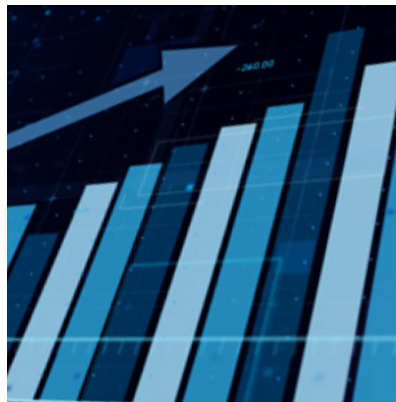
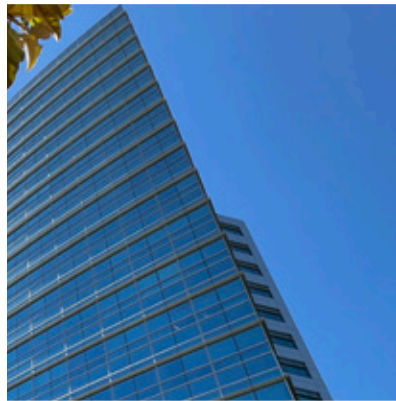
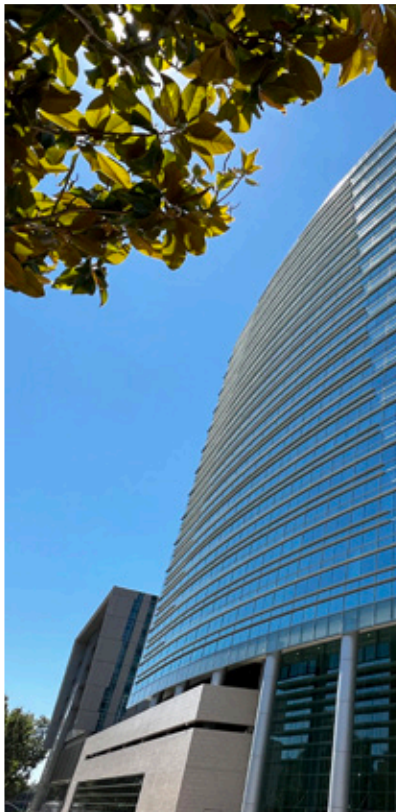


# Annual Comprehensive Financial Report

**California State Teachers' Retirement System**  
A component unit of the State of California  
For the fiscal year ended June 30, 2024





CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM

A component unit of the State of California

**Annual Comprehensive Financial Report**

for the fiscal year ended June 30, 2024

Prepared through the collaborative efforts of CalSTRS team members

# CalSTRS Annual Comprehensive Financial Report

## Introductory section

|                                  |    |
|----------------------------------|----|
| Letter of transmittal .....      | 7  |
| Awards and recognition .....     | 12 |
| Teachers' Retirement Board ..... | 14 |
| Executive staff .....            | 15 |
| Year in review .....             | 16 |

## Financial section

|                                    |    |
|------------------------------------|----|
| Independent auditor's report ..... | 21 |
|------------------------------------|----|

|   |    |
|---|----|
| Management's discussion and analysis<br>(unaudited) ..... | 24 |
|---|----|

### Basic financial statements

|  |    |
|--|----|
| Statement of fiduciary net position .....  | 41 |
| Statement of changes in fiduciary net position .....                               | 42 |
| Notes to the basic financial statements  |    |
| 1. Significant provisions of CalSTRS plans and<br>programs .....                   | 43 |
| 2. Summary of significant accounting policies .....                                | 49 |
| 3. Net pension liability of employers and<br>nonemployer contributing entity ..... | 53 |
| 4. Net other postemployment benefit (OPEB) liability<br>of employers .....         | 54 |
| 5. Deposits and investments .....  | 56 |
| 6. Fair value measurements .....   | 71 |
| 7. Loans and bonds payable .....   | 76 |
| 8. Contingencies .....   | 78 |
| 9. Commitments .....   | 78 |

### Required supplementary information (unaudited)

|  |    |
|--|----|
| Schedule of changes in net pension liability of<br>employers and nonemployer contributing entity .....                             | 79 |
| Schedule of net pension liability of employers and<br>nonemployer contributing entity .....  | 81 |
| Schedule of pension contributions from employers<br>and nonemployer contributing entity .....                                      | 82 |
| Schedule of money-weighted rate of return for the<br>State Teachers' Retirement Plan and Medicare<br>Premium Payment Program ..... | 83 |
| Schedule of changes in net OPEB liability of<br>employers .....  | 84 |
| Schedule of net OPEB liability of employers .....  | 86 |

## Other supplementary information

|  |    |
|--|----|
| Schedule of administrative expenses .....                          | 87 |
| Schedule of investment expenses .....                              | 88 |
| Schedule of consultant and professional services<br>expenses ..... | 92 |

## Investment section

|  |     |
|--|-----|
| Investment consultant's report .....                                   | 97  |
| Investment objectives .....  | 102 |
| Basis of presentation .....  | 102 |
| Investment overview and results .....                                  | 103 |
| Table 1: Net asset value of investments .....                          | 105 |
| Table 2: 10 years of time-weighted annual returns .....                | 105 |
| Table 3: Time-weighted returns net of fees .....                       | 106 |
| Table 4: Time-weighted returns net of fees by<br>portfolio types ..... | 106 |
| Table 5: Largest Public Equity holdings .....                          | 107 |
| Table 6: Largest Fixed Income holdings .....                           | 109 |

### Other investment tables

|   |     |
|---|-----|
| Table 7: Investment summary for the current<br>and previous fiscal year ..... | 112 |
| Table 8: Investment expenses by portfolio type .....                          | 113 |
| Table 9: Broker commissions .....   | 113 |

# CalSTRS Annual Comprehensive Financial Report

## Actuarial section

|   |     |
|---|-----|
| Actuary’s certification letter.....   | 115 |
| Actuarial methods.....  | 118 |
| Actuarial assumptions.....  | 120 |
| Changes since prior valuation.....  | 120 |
| Valuation results.....  | 121 |
| Independent actuarial review.....   | 121 |
| Summary of plan provisions—DB Program.....  | 122 |
| Summary of plan provisions—DBS Program.....   | 124 |
| Summary of plan provisions—CBB Program.....   | 125 |
| Summary of plan provisions—MPP Program.....   | 127 |
| <b>Table 1A:</b> Preretirement mortality for sample ages—DB Program only.....   | 128 |
| <b>Table 1B:</b> Postretirement mortality for sample ages.....  | 128 |
| <b>Table 2:</b> Probabilities of service retirement for sample ages and years of service—DB Program only ..               | 129 |
| <b>Table 3:</b> Probabilities of withdrawal from active service for sample years of service—DB Program only               | 129 |
| <b>Table 4:</b> Probabilities of refund by sample entry ages and years of service—DB Program only.....                    | 130 |
| <b>Table 5:</b> Assumption for pay increase due to promotions and longevity for sample ages in years—DB Program only..... | 130 |
| <b>Table 6:</b> Economic assumptions.....   | 131 |
| <b>Table 7:</b> Probabilities of disability retirement for sample ages—DB Program only.....                               | 131 |
| <b>Table 8:</b> Supplemental assumptions—DB Program only  | 132 |
| <b>Table 9:</b> Schedule of Medicare Part A enrollment rates —MPP Program only.....                                       | 132 |
| <b>Table 10:</b> Schedule of active member valuation data ....  | 133 |
| <b>Table 11:</b> Schedule of retired members, participants and beneficiaries added to and removed from rolls.....         | 134 |
| <b>Table 12:</b> Solvency test.....   | 135 |
| <b>Table 13:</b> Analysis of financial experience.....  | 136 |
| <b>Table 14:</b> Schedule of funding progress.....  | 138 |

## Statistical section

|   |     |
|---|-----|
| Statistical overview.....   | 140 |
| <b>State Teachers’ Retirement Plan schedules</b>  |     |
| <b>Table 1:</b> Changes in fiduciary net position for the State Teachers’ Retirement Plan.....  | 141 |
| <b>Table 2:</b> Benefit and refund deductions from changes in fiduciary net position by type.....                                       | 142 |
| <b>Defined Benefit Program schedules</b>  |     |
| <b>Table 1:</b> Active member characteristics.....  | 143 |
| <b>Table 2:</b> Members retired for service during fiscal year 2023-24, classified by Member-Only Benefit.                              | 143 |
| <b>Table 3:</b> Members retired for service during fiscal year 2023-24, classified by age and joint and survivor option elected.....    | 144 |
| <b>Table 4:</b> Characteristics of members going on disability during target fiscal year.....   | 145 |
| <b>Table 5:</b> Total number of benefit recipients by type of benefit.....  | 145 |
| <b>Table 6:</b> Members retired for service characteristics by year of retirement.....  | 146 |
| <b>Table 7:</b> Members retired for service characteristics....   | 149 |
| <b>Table 8:</b> Benefit recipients by type of benefit and option elected.....   | 150 |
| <b>Table 9:</b> Largest participating Defined Benefit and Defined Benefit Supplement employers for current year and nine years ago..... | 151 |
| <b>Table 10:</b> Restoration of purchasing power by year of retirement, fiscal year 2023-24.....  | 152 |
| <b>Table 11:</b> Restoration of allowance purchasing power through supplemental benefit payments.....                                   | 154 |
| <b>Defined Benefit Supplement Program schedules</b>   |     |
| <b>Table 1:</b> Members retired for service during fiscal year 2023-24, classified by age and option elected.....                       | 155 |
| <b>Table 2:</b> Characteristics of all members retired for service and receiving an annuity.....  | 156 |
| <b>Table 3:</b> Characteristics of all members retired for disability and receiving an annuity.....                                     | 156 |
| <b>Table 4:</b> Benefit recipients by type of benefit and option elected.....   | 157 |

## Statistical section (continued)

### Cash Balance Benefit Program schedules

|   |            |
|---|------------|
| <b>Table 1:</b> Participants retired for service during fiscal year 2023-24, classified by age and type of annuity elected..... | <b>158</b> |
| <b>Table 2:</b> Characteristics of all participants retired for service and receiving an annuity .....                          | <b>159</b> |
| <b>Table 3:</b> All participants receiving an annuity by type of benefit and type of annuity elected .....                      | <b>159</b> |
| <b>Table 4:</b> Largest participating employers for the Cash Balance Benefit Program, current year and nine years ago.....      | <b>160</b> |

### Programs administered or overseen by the retirement system (Pension2®)

|   |            |
|---|------------|
| <b>Table 1A:</b> Changes in fiduciary net position for the Pension2 IRC 403(b) Plan.....                  | <b>161</b> |
| <b>Table 1B:</b> Changes in fiduciary net position for the Pension2 IRC 457(b) Plan.....                  | <b>161</b> |
| <b>Table 2:</b> Largest participating employers for CalSTRS Pension2, current year and nine years ago ... | <b>162</b> |

### Medicare Premium Payment Program

|  |            |
|--|------------|
| <b>Table 1:</b> Changes in fiduciary net position for the Medicare Premium Payment Program.....  | <b>163</b> |
| <b>Table 2:</b> Benefit deductions from changes in fiduciary net position by type .....  | <b>163</b> |
| <b>Table 3:</b> Retired members enrolled in Medicare Premium Payment Program during fiscal year 2023-24, classified by age at retirement ..... | <b>164</b> |
| <b>Table 4:</b> Characteristics of all retired members enrolled in Medicare Premium Payment Program.....                                       | <b>164</b> |

### Teachers' Deferred Compensation Fund

|  |            |
|--|------------|
| <b>Table 1:</b> Changes in fiduciary net position for the Teachers' Deferred Compensation Fund ..... | <b>165</b> |
|--|------------|

# Introductory Section

## MISSION

Securing the financial future and sustaining the trust of California's educators

## STRATEGIC GOALS

### 1 Trusted stewards

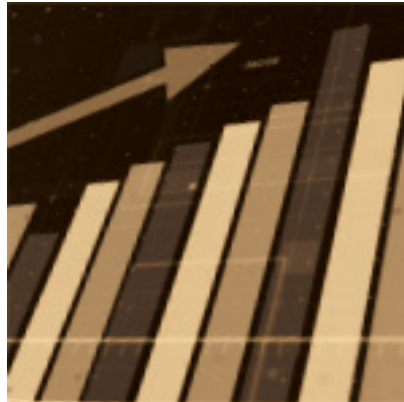
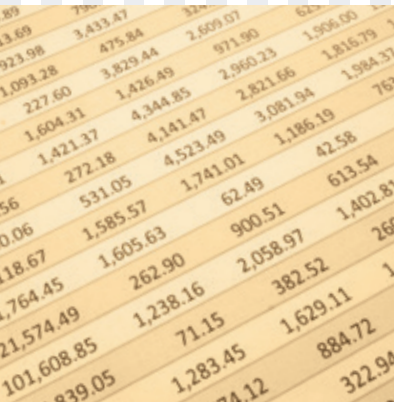
Ensure a well-governed, financially sound trust fund.

### 2 Leading innovation and managing change

Innovate to grow resiliency and efficiency in service of our members.

### 3 Sustainable organization

Fully integrate a unified environmental, social and governance ethos in all we do.





California State Teachers'  
Retirement System  
100 Waterfront Place  
West Sacramento, CA 95605



**December 1, 2024**

To our members, the Teachers' Retirement Board and other interested parties:

The *2024 Annual Comprehensive Financial Report* issued by the California State Teachers' Retirement System details the system's performance for the fiscal year beginning July 1, 2023, and ended June 30, 2024.

CalSTRS was established in 1913 as the pension plan for California's public school educators. We began by serving 120 retired members and 15,000 active members. Over a century later, we serve more than 1 million members and their beneficiaries. As of June 30, 2024, we employed more than 1,390 staff located throughout California.

With a net position of approximately \$343.5 billion as of June 30, 2024, CalSTRS is the largest educator-only pension fund in the world. We administer a hybrid retirement system that consists of traditional defined benefit, cash balance and voluntary defined contribution plans and provide disability and survivor benefits for prekindergarten through community college public school educators. We also administer a postemployment health benefit program. Our members include educators employed by approximately 1,800 school districts, community college districts, county offices of education and other public education employers.

Our mission is to secure the financial future and sustain the trust of California's educators. As fiduciaries, we continue to make informed decisions to ensure we're here for our members long after they've retired from their career in education.

## Helping members reach a secure retirement

Our relationship with our members begins when they first enter the profession and extends through their retirement years. Several factors make our members' financial planning considerations unique. Our members:

- Are predominantly female—over 70%.
- Dedicate more than 25 years to education and retire at age 61 on average.
- Live longer than the general United States population.
- Do not receive Social Security benefits for their service in education and may have their Social Security benefits from other employment reduced due to two federal laws: the Government Pension Offset and the Windfall Elimination Provision.
- May not have employer-funded health insurance after age 65.

CalSTRS members who retired in fiscal year 2023–24 received, on average, 58% of their highest salary. This, taken together with the factors above, means supplemental savings are essential. Through publications, webinars, in-person workshops, videos, newsletters and calculators, we inform our members of the importance of saving early and provide retirement planning tools throughout their careers.

To help ensure members have access to high-quality supplemental savings plans, we offer the CalSTRS Pension2® voluntary low-cost 403(b), 457(b), Roth 403(b) and Roth 457(b) plans. We also administer the 403bCompare.com website, a comprehensive resource that provides free cost and fee comparisons for 403(b) supplemental savings plans.

Recognizing that accurate and complete reporting of member data is essential to a secure retirement, we also partner with employers to continually improve and tailor our training offerings to suit their needs.

# Letter of transmittal

---

## Major initiatives

CalSTRS has a long history of stewardship that focuses on value creation, collaboration and advancement of sustainable business practices to manage long-term risks and capture investment opportunities. A summary of our major initiatives follows.

### Net zero investment portfolio pledge

The Teachers' Retirement Board committed CalSTRS to a net zero investment portfolio by 2050 or sooner to guard against the worst impacts of climate change, preserve a livable planet and enhance the long-term value of our investments. Our pledge represents a holistic, enduring commitment to do our part to help ensure a responsible transition to a net zero economy and is consistent with the goals of the Paris Agreement and the United Nations' Race to Zero campaign.

To achieve this goal, we're increasing investments in climate solutions, escalating our involvement in climate-related strategies, engaging corporations in our portfolio, influencing changes in public policies, and advancing sustainable business and investment practices. Our actions to address climate risk are rooted in our promise to secure the financial future of California's public educators.

### Expansion to 200 Waterfront

Our Headquarters campus has been expanded with a new tower built in alignment with sustainable green building practices that include sustainable construction, energy conservation and whole-building integrated energy efficiency measures. In August 2024, staff began occupying the new tower located at 200 Waterfront Place in West Sacramento. This new tower will accommodate future staffing growth and allow us to continue to meet the needs of our members.

The new tower continues our commitment to employee wellness through a second fitness center that promotes physical activity; a second café that provides healthy, locally sourced food; day care services for infants, toddlers and preschoolers; abundant natural light sources; flexible space to accommodate various working styles; and sit-stand desks and active stairwells to encourage movement.

### Sustainable organization

Organizational sustainability is the umbrella of decisions we make to ensure the viability of CalSTRS and the financial security of California's educators. Our sustainability practices promote long-term value creation, responsible investment strategies, stewardship of our natural resources and engagement with our stakeholder community.

We produce an annual sustainability report that highlights our economic, environmental and social impacts. This report is based on the international Global Reporting Initiative Standards and identifies our key topics, performance for the past fiscal year and upcoming activities.

### Diversity, equity and inclusion

We value diversity, equity and inclusion as core principles that help fulfill our mission. We believe fostering a workplace culture where all staff are treated with respect and feel they belong is the way to achieve our strategic goals of becoming trusted stewards, leading innovation, managing change and creating a sustainable organization.

Diversity, equity and inclusion has long been one of our core principles, and our diversity in the management of investments efforts began more than 30 years ago. In March 2023, we began a multiyear enterprise-wide effort to evolve and strengthen our commitment by focusing on structural and behavioral inclusion efforts with our staff.

### Innovation

We're formally growing and maturing our innovation capabilities to better anticipate the needs of our members and staff. In alignment with our 2022-25 *Strategic Plan*, we're developing an innovation program. In fiscal year 2023-24, we established an operating model, co-created an innovation playbook and launched our first pilots.



# Letter of transmittal

---

## **Pension Solution**

Pension Solution is a multiyear modernization project that will replace our current pension administration system and auxiliary systems. The new pension system will deliver a modern, flexible and sustainable solution that enhances services to members, beneficiaries, employers and staff. Pension Solution will help us gain long-term operational efficiencies, readily respond to member and business needs, and improve internal controls.

We contracted with Sagitec Solutions, LLC to work directly with CalSTRS staff through the end of the project to implement Pension Solution. We restructured the project to align with the latest industry best practices and added new resources to ensure workloads and teams are well-balanced for maximum efficiency and productivity. We've contracted with additional vendors to support project management, training services, business transition and testing services, and data services. Although the project has experienced delays, we adjusted and refocused the schedule to steer us toward successful implementation in fall 2025.

## **Enterprise risk management**

In line with the CalSTRS 2022–25 *Strategic Plan*, we're working toward maturing our Enterprise Risk Management and Enterprise Compliance Services programs in alignment with industry standards. In November 2023, we presented an 18-month maturity plan to the board, which will enhance our ability to identify, assess and mitigate risks while ensuring an ethical culture and compliance with relevant regulations.

Overall, this maturity plan includes deployment of enterprise risk software, an update to the enterprise risk framework, updates to the Enterprise Risk Management and Enterprise Compliance Services charters, staff training, third-party risk management program support and implementation of key risk indicators. We expect the plan to span from January 2024 through June 2025 with CalSTRS staff regularly assessing and reporting on progress to the Executive Risk and Compliance Committee and the board's Audits and Risk Management Committee.

We regularly review enterprise-level risks while considering internal and external factors that could be catalysts for emerging risks. We focus on business resiliency and technological enhancements to further support business continuity and disaster recovery.

## **Defined Benefit Program funding progress**

The health of the Teachers' Retirement Fund is essential to our mission of securing the financial future and sustaining the trust of our members and their beneficiaries. We remain focused on achieving full funding of the CalSTRS Defined Benefit Program according to the plan established in June 2014.

Set in motion via Chapter 47, Statutes of 2014 (California Assembly Bill 1469-Bonta), the plan established a schedule of contribution rate increases shared between members, employers and the State of California to bring CalSTRS to full funding by 2046. The funding plan is a model of shared responsibility and works with investment portfolio performance to advance us along the path of long-term sustainability.

While a gap remains between our current assets and the obligations facing the Defined Benefit Program—known as the unfunded actuarial obligation, or unfunded liability—we continue to make progress toward reducing the funding shortfall.

A snapshot of the Defined Benefit Program's assets and liabilities as reported in the June 30, 2023, actuarial valuation (released in May 2024) reflects steady improvements in our funded status. The funded ratio improved from 74.4% to 75.9%, while the unfunded actuarial obligation decreased from \$88.6 billion at the June 30, 2022, valuation to \$86.6 billion as of the June 30, 2023, valuation.

Actuarial valuation amounts, which are used for the administration and management of the plan, are computed differently than the net pension liability amounts (as defined by the Governmental Accounting Standards Board pronouncements), which are used for compliance with financial reporting requirements and can be found in the basic financial statements (Note 3: Net pension liability of employers and nonemployer contributing entity) of this report.

The funding plan remains ahead of schedule in our goal of the Defined Benefit Program reaching full funding by 2046. Progress toward this goal was advanced in part due to an investment return in fiscal year 2023–24 that exceeded our 7% investment return assumption as well as adjustments made to the actuarial assumptions by the board in January 2024.

## Management responsibility

The basic financial statements were prepared in accordance with the U.S. Generally Accepted Accounting Principles as promulgated by the Governmental Accounting Standards Board. CalSTRS management is responsible for the contents of this report and the integrity and fairness of the information presented in the basic financial statements, including data that, out of necessity, is based on estimates and judgements.

Management is also responsible for establishing and maintaining an effective internal control structure. A system of internal controls provides reasonable, but not absolute, assurance that assets are properly safeguarded and that financial statements are reliable. The concept of reasonable assurance recognizes that first, the cost of control should not exceed the benefits likely to be derived; and second, the valuation of the cost and benefits requires estimates and judgements by management. We believe the internal controls currently in place support this purpose, and the basic financial statements, accompanying schedules and statistical tables are fairly presented in all material respects.

## Financial section

The Financial section of this report includes CalSTRS' basic financial statements and the accompanying notes, along with management's discussion and analysis, which analyzes changes in our fiduciary net position for the fiscal year ended June 30, 2024. The markets are dynamic and fluid—any judgement of the financial statements should also consider current market conditions. Crowe LLP, CalSTRS' independent financial statement auditor, conducted an independent audit of the financial statements in accordance with auditing standards generally accepted in the United States and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Crowe LLP issued an unmodified opinion on CalSTRS' basic financial statements, which can be found in the independent auditor's report in the Financial section of this report.

## Investment section

The Investment section includes discussion of CalSTRS' investment objectives, gives an overview of our investment results for the fiscal year, and presents annual returns by asset class/strategy. The CalSTRS Investment Portfolio is broadly diversified, holding investments ranging from publicly traded short-term bonds to privately held partnerships. The scale and breadth of investments make the management and oversight of these assets highly complex. Most of the portfolio's total return is attributable to its asset allocation strategy. The long-term asset allocation decision involves balancing tradeoffs around risk and return, funding levels and contribution rates, and a wide range of possible scenarios in the global economy, geopolitics and more.

Over the 2023–24 fiscal year, the portfolio generated an 8.4% net return calculated on a time-weighted performance basis. Growth was driven by another strong year of equity market returns, led by mega cap tech stocks, amid declining inflation and expectations of interest rate cuts.

## Actuarial section

The Actuarial section provides a summary of demographic and economic assumptions adopted from experience studies that we generally conduct every four years. These assumptions are applied to the actuarial valuation that is performed on an annual basis. The actuarial valuation provides a picture of the overall funding health of our programs.

## Statistical section

The Statistical section of this report includes tables that reflect basic financial trends of the State Teachers' Retirement Plan and demographic characteristics of the Defined Benefit, Defined Benefit Supplement, Cash Balance Benefit, CalSTRS Pension2 and Medicare Premium Payment programs. Also captured in the tables, when applicable, is a 10-year comparison including the previous fiscal year. This historical view reveals overall trends in our programs and membership demographics that help us forecast our future ability to meet our members' retirement needs.

