Rosamond Community Services District	—	22	22	S
Rose Bowl Operating Company	_	34	34	S
Rosedale-Rio Bravo Water Storage District	_	10	10	S
Roseville Public Cemetery District	—	6	6	S
Ross Valley Fire Department	—	33	33	
Ross Valley Sanitary District	—	33	33	S
Rowland Water District	—	27	27	S
Rubidoux Community Services District	-	28	28	
Running Springs Water District	-	37	37	S
Rural County Representatives of California	—	32	32	S
Sacramento Area Council of Governments	—	58	58	S
Sacramento Area Flood Control Agency	—	17	17	S
Sacramento City Housing Authority	234	—	234	S
Sacramento County Public Law Library	—	16	16	S
Sacramento Groundwater Authority	—	6	6	S
Sacramento Metropolitan Air Quality Management District	_	95	95	S
Sacramento Metropolitan Cable Television Commission	_	8	8	S
Sacramento Metropolitan Fire District	607	88	695	S
Sacramento Municipal Utility District	2,291	—	2,291	S
Sacramento Public Library Authority	328	—	328	S
Sacramento Regional Fire/EMS Communications Center	_	58	58	S
Sacramento Suburban Water District	—	69	69	S
Sacramento Transportation Authority	-	3	3	S
Sacramento-Yolo Mosquito and Vector Control District	_	72	72	S
Salida Fire Protection District	—	1	1	S
Salinas Valley Solid Waste Authority	_	62	62	S
Salton Community Services District	—	11	11	S
San Andreas Regional Center, Inc.	398	—	398	S
San Andreas Sanitary District	—	6	6	S
San Benito County Water District	—	17	17	5
San Bernardino City Unified School District	—	21	21	5
San Bernardino County Housing Authority	135	—	135	S
San Bernardino County Transportation Authority	_	_	_	S
San Bernardino Valley Municipal Water District	—	34	34	S
San Bernardino Valley Water Conservation District	_	10	10	S
San Diego Association of Governments	413	_	413	S
San Diego Community College District	_	34	34	S
San Diego County Law Library	_	17	17	5
San Diego County Water Authority	235	—	235	S
San Diego Metropolitan Transit System	_	165	165	S
San Diego State University Associated Students	_	41	41	S

	Act	tive	
Other Public Agency	PERF A	PERF C	Total
San Diego Trolley, Inc.	630	_	630
San Diego Unified School District	_	36	36
San Dieguito Water District	_	23	23
San Elijo Joint Powers Authority	_	30	30
San Francisco Bay Area Rapid Transit District	4,186	_	4,186
San Francisco Bay Area Water Emergency Transportation Authority	_	18	18
San Francisco City and County Housing Authority	_	20	20
San Francisco Community College District Bookstore Auxiliary	_	_	_
San Francisco County Transportation Authority	-	41	41
San Francisco Health Authority	—	401	401
San Francisco Law Library	—	6	6
San Francisquito Creek Joint Powers Authority	_	4	4
San Gabriel County Water District	_	16	16
San Gabriel Valley Council of Governments	_	38	38
San Gabriel Valley Mosquito and Vector Control District	_	35	35
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	_	78	78
San Joaquin County IHSS Public Authority	_	8	8
San Joaquin Delta Community College District	_	13	13
San Juan Water District	_	49	49
San Lorenzo Valley Water District	_	34	34
San Luis Obispo Cal Poly Associated Students, Inc.	_	61	61
San Luis Obispo Council of Governments	_	19	19
San Luis Water District	_	16	16
San Mateo Consolidated Fire Department	_	155	155
San Mateo County Harbor District	_	41	41
San Mateo County In-Home Supportive Services Public Authority	_	16	16
San Mateo County Law Library	_	2	2
San Mateo County Schools Insurance Group	_	7	7
San Mateo County Transit District	794	_	794
San Miguel Community Services District	_	7	7
San Miguel Consolidated Fire Protection District	_	86	86
San Simeon Community Services District	_	_	_
Sanger Cemetery District	_	6	6
Sanitary District No. 5 of Marin County	_	13	13
Santa Ana River Flood Protection Agency	_	_	_
Santa Ana Unified School District	_	24	24
Santa Ana Watershed Project Authority	_	25	25
Santa Barbara County Law Library	_	20	20
Santa Barbara County Special Education Local		-	
Plan Area	_	8	8

Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

	Active			
Other Public Agency	PERF A	PERF C	Total	Other Public Agency
Santa Barbara Regional Health Authority	—	328	328	Shasta Valley Cemetery District
Santa Clara County Central Fire Protection	0.40		005	Shiloh Public Cemetery District
District	248	77	325	Sierra Lakes County Water District
Santa Clara County Health Authority	150	367	367	Sierra-Sacramento Valley Emergency Medical
Santa Clara County Housing Authority	150	-	150	Services Agency
Santa Clara County Law Library Santa Clara County Schools Insurance Group	_	3 5	3 5	Silicon Valley Animal Control Authority Silicon Valley Clean Water
Santa Clara Valley Open Space Authority		48	48	Silveyville Cemetery District
Santa Clara Valley Transportation Authority	666	40	666	Solano Cemetery District
Santa Clara Valley Water District	849	_	849	Solano County Mosquito Abatement District
Santa Clarita Valley School Food Services	040		045	Solano County Water Agency
Agency	_	97	97	Solano Irrigation District
Santa Clarita Valley Water Agency	_	213	213	Solano Transportation Authority
Santa Cruz County Law Library	—	_	_	Sonoma County Fire District
Santa Cruz County Regional Transportation				Sonoma County Junior College District
Commission	-	21	21	Sonoma County Library
Santa Cruz Local Agency Formation Commission	_	2	2	Sonoma Marin Area Rail Transit District
Santa Cruz Metropolitan Transit District	298	_	298	Sonoma State Enterprises, Inc.
Santa Cruz Port District		35	35	Sonoma Student Union Corporation
Santa Cruz Regional 9-1-1	_	51	51	Soquel Creek Water District
Santa Fe Irrigation District	_	44	44	South Bay Regional Public Communications
Santa Margarita Water District	183	_	183	Authority
Santa Maria Public Airport District	_	12	12	South Central Los Angeles Regional Center for Developmentally Disabled Persons
Santa Monica Community College District	_	15	15	South Coast Water District
Santa Nella County Water District	_	7	7	South County Support Services Agency
Santa Ynez River Water Conservation District,				South Feather Water and Power Agency
Improvement District No. 1	-	16	16	South Kern Cemetery District
Santos Manuel Student Union of California State University, San Bernardino	_	35	35	South Orange County Wastewater Authority
Sausalito-Marin City Sanitary District	_	10	10	South Placer Fire District
Schell Vista Fire Protection District	_	6	6	South Placer Municipal Utility District
School Risk And Insurance Management				South San Joaquin County Fire Authority
Group	-	9	9	South San Joaquin Irrigation District
Schools Excess Liability Fund	-	8	8	South San Luis Obispo County Sanitation
Schools Insurance Authority	—	88	88	District
Scotts Valley Fire Protection District	-	32	32	South Tahoe Public Utility District
Scotts Valley Water District	-	19	19	Southeast Area Social Services Funding Authority
Selma Cemetery District	-	8	8	Southern California Association of
Selma-Kingsburg-Fowler County Sanitation District		30	30	Governments
Serrano Water District		9	9	Southern California Library Cooperative
Sewer Authority Mid-Coastside		17	17	Southern California Public Power Authority
Sewerage Commission-Oroville Region	_	10	10	Southern California Regional Rail Authority
Shafter Wasco Irrigation District	_	10	11	Southern San Joaquin Municipal Utility District
Shasta Area Safety Communications Agency		39	39	Southern Sonoma County Resource
Shasta Community Services District	_	4	4	Conservation District
Shasta Lake Fire Protection District	_	10	10	Southwest Transportation Agency
Shasta Mosquito and Vector Control District	_	16	16	Special District Risk Management Authority Stallion Springs Community Services District
Shasta Regional Transportation Agency	_	8	8	Stanislaus Consolidated Fire Protection District
5 F		2		

	Active		
Other Public Agency	PERF A	PERF C	Total
Shasta Valley Cemetery District	_	2	2
Shiloh Public Cemetery District	_	4	4
Sierra Lakes County Water District	_	3	3
Sierra-Sacramento Valley Emergency Medical		12	12
Services Agency Silicon Valley Animal Control Authority	_	14	12
Silicon Valley Clean Water	_	85	85
Silveyville Cemetery District	_	8	8
Solano Cemetery District	_	0 11	0 11
Solano County Mosquito Abatement District	_	9	9
Solano County Water Agency	_	23	23
Solano County Water Agency Solano Irrigation District	_	23 79	23 79
Solano Transportation Authority	_	24	79 24
Sonoma County Fire District	_	24 101	101
Sonoma County Junior College District	_	101	101
	249	10	
Sonoma County Library Sonoma Marin Area Rail Transit District	249	111	249 144
	_	144	144
Sonoma State Enterprises, Inc. Sonoma Student Union Corporation	_	_	_
	_	44	44
Soquel Creek Water District South Bay Regional Public Communications	_	44	44
Authority	-	57	57
South Central Los Angeles Regional Center for Developmentally Disabled Persons	429	_	429
South Coast Water District	_	81	81
South County Support Services Agency	_	39	39
South Feather Water and Power Agency	_	56	56
South Kern Cemetery District	_	4	4
South Orange County Wastewater Authority	_	57	57
South Placer Fire District	_	54	54
South Placer Municipal Utility District	_	29	29
South San Joaquin County Fire Authority	_	91	91
South San Joaquin Irrigation District	_	101	101
South San Luis Obispo County Sanitation District		10	10
	_	13	13 116
South Tahoe Public Utility District Southeast Area Social Services Funding Authority	_	116	
Southern California Association of	_	31	31
Governments	210	—	210
Southern California Library Cooperative	—	5	5
Southern California Public Power Authority	—	17	17
Southern California Regional Rail Authority	247	—	247
Southern San Joaquin Municipal Utility District	—	14	14
Southern Sonoma County Resource Conservation District	_	_	_
Southwest Transportation Agency	_	35	35
Special District Risk Management Authority	_	19	19
Stallion Springs Community Services District	_	15	15
Stanialaus Consolidated Eiro District		EA	E 4

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Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

Act	tive		
PERF A	PERF C	Total	Other Public Agency
_	85	85	Truckee Fire Protection District
—	_	_	Truckee Sanitary District
617	—	617	Truckee Tahoe Airport District
_	19	19	Tulare Mosquito Abatement Dist
_	9	9	Tulare Public Cemetery District
—	10	10	Tuolumne City Sanitary District
—	8	8	Tuolumne Fire District
_	44	44	Tuolumne Utilities District
—	27	27	Turlock Mosquito Abatement Dis
_	6	6	Twain Harte Community Service
_	1	1	Twentynine Palms Water District Twin Rivers Unified School Distri
_	35	35	Ukiah Valley Fire District
_	2	2	Union Public Utility District
_	9	9	Union Sanitary District
_	11	11	United Water Conservation Distr
_	22	22	University Enterprises Corporation
_	6	6	University Enterprises, Inc.
_	12	12	University Student Center of Cali University Stanislaus
128	_	128	Upland City Housing Authority
_	11	11	Upper San Gabriel Valley Munici
_	7	7	District
_	60	60	Utica Water and Power Authority
—	24	24	Vacaville Fire Protection District
—	50	50	Vacaville-Elmira Cemetery Distri
	17	17	Val Verde Unified School District
—	20	20	Vallecitos Water District
—	6	6	Vallejo Flood and Wastewater Di
—	11	11	Valley Center Municipal Water D
—	30	30	Valley County Water District
_	14	14	Valley Mountain Regional Cente
_	1	1	Valley of the Moon Water Distric
_	23	23	Valley Sanitary District
_	30	30	Valley Springs Public Utility Distr
_	21	21	Valley-Wide Recreation and Par
-			Vandenberg Village Community District
_			Ventura College Foundation
_			Ventura County Law Library
_	14	14	Ventura County Schools Busines
_	210	210	Authority
_	210	210	Ventura County Schools Self-Fu
409	_	409	Ventura County Transportation C
_	3	3	Ventura Port District
_	24	24	Ventura River Water District
_	14	14	Victor Valley Transit Authority
	23	23	Victor Valley Wastewater Reclan
	23	20	Authority
	PERF A	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	PERF A PERF C Total

	Active			
Other Public Agency	PERF A	PERF C	Total	
Truckee Fire Protection District		54	54	
Truckee Sanitary District	_	38	38	
Truckee Tahoe Airport District	_	25	25	
Tulare Mosquito Abatement District	_	7	7	
Tulare Public Cemetery District	_	10	10	
Tuolumne City Sanitary District	_	4	4	
Tuolumne Fire District	_	2	2	
Tuolumne Utilities District	_	79	79	
Turlock Mosquito Abatement District	_	13	13	
Twain Harte Community Services District	_	18	18	
Twentynine Palms Water District	_	20	20	
Twin Rivers Unified School District	_	16	16	
Ukiah Valley Fire District	_	_		
Union Public Utility District	_	8	8	
Union Sanitary District	141	_	141	
United Water Conservation District	_	69	69	
University Enterprises Corporation at CSUSB		168	168	
University Enterprises, Inc.	153		153	
University Student Center of California State	100		100	
University Stanislaus	_	13	13	
Upland City Housing Authority	_	1	1	
Upper San Gabriel Valley Municipal Water District	_	9	9	
Utica Water and Power Authority	_	9	9	
Vacaville Fire Protection District	_	7	7	
Vacaville-Elmira Cemetery District	_	6	6	
Val Verde Unified School District	_	6	6	
Vallecitos Water District	_	102	102	
Vallejo Flood and Wastewater District	_	91	91	
Valley Center Municipal Water District	_	72	72	
Valley County Water District	_	31	31	
Valley Mountain Regional Center, Inc.	479	_	479	
Valley of the Moon Water District	_	16	16	
Valley Sanitary District	_	36	36	
Valley Springs Public Utility District	_	3	3	
Valley-Wide Recreation and Park District	_	88	88	
Vandenberg Village Community Services District	_	9	9	
Ventura College Foundation	_	7	7	
Ventura County Law Library	_	3	3	
Ventura County Schools Business Services Authority	_	12	12	
Ventura County Schools Self-Funding Authority	_	7	7	
Ventura County Transportation Commission	_	23	23	
Ventura Port District	_	43	43	
Ventura River Water District		7	7	
Victor Valley Transit Authority	_	28	28	
Victor Valley Wastewater Reclamation				
Authority	_	45	45	

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Other Public Agencies that Contract with CalPERS for Retirement Benefits $_{(\mbox{continued})}$

	Active		
Other Public Agency	PERF A	PERF C	Total
Vista Irrigation District	_	83	83
Walnut Valley Water District	_	55	55
Wasco Recreation and Park District	_	4	4
Washington Colony Cemetery District	_	2	2
Water Employee Services Authority	170	_	170
Water Facilities Authority	_	8	8
Water Replenishment District of Southern California	_	47	47
Weaverville Community Services District	_	5	5
Weaverville Sanitary District	_	3	3
West Almanor Community Services District	_	1	1
West Basin Municipal Water District	_	45	45
West Bay Sanitary District	_	32	32
West Cities Communication Center	_	19	19
West Contra Costa Integrated Waste Management Authority	_	6	6
West Contra Costa Transportation Advisory Committee	_	5	5
West County Transportation Agency	_	157	157
West County Wastewater District	_	66	66
West End Communications Authority	_		
West Kern Water District	_	43	43
West Stanislaus Irrigation District	_	15	15
West Valley Mosquito and Vector Control District		19	19
West Valley Sanitation District of Santa Clara County		27	27
West Valley Water District	_	78	78
West Valley-Mission Community College District	_	9	9
Westborough Water District	_	9	9
-	_	-	0 7
Western Contra Costa Transit Authority	_	150	
Western Municipal Water District Western Riverside Council of Governments	_	159	159
Westlands Water District	_	32 109	32 109
	_		
Westwood Community Services District Wheeler Ridge-Maricopa Water Storage	_	6	6
District	_	43	43
Wildomar Cemetery District	_		_
Williams Fire Protection Authority	_	11	11
Willow County Water District	—	12	12
Willow Creek Community Services District	—	5	5
Willows Cemetery District	_	2	2
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 Woodbridge Rural County Fire Protection	_	8	8
District	_	30	30

	Act	tive	
Other Public Agency	PERF A	PERF C	Total
Woodlake Fire District	_	8	8
Woodside Fire Protection District	—	57	57
Yolo County Federal Credit Union	—	62	62
Yolo County Housing Authority	—	37	37
Yolo County In-Home Supportive Services Public Authority	_	4	4
Yolo County Public Agency Risk Management Insurance Authority	_	7	7
Yolo County Transportation District	—	13	13
Yolo Emergency Communications Agency	—	39	39
Yolo-Solano Air Quality Management District	—	21	21
Yorba Linda Water District	—	76	76
Yuba Community College District	—	4	4
Yuba County Water Agency	—	96	96
Yuba Sutter Transit Authority	—	4	4
Yucaipa Valley Water District	_	66	66
Yuima Municipal Water District	_	8	8
Total	44,410	25,051	69,461