# Letter of transmittal

---

## Awards and recognition

### 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 CalSTRS for our *Annual Comprehensive Financial Report* for the year ended June 30, 2023. This is the 29th consecutive year we've received this prestigious award. To be awarded a certificate, a government entity must publish an easily readable and efficiently organized annual comprehensive financial report that satisfies both the United States Generally Accepted Accounting Principles and applicable legal requirements. The certificate is valid for one year. We believe this report for fiscal year 2023–24 continues to meet the requirements of the Certificate of Achievement program and are submitting the report to the Government Finance Officers Association to determine eligibility.

### Public Pension Standards Award for Funding and Administration

The Public Pension Coordinating Council (PPCC) presented us with its Public Pension Standards Award for Funding and Administration for the fiscal year ended June 30, 2024, for meeting professional standards for plan funding and administration as set forth in the Public Pension Standards. The PPCC is a coalition of three national associations that represent public retirement systems and administrators: the National Association of State Retirement Administrators, the National Council on Teacher Retirement and the National Conference on Public Employee Retirement Systems. Together, these associations represent more than 500 of the largest pension plans in the United States. This award is valid for one year.

## Acknowledgments

This 2024 *Annual Comprehensive Financial Report* demonstrates our commitment to the financial security of California's educators. The accuracy of the financial data reflects CalSTRS' executive leadership and is a duty performed with prudence in perpetuity. Thank you to the staff, advisers and stakeholder organizations dedicated to securing the financial future of our members.

For a complete understanding of CalSTRS' performance and sustainability milestones, this report should be reviewed in conjunction with our annual sustainability report based on Global Reporting Initiative Standards. View the Sustainability Report at [CalSTRS.com/sustainability-report](https://www.calstrs.com/sustainability-report).

Respectfully submitted,



Cassandra Lichnock  
Chief Executive Officer  
CalSTRS



Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**California State Teachers' Retirement System**

For its Annual Comprehensive  
Financial Report  
For the Fiscal Year Ended

June 30, 2023

*Christopher P. Morill*

Executive Director/CEO



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2024***

Presented to

***California State Teachers' 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)

A handwritten signature in black ink that reads "Alan H. Winkle". The signature is written in a cursive style with a large, prominent 'A' and 'W'.

Alan H. Winkle  
Program Administrator

# Teachers' Retirement Board

---



**DENISE BRADFORD**  
Board Chair  
K-12 Classroom Teacher  
Term: January 1, 2024 –  
December 31, 2027



**KAREN YAMAMOTO**  
Board Vice Chair  
Retiree Representative  
Term: February 16, 2024 –  
December 31, 2027



**MALIA M. COHEN**  
State Controller  
Ex Officio Member



**MICHAEL GUNNING**  
Public Representative  
Term: April 26, 2022 –  
December 31, 2025



**SHARON HENDRICKS**  
Community College Instructor  
Term: January 1, 2024 –  
December 31, 2027



**STEVE JUAREZ**  
Public Representative  
Term: September 24, 2024 –  
December 31, 2027



**HARRY M. KEILEY**  
K-12 Classroom Teacher  
Term: January 1, 2024 –  
December 31, 2027



**FIONA MA**  
State Treasurer  
Ex Officio Member



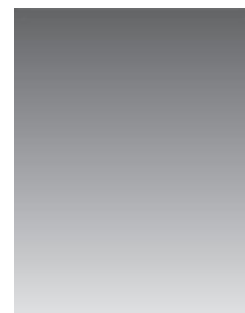
**JOE STEPHENSHAW**  
Director of Finance  
Ex Officio Member



**KEN TANG**  
School Board Representative  
Term: February 16, 2024 –  
December 31, 2027



**TONY THURMOND**  
State Superintendent of Public  
Instruction  
Ex Officio Member



**VACANT**  
Public Representative

Note: Board members are listed as of the date this report is issued.

# Executive staff

## Executive



**CASSANDRA LICHNOCK**  
Chief Executive Officer

## Investments



**SCOTT CHAN**  
Chief Investment Officer



**LISA BLATNIK**  
Chief Operating Officer

## Financial Services



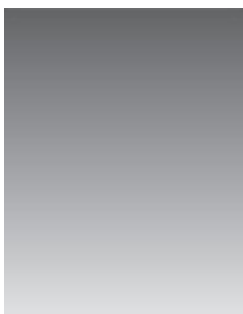
**JULIE UNDERWOOD**  
Chief Financial Officer

## General Counsel



**BRIAN J. BARTOW**  
General Counsel

## Administrative Services



**VACANT**  
Deputy Chief Investment Officer



**MELISSA NORCIA**  
Chief Administrative Officer

## Benefits and Services



**VACANT**  
Chief Benefits Officer

## Public Affairs



**TERESA SCHILLING**  
Chief Public Affairs Officer

## Technology Services



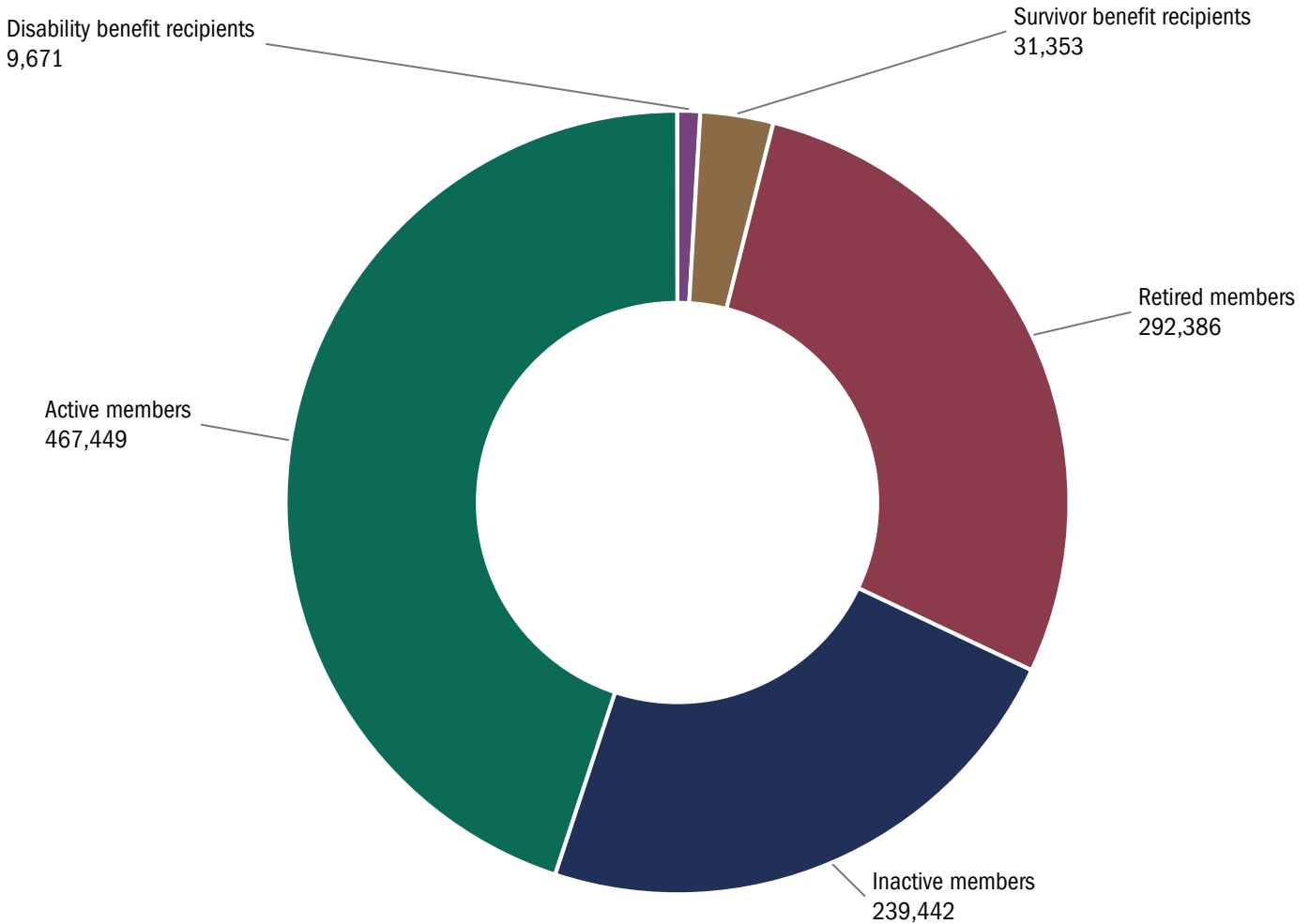
**ASHISH JAIN**  
Chief Technology Officer

Note: Executive staff are listed as of the date this report is issued.

## Members by the numbers

(as of June 30, 2024)

Total membership: 1,040,301



### Membership

Membership in the CalSTRS Defined Benefit Program includes California public school employees, prekindergarten through community college, who are involved in activities that support public education, including teaching, mentoring, selecting and preparing instructional materials, providing vocational or guidance counseling or supervising people engaged in those activities. Membership is in effect as long as contributions remain on deposit with CalSTRS.

Members are employed in approximately 1,800 public school districts, community college districts, county offices of education, charter schools, state agencies and regional occupational programs. The CalSTRS Defined Benefit Program includes retirement, disability and survivor benefits. Members can elect an option to provide a monthly lifetime income for their beneficiaries upon the member's death.



# Year in review

---

## Benefits to members and their beneficiaries

### Service retirement

CalSTRS is committed to providing exceptional service to its retired members. Our staff establishes and maintains timely and accurate benefits.

|               |   |
|---------------|---|
| <b>11,404</b> | Members who retired in fiscal year 2023–24                    |
| <b>10.0%</b>  | Increase from fiscal year 2022–23                             |
| <b>450</b>    | Retired members over the age of 100 years as of June 30, 2024 |

### Disability benefits

|              |   |
|--------------|---|
| <b>93%</b>   | Applications processed within 150 days  |
| <b>557</b>   | Applications received in 2023–24  |
| <b>268</b>   | Applications approved in 2023–24  |
| <b>14.0%</b> | Increase in number of disability applications received from fiscal year 2022–23 |

### Survivor benefits

|               |  |
|---------------|--|
| <b>91%</b>    | Payments processed within 30 days of receiving all necessary information |
| <b>11,202</b> | Notifications of death received in 2023–24                               |
| <b>0.1%</b>   | Increase in number of notifications from fiscal year 2022–23             |

## Communicating with our members and their beneficiaries

### Customer service

Members may reach a CalSTRS Contact Center agent by phone, secure online message or written correspondence.

|                    |   |
|--------------------|---|
| <b>311,041</b>     | Member inquiries answered                                     |
| <b>75%</b>         | Member calls answered within 30 seconds                       |
| <b>88 seconds</b>  | Average wait time to talk with a Contact Center agent         |
| <b>Less than 1</b> | Average number of business days to respond to online messages |

CalSTRS places great emphasis on customer satisfaction and regularly surveys members to ensure they receive accurate, timely and thorough answers to their questions. Last year, approximately 97% of members were “highly satisfied” with their Contact Center experience.

### Member communications

CalSTRS communicates with our active and retired members through a variety of channels.

#### Newsletters

One way CalSTRS communicates with our members and their beneficiaries is through the *CalSTRS Connections* and *Retired Educator* newsletters.

*CalSTRS Connections* is published for our active and inactive members. The newsletter provides information about retirement planning and decisions, webinars and benefits planning, legislative news and supplemental savings options.

*Retired Educator* is published for retired members and their beneficiaries. The newsletter provides information on benefit payments, postretirement earnings limits, benefits and services, legislation and Teachers' Retirement Board news.

#### Retirement Progress Report

Every year Defined Benefit Program members and Cash Balance Benefit Program participants who are not yet receiving a benefit receive a personalized *Retirement Progress Report* that contains retirement planning information and detailed account information as of June 30 for the prior fiscal year. For Defined Benefit Program members age 45 and older with at least five years of service credit, the report includes retirement benefit estimates. The reports are available online in September in the member's *myCalSTRS* account and are mailed in October if requested.

# Year in review

---

## Member publications

CalSTRS offers a number of informational publications to members at various stages in their careers.

The CalSTRS *Member Handbook* is a comprehensive resource on CalSTRS programs and benefits, including eligibility requirements and worksheets. The handbook is updated annually.

*Your Retirement Guide* provides information members need to plan, research and make retirement decisions regarding their Defined Benefit pension and Defined Benefit Supplement funds. It includes step-by-step instructions for applying for service retirement and what to expect after submitting the retirement application. This guide is also updated annually.

Our *Learn and Discover* publications contain targeted retirement information and are sent to four groups of CalSTRS members when they reach a career milestone. The first three career milestones—early career, midcareer and near retirement—are based on the member’s age and years of service credit. The last publication in the series is sent when the member reaches the fourth milestone—retirement.

In addition, we produce publications that cover specific topics, including, but not limited to:

- *Cash Balance Benefit Program*
- *Community Property Guide*
- *Concurrent Retirement*
- *Join CalSTRS? Join CalPERS?*
- *myCalSTRS*
- *Purchase Service Credit Now*
- *Refund: Consider the Consequences*
- *Social Security, CalSTRS and You*
- *Tax Considerations for Rollovers*
- *Understanding the Formula*
- *Uniformed Services Employment and Reemployment Rights Act*
- *Your Disability Benefits Guide*
- *Welcome to CalSTRS*
- *Working After Retirement*

## **CalSTRS online**

CalSTRS has four websites for members: [CalSTRS.com](https://www.calstrs.com), [my.CalSTRS.com](https://my.calstrs.com), [Pension2.com](https://pension2.com) and [403bCompare.com](https://403bcompare.com).

**CalSTRS.com** is the main site for information about membership and benefits, investments, board meetings, our newsroom and business partner opportunities, and also includes links to information for employers, including the Secure Employer Website. Features include online calculators to estimate retirement benefits and the cost to purchase service credit or redeposit funds; CalSTRS publications and forms; investment portfolio information; and self-scheduling for webinars, workshops and benefits planning sessions.

The Pension Sense blog at [CalSTRS.com/pension-sense](https://www.calstrs.com/pension-sense) offers [CalSTRS.com](https://www.calstrs.com) visitors and email subscribers the latest information on member benefits, our investment portfolio, corporate engagement activities and more.

**myCalSTRS**, our secure self-service site, provides members convenient access to their account. After registering for **myCalSTRS**, members can view their account balances, complete and submit forms online, keep their contact information current, view their *Retirement Progress Reports*, manage their beneficiary selections, and exchange secure messages with CalSTRS representatives.

**Pension2.com** is the website for Pension2, the CalSTRS voluntary defined contribution plan that offers 403(b), Roth 403(b), 457(b) and Roth 457(b) plans. It features online enrollment, financial planning tools and webinars.

At **403bCompare.com**, members can easily compare investment fees, performance and services of their employer’s 403(b) plans to find the best plan for their savings goals. Members can learn about the advantages of a 403(b) account, find their employer’s list of approved vendors, compare up to three plans side by side, and get information on how to enroll and start contributions. 403bCompare was created by CalSTRS pursuant to state statute.

Members can also stay connected to CalSTRS through social media on Facebook, Instagram, LinkedIn, YouTube and X (formerly Twitter).

# Year in review

---

## Benefits planning services

CalSTRS has seven member service centers: West Sacramento (headquarters), Glendale, Santa Clara, Irvine, Riverside, San Diego and Fresno.

Member service centers offer educational and benefits planning services, including individual and group benefits planning sessions, financial savings workshops and education around CalSTRS' voluntary defined contribution plan Pension2. These member service centers serve the greater Sacramento, Los Angeles, Bay Area, Orange County, Inland Empire, San Diego and Central Valley regions.

At each member service center, members have the opportunity to meet with CalSTRS benefits specialists by appointment or seek assistance with general information questions on a walk-in basis. Member service center staff also review and receive forms, transmit them to headquarters for processing, and provide CalSTRS forms and publications.

This year, 9,076 members attended individual or group benefits planning sessions or workshops in-person at a member service center or at a satellite location. 41,629 members attended benefits planning sessions or webinars in a virtual setting through telephone or Zoom. An additional 8,147 members received services at outreach events and job fairs. A total of 9,373 members took advantage of the opportunity to walk in and receive immediate assistance.

Another convenient service for members is the estimate-only service, which during fiscal year 2023–24 provided 2,623 members with updated retirement benefit estimates. We continue to focus on providing services that increase accessibility for members, reflect individual member needs and increase member self-education.

## Services to employers, member and client organizations

The mission of CalSTRS Employer Services is to build partnerships with employer partners by providing service and education that lead to accurate contribution reporting and member benefits. We've enhanced the delivery of contribution reporting education by making it available electronically and on demand for the employer while supplementing this information with in-person training and timely responses to their inquiries, supported by a quality and risk management program to monitor and measure responses against standards and mitigate risk through quality assurance. Employer reporting partners' satisfaction is regularly evaluated through our point of service surveys, and Employer Services has dedicated audit resolution and compensation review teams to focus on data quality for active members and to ensure retired member benefits comply with creditable compensation and service laws.

The Secure Employer Website, a secure channel for employers to submit their monthly reporting data, includes rules and immediate feedback about employer-submitted reporting to ensure contribution data is timely and accurate.

## Professional services

CalSTRS contracts for the services of various independent consultants essential to the effective and professional operation of the system. Milliman, Inc. provides actuarial services; Crowe LLP is the independent financial statement auditor; and Meketa Investment Group provides investment consulting services. Lists of investment professionals for investment services and other consultants are provided on Schedules VIII and IX, respectively, in the Financial section of this report. Table 9 in the Investment section also lists entities to whom CalSTRS paid broker commissions during the fiscal year.

# Financial Section

CalSTRS is the largest educator-only pension fund in the world, with \$343.5 billion in total net position as of June 30, 2024.



|            |          |          |          |          |          |
|------------|----------|----------|----------|----------|----------|
| 13.69      | 3,433.47 | 324      | 2,609.07 | 625      | 1,906.00 |
| 923.98     | 475.84   | 3,829.44 | 971.90   | 1,816.79 | 1,984.37 |
| 1,093.28   | 3,829.44 | 1,426.49 | 2,960.23 | 1,816.79 | 1,984.37 |
| 227.60     | 1,426.49 | 4,344.85 | 2,821.66 | 3,081.94 | 1,984.37 |
| 1,604.31   | 4,344.85 | 4,141.47 | 3,081.94 | 1,186.19 | 78       |
| 1,421.37   | 4,141.47 | 4,523.49 | 1,186.19 | 42.58    | 613.54   |
| 272.18     | 4,523.49 | 1,741.01 | 62.49    | 1,402.87 | 26       |
| 56         | 531.05   | 1,585.57 | 900.51   | 1,402.87 | 26       |
| 0.06       | 1,585.57 | 1,605.63 | 2,058.97 | 382.52   | 1,629.11 |
| 18.67      | 1,605.63 | 262.90   | 2,058.97 | 382.52   | 1,629.11 |
| 7,764.45   | 262.90   | 1,238.16 | 382.52   | 884.72   | 322.94   |
| 21,574.49  | 1,238.16 | 71.15    | 1,629.11 | 884.72   | 322.94   |
| 101,608.85 | 71.15    | 1,283.45 | 884.72   | 322.94   |          |
| 839.05     | 1,283.45 | 74.12    | 322.94   |          |          |

## INDEPENDENT AUDITOR'S REPORT

Teachers' Retirement Board of the California  
State Teachers' Retirement System  
West Sacramento, California

**Report on the Audit of the Financial Statements*****Opinion***

We have audited the financial statements of the California State Teachers' Retirement System ("System" or "CalSTRS"), a component unit of the State of California, as of and for the year ended June 30, 2024, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of the California State Teachers' Retirement System, as of June 30, 2024, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

***Basis for Opinion***

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

***Emphasis of Matters******Net Pension Liability of Employers and Nonemployer Contributing Entity***

As discussed in Note 3, based on the most recent actuarial valuation as of June 30, 2023, the System's independent actuaries determined that, at June 30, 2024, the value of the State Teachers' Retirement Plan (STRP) total pension liability exceeded the STRP fiduciary net position by \$67.2 billion. The actuarial valuation is sensitive to the underlying actuarial assumptions, including investment rate of return of 7.10%, consumer price inflation of 2.75%, wage growth of 3.5%, payroll growth of 3.25% and custom mortality tables based on CalSTRS most recent Experience Analysis. Our opinion is not modified with respect to this matter.

***Fair Value of Investments***

As discussed in Note 5 and 6, the financial statements include investments valued at approximately \$144.2 billion as of June 30, 2024, for which fair value has been estimated by general partners and investment advisors, and reviewed and approved by the System's management, in the absence of readily ascertainable market values. Because of the inherent uncertainty of valuation, the estimated values may differ from the values that would have been used had a ready market existed for the investment securities, and the differences could be material. Our opinion is not modified with respect to this matter.

## ***Responsibilities of Management for the Financial Statements***

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

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

## ***Auditor's Responsibility for the Audit of the Financial Statements***

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

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

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

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

## ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the Management's discussion and analysis on pages 24 - 40 and the Schedule of changes in net pension liability of employers and nonemployer contributing entity, Schedule of net pension liability of employers and nonemployer contribution entity, Schedule of pension contributions from employers and nonemployer contributing entity, Schedule of money-weighted rate of return for the State Teachers' Retirement Plan and Medicare Premium Payment Program, Schedule of changes in net OPEB liability of employers and Schedule of net OPEB liability of employers on pages 79 - 86 be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### **Supplementary Information**

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

### **Other Information**

Management is responsible for the other information included in the annual report. The other information comprises the Introductory section, Investment section, Actuarial section and Statistical section, but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

### **Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated October 4, 2024 on our consideration of the California State Teachers' Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering California State Teachers' Retirement System's internal control over financial reporting and compliance.



Crowe LLP

Sacramento, California

October 4, 2024, except for the Other Information, as to which the date is December 17, 2024

# Management's discussion and analysis (unaudited)

---

## Introduction

Management's discussion and analysis of the California State Teachers' Retirement System's (CalSTRS, the system, we, our) financial performance is intended to fairly and transparently provide an overview of activities for the fiscal year ended June 30, 2024. The discussion and analysis focuses on business events and resulting changes for the fiscal year. This discussion is more meaningful when read in conjunction with CalSTRS' basic financial statements and accompanying notes.

CalSTRS' actual results, performance and achievements expressed or implied in these statements may differ from expectations and are subject to changes in interest rates, securities markets, general economic conditions, legislation, regulations and other factors.

## Mission

Founded in 1913, CalSTRS was made up of approximately 15,000 members, held no assets and paid an average annual benefit of \$500. As of June 30, 2024, we have grown to serving approximately 1,040,000 members and their beneficiaries, holding approximately \$343.5 billion in total net position and paying an average annual Member-Only Benefit of approximately \$55,445.

Today, we are the largest educator-only pension fund in the world and continue to deliver on our mission—*securing the financial future and sustaining the trust of California's educators*.

## Year in review

This section provides discussion on significant events and changes impacting CalSTRS for the fiscal year ended June 30, 2024.

### Chief investment officer update

CalSTRS' chief investment officer (CIO), Christopher J. Ailman, announced his retirement at the January 2024 Investment Committee meeting of the Teachers' Retirement Board (board), and served as CIO through June 30, 2024. Ailman has served as the CalSTRS CIO since October 2000 and is one of the world's longest-tenured CIOs.

After conducting a global search for Ailman's replacement, the board selected Scott Chan as CIO effective July 1, 2024. Chan, who served as CalSTRS' deputy chief investment officer since 2018, now reports to the board's Investment Committee and the chief executive officer. Previously, Chan was senior managing director of the University of California, Office of the CIO of the Regents; chief investment officer for the Sacramento County Employees' Retirement System; and partner and portfolio manager for several hedge fund partnerships.

### Teachers' Retirement Board updates

Denise Bradford, Harry M. Keiley and Sharon Hendricks were all reelected to the board and began their additional four-year terms on January 1, 2024, which extend through December 31, 2027.

In February 2024, Kenneth Tang and Karen Yamamoto, who have served on the board since 2021 and 2017, respectively, were reappointed to the board by Governor Newsom. Tang will serve as the school board representative, and Yamamoto will serve as the retiree representative; both members were appointed to terms through December 31, 2027. Both reappointments were confirmed by the Senate in June 2024.

In May 2024, Denise Bradford and Karen Yamamoto were elected board chair and vice chair, respectively. Bradford succeeds Harry Keiley (who served as chair for the past four years), and Yamamoto replaces Bradford (who served as vice chair for one year). The board nominates and elects its chair and vice chair annually to provide board leadership, direction and policy development for the organization.

Jennifer Urdan's term as a member of the board ended on December 31, 2023, and her former seat remained vacant as of June 30, 2024. Urdan previously served as a public representative since her appointment to the board in August 2020. This vacancy will be filled through the appointment of a new public representative by the Governor.