LEGISLATORS' RETIREMENT SYSTEM MEMBERSHIP & RETIREMENT DATA

Legislators' Retirement System - 10-Year Review

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ACTIVE & INACTIVE MEMBERS										
Members of the Legislature	_	1	2	2	2	4	4	6	6	6
Constitutional Officers	—	3	4	4	5	10	10	13	14	17
Legislative Statutory Officers	—		—	_	—	—	—	1	2	4
TOTAL ACTIVE & INACTIVE MEMBERS	_	4	6	6	7	14	14	20	22	27
BENEFIT RECIPIENTS										
Members of the Legislature										
Service Retirement	158	163	171	181	198	202	205	215	221	225
Disability Retirement	7	7	7	7	7	7	7	7	8	7
Pre-Retirement Option 2	1	1	1	1	1	1	1	1	1	2
Total Members of the Legislature	166	171	179	189	206	210	213	223	230	234
Constitutional Officers										
Service Retirement	22	21	21	20	19	14	14	12	12	11
Disability Retirement	—	1	1	1	1	1	1	1	1	1
Pre-Retirement Option 2	—		—	1	1	1	1	1	1	—
Total Constitutional Officers	22	22	22	22	21	16	16	14	14	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	189	194	202	212	228	227	230	238	245	247
TOTAL MEMBERS	189	198	208	218	235	241	244	258	267	274

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 2022-23, the Board approved an employer contribution rate of 31.80 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) DEATH

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.

LRS Active & Inactive Members

Category	Active	Inactive	Total
Members of the Legislature	_	_	—
Constitutional Officers	—	2	2
Total	0	2	2

LRS Benefit Payments by Type

Category	Amount Paid
Service Retirement	\$6,994
Disability Retirement	111
Beneficiary Death Benefits	9
Beneficiary Death Benefits/Allowance	11
Adjustments ¹	(37)
Total	\$7,088

(1) Adjustments contain manual claims and overpayment recoveries.

DEATH BENEFITS (AFTER RETIREMENT)

Members choose between one of four options. The level of survivor benefit is based on the option chosen, without a reduction in allowance for members of the Legislature. Constitutional Officers and Statutory Officers receive a reduced allowance based on their age at time of retirement and the option they choose. Beneficiaries also receive a \$600 lump-sum payment.

COST-OF-LIVING ADJUSTMENTS (COLA)

The annual COLA is determined by the Consumer Price Index for all Urban Consumers.

LRS Benefit Recipients by Retirement Type

		Survivors &	
Category	Retired ¹	Beneficiaries ¹	Total
Members of Legislature			
Service Retirement	67	91	158
Disability Retirement	_	7	7
Pre-Retirement Option 2	_	1	1
TOTAL MEMBERS OF			
LEGISLATURE	67	99	166
Constitutional Officers			
Service Retirement	21	1	22
Disability Retirement	—	—	—
Pre-Retirement Option 2	—	—	—
TOTAL CONSTITUTIONAL			
OFFICERS	21	1	22
Legislative Statutory Officers			
Service Retirement	—	1	1
TOTAL LEGISLATIVE			
STATUTORY OFFICERS	—	1	1
TOTAL	88	101	189

(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, 2023 - 10-Year Review

	Years of Service Credit								
Retirement Effective Dates	0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31+		
2022-23									
Average Monthly Allowance	\$0	\$0	\$5,232	\$0	\$0	\$0	\$0		
Average Final Compensation	\$0	\$0 \$0	\$12,455	\$0	\$0	\$0	\$0		
Number of Recipients		φο —	2	φυ —	φ υ				
· · · · ·									
2021-22	\$0	\$3,697	\$0	\$0	\$0	\$0	\$0		
Average Monthly Allowance Average Final Compensation	\$0 \$0	\$3,697 \$10,671	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		
Number of Recipients	φ0 	\$10,071 2	φ0 	φ0 —	φ0 —	φ0 —	φ0 		
·									
2020-21 ¹	¢ 0	¢ 0	\$ 0	¢o	* 0	¢0	¢0.		
Average Monthly Allowance	\$0 ©0	\$0 \$0	\$0 \$0	\$0 ©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	\$3,064.24	\$0	\$0	\$0	\$0	\$0		
Average Final Compensation	\$0	\$8,936.25	\$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									
2014-15 Average Monthly Allowance ³	\$0	\$2,458	\$0	\$0	\$0	\$0	\$0		
Average Final Compensation	\$0 \$0	\$2,430 \$7,921	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		
Number of Recipients ³	φ0 —	φ <i>r</i> ,521 1		φυ —		φυ —	φ0 		
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 \$0	\$0		
Number of Recipients ³	1	3	֥	<u> </u>	֥	֥	֥		

(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

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ACTIVE & DEFERRED MEMBERS										
Judges	80	100	111	131	147	170	201	225	241	285
TOTAL ACTIVE & DEFERRED MEMBERS	80	100	111	131	147	170	201	225	241	285
BENEFIT RECIPIENTS										
Service Retirement	1,172	1,181	1,193	1,197	1,202	1,165	1,171	1,182	1,193	1,157
Disability Retirement	57	64	65	69	75	78	85	89	100	100
Deferred Retirement	442	458	481	507	526	534	556	584	594	598
Industrial Disability Retired	1	1	1	1	1	1	1	1	1	1
Pre-Retirement Survivor	13	13	13	12	12		_		_	_
Pre-Retirement Death	33	36	39	40	42	57	57	61	60	66
Extended Service Incentive Program	21	12	36	166	22	27	18	9	29	_
TOTAL BENEFIT RECIPIENTS	1,739	1,765	1,828	1,992	1,880	1,862	1,888	1,926	1,977	1,922
TOTAL MEMBERS	1,819	1,865	1,939	2,123	2,027	2,032	2,089	2,151	2,218	2,207

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.

Statistical Section (continued)

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	80	0	80
TOTAL	80	0	80

JRS Benefit Payments by Type

Category	Amount Paid
Service Retirement	\$168,740
Disability Retirement	3,819
Beneficiary Death Benefits	819
Beneficiary Death Benefits/Life Allowance	36,382
Extended Service Incentive Program	7,215
Adjustments ¹	(704)
TOTAL	\$216,271

(1) Adjustments contain manual claims and overpayment recoveries.

JRS Benefit Recipients by Retirement Type

		Survivors &	
Category	Retired ¹	Beneficiaries ¹	Total
Service Retirement	826	346	1,172
Disability Retirement	23	34	57
Deferred Retirement	255	187	442
Industrial Disability Retirement	_	1	1
Pre-Retirement Death	_	33	33
Pre-Retirement Option 2	_	13	13
Extended Service Incentive			
Program	21	—	21
TOTAL	1,125	614	1,739

(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, 2023 - 10-Year Review

Retirement Effective Dates	Years of Service Credit								
	0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	25 - 30	31+		
2022-23									
Average Monthly Allowance ¹	\$1,814	\$0	\$0	\$6,003	\$8,267	\$13,669	\$13,617		
Average Final Compensation	\$19,265	\$0	\$0	\$20,191	\$22,045	\$19,265	\$20,444		
Number of Recipients ¹	1			3	1	4	14		
2021-22									
Average Monthly Allowance ¹	\$0	\$0	\$0	\$8,544	\$8,362.21	\$13,440	\$12,617		
Average Final Compensation	\$0	\$0	\$0	\$18,756	\$18,756.16	\$18,756	\$20,787		
Number of Recipients ¹	_	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	\$15,753	\$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	\$0	\$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		

(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

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ACTIVE MEMBERS										
Judges II – Classic	1,204	1,238	1,283	1,314	1,352	1,326	1,350	1,367	1,385	1,396
Judges II – PEPRA ¹	453	386	342	311	293	217	158	124	85	—
TOTAL ACTIVE MEMBERS	1,657	1,624	1,625	1,625	1,645	1,543	1,508	1,491	1,470	1,396
BENEFIT RECIPIENTS										
Service Retirement	457	376	316	249	214	172	118	86	68	47
Monetary Credit Annuity	18	10	3	3	2	1	—	-	_	—
Disability Retirement	17	33	19	19	19	18	18	13	10	11
Optional Settlement Benefit	—	-	—	-	_	-	—	-		_
Pre-Retirement Survivor	—	-	—	-	_	-	—	-		_
Industrial Disability Retirement	4	5	3	4	4	5	5	4	4	3
Surviving Spouse 50% Allowance	6	4	6	7	8	7	6	6	6	6
Survivor Continuance	38	18	28	18	18	9	9	8	5	4
Option 2 Survivor Death Benefit	2	2	1	1	1	1	1	-		_
36-Month Judge's Salary	1	1	2	1	1	1	2	2	2	2
Monetary Credit	27	22	28	88	14	17	11	15	11	_
TOTAL BENEFIT RECIPIENTS	570	471	406	390	281	231	170	134	106	73
TOTAL MEMBERS	2,227	2,095	2,031	2,015	1,926	1,774	1,678	1,625	1,576	1,469

(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 a retirement allowance. 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 payable in the form of a lump sum.