William Prezant retired from the board in August 2024 after having served as a public representative since March 2019. This vacancy will be filled through the appointment of a new public representative by the Governor.



# Management's discussion and analysis (unaudited)

---

## Headquarters Expansion Project

In November 2018, the board approved the expansion of CalSTRS' West Sacramento headquarters to meet long-term space needs of the organization resulting from the increase in size and complexity of the system. To finance the construction of this expansion, CalSTRS issued tax-exempt lease revenue green bonds (Series 2019 Bonds and Series 2022 Bonds) in December 2019 and December 2022, respectively. Additional detail and discussion of Series 2019 Bonds and Series 2022 Bonds can be found in Note 7 of the basic financial statements.

On July 1, 2024, the Office of the State Fire Marshal issued a certificate of occupancy for CalSTRS' headquarters expansion at 200 Waterfront Place.

## Pension Solution Project

The Pension Solution Project is an ongoing effort by CalSTRS to modernize the legacy pension administration system. The project is the largest technology effort in CalSTRS' history and encompasses the implementation of a new benefits program management system to support program and policy changes, incorporates automated internal controls and improves processing times. It will interface with multiple systems, including our financial and electronic content management systems, and will provide upgraded secure portals for members and employers.

With the conclusion of the interim services period in June 2023, the new project phase kicked off in July 2023 with a schedule driving toward an implementation date of fall 2025. In September 2023, the board approved a sole-source contract with Sagitec Solutions, LLC to implement our pension solution system, including services up to implementation and beyond for maintenance and operations and stabilization activities. In November 2023, the board also approved contracts with three implementation support services vendors to support the project in five key workstreams: project management, business transition, testing, training and data services.

Additionally, in November 2023, the board approved a project budget augmentation of \$205.8 million, bringing the total budget to \$523.1 million for funding through the scheduled go live implementation date of fall 2025 and \$104.7 million for post implementation activities, including maintenance and operations, and stabilization.

## Actuarial experience analysis

CalSTRS performs an experience analysis (also called an experience study) approximately every four years to review our actuarial assumptions ensuring they remain reasonable, reflect the actual experience of the system, and are appropriate for assessing funding levels and determining the contribution levels from the state and employers needed to achieve full funding.

In January 2024, CalSTRS staff presented the results of the 2024 experience analysis to the board, which approved several changes to demographic and economic assumptions. These changes increased the Defined Benefit (DB) Program's funded ratio by an additional 1.1% as of the June 30, 2023, actuarial valuation report.

Notably, the increase was primarily driven by a shift in mortality improvement factors, which resulted in slower rates of improvements. These mortality improvement factors still assume increases in the life expectancies of CalSTRS members, but at a lesser rate when compared to previous assumptions in the 2020 experience analysis.

Additionally, CalSTRS' payroll growth assumption was reduced from 3.50% to 3.25% as downward pressure is expected to be applied on total CalSTRS' payroll in the future. The primary reason for this is a projected decrease in K-12 public school enrollments, while other factors include potential increases in new charter schools not electing to provide CalSTRS benefits and limitations of maximum creditable compensation for CalSTRS 2% at 62 members.

Additional detail of these changes can be found in the 2024 experience analysis available at [CalSTRS.com](https://www.calstrs.com).

## Management's discussion and analysis (unaudited)

---

### Investment Policy revision

The Investment Policy Statement (IPS) was modified over the course of fiscal year 2023–24. The Investment Committee approved: 1) the new asset allocation long-term targets, 2) expanded asset allocation ranges to manage and rebalance the strategic asset allocation targets of the portfolio, 3) defined total fund leverage risk, and 4) modified liquidity risk to be principle-based language.

CalSTRS has increasingly diversified its portfolio over time by investing in private markets and alternative investments. With more of our strategic asset allocation in less liquid assets, it increases the complexity of managing cash flows in periods when private market investments are drawing on capital and/or not returning capital.

These revisions to the IPS enhances CalSTRS investment staff's ability to optimally manage the portfolio and support prudent risk management and oversight, ensuring we meet our objectives to pay benefits, avoid selling assets at discounted prices, take advantage of market opportunities, and prudently rebalance the portfolio. By widening asset allocation ranges there is more flexibility and agility in implementing rebalancing strategies that further consider market cycles.

Adding policy language to formalize the use of portfolio leverage provides CalSTRS with another option to fulfill cash flow needs in circumstances when it is disadvantageous to sell assets. Total fund leverage comprises leverage tools that are accounted for at the total fund level or rely on CalSTRS' credit worthiness. As of June 30, 2024, the net total fund leverage was (\$1.3) billion or (0.4%) of the State Teachers' Retirement Plan (STRP) investment portfolio's net asset value.

Additional details on the Investment Policy Statement and net total fund leverage is available on [CalSTRS.com](https://www.calstrs.com).

### CalSTRS Collaborative Model

The CalSTRS Collaborative Model is an investment strategy to manage more assets internally—to reduce costs, control risks and increase expected returns—and leverage our external partnerships to achieve similar benefits, which will have long-term benefits for the system and our members.

This approach embraces partnerships and collaboration by expanding direct investment opportunities through various investment structures, including peer partnerships, joint ventures, co-investments, and passive and controlling stakes in investment companies, while building additional direct investing capabilities. The Collaborative Model covers a spectrum of different types of investment strategies and investment ownership structures from simple to very complex.

CalSTRS will continue to execute and capitalize on the cost savings of internal management in public and private markets, while increasing the number and types of strategies using the Collaborative Model. According to the Collaborative Model Savings report presented to the board in November 2023, CalSTRS has achieved an estimated average annual savings of \$273.5 million and more than \$1.6 billion in total since 2017. In 2022, the Collaborative Model saved the total fund roughly \$428 million, which added an estimated 0.13% to the 2022 net return. The Collaborative Model Savings report is available at [CalSTRS.com](https://www.calstrs.com).

# Management's discussion and analysis (unaudited)

## Financial highlights

This section discusses major changes in account balances for the STRP, CalSTRS Pension2 Personal Wealth Plan (Pension2®), the Medicare Premium Payment (MPP) Program and the Teachers' Deferred Compensation Fund (TDCF). Comparative financial statement information is presented for the STRP through condensed versions of the statement of fiduciary net position and statement of changes in fiduciary net position as of and for the fiscal years ended June 30, 2024, and June 30, 2023.

## State Teachers' Retirement Plan

The STRP is a multiple-employer, cost-sharing defined benefit plan composed of four programs: the DB Program, Defined Benefit Supplement (DBS) Program, Cash Balance Benefit (CBB) Program and Replacement Benefits Program. The STRP holds assets for the exclusive purpose of providing benefits to members of these programs and their beneficiaries.

## Fiduciary net position – STRP

(dollars in thousands)

| Assets and deferred outflows of resources                  | 2024                 | 2023                 | % change      |
|--|----------------------|----------------------|---------------|
| Investment assets <sup>1</sup>                             | \$378,439,722        | \$345,997,115        | 9.4%          |
| Cash   | 280,459              | 205,676              | 36.4%         |
| Investment receivables                                     | 4,860,994            | 5,741,755            | (15.3%)       |
| Member, employer, state and other receivables              | 7,746,523            | 7,081,372            | 9.4%          |
| Capital and other assets                                   | 814,350              | 732,114              | 11.2%         |
| <b>Total assets</b>  | <b>392,142,048</b>   | <b>359,758,032</b>   | <b>9.0%</b>   |
| <b>Deferred outflows of resources</b>                      | <b>165,165</b>       | <b>174,427</b>       | <b>(5.3%)</b> |
| <b>Total assets and deferred outflows of resources</b>     | <b>392,307,213</b>   | <b>359,932,459</b>   | <b>9.0%</b>   |
| <b>Liabilities and deferred inflows of resources</b>       |                      |                      |               |
| Investment liabilities                                     | 348,051              | 455,138              | (23.5%)       |
| Investments purchased payable                              | 6,234,050            | 6,652,763            | (6.3%)        |
| Obligation under reverse repurchase agreements             | 1,727,135            | –                    | 100.0%        |
| Loans and bonds payable                                    | 6,125,797            | 6,018,133            | 1.8%          |
| Benefits in process of payment                             | 2,099,378            | 426,849              | 391.8%        |
| Net pension and OPEB liabilities                           | 641,528              | 773,868              | (17.1%)       |
| Securities lending obligation                              | 32,573,328           | 27,384,547           | 18.9%         |
| Securities sold short                                      | 487,271              | 379,280              | 28.5%         |
| Other  | 729,171              | 652,336              | 11.8%         |
| <b>Total liabilities</b>                                   | <b>50,965,709</b>    | <b>42,742,914</b>    | <b>19.2%</b>  |
| <b>Deferred inflows of resources</b>                       | <b>323,828</b>       | <b>271,035</b>       | <b>19.5%</b>  |
| <b>Total liabilities and deferred inflows of resources</b> | <b>51,289,537</b>    | <b>43,013,949</b>    | <b>19.2%</b>  |
| <b>NET POSITION RESTRICTED FOR PENSIONS</b>                | <b>\$341,017,676</b> | <b>\$316,918,510</b> | <b>7.6%</b>   |

<sup>1</sup> Includes securities lending collateral of \$32.6 billion and \$27.3 billion as of June 30, 2024, and June 30, 2023, respectively.

# Management's discussion and analysis (unaudited)

## Changes in fiduciary net position – STRP

(dollars in thousands)

| Additions                                   | 2024                 | 2023                 | % change     |
|---|----------------------|----------------------|--------------|
| Member contributions                        | \$4,734,724          | \$4,304,648          | 10.0%        |
| Employer contributions                      | 8,585,432            | 7,746,196            | 10.8%        |
| State of California contributions           | 3,945,974            | 3,719,874            | 6.1%         |
| Net investment income                       | 26,173,060           | 19,674,901           | 33.0%        |
| Other income                                | 391,348              | 303,053              | 29.1%        |
| <b>Total additions</b>                      | <b>43,830,538</b>    | <b>35,748,672</b>    | <b>22.6%</b> |
| <b>Deductions</b>                           |                      |                      |              |
| Benefit payments                            | 19,046,225           | 18,244,899           | 4.4%         |
| Refunds of member contributions             | 141,857              | 138,940              | 2.1%         |
| Administrative expenses                     | 203,040              | 221,678              | (8.4%)       |
| Borrowing costs                             | 332,896              | 272,176              | 22.3%        |
| Other expenses                              | 7,354                | 8,754                | (16.0%)      |
| <b>Total deductions</b>                     | <b>19,731,372</b>    | <b>18,886,447</b>    | <b>4.5%</b>  |
| <b>Increase in net position</b>             | <b>24,099,166</b>    | <b>16,862,225</b>    | <b>42.9%</b> |
| <b>Net position restricted for pensions</b> |                      |                      |              |
| Beginning of the year                       | 316,918,510          | 300,056,285          | 5.6%         |
| <b>END OF THE YEAR</b>                      | <b>\$341,017,676</b> | <b>\$316,918,510</b> | <b>7.6%</b>  |

Net position for the STRP increased approximately \$24.1 billion, or 7.6%, from \$316.9 billion as of June 30, 2023, to \$341.0 billion as of June 30, 2024, primarily due to positive investment returns.

The STRP's time-weighted investment return for fiscal year 2023–24 was 8.4% (net of fees), which resulted in a net investment income of \$26.2 billion for the same period. Net investment income increased \$6.5 billion compared to the prior fiscal year, which had a time-weighted investment return of 6.3% (net of fees) and net investment income of \$19.7 billion. Investment assets increased \$32.4 billion, or 9.4%, from \$346.0 billion as of June 30, 2023, to \$378.4 billion as of June 30, 2024, primarily due to positive returns. Refer to the investment management section of management's discussion and analysis for detail of the STRP's investment returns.

Securities lending obligation increased 18.9%, or \$5.2 billion, due to an increase in demand by borrowers of securities in fiscal year 2023–24.

The increase in obligation under reverse repurchase agreements is due to new reverse repurchase agreements CalSTRS entered into during fiscal year 2023–24. There were no such transactions in the prior fiscal year.

Investment receivables decreased \$0.9 billion, and investments purchased payable decreased \$0.4 billion due to the timing of settlement of investment purchases and sales. Borrowing costs increased \$60.7 million due to higher average interest rates on outstanding loans within CalSTRS' Master Credit Facility Portfolio, which consists of unsecured revolving lines of credit and unsecured term loans that source funds for managing capital flows of certain investment strategies.

Total member, employer and State of California contributions increased \$1.5 billion, or 9.5%, primarily due to an increase in the number of active members and the amount of creditable compensation as member, employer and state contribution rates remained unchanged from the prior fiscal year.

Changes in the net pension liability (NPL), net other postemployment benefit (OPEB) liability, deferred outflows of resources and deferred inflows of resources are primarily driven by CalSTRS' recognition of changes to our proportionate share of the state's NPL, net OPEB liability and related deferrals.

Capital and other assets increased \$82.2 million, or 11.2%, primarily due to capitalized costs for the Headquarters Expansion Project and the Pension Solution Project.

## Management's discussion and analysis (unaudited)

---

Benefit payments increased \$0.8 billion, or 4.4%, due to an increase in the number of STRP's retirees and their beneficiaries and the annual benefit adjustment added to benefit allowances. Benefits in process of payment increased \$1.7 billion, or 391.8%, due to timing as the June 2024 monthly benefit payments were disbursed in July 2024 (in accordance with the annual pay dates calendar).

### Other programs and funds

In addition to the STRP, CalSTRS administers two defined contribution plans within the Pension2 Program, a postemployment benefit plan known as the MPP Program and the TDCF that accounts for ancillary activities associated with deferred compensation plans and programs. The following discussion provides noteworthy changes for each of these programs and funds.

#### Pension2 403(b) Plan

CalSTRS Pension2 403(b) Plan is a voluntary defined contribution program that offers low-cost and tax-deferred 403(b) and Roth 403(b) plans for additional retirement savings.

Net position for the Pension2 403(b) Plan increased \$0.4 billion, or 20.4%, to approximately \$2.3 billion as of June 30, 2024, primarily due to positive investment returns on program participants' investment assets. Net investment income for the 403(b) plan was \$247.3 million for the fiscal year ended June 30, 2024, compared to a net investment income of \$164.0 million for the fiscal year ended June 30, 2023.

#### Pension2 457(b) Plan

CalSTRS Pension2 457(b) Plan is a voluntary defined contribution program that offers low-cost and tax-deferred 457(b) and Roth 457(b) plans for additional retirement savings.

Net position for the Pension2 457(b) Plan increased \$42.6 million, or 32.5%, to approximately \$173.7 million as of June 30, 2024, primarily due to positive investment returns on program participants' investment assets. Net investment income for the 457(b) plan was \$19.6 million for the fiscal year ended June 30, 2024, compared to a net investment income of \$11.8 million for the fiscal year ended June 30, 2023.

#### Medicare Premium Payment Program

CalSTRS administers the MPP Program through the Teachers' Health Benefits Fund. The MPP Program pays Medicare Part A premiums and Medicare Parts A and B late enrollment surcharges for retired members of the DB Program who meet certain eligibility criteria. Members who retire on or after

July 1, 2012, are not currently eligible for coverage under the MPP Program.

The MPP Program has reflected a net deficit for the past seven years resulting from the implementation of Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27*, in fiscal year 2014–15 and GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, in fiscal year 2017–18. Implementation of these standards resulted in increased administrative expenses from the MPP Program's recognition of its share of the state's NPL and net OPEB liability. The amounts recognized represent long-term liabilities reported on an accrual basis and do not adversely impact the viability of the fund or its ability to meet current obligations.

Operationally, the MPP Program is funded on a pay-as-you-go basis, with contributions generally being made at the same time and in the same amount as benefit payments and expenses coming due. The net deficit decreased by \$0.2 million to approximately \$2.7 million as of June 30, 2024, with no significant change in activity compared to fiscal year 2022–23.

#### Teachers' Deferred Compensation Fund

The TDCF is a trust fund established to account for ancillary activities associated with deferred compensation plans and programs offered by CalSTRS, such as the Pension2 403(b) and 457(b) plans.

The TDCF has reflected a net deficit for the past 10 years resulting from the implementation of GASB Statement No. 68 and GASB Statement No. 75. Implementation of these standards resulted in increased administrative expenses from the TDCF's recognition of its share of the state's NPL and net OPEB liability. The amounts recognized represent long-term liabilities reported on an accrual basis and do not adversely impact the viability of the fund or its ability to meet current obligations.

The current net deficit of the TDCF decreased by \$1.2 million to approximately \$1.0 million as of June 30, 2024, primarily due to administrative fees earned by the TDCF in fiscal year 2023–24 exceeding administrative expenses incurred, with no other significant change in activity compared to fiscal year 2022–23.

# Management's discussion and analysis (unaudited)

## Overview of financial statements

Management's discussion and analysis is also an introduction to CalSTRS' basic financial statements. CalSTRS' financial statements include the following components:

- Basic financial statements
  - Statement of fiduciary net position
  - Statement of changes in fiduciary net position
  - Notes to the basic financial statements
- Required supplementary information (unaudited)
- Other supplementary information

## Statement of fiduciary net position

The statement of fiduciary net position presents information on all of CalSTRS' assets and liabilities, with the difference between the two reported as net position. Over time, the increase or decrease in net position serves as an indicator of CalSTRS' financial condition and our ability to fund future benefit payments.

## Statement of changes in fiduciary net position

The statement of changes in fiduciary net position reflects how CalSTRS' net position changed during the fiscal year and presents contributions, investment returns, benefit payments, and the costs of plan administration.

## Notes to the basic financial statements

The notes to the basic financial statements provide information essential to a full understanding of the basic financial statements. The type of information provided in each note is as follows:

- Note 1 provides a summary of information on the significant provisions of CalSTRS' plans and programs.
- Note 2 provides a summary of significant accounting policies, including the basis of accounting for CalSTRS, management's use of estimates, and cash and investment accounting policies.
- Note 3 provides information regarding the NPL of employers and nonemployer contributing entity for the STRP, including the actuarial assumptions and methods used to determine the total pension liability.
- Note 4 provides information regarding the net OPEB liability of employers for the MPP Program, including the

actuarial assumptions and methods used to determine the total OPEB liability.

- Note 5 provides information related to deposits, investments and risks (credit, interest rate and foreign currency) in addition to a schedule of investments that discloses the types of investments within each broad investment category.
- Note 6 provides information related to the fair value measurement of investments.
- Note 7 provides information on the various outstanding debt obligations for CalSTRS.
- Note 8 provides information on the potential contingencies of CalSTRS.
- Note 9 provides a summary of CalSTRS' significant commitments.

## Required supplementary information

The required supplementary information section consists of six unaudited schedules intended to assist readers in understanding the NPL of the STRP and the net OPEB liability of the MPP Program. The information available in this section includes:

- Schedule I – Schedule of changes in net pension liability of employers and nonemployer contributing entity
- Schedule II – Schedule of net pension liability of employers and nonemployer contributing entity
- Schedule III – Schedule of pension contributions from employers and nonemployer contributing entity
- Schedule IV – Schedule of money-weighted rate of return for the State Teachers' Retirement Plan and Medicare Premium Payment Program
- Schedule V – Schedule of changes in net OPEB liability of employers
- Schedule VI – Schedule of net OPEB liability of employers

## Other supplementary information

Other supplementary information includes details on administrative expenses, investment expenses, and consultant and professional services expenses. The schedules available in this section include:

- Schedule VII – Schedule of administrative expenses
- Schedule VIII – Schedule of investment expenses
- Schedule IX – Schedule of consultant and professional services expenses

# Management's discussion and analysis (unaudited)

## Major business components

The sections that follow describe the activities and results of CalSTRS' major business components (investment management and pension administration) for the fiscal year ended June 30, 2024.

### Investment management

CalSTRS' primary goal is to maintain a financially sound retirement system. Our investment philosophy is "long-term patient capital"—investing for long-term net cash flows and capital gain potential at a reasonable price. The chief investment officer has authority to oversee and manage the investments and assets of the system in compliance with policy guidelines adopted by the board or its Investment Committee.

#### Investment beliefs

CalSTRS' investment beliefs provide a foundational framework for all of CalSTRS' investment decision-makers to invest in a manner that reflects CalSTRS' unique view of the global investment markets and its vision for participating in these markets to accomplish its fiduciary goal. In this respect, these investment beliefs should help guide CalSTRS' policy leaders and other decision-makers to develop appropriate policies, procedures and investment plans for CalSTRS' assets. The nine investment beliefs are:

1. Diversification strengthens the fund.
2. The global public investment markets are largely, but not completely, efficient.
3. Managing investment costs yields long-term benefits.
4. Internal management is a critical capability.
5. CalSTRS can potentially capture an illiquidity risk premium.
6. Managing short-term drawdown risk can positively impact CalSTRS' ability to meet its long-term financial obligations.
7. Responsible corporate governance, including the management of environmental, social and governance factors, can benefit long-term investors like CalSTRS.
8. Alignment of financial interests between CalSTRS and its advisors is critical.
9. Investment risks associated with climate change and the related economic transition—physical, policy and technology driven—materially impact the value of CalSTRS' investment portfolio.

### Sustainability

CalSTRS recognizes the importance of sustainability and that its related risks affect the performance of the investment portfolio to varying degrees across companies, sectors, regions and asset classes. We continuously look to improve sustainability disclosures and integration that support long-term value creation and provide leadership in the global marketplace as long-term investors.

We publish several reports and provide relevant updates to convey our progress: *Sustainability Report*, *Diversity in the Management of Investments Report*, and the triennial *Addressing Climate-Related Financial Risk Report*, all of which are available at CalSTRS.com.

### Time-weighted returns

CalSTRS uses a time-weighted return to evaluate returns for portfolio performance purposes, and the discussion of investment performance that follows is based on the time-weighted methodology. CalSTRS also prepares and discloses a money-weighted return for financial reporting purposes in accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25*, and GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. The money-weighted rate of return for the STRP was 8.3% for the fiscal year ended June 30, 2024. Additional detail and discussion of money-weighted returns is included in Note 5 of the notes to the basic financial statements.

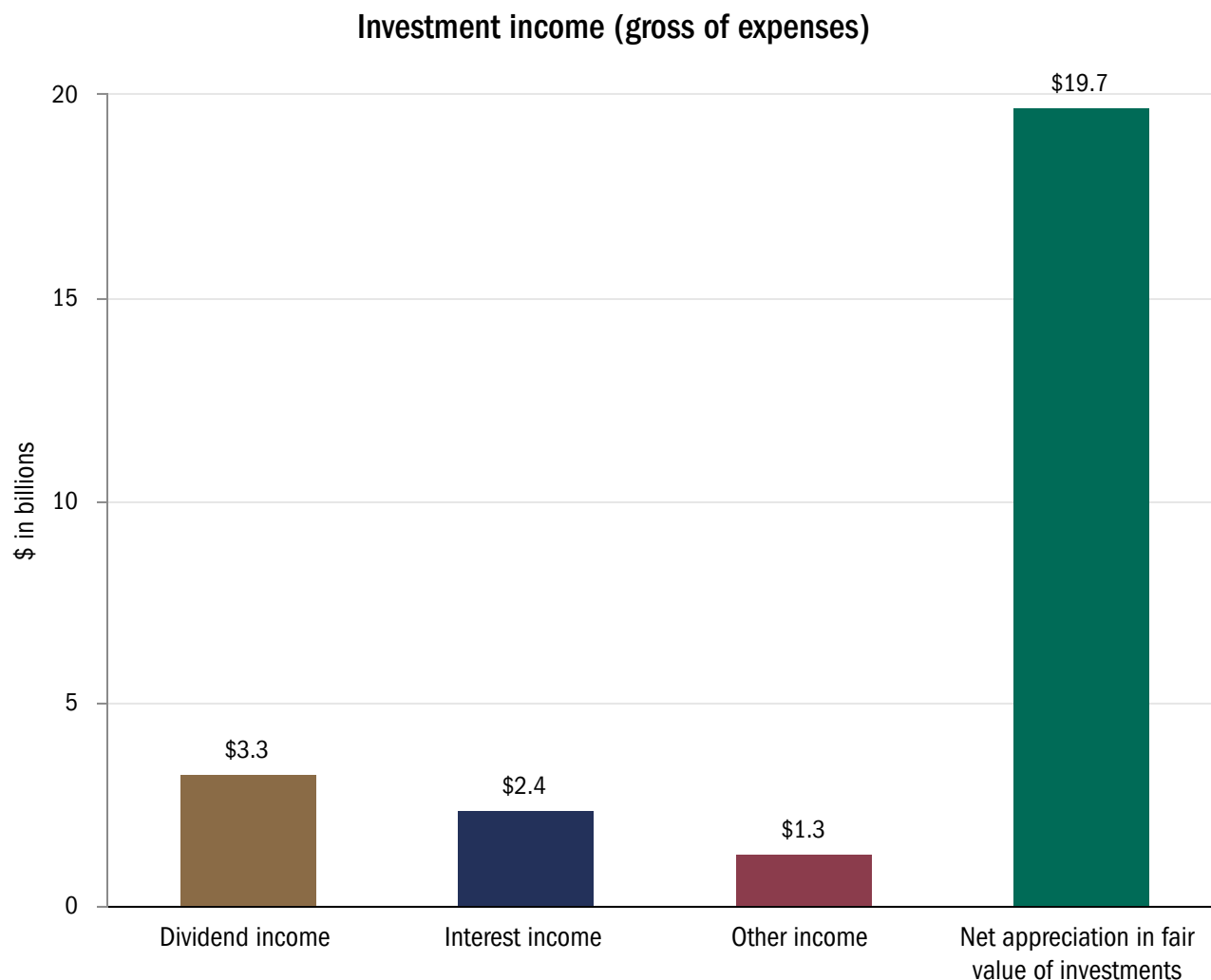
For the fiscal year ended June 30, 2024, our time-weighted return calculated on a net-of-fees basis was 8.4%. CalSTRS is a long-term investor with a goal of achieving an average return of 7.0% over a multiyear horizon to meet pension obligations. Our returns (net of fees) reflect the following long-term performance:

- 4.3% over 3 years
- 8.5% over 5 years
- 7.7% over 10 years
- 7.6% over 20 years
- 8.1% over 30 years

# Management's discussion and analysis (unaudited)

## Sources of investment income

The graph below displays a detailed view of the sources of investment income for the STRP (excluding securities lending income), based on the statement of changes in fiduciary net position as of June 30, 2024.



CalSTRS' investments earn income in the form of interest and dividends from holding fixed income securities and various types of equity interests in public companies and limited partnerships.

Other income consists primarily of distributed income from alternative investments (such as rent), term loans and securities litigation. Net appreciation consists of realized gains (losses) and unrealized appreciation (depreciation). Realized gains and losses are generally a result of investment sales, write-offs and reorganizations. Unrealized appreciation and depreciation are generated by period-over-period valuation fluctuations in all types of investments.

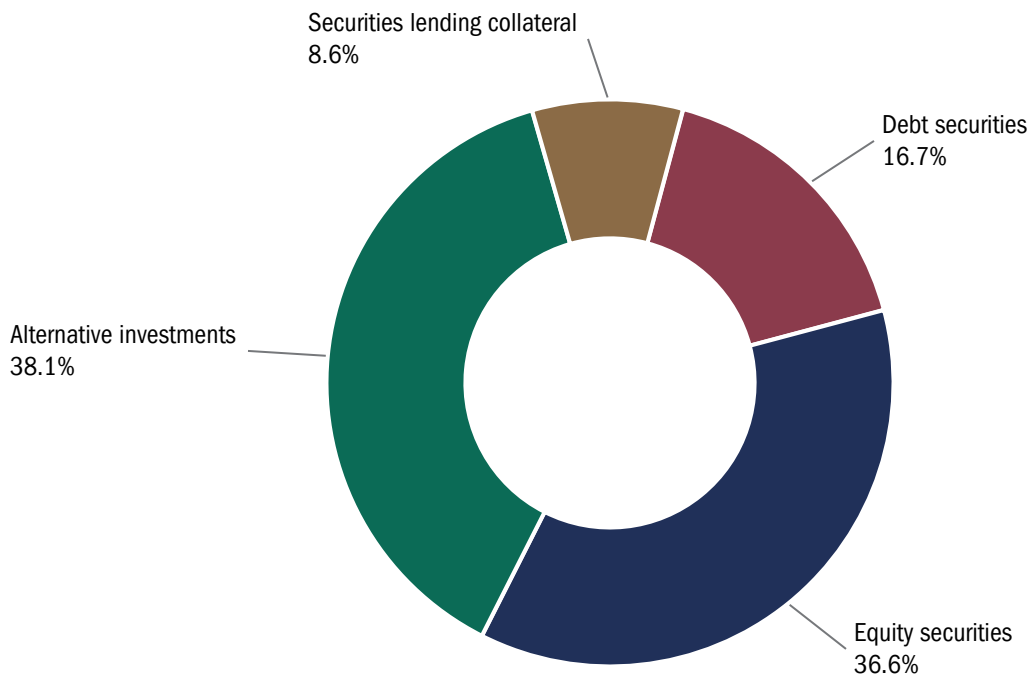


# Management's discussion and analysis (unaudited)

## Asset allocation and performance

The chart below presents net STRP investments based on their classification on the statement of fiduciary net position as of June 30, 2024.

Allocation of investments based on the statement of fiduciary net position<sup>1,2,3</sup>



- <sup>1</sup> This chart only represents net investment assets of the STRP as these assets are managed by CalSTRS. While CalSTRS offers investment strategies for the Pension2 Program, investment assets of the 403(b) and 457(b) plans are not actively managed by CalSTRS. Additionally, investment assets in the MPP Program and the TDCF are invested in the Surplus Money Investment Fund, which is a pooled investment program administered by the California State Treasurer.
- <sup>2</sup> Net derivative instruments and bond proceeds investment each represent less than 0.01% of total net investments for the STRP and are not presented in the above chart.
- <sup>3</sup> Recalculation of investments based on figures presented within the statement of fiduciary net position may differ due to rounding.

## Management's discussion and analysis (unaudited)

The following table displays the distribution of investments in the STRP (excluding bond proceeds investment and securities lending collateral and obligations) based on the portfolio allocation compared to the classification within the statement of fiduciary net position as of June 30, 2024.

### Portfolio allocation versus financial statement classification

| Portfolio allocation                  |                  | Financial statement classification |                  |
|---------------------------------------|------------------|------------------------------------|------------------|
| Asset class/Strategy                  | Asset allocation | Investments                        | % of asset class |
| Public Equity <sup>1</sup>            | 41.4%            | Equity securities                  | 97.5%            |
|                                       |                  | Debt securities                    | 1.3%             |
|                                       |                  | Alternative investments            | 0.9%             |
|                                       |                  | Other <sup>2</sup>                 | 0.3%             |
| Private Equity <sup>1</sup>           | 15.5%            | Alternative investments            | 100.0%           |
| Real Estate <sup>1</sup>              | 13.9%            | Alternative investments            | 99.7%            |
|                                       |                  | Equity securities                  | 0.4%             |
|                                       |                  | Debt securities                    | (1.1%)           |
|                                       |                  | Other <sup>2</sup>                 | 1.0%             |
| Fixed Income                          | 11.2%            | Debt securities                    | 101.9%           |
|                                       |                  | Alternative investments            | 1.4%             |
|                                       |                  | Other <sup>2</sup>                 | (3.3%)           |
| Risk Mitigating Strategies            | 8.4%             | Alternative investments            | 72.3%            |
|                                       |                  | Debt securities                    | 27.4%            |
|                                       |                  | Other <sup>2</sup>                 | 0.3%             |
| Inflation Sensitive                   | 6.3%             | Alternative investments            | 67.9%            |
|                                       |                  | Debt securities                    | 31.6%            |
|                                       |                  | Other <sup>2</sup>                 | 0.5%             |
| Cash/Liquidity                        | 1.7%             | Debt securities                    | 129.8%           |
|                                       |                  | Other <sup>2</sup>                 | (29.8%)          |
| Collaborative Strategies <sup>1</sup> | 1.6%             | Alternative investments            | 99.1%            |
|                                       |                  | Equity securities                  | 0.9%             |
| Strategic Overlay <sup>3</sup>        | 0.0%             | Debt securities                    | 839.8%           |
|                                       |                  | Derivative instruments             | (4.2%)           |
|                                       |                  | Other <sup>2</sup>                 | (735.6%)         |
| <b>Total Fund</b>                     | <b>100.0%</b>    |                                    |                  |

<sup>1</sup> Includes Sustainable Investments and Stewardship Strategies public and private investments totaling \$4.6 billion.

<sup>2</sup> Consists of cash, payables and receivables that are reflected as such on the statement of fiduciary net position, as well as any investment categories less than 0.1%.

<sup>3</sup> Represents 0.02% of the total portfolio allocation, which is 0.0% when rounded for presentation purposes.

### Equity securities

As of June 30, 2024, the STRP held \$138.4 billion in equity securities across all portfolios, an increase of 11.3% compared to the prior year. Equity securities are primarily composed of publicly traded domestic and international securities within the Public Equity Portfolio. The Public Equity Portfolio consists of two main strategies: Global Equity and Sustainable Investment and Stewardship Strategies (SISS). The SISS Portfolio has two components: the SISS Public Portfolio and the SISS Private Portfolio. SISS funds are included within the Public Equity, Private Equity, Real Estate and Collaborative Strategies portfolio allocations, but they are classified primarily as equity securities and alternative investments on the financial statements, as reflected in the table above.

Equity securities generated positive returns for the fiscal year ended June 30, 2024. The equity market declined in the first quarter of the fiscal year as fears that interest rates would continue to stay elevated for longer than expected weighed on the market. However, equities rebounded in subsequent quarters as central banks paused interest hikes as inflation eased and forecasted rate cuts in the second half of the 2024 calendar year. The broader U.S. equity market was also boosted by investor optimism in artificial intelligence development. The growth was led by a group of seven technology-oriented mega capitalization stocks with high performance during the 2023 and 2024 calendar years.

## Management's discussion and analysis (unaudited)

---

As equities grew, the S&P 500 hit an all-time high in February 2024 by closing above 5,000 for the first time. Overall performance of the Public Equity Portfolio outperformed its relative benchmark over the one-, three-, five- and 10-year periods.

### Debt securities

As of June 30, 2024, the STRP held \$62.9 billion in debt securities across all portfolios, an increase of 15.8% compared to the prior year. The Fixed Income Portfolio holds primarily debt securities comprised of U.S. and non-U.S. dollar-based investment grade and non-investment grade securities.

Fixed Income generated positive returns for the fiscal year ended June 30, 2024, despite mixed returns in the overall bond market. In the first quarter of the fiscal year, bond markets declined as central banks continued to increase rates to combat inflation with expectations that rates would remain elevated. The Federal Reserve increased its policy rate by 0.25% in July 2023, the eleventh increase since March 2022. The bond market bounced back in the second quarter of the fiscal year as the Federal Reserve and other central banks halted rate hikes as inflation moved lower and investors anticipated rate cuts in the 2024 calendar year.

The 10-year Treasury note yield dropped 0.71% over the second quarter of fiscal year 2023–24, providing a general boost to most bond prices. However, the bond market remained relatively flat in the second half of the fiscal year. In June 2024, the European Central Bank cut rates for the first time in five years while the Federal Reserve kept rates unchanged and projected only one rate cut during the remainder of the calendar year. Overall performance of the Fixed Income Portfolio outperformed its relative benchmark over the one-, three-, five- and 10-year periods.

### Alternative investments

As of June 30, 2024, the STRP held \$144.2 billion in alternative investments, an increase of 3.5% compared to the prior year. Alternative investments include investments in private equity, fixed income, real estate, inflation sensitive, SISS, collaborative strategies and risk mitigating strategies.

The Private Equity asset class is comprised primarily of limited-partnership and co-investment structures invested in equity-based and debt-based opportunities. Types of investment strategies include leveraged buyouts, venture capital, expansion capital, distressed debt and mezzanine investments. As part of the Collaborative Model, a system-wide initiative to bring more investment capacity in house, the Private Equity asset class continues to grow with an increased focus on co-investment opportunities.

Private equity returns were positive for the fiscal year ended June 30, 2024. The positive performance was driven by the buyout segment of the portfolio, which outperformed its custom benchmark across all time periods. Although fundraising activity continues to slow in the overall private equity market, the portfolio continues to focus on investing in lower-cost investment structures and partnering with high-quality firms. Overall performance of the Private Equity Portfolio outperformed its relative benchmark over the one-, three-, five- and 10-year periods.

The Real Estate asset class is comprised of equity and debt-based investments in directly held real estate, such as wholly owned properties and joint venture investments, and non-directly held real estate, which consists primarily of commingled funds and co-investments. The Real Estate asset class is focused on investing in direct, discretionary investments to provide CalSTRS with control and better alignment of interests with partners.

The Real Estate asset class posted a loss for the fiscal year ended June 30, 2024. Real estate capital markets declined as elevated interest rates continued to impact real estate pricing and values. Office real estate performance declined as vacancies increased due to the continuing effects of the pandemic, and the shift to remote work continues to affect office buildings. However, short- and long-term performance of the Real Estate Portfolio continues to outperform its target return benchmark.

# Management's discussion and analysis (unaudited)

## Asset allocation targets

CalSTRS conducts an Asset Liability Management (ALM) study every four years to direct how the Investment staff allocates assets among different opportunities. This study weighs the system's pension liabilities versus assets needed to fund these pensions over the long term and is a critical process that drives the performance of the investment portfolio. The ALM study and the review of the fund's actuarial experience study and valuations are aligned, which helps ensure the ALM is using the latest financial and demographic assumptions and applying those to both our assets and liabilities.

The long-term allocation targets in place as of June 30, 2024, were based on the 2023 ALM study and approved by the board's Investment Committee in May 2023. CalSTRS staff will make gradual shifts in allocations through a series of steps to move toward these long-term targets. The transition between each step is dependent upon market opportunities and will require approval by the board's Investment Committee.

In May 2024, the board approved a shift to step 2 of the allocation targets, which took effect as of July 1, 2024. This shift increased the Fixed Income target weight by 1.0% with a corresponding 1.0% decrease to the Public Equity target weight. The table below shows anticipated allocation steps on the way to reaching our long-term targets:

| Asset class/<br>Strategy      | Effective date   |                  |               |               | Long-term<br>target |
|-------------------------------|------------------|------------------|---------------|---------------|---------------------|
|                               | 7/1/23<br>Step 1 | 7/1/24<br>Step 2 | TBD<br>Step 3 | TBD<br>Step 4 |                     |
| Public Equity                 | 41.0%            | 40.0%            | 39.0%         | 38.0%         | 38.0%               |
| Real Estate                   | 15.0%            | 15.0%            | 15.0%         | 15.0%         | 15.0%               |
| Private Equity                | 14.0%            | 14.0%            | 14.0%         | 14.0%         | 14.0%               |
| Fixed Income                  | 12.0%            | 13.0%            | 14.0%         | 14.0%         | 14.0%               |
| Risk Mitigating<br>Strategies | 10.0%            | 10.0%            | 10.0%         | 10.0%         | 10.0%               |
| Inflation<br>Sensitive        | 6.0%             | 6.0%             | 6.0%          | 7.0%          | 7.0%                |
| Cash/Liquidity                | 2.0%             | 2.0%             | 2.0%          | 2.0%          | 2.0%                |

## Investment Cost Report

The 2022 calendar year *Investment Cost Report* was presented to the board in November 2023. This report provides cost trend data over an eight-year period for each asset class and investment strategy, a peer comparison of investment cost data, and a capture ratio analysis to show cost effectiveness of the total fund, asset classes and strategies over time.

Total portfolio costs, which include management fees and internal operating costs, are often highly correlated to the total portfolio's net asset value (NAV). However, the total portfolio NAV decreased from \$338.3 billion in 2021 to \$308.3 billion in 2022, while total portfolio investment cost (excluding carried interest) increased from \$1.8 billion in 2021 to \$2.0 billion in 2022.

This increase in costs (despite a decrease in the total portfolio's NAV) is primarily due to a higher allocation of investments to private assets and their associated costs. Private assets require specialized knowledge to manage higher risk and return investment profiles balanced by diversified aspects. While the total portfolio NAV decreased by 9%, the NAV of our private assets increased by 7% in 2022. These higher private asset investment values created higher management fees.

# Management's discussion and analysis (unaudited)

---

## Pension administration

As a provider of pension and other postemployment benefits, CalSTRS must ensure that the contributions we receive and investment income we earn will fund current and future benefits owed to our members and their beneficiaries. Actuarial valuation reports are prepared on an annual basis to help assess the funded status of our programs and are integral to our administration of benefits. As a result of requirements set forth by GASB standards, CalSTRS engages with our consulting actuary (Milliman) to produce two types of actuarial valuation reports for both the STRP and MPP Program: one for financial reporting purposes and one for funding purposes.

### Pension system actuarial valuation reports

The financial reporting actuarial valuation is performed to determine the NPL and other required financial disclosures in accordance with GASB standards. The NPL is calculated for the STRP as a whole and reflects benefits earned by plan members as of a certain date net of pension plan assets. The total pension liability for the STRP was determined by applying update procedures to the financial reporting actuarial valuation as of June 30, 2023, and rolling forward the total pension liability to June 30, 2024. CalSTRS does not project a depletion of assets with the provision of additional member, employer and state contributions resulting from the enactment of the CalSTRS Funding Plan. CalSTRS discounted all future obligations for the STRP using the long-term assumed rate of return on plan assets gross of administrative costs (currently 7.10%). Based on that assumption, the STRP had an NPL of \$67.2 billion as of June 30, 2024, which is a decrease of \$9.0 billion from an NPL of \$76.2 billion as of June 30, 2023.

The funding actuarial valuation assesses the sufficiency of existing assets and future contributions to fund promised benefits and guides decisions regarding the long-term viability of the programs. Separate funding actuarial valuations are performed for the DB Program, DBS Program and CBB Program.

An actuarial projection is also performed for the Supplemental Benefit Maintenance Account (SBMA), which is a special account in the STRP that provides inflation protection (after revenue received from the School Land Bank Fund administered by the State Lands Commission is exhausted) to CalSTRS members whose current purchasing power has fallen below 85% of the purchasing power of their initial benefit. The June 30, 2023, projection of SBMA funding sufficiency report showed that current SBMA assets plus expected future contributions are projected to be sufficient to pay all expected purchasing power benefits through June 30, 2089.

Assumptions used in the financial reporting actuarial valuation report and the funding actuarial valuation reports are the same except for the long-term rate of return, which is gross of administrative costs (7.10%) for financial reporting purposes and net of administrative costs (7.00%) for funding purposes. Investment return assumptions are developed by CalSTRS' investment and actuarial consultants and are adopted by the board.

The most recent funding actuarial valuation indicates that the DB Program had 75.9% of the funds needed to pay the actuarial cost of the benefits accrued as of June 30, 2023, which increased by 1.5% from the June 30, 2022, valuation. This increase is primarily attributable to contributions made to the DB Program and changes to actuarial assumptions (primarily the mortality assumption change), which are detailed in the 2024 experience analysis report available at [CalSTRS.com](https://www.calstrs.com).

Additionally, the funding actuarial valuation for the DBS Program indicates that as of June 30, 2023, the DBS Program had a funded ratio of 129.6% compared to the June 30, 2022, funded ratio of 129.9% before consideration of additional earnings credits (AECs). The funded ratio per the funding actuarial valuation for the CBB Program was 118.2% as of June 30, 2023, compared to 115.5% as of June 30, 2022, before the consideration of AECs.

In May 2024, the board granted AECs for the DBS and CBB programs totaling \$688.1 million and \$19.1 million, respectively. Awarding AECs reduced the funded ratios cited above to 123.5% and 112.8% for the DBS and CBB programs, respectively. Refer to Note 1 of the notes to the basic financial statements for additional information.

# Management's discussion and analysis (unaudited)

## Other postemployment benefits actuarial valuation reports

The financial reporting actuarial valuation is performed to determine the net OPEB liability (NOL) of the MPP Program and other required financial disclosures in accordance with GASB standards. The NOL reflects the present value of projected benefits to program participants as of a certain date, net of plan assets. The total OPEB liability for the MPP Program was determined by applying update procedures to the financial reporting actuarial valuation as of June 30, 2023, and rolling forward the total OPEB liability to June 30, 2024. As of June 30, 2024, the NOL for the MPP Program was \$266.5 million.

For financial reporting purposes, the plan is essentially unfunded as the fiduciary net position of the plan will not be sufficient to make the projected future benefit payments. Therefore, in accordance with GASB Statement No. 74, in instances such as this, the rate used to discount the total OPEB liability represents the yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an

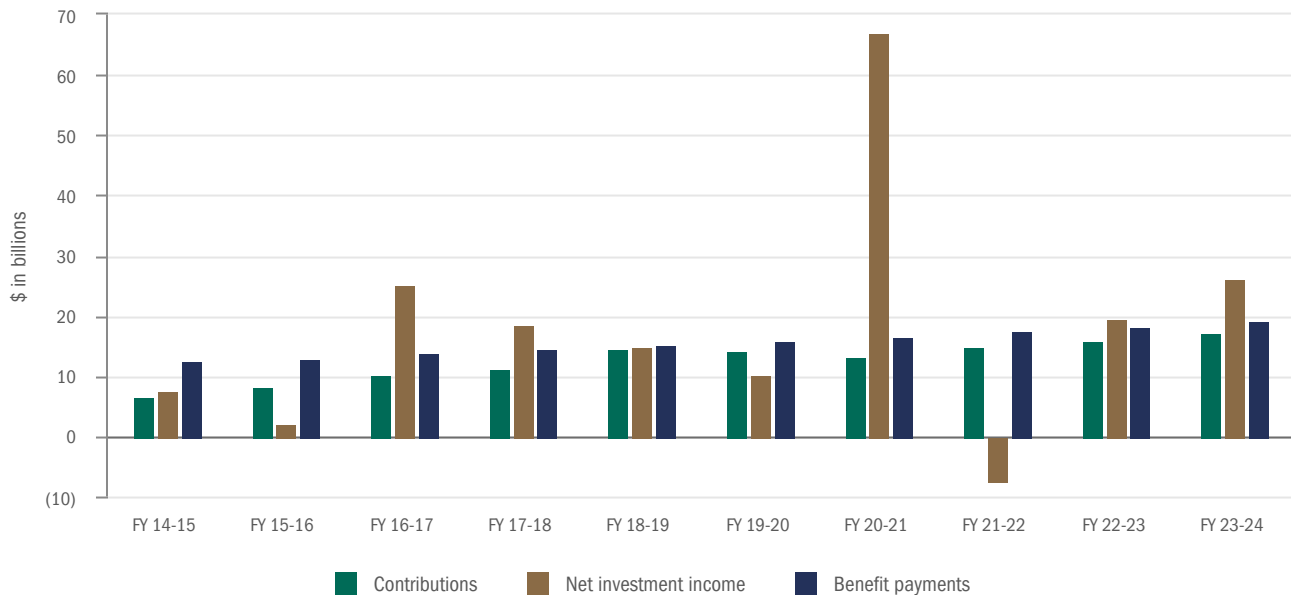
average rating of AA/Aa or higher. The discount rate as of June 30, 2024, for the MPP Program OPEB liability was 3.93% as measured by the Bond Buyer's 20-Bond GO Index as of June 30, 2024.

The MPP Program is funded on a pay-as-you-go basis by contributions that are redirected from the DB Program. As such, the funding actuarial valuation measures the sufficiency of DB Program employer contributions that will be available to fund the MPP Program benefits in future periods. This differs from the financial reporting actuarial valuation, which focuses on the obligation an employer incurs on behalf of employees through the employment-exchange process.

The MPP Program funding actuarial valuation as of June 30, 2023, found that the MPP Program assets, along with MPP Program allocated funding from future DB Program employer contributions, are sufficient to finance the future MPP Program obligations of \$221.9 million for both Part A premiums and Part A and Part B surcharges.

## STRP investment income, benefit payments and contributions

The following chart is a 10-year comparison of contributions, net investment income and benefit payments.