RETIREMENT FORMULA

Traditional 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) D

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	1,204
Judges II - PEPRA	453
TOTAL	1,657

JRS II Benefit Payments by Type

Category	Amount Paid
Service Retirement	\$52,511,179
Disability Retirement	2,793,676
Beneficiary Death Benefits	886,863
Beneficiary Death Benefits/Life Allowance	2,888,209
Monetary Credit	24,592,584
Adjustments ¹	195,256
TOTAL	\$83,867,767

(1) Adjustments contain manual claims and overpayment recoveries.

JRS II Benefit Recipients by Retirement Type

		Survivors &	
Category	Retired ¹	Beneficiaries ¹	Total
Service Retirement	439	18	457
Disability Retirement	17	—	17
Monetary Credit Annuity	16	2	18
Industrial Disability Retirement	4	—	4
Surviving Spouse 50% Allowance	—	6	6
Pre-Retirement Option 2	—	2	2
Survivor Continuance	—	38	38
36-Month Judge's Salary	—	1	1
Monetary Credit	27	—	27
TOTAL	503	67	570

(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)

Traditional 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 traditional 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. The monetary credit annuity does not receive cost-of-living adjustments.

JUDGES' RETIREMENT SYSTEM II PROGRAM DATA (CONTINUED)

JRS II Average Benefit Payments - As of June 30, 2023 - 10-Year Review

		Years of Credited Service								
Retirement Effective Dates	0-5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31+			
2022-23										
Average Monthly Allowance ¹	\$3,651	\$5,882	\$9,067	\$13,232	\$13,599	\$16,905	\$0			
Average Final Compensation	\$19,103	\$18,833	\$19,005	\$19,092	\$19,022	\$18,973	\$0			
Number of Recipients ¹	1	¢10,000 5	15	44	16	9	φο —			
2021-22										
Average Monthly Allowance ¹	\$0	\$5,070	\$8,686	\$11,752	\$13,977	\$15,790.44	\$0			
Average Final Compensation	\$0 \$0	\$3,070 \$17,993	\$18,253	\$18,320	\$18,533	\$18,850.61	\$0 \$0			
Number of Recipients ¹	φυ	ووو, <i>۱۲</i> , 595	\$10,235 19	φ10,320 22	۶10,555 14	φ10,030.01 7	φυ			
		0	19	22	14	1				
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 \$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 \$0	\$15,149	\$15,225	\$15,253	\$0 \$0	\$0 \$0	\$0 \$0			
Number of Recipients ²		¢10,110 1	8	13						
2042.44										
2013-14 Average Monthly Allowance ²	\$0	\$4,175	\$6,457	\$8,991	\$11,274	\$0	\$0			
Average Final Compensation	\$0 \$0	\$11,205	\$14,949	\$14,942	\$15,032	\$0 \$0	\$0			
Number of Recipients ²	ΨŬ 	φ11,200 4	φ14,040 12	φ1 4 ,5 4 2	<u>4.0,002</u> 1	.	φυ —			
(1) These averages and totals are for retired men			12							

 $(1) \ These \ averages \ and \ totals \ are \ for \ retired \ members \ only.$

(2) These averages and totals are for retired members and community property only.

Statistical Section Other Programs

- 208 Health Care Fund
- 209 Contingency Reserve Fund
- 210 Long-Term Care Fund
- 211 Health Benefits Program Data
- 220 Defined Contribution Plans
- 221 Long-Term Care Program Data

Statistical Section: Other Programs

HEALTH CARE FUND

Expenses & Revenues - 10-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
OPERATING REVENUES										
Premiums	\$4,515,217	\$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
Federal Government Subsidies	3,981	728	8,263	12,489	18,753	22,720	29,534	32,539	36,077	43,900
Federal Government										
Reimbursements			-	_	-	_	-	_	-	_
Other	37	101	-	<u> </u>				<u> </u>		
Total Operating Revenues	\$4,519,235	\$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
OPERATING EXPENSES										
Claims Expense	\$4,319,658	\$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
Increase (Decrease) in										
Estimated Liabilities	(36,576)	112,696	35,438	10,885	14,332	36,609	(14,701)	13,258	20,484	173,796
Federal Government Subsidy	10 - 1-									
Recapture	13,745	8,267	_	_		_	_			
Administrative Expenses	315,863	309,473	304,990	331,236	298,887	304,319	312,832	355,702	371,915	192,987
Total Operating Expenses	\$4,612,690	\$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
OPERATING INCOME (LOSS)	(\$93,455)	(\$355,519)	(\$6,772)	(\$103,231)	(\$161,655)	\$83,656	\$169,757	\$709	(\$173,661)	(\$28,233)
(2000)	(\$35,455)	(4000,010)	(\$0,772)	(#105,251)	(#101,000)	ψ03,030	φ103,131	ψ103	(#175,001)	(\$20,233)
NON-OPERATING REVENUES										
Investment Income/(Loss)	\$6,623	(\$39,207)	\$986	\$53,522	\$51,547	\$16,847	\$2,988	\$27,374	\$11,850	\$20,165
Total Non-Operating										
Revenues	\$6,623	(\$39,207)	\$986	\$53,522	\$51,547	\$16,847	\$2,988	\$27,374	\$11,850	\$20,165
NON-OPERATING										
EXPENSES										
Investment Expenses	\$98	\$135	\$145	\$160	\$166	\$89	\$92	\$77	\$83	\$157
Total Non-Operating										
Expenses	\$98	\$135	\$145	\$160	\$166	\$89	\$92	\$77	\$83	\$157
Securities Lending Income	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15
Cost of Lending Securities			-		-		-			(3)
Net Securities Lending	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12
NON-OPERATING INCOME	¢6 505	(\$20.242)	¢044	¢52.262	¢54 204	¢46 750	¢0.006	¢07 007	¢44 767	¢20.020
(LOSS)	\$6,525	(\$39,342)	\$841	\$53,362	\$51,381	\$16,758	\$2,896	\$27,297	\$11,767	\$20,020
CHANGE IN UNRESTRICTED										
NET POSITION	(\$86,930)	(\$394,861)	(\$5,931)	(\$49,869)	(\$110,274)	\$100,414	\$172,653	\$28,006	(\$161,894)	(\$8,213)
TOTAL UNRESTRICTED NET POSITION (DEFICIT)										
· · · ·										A / TA AT =
Beginning of Year	(\$75,299)	\$319,562	\$325,493	\$375,362	\$485,636	\$385,2221	\$314,274	\$286,268	\$448,162	\$456,375
End of Year	(\$162,229)	(\$75,299)	\$319,562	\$325,493	\$375,362	\$485,636	\$486,927	\$314,274	\$286,268	\$448,162

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

CONTINGENCY RESERVE FUND

Expenses & Revenues - 10-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
OPERATING REVENUES										
Administrative Fees Earned &										
Other	\$36,334	\$26,135	\$23,981	\$25,817	\$22,375	\$30,152	\$27,487	\$27,668	\$26,712	\$24,899
Total Operating Revenues	\$36,334	\$26,135	\$23,981	\$25,817	\$22,375	\$30,152	\$27,487	\$27,668	\$26,712	\$24,899
OPERATING EXPENSES										
Administrative Expenses	\$30.129	\$27.124	\$28.414	\$37.862	\$18,799	\$34.763	\$27.239	\$11.983	\$29.735	\$28.891
Total Operating Expenses	\$30,129	\$27,124	\$28,414	\$37,862	\$18,799	\$34,763	\$27,239	\$11,983	\$29,735	\$28,891
	<i>voo</i> , 120	¥2.,.2.	¥20,111	<i>vo</i> ., <i>vo</i> 2	<i><i><i>v</i>iciicicc</i></i>	<i>vo</i> 1,1 00	<i>\</i>	<i></i>	¥20,100	<i>\</i>
(LOSS)	\$6,205	(\$989)	(\$4,433)	(\$12,045)	\$3,576	(\$4,611)	\$248	\$15,685	(\$3,023)	(\$3,992)
NON-OPERATING REVENUES										
Investment Income	\$9,864	\$1,463	\$1,829	\$6,111	\$5,896	\$3,165	\$2,025	\$1,164	\$803	\$681
Total Non-Operating Revenues	\$9,864	\$1,463	\$1,829	\$6,111	\$5,896	\$3,165	\$2,025	\$1,164	\$803	\$681
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	\$9,864	\$1,463	\$1,829	\$6,111	\$5,896	\$3,165	\$2,025	\$1,164	\$803	\$681
CHANGE IN UNRESTRICTED										
NET POSITION	\$16,069	\$474	(\$2,604)	(\$5,934)	\$9,472	(\$1,446)	\$2,273	\$16,849	(\$2,220)	(\$3,311)
TOTAL UNRESTRICTED NET POSITION (DEFICIT)										
Beginning of Year	(\$56,379)	(\$56,853)	(\$54,249)	(\$48,315)	(\$57,787)	(\$56,341) ¹	\$10,025	(\$6,824)	(\$4,604)	(\$1,293)
End of Year	(\$40,310)	(\$56,379)	(\$56,853)	(\$54,249)	(\$48,315)	(\$57,787)	\$12,298	\$10,025	(\$6,824)	(\$4,604)

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

Statistical Section: Other Programs (continued)

LONG-TERM CARE FUND

Expenses & Revenues - 10-Year Review (Dollars in Thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
OPERATING REVENUES										
Premiums	\$339,755	\$297,388	\$271,766	\$278,535	\$283,445	\$296,323	\$306,303	\$282,426	\$272,362	\$286,571
Other	69	271	890	_	_	_	_	_		_
Total Operating										
Revenues	\$339,824	\$297,659	\$272,656	\$278,535	\$283,445	\$296,323	\$306,303	\$282,426	\$272,362	\$286,571
OPERATING EXPENSES										
Claims Expense	\$346,573	\$319,122	\$308,976	\$337,298	\$324,841	\$306,879	\$293,693	\$271,742	\$248,785	\$225,691
Increase (Decrease) in										
Estimated Liabilities	(540,123)	3,199,129	(5,001,779)	2,424,078	80,892	295,142	213,048	376,284	310,565	345,547
Increase (Decrease) in										
Estimated Settlement	764,100	(2,899,100)	2,900,000							
Liability Administrative Expenses	25,502	(2,099,100) 23,763	2,900,000	 27,500	24,300	26,545	25,082	 24,999	24,304	 22,946
Auministrative Expenses	20,002	23,703	25,004	27,300	24,300	20,040	20,002	24,999	24,304	22,940
Total Operating Expenses	\$596,052	\$642,914	(\$1,766,999)	\$2,788,876	\$430,033	\$628,566	\$531,823	\$673,025	\$583,654	\$594,184
OPERATING INCOME										
(LOSS)	(\$256,228)	(\$345,255)	\$2,039,655	(\$2,510,341	(\$146,588)	(\$332,243)	(\$225,520)	(\$390,599)	(\$311,292)	(\$307,613)
NON-OPERATING										
REVENUES	(005 005)	(0504.040)	0005 050	0004 450	0004 7 44	A477 500	\$00.000		(000 550)	\$000 0F4
Investment Income/(Loss)	(\$25,885)	(\$531,313)	\$635,250	\$224,152	\$321,711	\$177,562	\$68,986	\$226,526	(\$36,550)	\$393,354
Total Non-Operating	(\$25,885)	(\$531,313)	\$635,250	\$224,152	\$321,711	\$177,562	\$68,986	\$226,526	(\$36,550)	\$393,354
Revenues NON-OPERATING	(\$23,003)	(4331,313)	\$03 5,2 50	φ 224 , IJZ	φ3∠ 1,711	φ 1/1, 30 Ζ	\$00,900	φΖΖΟ,J ΖΟ	(\$30,330)	4393,334
EXPENSES										
Investment Expenses	\$2,805	\$2,408	\$2,231	\$2,547	\$2,596	\$1,853	\$1,816	\$1,606	\$1,734	\$1,615
Total Non-Operating	ψ2,000	ψ2, 1 00	ψ2,201	ψ2,041	ψ2,000	ψ1,000	ψ1,010	ψ1,000	ψ1,70+	ψ1,010
Expenses	\$2,805	\$2,408	\$2,231	\$2,547	\$2,596	\$1,853	\$1,816	\$1,606	\$1,734	\$1,615
Securities Lending Income	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cost of Lending Securities	֥		-	_		_				<u> </u>
Net Securities Lending	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NON-OPERATING	* *		•••	••				••	+•	
INCOME (LOSS)	(\$28,690)	(\$533,721)	\$633,019	\$221,605	\$319,115	\$175,709	\$67,170	\$224,920	(\$38,284)	\$391,739
CHANGE IN										
UNRESTRICTED NET										
POSITION	(\$284,918)	(\$878,976)	\$2,672,674	(\$2,288,736	\$172,527	(\$156,534)	(\$158,350)	(\$165,679)	(\$349,576)	\$84,126
TOTAL UNRESTRICTED										
NET POSITION										
(DEFICIT)										
Beginning of Year	(\$399,266)	\$479,710	(\$2,192,964)	\$95,772	(\$76,755)	\$79,779 ¹	\$247,993	\$413,672	\$763,248	\$679,122
End of Year	(\$684,184)	(\$399,266)	\$479,710	(\$2,192,964	\$95,772	(\$76,755)	\$89,643	\$247,993	\$413,672	\$763,248
(1) Due to prior period adjustment has										

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

HEALTH BENEFITS PROGRAM DATA

Total Covered Lives by Health Plan as of June 30, 2023

		Basic						Medicare			
	Sta	ite	Public /	Agency		Sta	ite	Public A	Agency		Total Covered
	Active	Retired	Active	Retired	Total	Active	Retired	Active	Retired	Total	Lives
Health Maintenance Organization (HMO)											
Anthem HMO Select	14,762	2,869	19,156	1,671	38,458	—	915		445	1,360	39,818
Anthem HMO Traditional	1,569	643	7,477	1,398	11,087	_	2,521	1	2,555	5,077	16,164
Blue Shield Access+	43,742	11,262	34,199	4,884	94,087	—	2,497	1	1,212	3,710	97,797
Blue Shield EPO	887	359	236	42	1,524	—	_		_	—	1,524
Blue Shield Trio	16,556	1,602	11,930	691	30,779	_	_	_	_	_	30,779
Health Net Salud y Más	5,615	214	5,919	211	11,959	_	_	_	_	_	11,959
Health Net SmartCare	2,101	439	5,106	961	8,607	_	_	_	_	_	8,607
Kaiser	249,776	38,711	241,899	21,057	551,443	2	70,895	1	43,490	114,388	665,831
Kaiser/Out of State	19	530	41	437	1,027	_	1,689	_	1,083	2,772	3,799
Sharp	11,387	1,065	1,811	185	14,448	_	307	_	53	360	14,808
UnitedHealthcare	50,019	8,557	11,045	1,675	71,296	3	29,665	_	17,902	47,570	118,866
UnitedHealthcare											
Harmony Western Health	2,905	536	1,149	96	4,686	_	249	_	4	253	4,939
Advantage	7,992	1,393	5,988	710	16,083	—	233		107	340	16,423
SUBTOTAL	407,330	68,180	345,956	34,018	855,484	5	108,971	3	66,851	175,830	1,031,314
Preferred Provider Organization (PPO)											
Anthem EPO Del Norte	44	10	2	—	56	—	_		_	—	56
PERS Gold	61,160	6,187	64,771	4,505	136,623	—	1,685		2,558	4,243	140,866
PERS Platinum	37,139	32,629	41,219	16,397	127,384	3	98,800	1	49,940	148,744	276,128
SUBTOTAL	98,343	38,826	105,992	20,902	264,063	3	100,485	1	52,498	152,987	417,050
Association (ASN) Plans											
CAHP	19,311	7,068	_	_	26,379	_	4,680		_	4.680	31.059
CCPOA North	3,710	2,198	_	_	5,908	_	855		_	855	6,763
CCPOA South	22,944	6,488	_	_	29,432	_	1,108		_	1,108	30,540
PORAC	2,975	825	14,038	5,436	23,274	_	262		2,890	3,152	26,426
SUBTOTAL	48,940	16,579	14,038	5,436	84,993	-	6,905	-	2,890	9,795	94,788
TOTAL	554,613	123,585	465,986	60,356	1,204,540	8	216,361	4	122,239	338,612	1,543,152

10-Year Enrollments

Members	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014 ²
Total Covered Lives ¹	1,543,152	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
Subscribers ¹	773,857	760,538	754,246	738,851	721,321	709,592	697,163	684,436	669,127	658,048