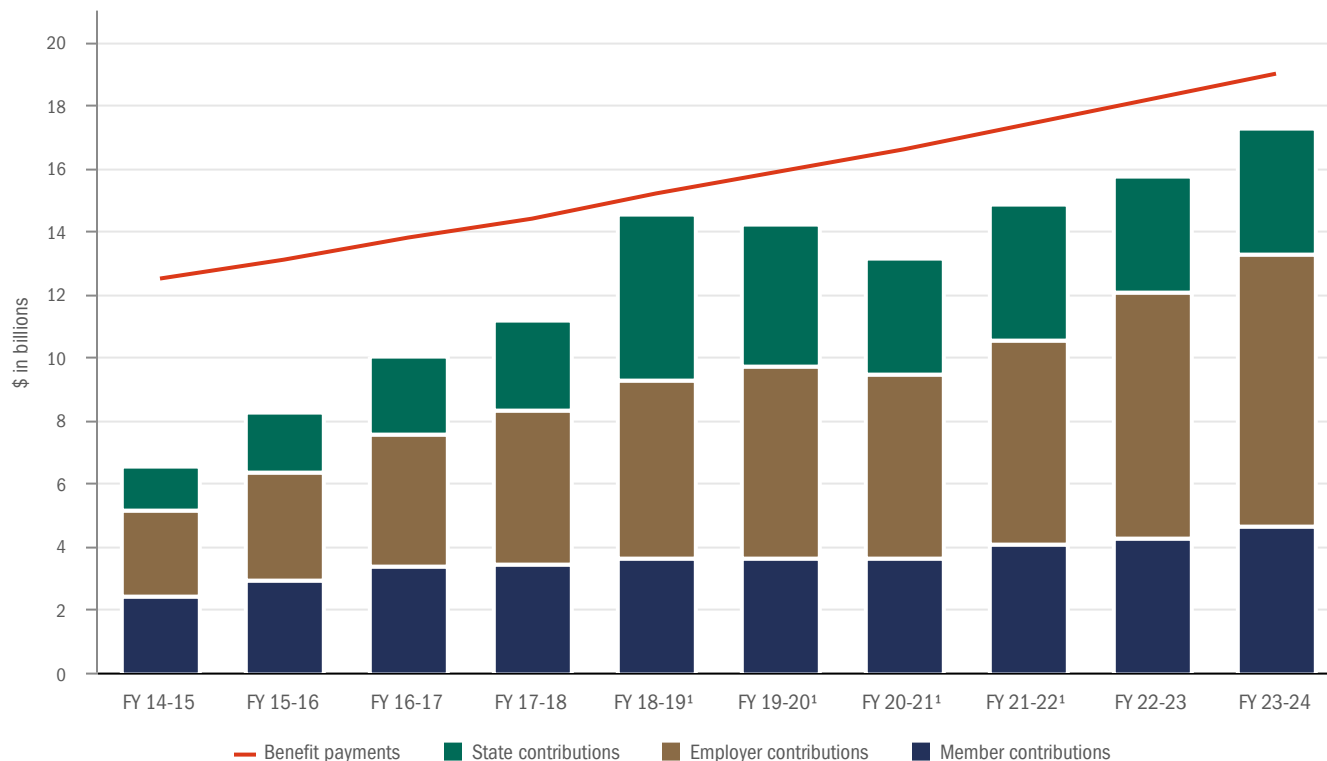


Note: Each data set shown by fiscal year in the chart above is presented in the order of contributions on the left, net investment income in the middle and benefit payments on the right.

## Management's discussion and analysis (unaudited)

As seen in the chart below, annual contributions generally fall short of annual benefit payments; however, it is normal for a mature pension plan to have benefit payments exceed contributions coming into the system. Additionally, investment income and the associated cash generated on our investments have historically been sufficient to cover the gap between contributions and benefit payments. Over the last 30 years, investment returns have funded approximately 61.8% of retirement benefits with the remainder coming from a combination of member, employer and state contributions.

The following chart compares STRP contributions to benefit payments for the last decade.



Note: Each data set shown by fiscal year in the chart above is presented in the order of state contributions on top, employer contributions in the middle and member contributions on the bottom.

<sup>1</sup> CalSTRS recognized one-time, supplemental contribution payments from the state of approximately \$583.7 million, \$297.0 million, \$1.1 billion and \$2.2 billion in fiscal years 2021-22, 2020-21, 2019-20 and 2018-19, respectively.

The gap between contributions and benefit payments began to decrease as a result of increased employer and state contribution rates pursuant to the CalSTRS Funding Plan beginning in fiscal year 2014-15. The gap was significantly reduced when the state made supplemental contribution payments of approximately \$2.2 billion and \$1.1 billion in fiscal years 2018-19 and 2019-20, respectively. However, those supplemental payments were one-time, nonrecurring contributions. Going forward, the gap between contributions and benefit payments is expected to increase in perpetuity in line with a maturing pension plan.

As a pension plan matures, having negative cash flows is expected and does not necessarily imply the system will have to sell assets to make benefit payments. Through the end of the CalSTRS Funding Plan, cash generated from investment income (such as dividends, coupons on bonds and rental income on real estate holdings) would need to be at least 2.5% of total assets to avoid having to sell assets to pay benefits. According to CalSTRS' 2023 *Review of Funding Levels and Risks Report* available at [CalSTRS.com](https://www.calstrs.com), enough cash is currently generated from investment income to cover this gap and has averaged 2.7% over the last 30 years.

## Management's discussion and analysis (unaudited)

---

### Closing remarks

Net position for all CalSTRS administered funds as of June 30, 2024, was \$343.5 billion, which is an increase of approximately \$24.5 billion, or 7.7%, from the previous fiscal year. This increase was primarily driven by positive investment returns and keeps CalSTRS on track to achieve full funding. The funded status of our DB Program continues to increase and was 75.9% as of the most recent funding actuarial valuation report. CalSTRS remains acting as a broadly diversified, long-term investor, which helps manage periods of market volatility and uncertainty. Our overall diversification minimizes the risk of loss and maximizes the rate of return.

Our investment and enterprise risk management programs and strategic and funding plans all position CalSTRS to remain in a sound financial position to meet our obligations to our members and their beneficiaries. We remain committed to securing the financial future and sustaining the trust of California's educators.

### Requests for information

This financial report is designed to provide a general overview of CalSTRS' finances. For questions concerning the information in this report or for additional information, contact:

CalSTRS  
P.O. Box 15275  
Sacramento, CA 95851-0275

Respectfully submitted,



Julie Underwood  
Chief Financial Officer



# Basic financial statements

## Statement of fiduciary net position

As of June 30, 2024

(dollars in thousands)

|  | State<br>Teachers'<br>Retirement<br>Plan | Pension2<br>403(b) Plan | Pension2<br>457(b) Plan | Medicare<br>Premium<br>Payment<br>Program | Teachers'<br>Deferred<br>Compensation<br>Fund | Total                |
|--|--|-------------------------|-------------------------|---|---|----------------------|
| <b>Assets and deferred outflows of resources</b>           |  |                         |                         |   |   |                      |
| <b>Investments</b>   |  |                         |                         |   |   |                      |
| Debt securities  | \$62,931,246                             | \$937,846               | \$50,582                | \$340                                     | \$4,528                                       | \$63,924,542         |
| Equity securities  | 138,429,197                              | 1,383,930               | 121,366                 | —   | —   | 139,934,493          |
| Alternative investments                                    | 144,180,234                              | —                       | —                       | —   | —   | 144,180,234          |
| Derivative instruments                                     | 320,548                                  | —                       | —                       | —   | —   | 320,548              |
| Securities lending collateral                              | 32,564,283                               | —                       | —                       | —   | —   | 32,564,283           |
| Bond proceeds investment                                   | 14,214                                   | —                       | —                       | —   | —   | 14,214               |
| <b>Total investment assets</b>                             | <b>378,439,722</b>                       | <b>2,321,776</b>        | <b>171,948</b>          | <b>340</b>                                | <b>4,528</b>                                  | <b>380,938,314</b>   |
| <b>Cash</b>  | <b>280,459</b>                           | <b>—</b>                | <b>—</b>                | <b>—</b>                                  | <b>—</b>                                      | <b>280,459</b>       |
| <b>Receivables</b>   |  |                         |                         |   |   |                      |
| Investments sold   | 3,853,413                                | —                       | —                       | —   | —   | 3,853,413            |
| Interest and dividends                                     | 1,007,581                                | —                       | —                       | 15  | 50  | 1,007,646            |
| Member, employer and state                                 | 1,128,380                                | 15,855                  | 1,634                   | —   | —   | 1,145,869            |
| Loans receivable   | 6,256,014                                | 8,034                   | 480                     | —   | —   | 6,264,528            |
| Other  | 362,129                                  | —                       | —                       | 1   | 1   | 362,131              |
| <b>Total receivables</b>                                   | <b>12,607,517</b>                        | <b>23,889</b>           | <b>2,114</b>            | <b>16</b>                                 | <b>51</b>                                     | <b>12,633,587</b>    |
| <b>Other assets</b>  |  |                         |                         |   |   |                      |
| Capital assets, net of accumulated depreciation            | 813,975                                  | —                       | —                       | —   | —   | 813,975              |
| Other  | 375                                      | —                       | —                       | —   | 2   | 377                  |
| <b>Total other assets</b>                                  | <b>814,350</b>                           | <b>—</b>                | <b>—</b>                | <b>—</b>                                  | <b>2</b>                                      | <b>814,352</b>       |
| <b>Total assets</b>  | <b>392,142,048</b>                       | <b>2,345,665</b>        | <b>174,062</b>          | <b>356</b>                                | <b>4,581</b>                                  | <b>394,666,712</b>   |
| <b>Deferred outflows of resources</b>                      | <b>165,165</b>                           | <b>—</b>                | <b>—</b>                | <b>370</b>                                | <b>895</b>                                    | <b>166,430</b>       |
| <b>Total assets and deferred outflows of resources</b>     | <b>392,307,213</b>                       | <b>2,345,665</b>        | <b>174,062</b>          | <b>726</b>                                | <b>5,476</b>                                  | <b>394,833,142</b>   |
| <b>Liabilities and deferred inflows of resources</b>       |  |                         |                         |   |   |                      |
| <b>Investments</b>   |  |                         |                         |   |   |                      |
| Derivative instruments                                     | 348,051                                  | —                       | —                       | —   | —   | 348,051              |
| <b>Total investment liabilities</b>                        | <b>348,051</b>                           | <b>—</b>                | <b>—</b>                | <b>—</b>                                  | <b>—</b>                                      | <b>348,051</b>       |
| Investments purchased payable                              | 6,234,050                                | —                       | —                       | —   | —   | 6,234,050            |
| Obligation under reverse repurchase agreements             | 1,727,135                                | —                       | —                       | —   | —   | 1,727,135            |
| Loans and bonds payable                                    | 6,125,797                                | —                       | —                       | —   | —   | 6,125,797            |
| Benefits in process of payment                             | 2,099,378                                | —                       | —                       | —   | —   | 2,099,378            |
| Net pension and OPEB liabilities                           | 641,528                                  | —                       | —                       | 2,299                                     | 3,711   | 647,538              |
| Securities lending obligation                              | 32,573,328                               | —                       | —                       | —   | —   | 32,573,328           |
| Securities sold short                                      | 487,271                                  | —                       | —                       | —   | —   | 487,271              |
| Other  | 729,171                                  | 7,796                   | 314                     | 86  | 754   | 738,121              |
| <b>Total liabilities</b>                                   | <b>50,965,709</b>                        | <b>7,796</b>            | <b>314</b>              | <b>2,385</b>                              | <b>4,465</b>                                  | <b>50,980,669</b>    |
| <b>Deferred inflows of resources</b>                       | <b>323,828</b>                           | <b>—</b>                | <b>—</b>                | <b>1,029</b>                              | <b>2,006</b>                                  | <b>326,863</b>       |
| <b>Total liabilities and deferred inflows of resources</b> | <b>51,289,537</b>                        | <b>7,796</b>            | <b>314</b>              | <b>3,414</b>                              | <b>6,471</b>                                  | <b>51,307,532</b>    |
| <b>NET POSITION RESTRICTED FOR PENSIONS/OPEB</b>           | <b>\$341,017,676</b>                     | <b>\$2,337,869</b>      | <b>\$173,748</b>        | <b>(\$2,688)</b>                          | <b>(\$995)</b>                                | <b>\$343,525,610</b> |

The accompanying notes are an integral part of these statements.

# Basic financial statements

## Statement of changes in fiduciary net position

For the fiscal year ended June 30, 2024

(dollars in thousands)

|   | State<br>Teachers'<br>Retirement<br>Plan | Pension2<br>403(b) Plan | Pension2<br>457(b) Plan | Medicare<br>Premium<br>Payment<br>Program | Teachers'<br>Deferred<br>Compensation<br>Fund | Total                |
|---|--|-------------------------|-------------------------|---|---|----------------------|
| <b>Additions</b>                                    |  |                         |                         |   |   |                      |
| <b>Contributions</b>                                |  |                         |                         |   |   |                      |
| Member  | \$4,734,724                              | \$285,954               | \$28,746                | \$—                                       | \$—   | \$5,049,424          |
| Employer  | 8,585,432                                | 3,103                   | 367                     | 23,590                                    | —   | 8,612,492            |
| State of California                                 | 3,945,974                                | —                       | —                       | —   | —   | 3,945,974            |
| <b>Total contributions</b>                          | <b>17,266,130</b>                        | <b>289,057</b>          | <b>29,113</b>           | <b>23,590</b>                             | <b>—</b>                                      | <b>17,607,890</b>    |
| <b>Investment income</b>                            |  |                         |                         |   |   |                      |
| Net appreciation in fair value of investments       | 19,748,609                               | 204,427                 | 16,148                  | 4   | 42  | 19,969,230           |
| Interest, dividends and other                       | 6,988,116                                | 42,879                  | 3,419                   | 52  | 172   | 7,034,638            |
| Securities lending income                           | 1,550,282                                | —                       | —                       | —   | —   | 1,550,282            |
| <b>Investment expenses</b>                          |  |                         |                         |   |   |                      |
| Cost of lending securities                          | (1,652,274)                              | —                       | —                       | —   | —   | (1,652,274)          |
| Reverse repurchase agreements                       | (26,325)                                 | —                       | —                       | —   | —   | (26,325)             |
| Other investment expenses                           | (435,348)                                | —                       | —                       | —   | —   | (435,348)            |
| <b>Net investment income</b>                        | <b>26,173,060</b>                        | <b>247,306</b>          | <b>19,567</b>           | <b>56</b>                                 | <b>214</b>                                    | <b>26,440,203</b>    |
| <b>Other income</b>                                 | <b>391,348</b>                           | <b>540</b>              | <b>23</b>               | <b>—</b>                                  | <b>1,977</b>                                  | <b>393,888</b>       |
| <b>Total additions</b>                              | <b>43,830,538</b>                        | <b>536,903</b>          | <b>48,703</b>           | <b>23,646</b>                             | <b>2,191</b>                                  | <b>44,441,981</b>    |
| <b>Deductions</b>                                   |  |                         |                         |   |   |                      |
| Retirement, disability, death and survivor benefits | 18,409,826                               | —                       | —                       | —   | —   | 18,409,826           |
| Premiums paid                                       | —  | —                       | —                       | 23,094                                    | —   | 23,094               |
| Distributions and withdrawals                       | —  | 127,531                 | 5,041                   | —   | —   | 132,572              |
| Purchasing power benefits                           | 636,399                                  | —                       | —                       | —   | —   | 636,399              |
| Refunds of member contributions                     | 141,857                                  | 7,329                   | 648                     | —   | —   | 149,834              |
| Administrative expenses                             | 203,040                                  | 5,972                   | 412                     | 368                                       | 1,013   | 210,805              |
| Borrowing costs                                     | 332,896                                  | —                       | —                       | —   | —   | 332,896              |
| Other expenses                                      | 7,354                                    | —                       | —                       | 1   | 5   | 7,360                |
| <b>Total deductions</b>                             | <b>19,731,372</b>                        | <b>140,832</b>          | <b>6,101</b>            | <b>23,463</b>                             | <b>1,018</b>                                  | <b>19,902,786</b>    |
| <b>Increase in net position</b>                     | <b>24,099,166</b>                        | <b>396,071</b>          | <b>42,602</b>           | <b>183</b>                                | <b>1,173</b>                                  | <b>24,539,195</b>    |
| <b>Net position restricted for pensions/OPEB</b>    |  |                         |                         |   |   |                      |
| Beginning of the year                               | 316,918,510                              | 1,941,798               | 131,146                 | (2,871)                                   | (2,168)                                       | 318,986,415          |
| <b>END OF THE YEAR</b>                              | <b>\$341,017,676</b>                     | <b>\$2,337,869</b>      | <b>\$173,748</b>        | <b>(\$2,688)</b>                          | <b>(\$995)</b>                                | <b>\$343,525,610</b> |

The accompanying notes are an integral part of these statements.

# Notes to the basic financial statements

## 1. Significant provisions of CalSTRS plans and programs

The California State Teachers' Retirement System (CalSTRS, the system, we, our) administers a hybrid retirement system consisting of a defined benefit plan, two defined contribution plans, a postemployment benefit plan and a fund used to account for ancillary activities associated with the deferred compensation plans and programs:

- State Teachers' Retirement Plan (STRP)
- CalSTRS Pension2 403(b) Plan
- CalSTRS Pension2 457(b) Plan
- Medicare Premium Payment (MPP) Program
- Teachers' Deferred Compensation Fund (TDCF)

CalSTRS provides pension benefits, including disability and survivor benefits, to full-time and part-time California public school teachers from pre-kindergarten through community college and certain other employees of the public school system and other state agencies. The Teachers' Retirement Law (Education Code section 22000 et seq.), as enacted and amended by the California Legislature and the Governor, established these plans and CalSTRS as the administrator. The terms of the plans may be amended through legislation.

CalSTRS is a component unit of the State of California (the state). These financial statements include only the accounts of CalSTRS. The state includes CalSTRS' various plans and programs as fiduciary funds in its financial statements.

Under California Constitution, Article 16, Section 17, the Teachers' Retirement Board (the board) has plenary authority and fiduciary responsibility for investment of moneys and administration of the system. The board is composed of 12 members:

- Five members appointed by the Governor and confirmed by the Senate for a term of four years: one school board representative, one retired CalSTRS member and three public representatives.
- Four ex officio members who serve for the duration of their term in office: the California Director of Finance (who is appointed by the Governor and confirmed by the Senate), the California State Controller, the California State Treasurer and the State Superintendent of Public Instruction.
- Three member-elected positions representing current educators who serve for a term of four years.

Section 22209 of the Education Code gives the board authority to appoint a chief executive officer (CEO), while Section 20520 of the California Code of Regulations gives the board authority to delegate any acts within its power to the CEO. Pursuant to Section 22301 of the Education Code, the CEO may delegate any act or duty to subordinates unless required by the board to act personally.

### State Teachers' Retirement Plan

The STRP is a multiple-employer, cost-sharing defined benefit plan composed of four programs: Defined Benefit (DB) Program, Defined Benefit Supplement (DBS) Program, Cash Balance Benefit (CBB) Program and Replacement Benefits (RB) Program. A Supplemental Benefit Maintenance Account (SBMA) exists within the STRP and provides purchasing power protection for DB Program benefits. The STRP holds assets for the exclusive purpose of providing benefits to members of these programs and their beneficiaries. CalSTRS also uses plan assets to defray reasonable expenses of administering the STRP. Although CalSTRS is the administrator of the STRP, the state is the sponsor and obligor of the trust. In addition, the state is both an employer and nonemployer contributing entity to the STRP.

### STRP Defined Benefit Program

As of June 30, 2024, there were approximately 1,800 employers (school districts, community college districts, county offices of education, charter schools, state agencies and regional occupational programs) reporting payroll data through 73 reporting entities to the DB Program. Membership is mandatory for all employees meeting certain statutory requirements and optional for all other employees performing creditable service activities. The DB Program provides retirement benefits based on members' final compensation, age and years of service credit. In addition, the program provides benefits to members upon disability and to their survivors or beneficiaries upon the death of eligible members.

The following table presents rounded membership numbers for the DB Program as of June 30, 2024.

|  |                  |
|--|------------------|
| <b>Active members</b>                            |                  |
| Vested   | 328,000          |
| Nonvested  | 139,000          |
| <b>Total active members</b>                      | <b>467,000</b>   |
| <b>Inactive members</b>                          |                  |
| Vested   | 52,000           |
| Nonvested  | 188,000          |
| <b>Total inactive members</b>                    | <b>240,000</b>   |
| <b>Retirees and beneficiaries</b>                | <b>333,000</b>   |
| <b>TOTAL MEMBERS, RETIREES AND BENEFICIARIES</b> | <b>1,040,000</b> |

## Notes to the basic financial statements

---

The DB Program has two benefit structures:

- CalSTRS 2% at 60: Members first hired on or before December 31, 2012, to perform service that could be creditable to CalSTRS.
- CalSTRS 2% at 62: Members first hired on or after January 1, 2013, to perform service that could be creditable to CalSTRS.

There are several differences between the two benefit structures, which are noted below.

### CalSTRS 2% at 60

- CalSTRS 2% at 60 members are eligible for normal retirement at age 60, with a minimum of five years of credited service. The normal retirement benefit is equal to a factor of 2.0% of final compensation multiplied by the number of years of credited service. Early retirement options are available at age 55 with five years of credited service or as early as age 50 with 30 years of credited service. The age factor for retirements after age 60 increases with each quarter year of age to a maximum of 2.4% at age 63 or older. Members who have 30 years or more of credited service receive an additional increase of 0.2% to the age factor, up to the 2.4% maximum.
- CalSTRS calculates retirement benefits based on one-year final compensation for members with 25 or more years of credited service, or for classroom teachers with fewer than 25 years of credited service if the employer entered into, extended, renewed or amended an agreement prior to January 1, 2014, to elect to pay the additional benefit cost for all of its classroom teachers. One-year final compensation is a member's highest average annual compensation earnable for 12 consecutive months based on the creditable compensation that the member could earn in a school year while employed on a full-time basis. For most members with fewer than 25 years of credited service, final compensation is the highest average annual compensation earnable for any 36 consecutive months based on the creditable compensation that the member could earn in a school year while employed on a full-time basis.
- For fiscal year 2023–24, the limit on compensation that can be counted toward a member's benefit is \$330,000, if hired on or after July 1, 1996, pursuant to Internal Revenue Code (IRC) section 401(a)(17). No contributions are paid by the member, employer or the state on compensation in excess of the limit, and any compensation beyond the limit is excluded from determining final compensation.

- Final compensation is based on salary and certain other types of remuneration. Other types of compensation, such as allowances, cash in lieu of fringe benefits and compensation for unused accumulated leave are not creditable compensation and do not count toward any CalSTRS benefit program. Contributions on compensation paid a limited number of times and compensation determined to have been paid to enhance a benefit are creditable to the DBS Program.
- Members who accumulated at least 30 years of credited service by December 31, 2010, receive a longevity bonus of \$200, \$300 or \$400 per month for 30, 31 or 32 or more years of credited service, respectively.
- Specified members retired under the DB Program, their option beneficiaries and surviving spouses receiving a benefit as of January 1, 2000, are guaranteed a minimum benefit based on the member's years of service credit. The total annual amount payable to the member with 20 years of service credit generally will not be less than \$15,000, increasing incrementally to \$20,000 with 30 or more years of service credit.

### CalSTRS 2% at 62

- CalSTRS 2% at 62 members are eligible for normal retirement at age 62, with a minimum of five years of credited service. The normal retirement benefit is equal to 2.0% of final compensation multiplied by the number of years of credited service. An early retirement option is available at age 55. The age factor for retirement after age 62 increases with each quarter year of age to 2.4% at age 65 or older.
- All CalSTRS 2% at 62 members have their final compensation based on their highest average annual compensation earnable for 36 consecutive months based on the creditable compensation that the member could earn in a school year while employed on a full-time basis.
- The limit on compensation that can be counted toward a member's benefit is adjusted each fiscal year based on changes in the Consumer Price Index for All Urban Consumers: U.S. City Average. In fiscal year 2023–24, the limit was \$176,614.
- Compensation paid in cash by an employer, pursuant to a publicly available written contractual agreement, for each pay period in which creditable service is performed is creditable to CalSTRS benefit programs for CalSTRS 2% at 62 members. Other compensation, such as allowances, cash in lieu of fringe benefits, compensation paid a limited number of times and compensation determined to have been paid to enhance a benefit, is not creditable to any CalSTRS benefit program.

## Notes to the basic financial statements

---

The following provisions apply to both CalSTRS 2% at 60 and CalSTRS 2% at 62 members:

- After earning five years of credited service, members become vested to receive service retirement benefits.
- After five years of credited service, a member (younger than age 60 if under disability Coverage A or no age limit if under disability Coverage B) is eligible for disability benefits of 50% of final compensation plus 10% of final compensation for each eligible child, up to a maximum addition of 40%. Final compensation for these disability benefits is based on the creditable compensation that the member actually earned. The member must have a disability that can be expected to last continuously for at least 12 months to qualify for a benefit.
- Contributions on compensation for service in excess of one year due to overtime or working additional assignments are credited to the DBS Program at the lowest annualized pay rates up to the creditable compensation limit.
- A family benefit is available if an active member dies and has at least one year of credited service.
- Members' accumulated contributions are refundable with interest upon separation from CalSTRS. The board determines the credited interest rate for each fiscal year. For the fiscal year ended June 30, 2024, the rate of interest credited to members' accounts was 3.49%.
- There is a postretirement annual benefit increase of 2% per year on a simple (rather than compound) basis. This benefit is vested for members who retired in 2014 or pay the higher contribution rates resulting from the CalSTRS Funding Plan, which was enacted in June 2014 with the passage of California Assembly Bill 1469.
- The member's benefit is reduced dollar for dollar, regardless of age, for the first 180 calendar days after retirement if the member performs activities in the public schools that could be creditable to CalSTRS, unless the governing body of the school district takes certain actions specified in Education Code section 24214.5 with respect to a member who is above normal retirement age.
- There is an annual limitation on earnings from activities that could be creditable to CalSTRS for retired members. The member's benefit is reduced dollar for dollar by the amount of any earnings in excess of \$50,655 in fiscal year 2023–24.
- Any benefit enhancements to the DB Program made on or after January 1, 2013, apply only to service performed on or after the effective date of the enhancement.