(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, 2023

	State	Public Agency	Total
Total Covered Lives	894,567	648,585	1,543,152

State HMO Total Covered Lives by County as of June 30, 2023

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	505	207	551	—	1	_	319	11,814	_	_	2,407	20	_	15,824
Alpine	_	_	_	_	—	_	_	_	—	_	1	_	_	1
Amador	2	3	_	—	_	_	_	2,015	_	—	39	_	—	2,059
Butte	_	71	3,301	_	2	_	_	3	_	_	490	_	_	3,867
Calaveras	—	1	4	40	_	_	-	11	_	_	19	-	_	75
Colusa	_	_	4	57	_	_	_	_	_	-	20	_	8	89
Contra Costa	248	186	687	_	_	_	543	8,284	_	_	1,221	15	_	11,184
Del Norte	-	1	-	-	-	-	-	-	-	-	4	-	-	5
El Dorado	495	164	663	1	351	—	-	5,501	-	—	305	-	477	7,957
Fresno	202	99	2,549	-	-	-	92	12,457	-	-	9,487	52	-	24,938
Glenn	_	3	171	—	—	_	-	—	—	—	41	-	—	215
Humboldt	_	157	2,548	_	_	—	-	3	_	-	271	-	166	3,145
Imperial	742	45	1,129	_	—	—	—	5	—	-	106	1	—	2,028
Inyo	_	_	_	14	_	_	_		_	-	4	-	-	18
Kern	262	64	1,391	—	482	362	90	10,311	_	-	1,003	7	—	13,972
Kings	6	66	1,120	_	675	-	43	989	-	-	4,132	11	_	7,042
Lake	_	_	2	29	_	_	_	2	_	_	12	-	1	46
Lassen	4 500	- 070	4	50	-	-	-	40.077	_	_	9	-	-	63
Los Angeles	1,563	373	4,731	-	2,112	2,182	136	40,877		1	3,803	1,105	—	56,883
Madera	2	24	423	_	_	—		2,749	_	-	1,014	7		4,219
Marin	—	53	73	—	_	—	76	1,420	_	_	213	4	89	1,928
Mariposa	—	2 21	107 46	603	_	—	_	17	_	_	32 144	—	-	158 815
Mendocino		21	40 680	003	—	—	—	1 18	_	_	256	_	—	1,520
Merced Modoc				5	_	—	_		_	_		—	—	1,520
Mono	_	_	_	8	_	_	_	_	_	_	2	_	_	10
Monterey	1,762	_	5	_	860	_	_	1	_	_	45	_	_	2,673
Napa		16	1	_		_	22	4,092	_	_	45 25	_	89	4,245
Nevada	132	59	252	_	317	_		71	_	_	239	_	_	1,070
Orange	523	216	2,911	_	674	788	18	12,363	_	1	2,126	559	_	20,179
Placer	558	165	1,692	_	557	_	_	15,682	_	_	4,269	36	517	23,476
Plumas	_	_	3	13	_	_	_		_	_	8	_	_	24
Riverside	475	147	3,030	_	158	456	39	17,323	_	3	2,197	428	2	24,258
Sacramento	4,674	1,116	13,797	_	6,145	_	5	113,284	_	3	23,378	112	6,854	169,368
San Benito	_	19	_	_	_	_	_	2	_	_	6	_	_	27
San Bernardino	620	122	2,260	_	232	1,003	70	21,491	_	1	2,832	715	_	29,346
San Diego	565	16	1,991	_	_	1,038	42	12,352	_	12,749	3,201	461	_	32,415
San Francisco	94	141	420	_	_	_	263	4,222	_	_	1,971	13	_	7,124
San Joaquin	755	146	1,499	_	_	_	86	11,131	_	1	2,402	18	_	16,038
San Luis														
Obispo	4	173	1,984	-	1,643	-	-	4	-	-	6,749	51	-	10,608
San Mateo	—	92	193	—	—	—	86	3,012	—	_	1,503	10	—	4,896
Santa Barbara	_	53	640	_	89	_	_	2	_	_	207	_	_	991
Santa Clara	400	103	392	_	6	_	60	8,464	—	_	1,347	12	_	10,784
Santa Cruz	69	26	408	_	89	_	11	529	-	-	689	5	_	1,826
Shasta	1	1	8	185	_	_	-	1	_	_	31	-	_	227
Sierra	-	1	1	24	-	-	-	-	-	-	15	-	-	41
Siskiyou	-	_	1	49	_	-	-	1	_	_	10	-	_	61

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State HMO Total Covered Lives by County as of June 30, 2023 (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	107	210	_	_	_	190	15,573	_	_	1,263	4	336	17,688
Sonoma	4	112	150	_	_	_	182	6,850	_	_	954	3	420	8,675
Stanislaus	332	46	643	_	197	_	2	3,834	_	_	1,331	6	_	6,391
Sutter	_	_	4	_	_	_	_	146	_	_	32	_	_	182
Tehama	_	_	2	55	_	_	_	_	_	_	12	_	_	69
Trinity		_		11	_	_	_	_		_	2	_	_	13
Tulare	2,130	17	2,533	_	2,720	_	165	133	_	_	410	_	_	8,108
Tuolumne	7	7		102	_	_	_	5		_	10	_	_	131
Ventura	379	77	484	_	324	_	_	3,282	_	_	556	_	_	5,102
Yolo	479	185	1,581		519	_	_	7,598		_	2,812	29	654	13,857
Yuba	7	1	9	_	_	_	_	1,365	_	_	33	_	_	1,415
Out of State	7	_	211	_	5	_	_	93	2,238	_	2,542	6	5	5,107
Out of Country/ Unknown	_	_	2	_	_	_	_	1	_	_	2	_	_	5
Total Covered Lives	18,546	4,733	57,501	1,246	18,158	5,829	2,540	359,384	2,238	12,759	88,244	3,690	9,618	584,486

State PPO Total Covered Lives by County as of June 30, 2023

County	Anthem EPO Del Norte	PERS Gold	PERS Platinum	Total
Alameda	_	593	2,144	2,737
Alpine	_	18	21	39
Amador	—	241	1,037	1,278
Butte	—	2,586	3,053	5,639
Calaveras	—	338	886	1,224
Colusa	—	31	65	96
Contra Costa	—	353	1,565	1,918
Del Norte	54	3,172	1,352	4,578
El Dorado		885	2,105	2,990
Fresno	_	2,344	4,673	7,017
Glenn	—	115	119	234
Humboldt	_	1,790	2,278	4,068
Imperial	—	1,032	965	1,997
Inyo	—	518	344	862
Kern	—	2,880	2,868	5,748
Kings	—	1,001	921	1,922
Lake	—	143	398	541
Lassen	—	4,339	1,819	6,158
Los Angeles	—	6,547	13,714	20,261
Madera	—	637	685	1,322
Marin	—	135	746	881
Mariposa	—	68	214	282
Mendocino	—	321	431	752
Merced	—	788	748	1,536
Modoc	—	91	176	267
Mono		110	127	237
Monterey	—	4,013	4,063	8,076

State PPO Total Covered Lives by County as of June 30, 2023 (continued)

County	Anthem EPO Del Norte	PERS Gold	PERS Platinum	Total
Napa	_	123	650	773
Nevada	—	348	775	1,123
Orange	—	3,029	6,511	9,540
Placer	—	748	2,774	3,522
Plumas	—	202	293	495
Riverside	—	2,251	3,467	5,718
Sacramento	—	4,186	11,933	16,119
San Benito	—	218	252	470
San Bernardino	—	1,711	2,894	4,605
San Diego	_	1,352	4,950	6,302
San Francisco	—	449	1,392	1,841
San Joaquin	_	584	1,635	2,219
San Luis Obispo	—	4,925	7,953	12,878
San Mateo	_	224	921	1,145
Santa Barbara	—	635	1,012	1,647
Santa Clara	—	589	1,973	2,562
Santa Cruz	—	209	704	913
Shasta	_	3,518	2,659	6,177
Sierra	_	14	39	53
Siskiyou	_	694	661	1,355
Solano	_	218	899	1,117
Sonoma	_	275	1,615	1,890
Stanislaus	_	397	1,114	1,511
Sutter	_	545	1,244	1,789
Tehama	_	801	718	1,519
Trinity	_	177	144	321
Tulare	_	2,658	3,580	6,238
Tuolumne	_	845	1,350	2,195
Ventura	—	1,122	2,475	3,597
Yolo		529	1,495	2,024
Yuba	—	341	640	981
Out of State		26	51,989	52,015
Out of Country/ Unknown			343	343
Total Covered Lives	54	69,032	168,571	237,657

Statistical Section: Other Programs (continued)

HEALTH BENEFITS PROGRAM DATA (CONTINUED)

State ASN Total Covered Lives by County as of June 30, 2023

County	CAHP	CCPOA North	CCPOA South	PORAC	Total	County	CAHP	CCPOA North	CCPOA South	PORAC	Total
Alameda	290	24	_	9	323	Placer	1,795	233	_	60	2,088
Alpine	4	_	_	_	4	Plumas	157	_	_	16	173
Amador	138	_	_	17	155	Riverside	2,835	_	4,516	346	7,697
Butte	411	44	_	301	756	Sacramento	1,411	968	4	71	2,454
Calaveras	151	—	_	42	193	San Benito	102	—	—	29	131
Colusa	59	_	_	10	69	San Bernardino	1,789	_	2,722	69	4,580
Contra Costa	487	78	_	17	582	San Diego	1,612	—	2,266	114	3,992
Del Norte	106	1	_	11	118	San Francisco	61	20	_	6	87
El Dorado	690	124		48	862	San Joaquin	621	905	—	5	1,531
Fresno	1,130	732	7	189	2,058	San Luis Obispo	809	1	2,666	291	3,767
Glenn	72	—		2	74	San Mateo	129	10	_	12	151
Humboldt	304	_	_	111	415	Santa Barbara	381	_	563	29	973
Imperial	304	—	5,253	10	5,567	Santa Clara	306	12	—	24	342
Inyo	103	_	_	15	118	Santa Cruz	201	21	_	46	268
Kern	1,383	6	9,851	65	11,305	Shasta	1,040	—	—	174	1,214
Kings	276	679	_	17	972	Sierra	7	_	_	_	7
Lake	151	—	_	31	182	Siskiyou	367	—	—	150	517
Lassen	113	_	_	58	171	Solano	683	245	_	8	936
Los Angeles	2,176	—	1,975	221	4,372	Sonoma	437	52	—	28	517
Madera	359	171	_	20	550	Stanislaus	578	327	_	33	938
Marin	99	35		—	134	Sutter	216	—	—	34	250
Mariposa	55	2	_	5	62	Tehama	220	_	_	79	299
Mendocino	161	—		18	179	Trinity	25	—	—	6	31
Merced	372	200	_	63	635	Tulare	774	1,735	5	87	2,601
Modoc	102	—	_	24	126	Tuolumne	136	—	—	51	187
Mono	31	_	_	2	33	Ventura	903	_	350	99	1,352
Monterey	326	—	_	120	446	Yolo	233	110	—	6	349
Napa	158	—	_	14	172	Yuba	127	_	_	2	129
Nevada	296	28		37	361	Out of State	1,557	—	3	530	2,090
Orange	1,234	_	359	180	1,773	Out of Country/ Unknown	6	_	_	_	6
						Total Covered	04 050				

Lives	31,059	6,763	30,540	4,062	72,424
Covered					

Statistical Section: Other Programs (continued)

HEALTH BENEFITS PROGRAM DATA (CONTINUED)

Public Agency HMO Total Covered Lives by County as of June 30, 2023

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	882	1,012	1,346	—	—	—	489	30,179	—	—	1,137	—	—	35,045
Amador	-	1	-	-	-	-	-	179	-	-	11	-	-	191
Butte	—	32	413	_	1	—	_	1	_	—	229	—	_	676
Calaveras	-	-	-	5	-	-	-	3	_	-	22	-	-	30
Colusa	—	—	8	105	—	—	—	—	—	—	64	—	32	209
Contra Costa	843	956	1,756	_	_	_	1,595	33,998	_	_	1,144	_	_	40,292
Del Norte	—	_	—	—	—	_	—	—	—	-	1	_	_	1
El Dorado	119	58	296	_	82	_	_	2,579	_	_	99	_	348	3,581
Fresno	52	25	84	—	—	—	4	1,274	—	—	1,211	—	—	2,650
Glenn	—	15	241	_	_	_	_	—	_	_	80	_	_	336
Humboldt	—	17	105	—	—	—	—	—	—	—	117	—	359	598
Imperial	125	9	32	—	—	—	—	1	—	—	8	_	_	175
Inyo	—	—	3	5	—	—	—	—	—	—	3	—	—	11
Kern	87	26	98	_	_	84	42	756	_	_	100	_	_	1,193
Kings	—	1	2	_	—	—	7	19	_	—	44	—	_	73
Lake	—	—	—	5	—	—	—	—	—	—	12	_	_	17
Lassen	—	2	—	2	—	—	—	—	—	—	4	—	—	8
Los Angeles	4,528	2,220	11,837	_	4,277	2,892	1,681	50,185	_	_	3,798	537	-	81,955
Madera	5	20	94	—	—	_	_	1,600	—	-	990	—	—	2,709
Marin	-	132	51	-	-	-	68	3,417	-	-	167	-	198	4,033
Mariposa	1	2	22	_	_	_	-	6	—	_	32	-	_	63
Mendocino	-	3	4	20	-	-	-	-	-	-	24	-	-	51
Merced	174	15	213	_	_	_	-	6	—	_	86	-	_	494
Modoc	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Mono	—	_	1	—	—	_	—	—	—	—	1	—	—	2
Monterey	884	-	11	-	1,277	-	-	14	-	-	106	-	-	2,292
Napa	—	48	—	—	—	—	5	6,336	—	—	21	—	269	6,679
Nevada	408	127	225	_	868	_	_	40	-	_	598	_	-	2,266
Orange	1,711	657	2,866	_	887	574	88	13,671	—	—	2,171	147	_	22,772
Placer	213	276	1,245	-	320	-	-	10,071	-	-	2,042	-	795	14,962
Plumas	—	-	5	10	—	—			—	—	5	-	_	20
Riverside	3,604	736	5,575	-	1,662	848	575	24,517	-	-	3,358	371		41,246
Sacramento	274	172	1,221	—	303	_	—	13,046	—	—	1,247	—	1,474	17,737
San Benito San	_	68	8	_	_	_	_	2	_	_	25	_	_	103
Bernardino	2,451	418	2,778	_	638	622	513	15,551	_	—	1,387	160	_	24,518
San Diego	563	5	571	—	1	1,110	56	3,056	—	2,048	1,377	33	—	8,820
Francisco	54	263	274	—	—	_	109	2,623	—	—	158	_	—	3,481
San Joaquin	889	261	1,377	—	1	—	133	14,608	—	—	395	—	_	17,664
San Luis Obispo	_	72	234	_	204	_	_	4	_	_	1,424	_	_	1,938
San Mateo	3	1,231	821	_		_	205	10,669	_	_	789	_	_	13,718
Santa														
Barbara	2	217	855	_	159	_	-	2	—	—	125	_	—	1,360
Santa Clara	701	840	742	-		_	99	21,827	-	-	576	-	-	24,785
Santa Cruz	741	350	2,795	_	1,212	—	69	3,715	—	-	950	—	_	9,832
Shasta	_	-	4	40	-	_	_	-	_	-	25	-	-	69
Sierra	_	_	—	64	—	—	_	—	—	—	2	—	_	66
Siskiyou	2	1	_	4	-	_	_	—	_	-	14	-	_	21
Solano	2	505	215	—		_	189	21,065	—	-	387	_	890	23,253

Public Agency HMO Total Covered Lives by County as of June 30, 2023 (continued)

County	Anthem HMO Select	Anthem HMO Traditional	Blue Shield Access+	Blue Shield EPO	Blue Shield Trio	Health Net Salud y Más		Kaiser	Kaiser/ Out of State	Sharp	United Healthcare Alliance	United Healthcare Harmony	Western Health Advantage	Total
Sonoma	_	125	73	_	_	_	74	7,357	_	_	189	_	564	8,382
Stanislaus	341	161	383	_	392	_	_	5,562	_	_	188	_	_	7,027
Sutter	_	_	_	_	_	_	_	23	_	_	14	_	_	37
Tehama	_	_	2	4	_	_	_	_	_	_	7	_	_	13
Trinity	_	_	_	_	_	_	_	_	_	_	3	_	_	3
Tulare	152	_	37	—	8	—	66	16	—	_	35	_	_	314
Tuolumne	_	1	2	14	_	—	_	—	—	—	8	_	_	25
Ventura	1,374	280	832	—	209	—	_	4,595	—	_	487	_	_	7,777
Yolo	76	65	311	—	118	_	_	3,427	—	—	971	_	1,875	6,843
Yuba	_	_	1	—	_	—	_	391	—	_	21	_	_	413
Out of State	11	5	227	—	2	_	_	53	1,561	1	2,130	1	1	3,992
Out of Country/ Unknown	_	_	_	_	_	_	_	3	_	_	3	_	_	6
Total Covered Lives	21,272	11,431	40,296	278	12,621	6,130	6,067	306,447	1,561	2,049	30,622	1,249	6,805	446,828