- A CalSTRS member who is convicted of committing a felony in the course of their official duties, including specifically, a felony involving a child with whom the member had contact as part of the member's official duties, forfeits their right to any benefits accrued commencing with the commission of the felony.

### Purchasing power protection

Purchasing power protection payments are provided to retired and disabled members of the DB Program and their beneficiaries through annual distributions (in quarterly payments) to restore purchasing power up to 85% of the initial monthly benefit. These payments are funded by revenue generated from school lands with the remaining balance covered by the SBMA.

School lands revenue is generated from land granted to California by the federal government to support schools and lieu lands, which are properties purchased with the proceeds from the sale of school lands. California Public Resources Code section 6217.5 allocates school lands revenue to the system for purchasing power protection. The SBMA is funded through a continuous appropriation from the state's General Fund in an amount equal to 2.5% of the total creditable compensation of the fiscal year ended in the immediately preceding calendar year, reduced by \$72.0 million, pursuant to Education Code section 22954.

Purchasing power protection payments are established as vested benefits to the extent that funds are available pursuant to a contractually enforceable promise of the state to make the contributions from the General Fund at the current levels.

For the fiscal year ended June 30, 2024, the amount of school lands revenues credited toward purchasing power protection was \$7.0 million, while the amount contributed to the SBMA from the General Fund was \$854.1 million. In fiscal year 2023–24, 108,128 members received supplemental benefit payments.

### Benefit enhancements

A school employer may provide, at the employer's cost, an additional two years of service credit to increase the amount of the member's monthly retirement benefit. This may be paid for by the employer in installments not to exceed eight years. If the employer chooses to pay in installments, the employer is charged interest on the unpaid balance at the actuarially assumed rate of return on investments for the DB Program (currently 7.00%). As of June 30, 2024, the outstanding balance of receivables for benefit enhancements was \$8.7 million.

# Notes to the basic financial statements

## Contributions

The parameters for member, employer and state contribution rates are set by the California Legislature and the Governor and detailed in the Teachers' Retirement Law. Current contribution rates were established by California Assembly Bill 1469 (CalSTRS Funding Plan), which was passed into law in June 2014 and established a schedule of contribution rate increases shared among members, employers and the state to bring CalSTRS toward full funding by 2046.

## Members

The member contribution rate for CalSTRS 2% at 60 members is set in statute at 10.25%, while CalSTRS 2% at 62 members are required to pay at least one-half of the normal cost of their DB Program benefit (rounded to the nearest quarter of 1%).

For fiscal year 2023-24, CalSTRS 2% at 62 members paid 9% toward the normal cost and an additional 1.205% as per the CalSTRS Funding Plan for a total member contribution rate of 10.205%. The contribution rate for CalSTRS 2% at 62 members is adjusted if the normal cost increases or decreases by more than 1% since the last time the member contribution rate was set. Based on the June 30, 2023, funding actuarial valuation adopted by the board in May 2024, the increase in normal cost was less than 1%. Therefore, the contribution rate for CalSTRS 2% at 62 members will not change effective July 1, 2024.

Member contribution rates as described above and effective for fiscal years 2023-24 and 2024-25 are summarized below:

| Effective date | CalSTRS<br>2% at 60 members | CalSTRS<br>2% at 62 members |
|----------------|-----------------------------|-----------------------------|
| July 1, 2023   | 10.250%                     | 10.205%                     |
| July 1, 2024   | 10.250%                     | 10.205%                     |

## Employers

Employers are required to contribute a base contribution rate set in statute at 8.25%. Pursuant to the CalSTRS Funding Plan, employers also have a supplemental contribution rate to eliminate their share of the CalSTRS unfunded actuarial obligation by 2046. The CalSTRS Funding Plan authorizes the board to adjust the employer supplemental contribution rate up or down by a maximum of 1% for a total rate of no higher than 20.25% and no lower than 8.25%. In May 2024, the board voted to keep the employer supplemental contribution rate at 10.85% for fiscal year 2024-25 for a total employer contribution rate of 19.10%.

Employer contribution rates as described above and effective for fiscal year 2023-24 and beyond are summarized below:

| Effective date               | Base rate | Supplemental rate per<br>CalSTRS Funding Plan              | Total rate   |
|------------------------------|-----------|--|--------------|
| July 1, 2023                 | 8.250%    | 10.850%  | 19.100%      |
| July 1, 2024                 | 8.250%    | 10.850%  | 19.100%      |
| July 1, 2025 - June 30, 2046 | 8.250%    | <sup>1</sup>   | <sup>1</sup> |
| July 1, 2046                 | 8.250%    | Increase from AB 1469 not applicable in 2046-47 and beyond |              |

<sup>1</sup> The CalSTRS Funding Plan authorizes the board to adjust the employer contribution rate up or down by up to 1% each year, but no higher than 20.25% and no lower than 8.25%.

# Notes to the basic financial statements

## State

The state is required to contribute a base contribution rate set in statute at 2.017%. Pursuant to the CalSTRS Funding Plan, the state also has a supplemental contribution rate, which the board can increase by no more than 0.5% each fiscal year to help eliminate the state's share of the CalSTRS unfunded actuarial obligation by 2046. In May 2024, the board voted to keep the state supplemental contribution rate at 6.311% for fiscal year 2024–25.

The total state contribution rate also includes a portion to fund the SBMA, which provides inflation protection to CalSTRS members whose current purchasing power has fallen below 85% of the purchasing power of their initial benefit. The SBMA is funded through a continuous appropriation from the state's General Fund in an amount equal to 2.5% of the total creditable compensation of the fiscal year ended in the immediately preceding calendar year, reduced by \$72.0 million, pursuant to Education Code section 22954. The total state contribution rate is 10.828% effective July 1, 2024.

State contribution rates as described above and effective for fiscal year 2023–24 and beyond are summarized below:

| Effective date               | Base rate | Supplemental rate per CalSTRS Funding Plan | SBMA funding | Total   |
|------------------------------|-----------|--|--------------|---------|
| July 1, 2023                 | 2.017%    | 6.311%                                     | 2.500%       | 10.828% |
| July 1, 2024                 | 2.017%    | 6.311%                                     | 2.500%       | 10.828% |
| July 1, 2025 – June 30, 2046 | 2.017%    | 1  | 2.500%       | 1       |
| July 1, 2046                 | 2.017%    | 2  | 2.500%       | 2       |

<sup>1</sup> The board has limited authority to adjust the state contribution rate annually through June 2046 to eliminate the remaining unfunded actuarial obligation. The board cannot increase the supplemental rate by more than 0.5% in a fiscal year, and if there is no unfunded actuarial obligation, the supplemental contribution rate would be reduced to 0%.

<sup>2</sup> From July 1, 2046, and thereafter, the board has limited authority to adjust the state contribution rate to fund the normal cost deficit or the unfunded obligation. The board cannot adjust the supplemental rate by more than 0.25% per year, and the supplemental rate may not exceed 1.505% in total. If there is neither an unfunded obligation nor a normal cost deficit, the supplemental contribution rate would be reduced to 0%.

## STRP Defined Benefit Supplement Program

The DBS Program, established pursuant to Education Code section 25000, is a cash balance defined benefit pension program that operates within the STRP. All members of the DB Program have an account under the DBS Program and are eligible to receive a DBS benefit based on the amount of funds contributed, interest credited and additional earnings credits awarded to their DBS account.

Interest is credited to the nominal DBS Program accounts at the minimum guaranteed annual rate established by the board prior to each plan year, which was 3.49% for the fiscal year ended June 30, 2024. The board may credit additional earnings to members' nominal accounts if actual investment earnings exceed the minimum guaranteed annual rate and meet criteria set out in the board policy.

In May 2024, the board elected to award an additional earnings credit (AEC) of 5.81% of DBS members' June 30, 2023, nominal account balances. The total value of the AEC awarded was approximately \$688.1 million.

## Contributions

For creditable service performed by DB Program members in excess of one year of service credit within one fiscal year, member contributions of either 8% (CalSTRS 2% at 60 members) or 9% (CalSTRS 2% at 62 members) and employer contributions of 8% are credited to the members' nominal DBS Program accounts (up to any applicable compensation cap). For CalSTRS 2% at 60 members only, member contributions of 8% and employer contributions of 8% for compensation as a result of limited-term payments or compensation determined to have been paid to enhance their DB Program benefits are also credited to DBS Program accounts.

# Notes to the basic financial statements

---

## **STRP Cash Balance Benefit Program**

The CBB Program, established and subsequently merged into the STRP pursuant to Education Code section 26000, is a cash balance defined benefit pension program. The CBB Program is designed for employees of California's public schools who are hired to perform creditable service for less than 50% of the full-time equivalent for a position in a school district or county office of education or on a part-time or temporary basis in a community college district.

Participation in the CBB Program is optional; a school district, community college district, county office of education, charter school or regional occupational program may elect to offer the CBB Program. Under such election, the program will automatically cover each eligible employee, unless the employee elects to participate in the DB Program or an alternative plan provided by the employer within 60 days of hire or the election period determined by the employer. As of June 30, 2024, there were 29 employers reporting payroll data through 28 reporting entities for 42,793 contributing participants.

Interest is credited to nominal CBB Program accounts at the minimum guaranteed annual rate established by the board prior to each plan year, which was 3.35% for the fiscal year ended June 30, 2024. The board may credit additional earnings to members' nominal accounts if actual investment earnings exceed the minimum guaranteed annual rate and meet criteria pursuant to the board policy. In May 2024, the board elected to award an AEC of 4.91% of CBB members' June 30, 2023, nominal account balances. The total value of the AEC awarded was approximately \$19.1 million.

### Contributions

A summary of statutory minimum contribution rates for the CBB Program is as follows:

Participants – 4.0% of applicable participant salaries

Employers – 4.0% of applicable participant salaries

Employers may enter into a collective bargaining agreement to pay different rates if certain minimum conditions are met.

## **STRP Replacement Benefits Program**

The RB Program is an excess benefits arrangement for DB Program members that is administered as a qualified excess benefit arrangement through a separate pension program apart from the other three STRP programs. It was created pursuant to Education Code section 24260 and is established in accordance with IRC section 415(m). 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 limit for individual CalSTRS 2% at 60 members varies based on the

age at which they retire. For calendar year 2024, the federal dollar limit applicable to a CalSTRS member retiring at exactly age 65 and receiving only a single-life benefit from the DB Program is \$234,201. The federal dollar limit for other ages at retirement and other benefit types will differ.

Employer contributions that would otherwise be credited to the DB Program each month are instead credited to the RB Program to fund monthly program costs. Monthly employer contributions are received and paid to members in amounts equivalent to the benefits not paid as a result of IRC section 415(b), subject to withholding for any applicable income or employment taxes. As of June 30, 2024, there were 178 retirees, beneficiaries and nonmember spouses receiving benefits from the RB Program.

## **CalSTRS Pension2 Personal Wealth Plan**

The CalSTRS Pension2 Personal Wealth Plan (Pension2) includes two tax-deferred defined contribution plans pursuant to IRC sections 403(b) and 457(b), which were established by Education Code sections 24950 and 24975, respectively. Voya Institutional Plan Services (Voya) and the Teachers Insurance and Annuity Association (TIAA) are responsible for administrative services, including custody and record-keeping, while CalSTRS determines the investment options that are offered to plan participants.

The 403(b) plan and the 457(b) plan had 30,686 and 2,502 plan participants and 1,127 and 197 participating employers, respectively, with account balances as of June 30, 2024. Pension2 is only available to all full-time California prekindergarten through community college district and county office of education employees. Part-time employees' eligibility is determined by their employers. Enrollment in the 457(b) plan is by employer adoption only.

Employee contributions to the plans are voluntary and require no minimum limitations; however, the IRC imposes an annual maximum amount that can be contributed to the plans. Pension2 is not directly affected by the California Public Employees' Pension Reform Act of 2013 (PEPRA). However, according to PEPRA, employers may provide a contribution to a defined contribution plan, such as Pension2, for CalSTRS 2% at 62 member compensation in excess of the compensation limit.

Pension2 investments are composed of a selection of mutual funds with underlying investments that include stocks, bonds, real estate investments and guaranteed annuity contracts, which are participant directed. The Pension2 benefits are the accumulation of contributions and investment earnings credited to the members' accounts.



# Notes to the basic financial statements

---

## Medicare Premium Payment Program

The MPP Program is a cost-sharing multiple-employer other postemployment benefit (OPEB) plan administered by CalSTRS through the Teachers' Health Benefits Fund, which was established pursuant to Education Code section 25930. The MPP Program pays Medicare Part A premiums and Medicare Parts A and B late enrollment surcharges for eligible members of the DB Program who were retired or began receiving a disability allowance prior to July 1, 2012, and were not eligible for premium-free Medicare Part A. Members who enrolled in Medicare after July 1, 2012, are not eligible for CalSTRS' payment of late enrollment surcharges. Also, members who retire on or after July 1, 2012, are not eligible for coverage under the MPP Program.

As of June 30, 2024, 4,121 retirees participated in the MPP Program; however, the number of retired members who will participate in the program in the future is unknown as eligibility cannot be predetermined.

The MPP Program is funded on a pay-as-you-go basis from a portion of monthly employer contributions. In accordance with Education Code section 22950, contributions that would otherwise be credited to the DB Program each month are instead credited to the MPP Program to fund monthly program and administrative costs. Total redirections to the MPP Program are monitored to ensure that total incurred costs do not exceed the amount initially identified as the cost of the program.

## Teachers' Deferred Compensation Fund

The TDCF was established pursuant to Education Code section 24976 and is used to account for ancillary activities associated with deferred compensation plans and programs offered by CalSTRS to enhance the tax-deferred financial options for the members and their beneficiaries.

The TDCF is funded by the fee revenues received by CalSTRS from deferred compensation plans and a vendor registration program.

## 2. Summary of significant accounting policies

### Basis of accounting

CalSTRS maintains accounting records using the accrual basis of accounting. We recognize member, employer and state contributions in the period in which the contributions are due pursuant to legal requirements. Also, CalSTRS recognizes benefits when due and payable in accordance with our retirement and benefits plans and programs.

Purchases and sales of investments are recorded on the trade date. Interest income is recorded when earned. Dividends are recorded on the ex-dividend date.

### Use of estimates in the preparation of financial statements

CalSTRS' financial statements are prepared in conformity with accounting principles generally accepted in the U.S. as promulgated by the Governmental Accounting Standards Board (GASB). Management makes estimates and assumptions that affect certain amounts and disclosures in the accompanying financial statements, the most significant of which include estimates related to contribution revenues, total pension liability, total OPEB liability and the fair value of certain alternative investments.

### New accounting standards

CalSTRS reviews the requirements of all new GASB pronouncements and their impact on our financial statements. For the fiscal year ended June 30, 2024, there was no material impact to CalSTRS' financial statements resulting from the implementation of GASB standards.

### Cash

Cash held by CalSTRS includes foreign currency, deposits with the California State Treasurer's Office (STO) and global custodian (State Street Bank), and cash held at commercial banks for operational purposes. CalSTRS maintains a targeted balance within the Pooled Money Investment Account (PMIA) held with the STO to meet daily obligations. Cash balances in excess of needs are swept nightly into PMIA and invested in short-term assets by the STO. In addition to the PMIA account, CalSTRS also operates checking accounts and zero balance accounts with various banking institutions authorized to provide services to state agencies. While zero balance accounts do not require collateralization, other non-zero balance accounts have a collateralization requirement set forth by the California Government Code section 16521 and are monitored by the STO.

### Investments

Under the California Constitution, the board has the sole and exclusive fiduciary responsibility over the assets of the system. The constitution also requires the diversification of investments to minimize the risk of loss and maximize the rate of return, unless, under the circumstances, it is clearly not prudent to do so.

## Notes to the basic financial statements

---

As an administrator of public pension funds, CalSTRS is not subject to the Employee Retirement Income Security Act (ERISA), which governs corporate pension plans. However, our investment decision-making criteria are based on the “prudent investor” standard, for which the ERISA standards serve as a basis.

To manage growth of assets in a prudent manner, the CalSTRS Investment Policy Statement (IPS) provides a framework for the operation of the investment portfolio and may be amended by a majority vote of the board. It allows for investments consisting of debt and equity securities, alternative investments and derivative instruments. See Note 5 for disclosures on deposits and investments.

In the statement of changes in fiduciary net position, we present the net appreciation (depreciation) in the fair value of our investments, which consists of the realized gains and losses on securities sold and the unrealized appreciation (depreciation) on those investments still held in the portfolio.

The value and performance of CalSTRS’ investments are subject to various risks, including credit risk, interest rate risk, concentration of credit risk, custodial credit risk and foreign currency risk, which are in turn affected by economic and market factors affecting certain industries, sectors or geographies. See Note 5 for disclosures related to these risks.

Most investments are reported at fair value. The diversity of the investment types held by CalSTRS requires a wide range of valuation techniques to determine fair value. See Note 6 for disclosures related to fair value.

Expenses directly associated with investment management, operations and servicing, as well as foreign taxes, have been included as other investment expenses in the statement of changes in fiduciary net position. The schedule of investment expenses in the other supplementary information section of this report provides a listing of investment expenses by type. Certain costs such as carried interest, private asset manager fees and broker commissions for securities trades are included in the cost basis of the investment, with the exception of broker commissions for certain equity securities and derivative instruments for which they are expensed.

### Investment risk management

To protect the value of non-U.S. investments against foreign currency fluctuation, CalSTRS enters into currency forwards and option contracts. CalSTRS could be exposed to risk if the counterparties to the forward and option contracts are unable to meet the terms of their contracts. CalSTRS also enters into futures contracts, swaps and options to reduce portfolio risks and volatility. CalSTRS seeks to minimize risk from counterparties by establishing minimum credit quality standards and through the use of master trading agreements, which require a daily exchange of collateral that is marked to market as required to help offset counterparty risk. See Note 5 for disclosures related to these risks.

### Capital assets

Capital assets held by CalSTRS (which consist of land, building, equipment and intangible assets) are recorded at cost and reflected on the statement of fiduciary net position, net of accumulated depreciation/amortization. The capitalization threshold is \$1.0 million. Depreciation/amortization is charged to operations using the straight-line method on the estimated useful life of the related asset and is included in administrative expenses on the statement of changes in fiduciary net position. Generally, estimated useful lives range from a minimum of more than one year to 40 years. As of June 30, 2024, accumulated depreciation/amortization was \$123.1 million and depreciation/amortization expense was \$8.1 million for the fiscal year ended June 30, 2024.

CalSTRS reviews our capital assets for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. As of June 30, 2024, there has been no impairment of capital assets.

Interest cost incurred before the end of the construction period of an asset is recognized as an expense in the period in which the cost is incurred.

### Bonds payable

Bonds payable are carried at their outstanding principal balances plus unamortized bond premiums. The bond premium received in the issuance of the bonds is amortized as a reduction to interest expense over the term of the bonds using the straight-line method.

# Notes to the basic financial statements

---

## Administrative expenses

The cost of administering CalSTRS is financed through contributions and investment earnings. The schedule of administrative expenses in the other supplementary information section of this report provides a listing of administrative expenses by type.

## Income taxes

The STRP and MPP Program are organized as tax-exempt retirement plans under the IRC. Pension2, which includes IRC 403(b) and 457(b) plans, and the TDCF are organized as tax-deferred supplemental programs under the IRC. CalSTRS management believes that it has operated these funds and programs within the constraints imposed by federal tax law.

## Securities sold short

Securities sold short represent obligations to deliver borrowed securities to the lenders of equity securities. These obligations are valued at the last quoted price or official closing prices taken from the primary markets and exchanges in which each security trades. The gains and losses from the changes in fair valuation are reported within net appreciation (depreciation) on the statement of changes in fiduciary net position.

## Securities lending transactions

CalSTRS reports securities lent, reinvested cash collateral and the related liabilities resulting from securities lending transactions on the statement of fiduciary net position. CalSTRS also reports the income earned and costs of lending securities as investment income and expenses on the statement of changes in fiduciary net position.

## Reverse repurchase agreement transactions

CalSTRS reports the liabilities resulting from the reverse repurchase agreements as obligations under reverse repurchase agreements, and the underlying securities used as collateral are reported as investments on the statement of fiduciary net position. Any interest cost associated with the reverse repurchase agreements is reported as investment expenses on the statement of changes in fiduciary net position.

## Reserves

CalSTRS maintains reserve accounts for various operating purposes within net position restricted for pensions/OPEB. These include four reserve accounts for the DBS Program, four reserve accounts for the CBB Program, one reserve account for the SBMA and a combination of other reserve accounts not legally required for disclosure.

### Defined Benefit Supplement Contribution, Accumulated Interest and Annuitant Reserves

Section 25002 of the Education Code formed the DBS Annuitant Reserve to establish and maintain a segregated account for expenditures on annuities payable under the DBS Program. The DBS Program is a cash balance defined benefit pension program that provides a supplemental benefit in addition to the regular DB Program benefit. During a member's career, credits and interest accumulate in the DBS Program's Contribution and Accumulated Interest reserves, respectively. When a member retires, the reserve funds are either paid out as a lump sum or transferred to the DBS Annuitant Reserve if the participant elects to receive their benefit as an annuity.

### Defined Benefit Supplement Gain and Loss Reserve

Section 25001 of the Education Code establishes the DBS Gain and Loss Reserve, which represents a segregated account that may be used to: 1) credit interest to member DBS accounts at the minimum interest rate for plan years in which the obligation cannot be met from the plan's investment earnings, 2) make additional earnings credits to DBS accounts upon a decision by the board to allocate excess investment earnings, or 3) provide additions to the DBS Annuitant Reserve for annuities payable under the DBS Program.

## Notes to the basic financial statements

### Cash Balance Benefit Active Contribution, Accumulated Interest and Annuitant Reserves

Section 26204 of the Education Code establishes the CBB Annuitant Reserve for the payment of monthly annuities with respect to the CBB Program. The CBB Program is an optional cash balance pension plan for part-time certificated educators available to CalSTRS employers as an alternative to the DB Program, Social Security and other retirement plans. During a participant's career, credits and interest accumulate in the Cash Balance Benefit Active Contribution and Accumulated Interest reserves. When a participant retires, the reserve funds are either paid out as a lump sum or transferred to the Cash Balance Benefit Annuitant Reserve if the participant elects to receive their benefit as an annuity.

### Cash Balance Benefit Gain and Loss Reserve

Section 26202 of the Education Code establishes the CBB Gain and Loss Reserve, which may be used to: 1) credit interest to participants' accounts at the minimum interest rate during years in which CalSTRS' investment earnings with respect to the CBB Program are not sufficient for that purpose, 2) make additional earnings credits to participants' accounts upon a decision by the board to allocate excess investment earnings, or 3) provide additions to the CBB Annuitant Reserve for monthly annuity payments.

### Supplemental Benefit Maintenance Account Reserve

Section 22400 of the Education Code establishes the SBMA to separately maintain and manage annual supplemental payments disbursed in quarterly installments to all benefit recipients whose purchasing power has fallen below 85% of the purchasing power of the initial benefit, as long as funds are available. The SBMA is primarily funded by contributions from the state and the interest earned on the SBMA reserve balance credited at the actuarially assumed interest rate.

### Other reserves not legally required for disclosure

These represent accumulated changes in operations reflecting contributions earned, benefit payments made, investment returns and the costs of plan administration for the DB Program (excluding SBMA), Pension2, MPP Program and TDCF.

The reserve balances as of June 30, 2024, are summarized in the table below:

| <b>Reserve type</b>                                     | <b>Reserve balance</b> |
|---|------------------------|
|   | (dollars in thousands) |
| Defined Benefit Supplement Contribution Reserve         | \$9,814,161            |
| Defined Benefit Supplement Accumulated Interest Reserve | 3,087,336              |
| Defined Benefit Supplement Annuitant Reserve            | 622,243                |
| Defined Benefit Supplement Gain and (Loss) Reserve      | 5,802,229              |
| Cash Balance Benefit Active Contribution Reserve        | 338,068                |
| Cash Balance Benefit Accumulated Interest Reserve       | 96,717                 |
| Cash Balance Benefit Annuitant Reserve                  | 8,219                  |
| Cash Balance Benefit Gain and (Loss) Reserve            | 81,802                 |
| Supplemental Benefit Maintenance Account Reserve        | 26,934,945             |
| Other reserves not legally required for disclosure      | 296,739,890            |
| <b>TOTAL</b>  | <b>\$343,525,610</b>   |

# Notes to the basic financial statements

## 3. Net pension liability of employers and nonemployer contributing entity

The components of the net pension liability (NPL) of the STRP for participating employers and the state (nonemployer contributing entity) as of June 30, 2024, are as follows:

### Components of the NPL – STRP

(dollars in millions)

|   |                 |
|---|-----------------|
| Total pension liability   | \$408,181       |
| Less: STRP fiduciary net position                                 | 341,018         |
| <b>NPL of employers and the State of California</b>               | <b>\$67,163</b> |
| STRP fiduciary net position as a % of the total pension liability | 83.5%           |

### Actuarial methods and assumptions

The total pension liability for the STRP was determined by applying update procedures to the financial reporting actuarial valuation as of June 30, 2023, and rolling forward the total pension liability to June 30, 2024. Significant actuarial methods and assumptions used in the financial reporting actuarial valuation to determine the total pension liability as of June 30, 2024, include:

|  |   |
|--|---|
| Valuation date                         | June 30, 2023   |
| Experience study <sup>1</sup>          | July 1, 2007–June 30, 2022  |
| Actuarial cost method                  | Entry age actuarial cost method   |
| Investment rate of return <sup>2</sup> | 7.10%   |
| Consumer price inflation               | 2.75%   |
| Wage growth                            | 3.50%   |
| Payroll growth                         | 3.25%   |
| Postretirement benefit increases       | 2% simple for DB (annually)<br>Maintain 85% purchasing power level for DB, not applicable for DBS/CBB |

<sup>1</sup> Both a five-year period (July 1, 2017 – June 30, 2022) and 15-year period were considered in the 2024 experience study; however, assumptions were primarily based on the results of the 15-year study. Additional information is available in the 2024 experience analysis report available at CalSTRS.com.

<sup>2</sup> Net of investment expenses but gross of administrative expenses.

The sections that follow provide additional discussion on key assumptions and methods for the valuation of the STRP.

### Discount rate

The discount rate used to measure the total pension liability was 7.10%, which was unchanged from the prior fiscal year. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and employers are made at statutory contribution rates in accordance with the rate increases as disclosed in Note 1. Projected inflows from investment earnings were calculated using the long-term assumed investment rate of return of 7.10% and assume that contributions, benefit payments and administrative expenses occur midyear.

Based on those assumptions, the STRP's fiduciary net position was projected to be available to make all projected future benefit payments to current plan members. Therefore, the long-term assumed investment rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

The long-term investment rate of return assumption was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class/strategy. Expected real rates of return are net of our 2.75% inflation assumption and are derived from best-estimate ranges of 20- to 30-year geometrically linked expected returns. These best-estimate ranges were developed using capital market assumptions from CalSTRS investment staff and investment consultants as inputs to the process.

The actuarial investment rate of return assumption was adopted by the board in January 2024 in conjunction with the most recent experience study. For each current and future valuation, CalSTRS' independent consulting actuary (Milliman) reviews the return assumption for reasonableness based on the most current capital market assumptions. The assumed asset allocation and best estimates of the expected rates of return for each major asset class/strategy as of June 30, 2024, are summarized in the following table:

| Asset class/<br>Strategy      | Assumed<br>asset<br>allocation | Long-term<br>expected rate<br>of return <sup>1</sup> | Long-term<br>expected real<br>rate of return <sup>1,2</sup> |
|-------------------------------|--------------------------------|--|---|
| Public Equity                 | 38.0%                          | 8.00%  | 5.25%   |
| Real Estate                   | 15.0%                          | 6.80%  | 4.05%   |
| Private Equity                | 14.0%                          | 9.50%  | 6.75%   |
| Fixed Income                  | 14.0%                          | 5.20%  | 2.45%   |
| Risk Mitigating<br>Strategies | 10.0%                          | 5.00%  | 2.25%   |
| Inflation<br>Sensitive        | 7.0%                           | 6.40%  | 3.65%   |
| Cash/Liquidity                | 2.0%                           | 2.80%  | 0.05%   |

<sup>1</sup> 20- to 30-year geometric average.

<sup>2</sup> Real rates of return are net of assumed 2.75% inflation.

# Notes to the basic financial statements

## Sensitivity of NPL to changes in the discount rate

Presented below is the NPL of employers and the state using the current discount rate as well as what the NPL would be if it were calculated using a discount rate that is 1% to 3% lower or 1% to 3% higher than the current rate:

| Discount rate        | NPL of employers and nonemployer contributing entity<br>(dollars in millions) |
|----------------------|---|
| 3% decrease (4.10%)  | \$259,269   |
| 2% decrease (5.10%)  | 182,619   |
| 1% decrease (6.10%)  | 119,461   |
| Current rate (7.10%) | 67,163  |
| 1% increase (8.10%)  | 23,492  |
| 2% increase (9.10%)  | (13,265)  |
| 3% increase (10.10%) | (44,324)  |

## Mortality

CalSTRS uses a generational mortality assumption, which is based off generational mortality tables that reflect expected future improvements in mortality and includes a base table and a projection table. The base mortality tables are CalSTRS custom tables derived to best fit the patterns of mortality amongst our members. The projection table reflects the expected annual reduction in mortality rates at each age. The current mortality assumption uses a base year of 2023 and projected improvement is based on the MP-2021 Ultimate Projection Scale.

## 4. Net other postemployment benefit (OPEB) liability of employers

The components of the net OPEB liability of the MPP Program for participating employers as of June 30, 2024, are as follows:

| Components of the net OPEB liability – MPP Program<br>(dollars in thousands) |                  |
|--|------------------|
| Total OPEB liability   | \$263,860        |
| Less: MPP Program fiduciary net position                                     | (2,688)          |
| <b>Net OPEB liability of employers</b>                                       | <b>\$266,548</b> |
| MPP Program fiduciary net position as a % of the total OPEB liability        | (1.02%)          |

## Actuarial methods and assumptions

The total OPEB liability for the MPP Program as of June 30, 2024, was determined by applying update procedures to the financial reporting actuarial valuation as of June 30, 2023, and rolling forward the total OPEB liability to June 30, 2024. Significant actuarial methods and assumptions used in the financial reporting actuarial valuation to determine the total OPEB liability as of June 30, 2024, include:

|   |                                    |
|---|------------------------------------|
| Valuation date  | June 30, 2023                      |
| Experience study <sup>1</sup>                         | July 1, 2007–<br>June 30, 2022     |
| Actuarial cost method                                 | Entry age actuarial<br>cost method |
| Investment rate of return                             | 3.93%                              |
| Medicare Part A premium costs trend rate <sup>2</sup> | 5.0%                               |
| Medicare Part B premium costs trend rate <sup>2</sup> | 6.5%                               |

<sup>1</sup> The MPP Program uses some of the same assumptions as used for the STRP, and includes some additional assumptions that are specific to the MPP Program. As such, the experience study dates reflect the range used in Note 3 for the STRP; however, experience from June 30, 2014, through June 30, 2022, was also evaluated for assumptions specific to the MPP Program.

<sup>2</sup> The assumed increases in the Medicare Part A and Part B cost trend rates vary by year; however, the increases are approximately equivalent to a 5.0% and 6.5% increase each year for Medicare Part A and Part B premiums, respectively.

The sections that follow provide additional discussion on specific assumptions and methods for the valuation of the MPP Program.

## Discount rate

The MPP Program is funded on a pay-as-you-go basis with contributions generally being made at the same time and in the same amount as benefit payments and expenses coming due. Any funds within the MPP Program as of June 30, 2024, were to manage differences between estimated and actual amounts to be paid and were invested in the Surplus Money Investment Fund (SMIF), which is a pooled investment program administered by the California State Treasurer.

As the MPP Program is funded on a pay-as-you-go basis, the OPEB plan's fiduciary net position was not projected to be sufficient to make projected future benefit payments. Therefore, the MPP Program used the Bond Buyer's 20-Bond GO Index from Bondbuyer.com as of June 30, 2024, as the discount rate, which was applied to all periods of projected benefit payments to measure the total OPEB liability. The discount rate as of June 30, 2024, was 3.93%, which is an increase of 0.28% from 3.65% as of June 30, 2023.

# Notes to the basic financial statements

## Sensitivity of the net OPEB liability to changes in the discount rate

Presented below is the net OPEB liability of employers using the current discount rate as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

| Discount rate                 | Net OPEB liability<br>of employers |
|-------------------------------|------------------------------------|
|                               | (dollars in thousands)             |
| 1% decrease (2.93%)           | \$287,599                          |
| Current discount rate (3.93%) | 266,548                            |
| 1% increase (4.93%)           | 248,038                            |

## Future enrollment

Assumptions were made about future participation (enrollment) into the MPP Program as CalSTRS is unable to determine which members not currently participating meet all eligibility criteria for enrollment in the future. Assumed enrollment rates were derived based on past experience and are stratified by age with the probability of enrollment diminishing as the members' ages increase. This estimated enrollment rate was then applied to the population of members who may meet criteria necessary for eligibility but are not currently enrolled in the MPP Program. Based on this, the estimated number of future enrollments used in the financial reporting valuation was 154 or an average of 0.12% of the potentially eligible population of 132,333.

## Mortality

CalSTRS uses a generational mortality assumption, which is based off generational mortality tables that reflect expected future improvements in mortality and includes a base table and projection table. The base mortality tables are CalSTRS custom tables derived to best fit the patterns of mortality among our members. The projection table reflects the expected annual reduction in mortality rates at each age. The current mortality assumption uses a base year of 2023, and projected improvement is based on the MP-2021 Ultimate Projection Scale.

## Medicare costs trend rate

The June 30, 2023, financial reporting actuarial valuation uses the 2024 Medicare Part A and Part B premiums as the basis for future premium calculations. Future premiums are assumed to increase with a medical trend rate that varies by year, as shown in the following table:

| Trend assumption<br>Years <sup>1</sup> | Assumed annual increase |        |
|--|-------------------------|--------|
|  | Part A                  | Part B |
| 2023-2032                              | 5.4%                    | 6.6%   |
| 2033-2042                              | 4.9%                    | 5.6%   |
| 2043-2052                              | 4.3%                    | 4.5%   |
| 2053 and later                         | 4.1%                    | 4.3%   |

<sup>1</sup> Trend rates indicate medical inflation in the specific year and, therefore, affect the premiums for the following years. For example, the projected 2024-25 premium is the 2023-24 premium increased by the assumed 2023-24 trend rate.

The Part A trend is approximately equivalent to assuming a fixed 5.0% increase each year. The Part B trend is approximately equivalent to assuming a fixed 6.5% increase each year.

Presented below is the net OPEB liability of employers using the current Medicare costs trend rates, as well as what the net OPEB liability would be if it were calculated using Medicare costs trend rates that are 1% lower and 1% higher than the current rate:

| Medicare costs trend rate                   | Net OPEB liability<br>of employers<br>(dollars in thousands) |
|---|--|
| 1% decrease (4.0% Part A and 5.5% Part B)   | \$246,928  |
| Current rates (5.0% Part A and 6.5% Part B) | 266,548  |
| 1% increase (6.0% Part A and 7.5% Part B)   | 288,453  |

# Notes to the basic financial statements

---

## Use of assumptions and methods

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts (such as Medicare premiums) and assumptions about the probability of the occurrence of events far into the future (such as mortality, disabilities and retirees eligible for the program). Actuarially determined amounts are subject to continual review and potential modifications, as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan and include the types of benefits provided at the time of each valuation and the historical pattern of benefit costs. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations.

Actuarial calculations reflect a long-term perspective and take into account the premiums and surcharges paid after termination of employment until the death of the employee. In many cases, actuarial calculations reflect several decades of payments after termination of employment.

## 5. Deposits and investments

### Money-weighted rate of return

For the fiscal year ended June 30, 2024, the money-weighted rate of return on STRP investments, net of pension plan investment expenses, was 8.3%. Although the MPP Program is funded on a pay-as-you-go basis, funds held within the program are used to manage differences between estimated and actual amounts and were invested in the Surplus Money Investment Fund. The money-weighted rate of return on MPP Program investments, net of OPEB plan investment expenses, was 4.3%. The money-weighted rate of return expresses investment performance, taking into account the impact of cash infusion into and disbursements from the pension or OPEB plan.

### Schedule of investments

CalSTRS is authorized to invest and reinvest the monies of the system to meet the objectives of the IPS as established by the board.

The table on the following page represents the investments by type as presented in the statement of fiduciary net position, including detailed investments within debt securities, equity securities, alternative investments and derivative instruments.



# Notes to the basic financial statements

## Schedule of investments

As of June 30, 2024

(dollars in thousands)

|  | State<br>Teachers'<br>Retirement<br>Plan | Pension2<br>403(b) Plan | Pension2<br>457(b) Plan | Medicare<br>Premium<br>Payment<br>Program | Teachers'<br>Deferred<br>Compensation | Total                |
|--|--|-------------------------|-------------------------|---|---------------------------------------|----------------------|
| <b>Assets</b>                          |  |                         |                         |   |                                       |                      |
| <b>Debt securities</b>                 |  |                         |                         |   |                                       |                      |
| Asset-backed securities                | \$847,171                                | \$—                     | \$—                     | \$—                                       | \$—                                   | \$847,171            |
| Corporate bonds                        | 11,740,175                               | —                       | —                       | —   | —                                     | 11,740,175           |
| Foreign government issues              | 803,166                                  | —                       | —                       | —   | —                                     | 803,166              |
| Mortgage-backed securities             | 10,593,233                               | —                       | —                       | —   | —                                     | 10,593,233           |
| Municipal securities                   | 85,655                                   | —                       | —                       | —   | —                                     | 85,655               |
| U.S. government and agency obligations | 27,178,957                               | —                       | —                       | —   | —                                     | 27,178,957           |
| Short-term securities                  | 11,682,889                               | 22,480                  | 2,754                   | 340                                       | 4,528                                 | 11,712,991           |
| Mutual funds-bond funds                | —  | 161,304                 | 13,350                  | —   | —                                     | 174,654              |
| Guaranteed annuity contracts           | —  | 754,062                 | 34,478                  | —   | —                                     | 788,540              |
| <b>Total debt securities</b>           | <b>62,931,246</b>                        | <b>937,846</b>          | <b>50,582</b>           | <b>340</b>                                | <b>4,528</b>                          | <b>63,924,542</b>    |
| <b>Equity securities</b>               |  |                         |                         |   |                                       |                      |
| Common stocks                          | 133,893,712                              | —                       | —                       | —   | —                                     | 133,893,712          |
| Depository receipts                    | 1,590,249                                | —                       | —                       | —   | —                                     | 1,590,249            |
| Mutual funds-stock funds               | 102                                      | 1,383,930               | 121,366                 | —   | —                                     | 1,505,398            |
| Preferred stocks                       | 360,719                                  | —                       | —                       | —   | —                                     | 360,719              |
| Real estate investment trusts          | 2,584,415                                | —                       | —                       | —   | —                                     | 2,584,415            |
| <b>Total equity securities</b>         | <b>138,429,197</b>                       | <b>1,383,930</b>        | <b>121,366</b>          | <b>—</b>                                  | <b>—</b>                              | <b>139,934,493</b>   |
| <b>Alternative investments</b>         |  |                         |                         |   |                                       |                      |
| Debt-privately held                    | 11,835,597                               | —                       | —                       | —   | —                                     | 11,835,597           |
| Equity-privately held                  | 88,913,430                               | —                       | —                       | —   | —                                     | 88,913,430           |
| Real estate-directly held              | 28,819,033                               | —                       | —                       | —   | —                                     | 28,819,033           |
| Real estate-non-directly held          | 14,612,174                               | —                       | —                       | —   | —                                     | 14,612,174           |
| <b>Total alternative investments</b>   | <b>144,180,234</b>                       | <b>—</b>                | <b>—</b>                | <b>—</b>                                  | <b>—</b>                              | <b>144,180,234</b>   |
| <b>Derivative instruments</b>          |  |                         |                         |   |                                       |                      |
| Forwards                               | 219,509                                  | —                       | —                       | —   | —                                     | 219,509              |
| Futures                                | 53,224                                   | —                       | —                       | —   | —                                     | 53,224               |
| Options                                | 876                                      | —                       | —                       | —   | —                                     | 876                  |
| Rights and warrants                    | 263                                      | —                       | —                       | —   | —                                     | 263                  |
| Swaps                                  | 46,676                                   | —                       | —                       | —   | —                                     | 46,676               |
| <b>Total derivative instruments</b>    | <b>320,548</b>                           | <b>—</b>                | <b>—</b>                | <b>—</b>                                  | <b>—</b>                              | <b>320,548</b>       |
| <b>Securities lending collateral</b>   | <b>32,564,283</b>                        | <b>—</b>                | <b>—</b>                | <b>—</b>                                  | <b>—</b>                              | <b>32,564,283</b>    |
| <b>Bond proceeds investment</b>        | <b>14,214</b>                            | <b>—</b>                | <b>—</b>                | <b>—</b>                                  | <b>—</b>                              | <b>14,214</b>        |
| <b>Total investment assets</b>         | <b>378,439,722</b>                       | <b>2,321,776</b>        | <b>171,948</b>          | <b>340</b>                                | <b>4,528</b>                          | <b>380,938,314</b>   |
| <b>Liabilities</b>                     |  |                         |                         |   |                                       |                      |
| <b>Derivative instruments</b>          |  |                         |                         |   |                                       |                      |
| Forwards                               | 260,253                                  | —                       | —                       | —   | —                                     | 260,253              |
| Futures                                | 33,660                                   | —                       | —                       | —   | —                                     | 33,660               |
| Options                                | 2,075                                    | —                       | —                       | —   | —                                     | 2,075                |
| Swaps                                  | 52,063                                   | —                       | —                       | —   | —                                     | 52,063               |
| <b>Total derivative instruments</b>    | <b>348,051</b>                           | <b>—</b>                | <b>—</b>                | <b>—</b>                                  | <b>—</b>                              | <b>348,051</b>       |
| <b>Total investment liabilities</b>    | <b>348,051</b>                           | <b>—</b>                | <b>—</b>                | <b>—</b>                                  | <b>—</b>                              | <b>348,051</b>       |
| <b>TOTAL NET INVESTMENTS</b>           | <b>\$378,091,671</b>                     | <b>\$2,321,776</b>      | <b>\$171,948</b>        | <b>\$340</b>                              | <b>\$4,528</b>                        | <b>\$380,590,263</b> |

# Notes to the basic financial statements

---

## Debt securities

Debt securities consist primarily of long-term investments issued by the U.S. government and U.S. government-sponsored agencies, municipal securities, foreign governments, corporations, securitized offerings backed by residential and commercial mortgages, and inflation-indexed bonds (also known as inflation-linked bonds). Debt securities also consist of short-term securities that by definition typically have maturities of less than one year. Debt securities in Pension2 include securities such as bond mutual funds and guaranteed annuity contracts. The annuity contracts offer a guaranteed minimum interest rate for the life of the contract.

Short-term investments consist of money market funds, certificates of deposits and similar instruments with maturities and/or holding periods generally of less than one year. Deposits in the PMIA (classified under short-term securities), administered by the STO, represent various investments with approximately 217 average days to maturity. The STO pools these monies with those of other state agencies for investing in short-term securities. The monies are available for withdrawal at any time. Deposits in the Short-Term Investment Fund, administered by State Street Bank and Trust Company (State Street Bank), represent various investments with approximately 34 average days to maturity.

## Equity securities

Equity securities consist primarily of domestic and international common stocks, preferred stocks, depository receipts, real estate investment trusts (REITs), exchange-traded funds (ETFs) and stock mutual funds.

## Alternative investments

Alternative investments consist primarily of limited partnership structures invested in privately held debt or privately held equity, including venture capital, leveraged buyouts and co-investments, as well as investments in real estate, infrastructure, agriculture and timberland. They include investments held within the Private Equity, Real Estate, Public Equity, Risk Mitigating Strategies, Inflation Sensitive, and Collaborative Strategies asset classes. Alternative investments also include investments from the Sustainable Investment and Stewardship Strategies (SISS).

Alternative investments are generally long-term and illiquid in nature. As a result, investors are subject to redemption restrictions, which generally limit distributions and restrict the ability of limited partners to exit a partnership investment prior to its dissolution.

Investments in real estate directly held assets are in separate accounts and joint ventures, which are primarily composed of retail, office, industrial and multifamily properties. Certain real estate investments are leveraged through partnerships using a combination of equity contributions from CalSTRS and other investors and through the use of debt. CalSTRS engages real estate advisors and operating partners who are responsible for managing a portfolio's day-to-day activities, performance and reporting. Real estate non-directly held investments primarily include commingled limited partnership investments in which CalSTRS does not have a controlling interest.

## Derivative instruments

CalSTRS holds investments in derivative instruments, such as futures, foreign currencies forward contracts, options, swaps, rights and warrants.

A futures contract is an exchange-traded contract whereby the purchaser agrees to buy an asset at a stated price on a specific future date. A foreign currency forward contract is a customized, bilateral agreement to exchange a specified currency at a specified future settlement date at a forward price agreed to on the trade date.

CalSTRS invests in exchange-traded options and over-the-counter options. An option is a contract that entitles the holder to purchase or sell a specific amount of contracts or notional amount at a specified price (strike price). The underlying asset, quantity of the underlying or notional amount, expiration date and strike price are standardized for exchange-traded options and are customized for over-the-counter options.

Swaps are derivative instruments in which two parties agree to exchange one stream of cash flows against another stream or a guarantee. These streams are called the legs of the swap, and usually at least one leg has a rate that is variable. The variable leg can depend on a reference rate, the total return of an asset or an economic statistic. Cash flows are calculated based on a notional amount, which are usually not exchanged between counterparties.

## Notes to the basic financial statements

---

Rights and warrants held by CalSTRS are typically acquired through corporate actions. A right is a privilege granted to shareholders of a corporation to subscribe to shares of a new issue of common stock before it is offered to the public. A warrant gives the holder the right, but not the obligation, to buy an underlying equity security at a given price and quantity during a specified period.

### Securities lending

California statutes and board policies permit CalSTRS to make short-term, collateralized loans of its securities to broker-dealers and other entities to earn incremental income. CalSTRS has contracted with our global custodian, third-party securities lending agents and their respective custodians to lend equity and debt securities. The majority of the security loans can be terminated on demand by either CalSTRS or the borrower. The underlying securities on loan are reported as assets on the statement of fiduciary net position.

Collateral in the form of cash or other securities is required for 102% and 105% of the fair value of domestic and international securities loaned, respectively. For non-U.S. debt securities loaned, CalSTRS follows market practice, which requires collateral of 102% of the fair value of the loaned securities. Since the majority of loans are terminable at will, their duration does not generally match the duration of the investments made with the cash collateral. As of June 30, 2024, the weighted duration difference between the investments and these loans was approximately 16 days.

As of June 30, 2024, the fair value of the securities on loan was \$35.5 billion. The securities lending obligations were \$32.6 billion. The fair value of the reinvested cash collateral was \$32.6 billion; the non-cash collateral was \$3.8 billion; and the calculated mark (collateral adjustment requested for the next business day) was (\$69.8) million. The invested collateral and corresponding obligation are reflected in the statement of fiduciary net position as assets and liabilities, respectively. The reinvested cash collateral securities in this program are typically held to maturity and are expected to mature at par.

In accordance with GASB Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions*, the non-cash collateral of \$3.8 billion is not reported in the statement of fiduciary net position as CalSTRS is not permitted to pledge or sell these collateral securities received unless the borrower defaults. The contracts with the securities lending agents require them to indemnify CalSTRS if the borrowers fail to return the securities (or if the collateral is not sufficient to replace the securities lent) or if

the borrowers fail to pay CalSTRS for income distributions by the securities' issuers while the securities are on loan.

### Bond proceeds investment

Bond proceeds investment represents the investment of the proceeds of the CalSTRS Series 2019 Bonds and CalSTRS Series 2022 Bonds, which were issued in December 2019 and December 2022, respectively. Both were issued through the California Infrastructure and Economic Development Bank for the construction of CalSTRS' headquarters expansion, issuance costs and payment of interest during the construction period. Until the bond proceeds are needed, they are invested at the direction of CalSTRS. The investment of the proceeds is restricted to certain types of investment securities by the terms of the governing bond trust agreement.