Public Agency PPO Total Covered Lives by County as of June 30, 2023

County	Anthem EPO Del Norte	PERS Gold	PERS Platinum	Total
Alameda	_	1,404	2,917	4,321
Alpine	—	_	1	1
Amador	—	79	262	341
Butte	—	1,843	623	2,466
Calaveras	—	278	609	887
Colusa	—	420	145	565
Contra Costa	—	1,364	3,191	4,555
Del Norte	2	156	61	219
El Dorado	—	579	771	1,350
Fresno	_	352	496	848
Glenn	_	496	183	679
Humboldt	_	2,371	630	3,001
Imperial	_	65	40	105
Inyo	_	382	1,205	1,587
Kern	_	347	319	666
Kings	—	13	35	48
Lake	—	82	193	275
Lassen	_	235	105	340
Los Angeles	_	10,328	21,100	31,428
Madera	_	430	354	784
Marin	_	336	722	1,058
Mariposa	_	40	154	194
Mendocino	_	37	108	145
Merced	_	460	297	757
Modoc	_	25	18	43
Mono	_	379	308	687
Monterey	_	8,000	4,439	12,439
Napa	_	406	703	1,109
Nevada	_	1,570	809	2,379
Orange	_	4,115	6,094	10,209

Public Agency PPO Total Covered Lives by County as of June 30, 2023 (continued)

County	Anthem EPO Del Norte	PERS Gold	PERS Platinum	Total
Placer	_	1,026	1,766	2,792
Plumas	_	363	209	572
Riverside	_	3,972	4,067	8,039
Sacramento	_	694	979	1,673
San Benito	_	808	515	1,323
San Bernardino	_	2,364	2,410	4,774
San Diego	_	793	1,263	2,056
San Francisco	_	301	546	847
San Joaquin	_	1,387	1,563	2,950
San Luis Obispo	_	2,902	1,208	4,110
San Mateo	_	764	2,616	3,380
Santa Barbara	_	2,964	1,213	4,177
Santa Clara	_	1,977	4,251	6,228
Santa Cruz	_	836	2,065	2,901
Shasta	_	3,976	1,347	5,323
Sierra	_	32	43	75
Siskiyou	_	1,481	440	1,921
Solano	_	527	936	1,463
Sonoma	_	568	1,009	1,577
Stanislaus	_	1,845	1,153	2,998
Sutter	_	395	391	786
Tehama	_	571	179	750
Trinity	_	252	307	559
Tulare	_	162	234	396
Tuolumne	_	269	531	800
Ventura	_	3,125	4,060	7,185
Yolo	—	344	526	870
Yuba		526	402	928
Out of State	-	18	24,345	24,363
Unknown	_	_	91	91
Total Covered Lives	2	71,834	107,557	179,393

Statistical Section: Other Programs (continued)

Public Agency ASN Total Covered Lives by County as of June 30, 2023

County	CAHP	CCPOA North	CCPOA South	PORAC	Total	County	CAHP	CCPOA North	CCPOA South	PORAC	Total
Alameda	_	_	_	547	547	Placer	_	_	_	606	606
Amador	_	_	_	140	140	Plumas	_	_	_	90	90
Butte	_	_	_	352	352	Riverside	_	—	_	1,201	1,201
Calaveras	_	_	_	44	44	Sacramento	_	_	_	241	241
Colusa	_	—	—	29	29	San Benito	_	—	—	548	548
Contra Costa	_	_	_	703	703	San Bernardino	_	_	_	913	913
Del Norte	_	—	—	1	1	San Diego	_	_	_	217	217
El Dorado	_	_	_	235	235	San Francisco	_	_	_	32	32
Fresno	_	_	—	53	53	San Joaquin	_	_	_	326	326
Glenn	_	_	_	97	97	San Luis Obispo	_	_	_	220	220
Humboldt	_	—	—	61	61	San Mateo	_	—	—	242	242
Imperial	_	_	_	48	48	Santa Barbara	_	_	_	183	183
Inyo	_	—	—	201	201	Santa Clara	_	—	—	534	534
Kern	_	_	_	36	36	Santa Cruz	_	_	_	769	769
Kings	_	—	—	5	5	Shasta	_	—	—	444	444
Lake	_	_	_	120	120	Sierra	_	_	_	4	4
Lassen	_	_	_	16	16	Siskiyou	_	_	_	99	99
Los Angeles	_	_	_	2,600	2,600	Solano	_	_	_	121	121
Madera	_	_	_	20	20	Sonoma	_	_	_	103	103
Marin	_	_	_	59	59	Stanislaus	_	_	_	52	52
Mariposa	_	_	_	21	21	Sutter	_	_	_	377	377
Mendocino	_	_	_	22	22	Tehama	_	_	_	38	38
Merced	_	_	_	162	162	Trinity	_	_	_	32	32
Modoc	_	_	_	8	8	Tulare	_	_	_	10	10
Mono	_	_	_	156	156	Tuolumne	_	_	_	67	67
Monterey	_	_	_	2,258	2,258	Ventura	_	_	_	819	819
Napa	_	_	_	58	58	Yolo	_	_	_	70	70
Nevada	_	_	_	275	275	Yuba	_	_	_	284	284
Orange	_	_	_	2,482	2,482	Out of State	_	—	_	2,912	2,912
						Out of Country/					
						Unknown	_	_	_	1	1
						Total Covered Lives	_		_	22,364	22,364

DEFINED CONTRIBUTION PLANS

The 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, 2023, the Deferred Compensation Program was adopted by 843 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 taxdeferred 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 2022-23 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, 2023, the total Long-Term Care (LTC) participant count decreased 5.3 percent to 99,755. This decrease may be attributable to the LTC program stabilization and sustainability measures and realized participant population attrition. Premiums collected in Fiscal Year 2022-23 were \$339.8 million.

Long-Term Care Program Data - Comprehensive Plans

	LTC 1 (1995-2002)		LTC 2 (20	03-2004)	LTC 3 (20		
Benefit Period	With Inflation	No Inflation	With Inflation	No Inflation	With Inflation	No Inflation	Total
Lifetime	10,899	5,125	607	544	709	811	18,695
10 Year	_	7,866	_	828	_	5	8,699
6 Year	1,991	17,661	12	1,245	1,466	2,752	25,127
3 Year	2,198	7,860	195	1,285	1,337	1,400	14,275
2 Year	404	8,645	44	978	560	1,119	11,750
In-Nonforfeiture	10	4	_	_	_	116	130
TOTAL	15,502	47,161	858	4,880	4,072	6,203	78,676

Long-Term Care Program Data - Facility Only Plans

	LTC 1 (199	5-2002)	LTC 2 (200)3-2004)	LTC 3 (200	05-2008)	
Benefit Period	With Inflation	No Inflation	With Inflation	No Inflation	With Inflation	No Inflation	Total
Lifetime	1,238	768	69	31	99	114	2,319
10 Year	—	1,543	—	126	_	_	1,669
6 Year	217	3,291	5	173	118	339	4,143
3 Year	554	2,939	24	253	240	283	4,293
2 Year	82	2,575	5	178	99	238	3,177
In-Nonforfeiture	1	4	—	—	_	16	21
TOTAL	2,092	11,120	103	761	556	990	15,622

Partnership Plans with Inflation

	LT	C 1 (1995-2002)	Ľ	TC 2 (2003-2004)	L1		
Benefit Period	5% Inflation	3% Inflation	5% Inflation	3% Inflation	5% Inflation	3% Inflation	Total
2 Year	1,364	229	67	14	34	12	1,720
1 Year	669	318	30	39	18	13	1,087
6 Month	25	218	_	39	0	8	290
In-Nonforfeiture	134	-	_	_	_	_	134
TOTAL	2,192	765	97	92	52	33	3,231

LTC 4¹ 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	36	3	189	32	96	368
6 Year	23	70	13	308	29	124	567
3 Year	31	130	5	403	43	296	908
2 Year	30	45	_	136	31	109	351
1 Year	3	7	_	_	_	_	10
6 Month	_	6	_	_	_	_	6
In-Nonforfeiture	_	_	_	_	3	13	16
TOTAL	99	294	21	1,036	138	638	2,226

(1) LTC 4 opened for enrollment in December 2013.

Ten-Year Historical Participant Counts

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Covered Lives	99,755	105,370	111,518	116,832	120,632	124,472	128,276	132,274	136,253	139,947