The primary objectives of bond proceeds investment are the preservation of capital, liquidity and return on investment. Investment decisions are undertaken in a manner to preserve capital by mitigating credit and interest rate risk. Additionally, the bond proceeds investment portfolio is structured to have security maturities align with scheduled construction and interest payments.

### Reverse repurchase agreements

State statutes and board policy permit the system to enter into reverse repurchase agreements, that is, a sale of securities with a simultaneous agreement to repurchase the same securities in the future at the same price plus a contract rate of interest. The system had \$1.7 billion in reverse repurchase agreements outstanding as of June 30, 2024. The credit exposure related to these agreements was \$48.3 million. Since the proceeds from reverse repurchase agreements are used for liquidity management and not for reinvestment purposes, the maturities of the purchases made with the proceeds of reverse repurchase agreements are not matched to the maturities of the agreements.

### Investment risk schedules

In accordance with GASB Statement No. 40, *Deposit and Investment Risk Disclosures—an amendment of GASB Statement No. 3*, the following investment risk schedules disclose CalSTRS' investments that are subject to certain types of risks, including credit risk, interest rate risk, concentration of credit risk, custodial credit risk and foreign currency risk. The policies addressing each risk are discussed in more detail in the pages that follow. These policies are contained within the IPS and are reviewed and approved annually by the board.

## Notes to the basic financial statements

### Credit risk

Credit risk is the risk that an issuer or other counterparty to a debt instrument will not fulfill its obligations. This is measured by the assignment of ratings by nationally recognized statistical rating organizations.

CalSTRS Investment Guidelines require that, at the time of purchase, at least 95% of the fair value of the corporate securities comprising the credit portion of the core fixed income portfolio be rated investment grade.

The ratings used to determine the quality of the individual securities in the table below are the ratings provided by Standard & Poor's (S&P) Global Inc. Obligations issued or guaranteed by the U.S. government or government-sponsored agencies are eligible without limit. Furthermore, the total position of the outstanding debt of any non-agency mortgage-backed, asset-backed and commercial mortgage-backed securities issuer shall be limited to 10% of the fair

value of the portfolio, on the basis of each separate trust (pool of assets), at the time of purchase. Obligations of other issuers are not to exceed 5% per issuer, at the time of purchase, of the fair value of any individual portfolio.

CalSTRS' investment policies and guidelines also include an allocation for opportunistic strategies, which allows for the purchase of bonds rated below investment grade. The amount of these investments that each investment manager may hold is negotiated on a manager-by-manager basis.

CalSTRS may invest in an unrated security if the security is comparable in quality to other rated securities that are eligible for purchase. The notation N/R represents those securities that are not rated, and N/A represents those securities for which the rating disclosure requirements are not applicable, such as obligations of the U.S. government and obligations explicitly guaranteed by the U.S. government.

As of June 30, 2024, the credit ratings of all debt securities are as follows:

### Debt securities

(dollars in thousands)

| Ratings                   | Asset-backed securities | Corporate bonds     | Foreign government issues | Mortgage-backed securities | Municipal securities | U.S. government and agency obligations | Short-term securities | Mutual funds - bond funds | Guaranteed annuity contracts | Total               |
|---------------------------|-------------------------|---------------------|---------------------------|----------------------------|----------------------|--|-----------------------|---------------------------|------------------------------|---------------------|
| <b>Long-term ratings</b>  |                         |                     |                           |                            |                      |  |                       |                           |                              |                     |
| AAA                       | \$296,898               | \$336,088           | \$14,582                  | \$182,027                  | \$9,746              | \$-                                    | \$-                   | \$-                       | \$-                          | \$839,341           |
| AA                        | 1,308                   | 584,273             | 110,933                   | 58,000                     | 55,932               | 493,182                                | -                     | 62,524                    | -                            | 1,366,152           |
| A                         | 1,471                   | 3,471,087           | 168,278                   | 21,127                     | 7,981                | -                                      | -                     | -                         | -                            | 3,669,944           |
| BBB                       | 10,301                  | 4,817,842           | 281,053                   | 4,812                      | -                    | -                                      | -                     | -                         | -                            | 5,114,008           |
| BB                        | 8,433                   | 846,556             | 22,686                    | 3,841                      | -                    | -                                      | -                     | -                         | -                            | 881,516             |
| B                         | 2,751                   | 1,097,683           | 12,291                    | 317                        | -                    | -                                      | -                     | -                         | -                            | 1,113,042           |
| CCC                       | 735                     | 174,104             | 6,024                     | -                          | -                    | -                                      | -                     | -                         | -                            | 180,863             |
| CC                        | -                       | 701                 | -                         | -                          | -                    | -                                      | -                     | -                         | -                            | 701                 |
| C                         | -                       | 248                 | -                         | -                          | -                    | -                                      | -                     | -                         | -                            | 248                 |
| D                         | -                       | 439                 | -                         | -                          | -                    | -                                      | -                     | -                         | -                            | 439                 |
| N/R                       | 525,274                 | 411,154             | 187,319                   | 8,405,964                  | 11,996               | 33,164                                 | -                     | -                         | -                            | 9,574,871           |
| N/A                       | -                       | -                   | -                         | 1,917,145                  | -                    | 26,652,611                             | -                     | -                         | 788,540                      | 29,358,296          |
| <b>Short-term ratings</b> |                         |                     |                           |                            |                      |  |                       |                           |                              |                     |
| A-1                       | -                       | -                   | -                         | -                          | -                    | -                                      | -                     | 112,130                   | -                            | 112,130             |
| N/R                       | -                       | -                   | -                         | -                          | -                    | -                                      | 8,059,904             | -                         | -                            | 8,059,904           |
| N/A                       | -                       | -                   | -                         | -                          | -                    | -                                      | 3,653,087             | -                         | -                            | 3,653,087           |
| <b>TOTAL</b>              | <b>\$847,171</b>        | <b>\$11,740,175</b> | <b>\$803,166</b>          | <b>\$10,593,233</b>        | <b>\$85,655</b>      | <b>\$27,178,957</b>                    | <b>\$11,712,991</b>   | <b>\$174,654</b>          | <b>\$788,540</b>             | <b>\$63,924,542</b> |

## Notes to the basic financial statements

As of June 30, 2024, the credit ratings of all securities lending collateral are as follows:

### Securities lending collateral

(dollars in thousands)

| Ratings                   | Asset-backed securities | Corporate bonds    | Mortgage-backed securities | U.S. government and agency obligations | Short-term securities | Total               |
|---------------------------|-------------------------|--------------------|----------------------------|--|-----------------------|---------------------|
| <b>Long-term ratings</b>  |                         |                    |                            |  |                       |                     |
| AAA                       | \$1,141,727             | \$—                | \$—                        | \$—                                    | \$—                   | \$1,141,727         |
| AA                        | —                       | 917,862            | —                          | 296,816                                | —                     | 1,214,678           |
| A                         | —                       | 1,440,327          | —                          | —                                      | —                     | 1,440,327           |
| BBB                       | —                       | 73,344             | —                          | —                                      | —                     | 73,344              |
| N/A                       | —                       | —                  | —                          | 15,010                                 | —                     | 15,010              |
| N/R                       | 1,005,034               | 426,447            | 318                        | —                                      | —                     | 1,431,799           |
| <b>Short-term ratings</b> |                         |                    |                            |  |                       |                     |
| A-1                       | —                       | —                  | —                          | —                                      | 8,702,176             | 8,702,176           |
| N/R                       | —                       | —                  | —                          | —                                      | 18,545,222            | 18,545,222          |
| <b>TOTAL</b>              | <b>\$2,146,761</b>      | <b>\$2,857,980</b> | <b>\$318</b>               | <b>\$311,826</b>                       | <b>\$27,247,398</b>   | <b>\$32,564,283</b> |

### Interest rate risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment.

Investments may contain terms that increase the sensitivity of their fair values to increasing and decreasing interest rates. Although CalSTRS has investments that have an inherent prepayment risk as well as caps, floors and step-up features, these are mitigated through the diversification of asset classes, security selection, maturity and credit quality.

CalSTRS' investment policies and guidelines allow the core long-term investment grade portfolios the discretion to

deviate the average duration of the portfolio within a range of +/- 20% (80% to 120%) of the weighted average effective duration of the performance benchmark.

As of June 30, 2024, the overall weighted effective duration and benchmark of the long-term Fixed Income portfolios were 5.83 years and 5.88 years, respectively. The following table presents the net asset values, durations and associated benchmarks by investment type held in the long-term Fixed Income portfolios.

### Long-term fixed income duration

(dollars in thousands)

| Investment type (by portfolio)         | Portfolio net asset value | Effective duration | Benchmark duration | Difference |
|--|---------------------------|--------------------|--------------------|------------|
| <b>Core portfolio</b>                  |                           |                    |                    |            |
| Commercial mortgage-backed securities  | \$488,896                 | 4.25               | 4.24               | 0.01       |
| Credit obligations                     | 8,875,660                 | 6.72               | 6.75               | (0.03)     |
| Mortgage-backed securities             | 8,218,768                 | 5.52               | 5.66               | (0.14)     |
| U.S. government and agency obligations | 14,502,284                | 5.88               | 5.85               | 0.03       |
| <b>Debt opportunistic</b>              |                           |                    |                    |            |
| Corporate high yield                   | 1,137,586                 | 3.06               | 3.27               | (0.21)     |
| Debt core plus                         | 3,211,129                 | 6.00               | 5.80               | 0.20       |
| Leveraged loans                        | 1,154,434                 | 0.35               | 0.25               | 0.10       |
| Special situations                     | 49,233                    | 0.44               | 5.88               | (5.44)     |
| <b>TOTAL</b>                           | <b>\$37,637,990</b>       |                    |                    |            |

## Notes to the basic financial statements

The U.S. Treasury Inflation Protected Securities (TIPS), CalSTRS Home Loan Program, long-duration U.S. Treasury securities and other debt securities in non-Fixed Income portfolios are not included in the previous table. The duration or weighted average maturity for these investments are as follows:

- The U.S. TIPS had a net asset value of \$4.2 billion with an effective duration of 6.52 years compared to the benchmark duration of 6.51 years.
- The CalSTRS Home Loan Program had a net asset value of \$16.9 million with a weighted average maturity of 15.29 years.
- The long-duration U.S. Treasury securities had a net asset value of \$8.0 billion with an effective duration of 16.49 years compared to the benchmark duration of 16.50 years.
- Other debt securities in non-Fixed Income portfolios had a fair value of \$714.4 million with a weighted average maturity of 7.44 years.
- Cash and accruals totaling (\$270.6) million and swaps and other collateral totaling (\$5.9) million are included in the net asset value within the Fixed Income portfolios but are not included in debt securities on the statement of fiduciary net position.

As of June 30, 2024, the segmented time distribution for the short-term securities based upon the expected maturity or first reset dates is as follows:

### Short-term fixed income segmented time distribution

(dollars in thousands)

| Investment type                        | 0-30 days          | 31-90 days         | 91-120 days        | 121-180 days       | 181-365 days     | 366+ days   | Total               |
|--|--------------------|--------------------|--------------------|--------------------|------------------|-------------|---------------------|
| Asset-backed securities                | \$8,944            | \$192,316          | \$57,849           | \$48,006           | \$38,583         | \$—         | \$345,698           |
| Corporate bonds                        | 80,111             | —                  | —                  | 49,905             | —                | —           | 130,016             |
| Money-market securities                | 3,519,051          | 1,224,588          | 93,957             | 517,548            | 97,165           | —           | 5,452,309           |
| Pooled money investment account        | 54,295             | —                  | —                  | —                  | —                | —           | 54,295              |
| Short-term investment fund             | 1,871,304          | —                  | —                  | —                  | —                | —           | 1,871,304           |
| U.S. government and agency obligations | 486,504            | 1,717,234          | 1,419,921          | 483,231            | 242,449          | —           | 4,349,339           |
| <b>TOTAL</b>                           | <b>\$6,020,209</b> | <b>\$3,134,138</b> | <b>\$1,571,727</b> | <b>\$1,098,690</b> | <b>\$378,197</b> | <b>\$—</b>  | <b>\$12,202,961</b> |
| <b>WEIGHTINGS</b>                      | <b>49.3%</b>       | <b>25.7%</b>       | <b>12.9%</b>       | <b>9.0%</b>        | <b>3.1%</b>      | <b>0.0%</b> | <b>100.0%</b>       |

The primary investment objective for short-term investments is to seek the preservation of capital and liquidity and to generate the highest possible current income consistent with a prudent level of risk. The investment guidelines of the short-term portfolio state that the average maturity of the investments shall be managed so that it will not exceed 180 days.

As of June 30, 2024, the segmented time distribution based upon the expected maturity or first reset date for the invested securities lending collateral is as follows:

### Securities lending collateral segmented time distribution

(dollars in thousands)

| Investment type                        | 0-1 day             | 2-6 days           | 7-29 days          | 30-59 days         | 60-89 days         | 90+ days           | Total               |
|--|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Asset-backed securities                | \$160,409           | \$45,167           | \$1,253,010        | \$45,880           | \$168,009          | \$474,286          | \$2,146,761         |
| Corporate bonds                        | 581,361             | 156,357            | 734,908            | 363,407            | 677,985            | 343,962            | 2,857,980           |
| Mortgage-backed securities             | —                   | —                  | 318                | —                  | —                  | —                  | 318                 |
| U.S. government and agency obligations | —                   | 25,033             | 24,679             | —                  | —                  | 262,114            | 311,826             |
| Short-term securities                  | 17,492,014          | 1,549,106          | 693,109            | 1,078,595          | 933,041            | 5,501,533          | 27,247,398          |
| <b>TOTAL</b>                           | <b>\$18,233,784</b> | <b>\$1,775,663</b> | <b>\$2,706,024</b> | <b>\$1,487,882</b> | <b>\$1,779,035</b> | <b>\$6,581,895</b> | <b>\$32,564,283</b> |
| <b>WEIGHTINGS</b>                      | <b>56.0%</b>        | <b>5.4%</b>        | <b>8.3%</b>        | <b>4.6%</b>        | <b>5.5%</b>        | <b>20.2%</b>       | <b>100.0%</b>       |

## Notes to the basic financial statements

The invested securities lending cash collateral is diversified among different investment types with the maximum remaining effective maturity of any instrument being three years at the time of purchase. The fund must remain liquid to meet collateral returns.

### Pension2

Pension2 403(b) and 457(b) plans invest in Voya Fixed Plus III and TIAA Traditional Annuities. The primary objectives of these investments are the guarantee of principal and a guaranteed minimum interest rate of 1.0% for the life of the contract. The interest rate guarantees under the contracts are subject to the claim-paying abilities of Voya Retirement Insurance and Annuity Company and TIAA.

As of June 30, 2024, the weighted average maturity of investments with underlying debt holdings for the Pension2 403(b) and 457(b) plans on the statement of fiduciary net position are as follows:

### Pension2 weighted average maturity

(dollars in thousands)

| Investment type                              | Maturity  | Fair value       |
|--|-----------|------------------|
| CREF money market account                    | 56 days   | \$1              |
| Federated U.S. treasury cash reserves        | 43 days   | 25,233           |
| Vanguard inflation-protected securities fund | 7.1 years | 112,130          |
| Vanguard short-term bond index fund          | 2.9 years | 18,841           |
| Vanguard total bond market index fund        | 8.5 years | 43,683           |
| <b>TOTAL</b>                                 |           | <b>\$199,888</b> |

### Concentration of credit risk

Concentration of credit risk is the risk of loss attributed to the magnitude of CalSTRS' investment in a single issuer. The CalSTRS IPS states that no more than 3% of the total fund shall be invested in or exposed to any one security or corporation, with the exception of U.S. treasury or agency obligations. As of June 30, 2024, this condition from the IPS was met. As such, no single issuer, excluding investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools and other pooled investments, exceeded 5% of total investments.

### Custodial credit risk

Custodial credit risk is the risk that if a depository institution or counterparty fails, CalSTRS would not be able to recover the value of our deposits, investments or collateral securities. As of June 30, 2024, all of CalSTRS non-cash investments are not exposed to custodial credit risk because they are held in CalSTRS' name. Demand and time deposits held by the various financial institutions and the state banks are insured up to \$250,000 by the Federal Deposit Insurance Corporation or by collateral held by the STO or an agency of that office in the state's name. CalSTRS does not have a general policy relating to custodial credit risk.

## Notes to the basic financial statements

### Foreign currency risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. As of June 30, 2024, CalSTRS' investment exposure in foreign currency risk is as follows:

### Foreign currency risk

(dollars in thousands; in U.S. dollar equivalents)

| Currency name      | Debt securities  | Alternative investments | Equity securities   | Derivative instruments | Cash <sup>1</sup> | Total exposure      |
|--------------------|------------------|-------------------------|---------------------|------------------------|-------------------|---------------------|
| Argentine peso     | \$—              | \$—                     | \$—                 | \$—                    | \$3               | \$3                 |
| Australian dollar  | —                | —                       | 2,037,674           | 4,122                  | 4,356             | 2,046,152           |
| Bahraini dinar     | —                | —                       | —                   | (2)                    | —                 | (2)                 |
| Brazilian real     | 12,758           | —                       | 503,788             | (1,888)                | 5,277             | 519,935             |
| Canadian dollar    | 562,721          | 423,541                 | 3,686,370           | (2,082)                | 19,872            | 4,690,422           |
| Chilean peso       | —                | —                       | 60,608              | 1,396                  | 2,441             | 64,445              |
| Colombian peso     | —                | —                       | 13,803              | (7,532)                | 1,202             | 7,473               |
| Czech koruna       | —                | —                       | 14,648              | 3,848                  | 973               | 19,469              |
| Danish krone       | —                | —                       | 1,166,409           | 509                    | 1,854             | 1,168,772           |
| Egyptian pound     | —                | —                       | 6,786               | (193)                  | 70                | 6,663               |
| Euro               | 91,707           | 7,987,819               | 10,781,977          | 8,008                  | 30,544            | 18,900,055          |
| Hong Kong dollar   | —                | —                       | 3,026,448           | (900)                  | 8,695             | 3,034,243           |
| Hungarian forint   | —                | —                       | 56,875              | (4,153)                | 1,002             | 53,724              |
| Indian rupee       | 5,945            | —                       | 2,504,000           | 285                    | 11,467            | 2,521,697           |
| Indonesian rupiah  | —                | —                       | 330,595             | (1,412)                | 1,743             | 330,926             |
| Israeli new shekel | —                | —                       | 167,242             | 893                    | 1,516             | 169,651             |
| Japanese yen       | 145,216          | —                       | 7,914,837           | (7,599)                | 37,255            | 8,089,709           |
| Kazakhstani tenge  | —                | —                       | —                   | (114)                  | —                 | (114)               |
| Kuwaiti dinar      | —                | —                       | 47,100              | 5                      | 1,235             | 48,340              |
| Malaysian ringgit  | —                | —                       | 125,832             | 14                     | 1,962             | 127,808             |
| Mexican peso       | 34,245           | —                       | 253,278             | (22,199)               | 10,405            | 275,729             |
| Moroccan dirham    | —                | —                       | —                   | (356)                  | —                 | (356)               |
| New Taiwan dollar  | —                | —                       | 2,628,882           | (935)                  | 3,843             | 2,631,790           |
| New Zealand dollar | —                | —                       | 51,972              | 3,897                  | 2,405             | 58,274              |
| Norwegian krone    | —                | —                       | 329,907             | 139                    | 1,840             | 331,886             |
| Peruvian sol       | —                | —                       | —                   | (1,131)                | 121               | (1,010)             |
| Philippine peso    | —                | —                       | 37,527              | (507)                  | 2,354             | 39,374              |
| Polish zloty       | —                | —                       | 198,741             | (430)                  | 2,015             | 200,326             |
| Pound sterling     | 21,309           | 1,703,179               | 4,498,655           | (3,639)                | 13,739            | 6,233,243           |
| Qatari riyal       | —                | —                       | 42,119              | (12)                   | 1,598             | 43,705              |
| Romanian leu       | —                | —                       | —                   | 57                     | —                 | 57                  |
| Russian ruble      | —                | —                       | —                   | —                      | 486               | 486                 |
| Saudi riyal        | —                | —                       | 108,940             | (34)                   | 185               | 109,091             |
| Singapore dollar   | —                | —                       | 515,861             | 391                    | 2,112             | 518,364             |
| South African rand | —                | —                       | 357,957             | (3,527)                | 5,824             | 360,254             |
| South Korean won   | —                | —                       | 1,740,574           | 539                    | 3,118             | 1,744,231           |
| Swedish krona      | —                | —                       | 910,907             | 1,500                  | 1,681             | 914,088             |
| Swiss franc        | —                | —                       | 2,790,498           | (2,079)                | 2,781             | 2,791,200           |
| Thai baht          | —                | —                       | 150,835             | (78)                   | 3,586             | 154,343             |
| Turkish lira       | —                | —                       | 92,655              | (1,388)                | 1,135             | 92,402              |
| UAE dirham         | —                | —                       | 112,859             | —                      | 434               | 113,293             |
| Yuan renminbi      | —                | —                       | 638,771             | (1,139)                | 11,444            | 649,076             |
| <b>Total</b>       | <b>\$873,901</b> | <b>\$10,114,539</b>     | <b>\$47,905,930</b> | <b>(\$37,726)</b>      | <b>\$202,573</b>  | <b>\$59,059,217</b> |

<sup>1</sup> Spot contracts of (\$247) are included in the cash total above.



## Notes to the basic financial statements

CalSTRS' investments denominated in foreign currencies are reported within assets and liabilities on the statement of fiduciary net position.

Foreign currency is composed of international investment proceeds and income to be repatriated into U.S. dollars and funds available to purchase international securities. Foreign currency is held temporarily in foreign accounts until it is able to be repatriated or expended.

In accordance with the IPS, CalSTRS has established a strategic allocation to non-U.S. dollar public and private equity assets (i.e., private equity investments and real estate). Considering this commitment to non-U.S. dollar assets and the impact currency fluctuations can have on the total return of dollar-based investors, CalSTRS has recognized the need to implement strategies designed to address the management of currency risk.

CalSTRS believes that our Currency Management Program should emphasize the protection of the value of its non-U.S. dollar public and private equity assets against a strengthening U.S. dollar first, yet recognizes that opportunities also exist for alpha generation (the ability to derive a return in excess of a market return) within the currency markets.

CalSTRS Fixed Income staff has management and oversight responsibilities for the Currency Management Program. The position range has been designed to allow for some degree of symmetry around the underlying exposure to the foreign-denominated assets within CalSTRS to both protect the translation value of the assets against a strengthening U.S. dollar and to enhance returns in a declining U.S. dollar environment.

As of June 30, 2024, the Pension2 403(b) and 457(b) plans do not expose CalSTRS to foreign currency risk.

### Bond proceeds investment risk schedules

Bond proceeds were invested primarily in U.S. government and agency obligations. As of June 30, 2024, the bond proceeds investment does not expose CalSTRS to foreign currency and concentration of credit risk. Additionally, as of June 30, 2024, all of CalSTRS' non-cash bond proceeds investment is not exposed to custodial risk as they are held in CalSTRS' name.

As of June 30, 2024, the segmented time distribution for the bond proceeds investment based upon the expected maturity or first reset dates is as follows:

### Bond proceeds investment segmented time distribution

(dollars in thousands)

| Investment type                        | 0-30 days       | 31-90 days  | 91-120 days | 121-180 days | 181-365 days | 366+ days   | Total           |
|--|-----------------|-------------|-------------|--------------|--------------|-------------|-----------------|
| U.S. government and agency obligations | \$14,214        | \$—         | \$—         | \$—          | \$—          | \$—         | \$14,214        |
| <b>TOTAL</b>                           | <b>\$14,214</b> | <b>\$—</b>  | <b>\$—</b>  | <b>\$—</b>   | <b>\$—</b>   | <b>\$—</b>  | <b>\$14,214</b> |
| <b>WEIGHTINGS</b>                      | <b>100.0%</b>   | <b>0.0%</b> | <b>0.0%</b> | <b>0.0%</b>  | <b>0.0%</b>  | <b>0.0%</b> | <b>100.0%</b>   |

As of June 30, 2024, the credit ratings of all bond proceeds investment are as follows:

### Bond proceeds investment credit risk

(dollars in thousands)

| Ratings                   | U.S. government and agency obligations | Total           |
|---------------------------|--|-----------------|
| <b>Short-term ratings</b> |  |                 |
| N/A                       | \$14,214                               | \$14,214        |
| <b>TOTAL</b>              | <b>\$14,214</b>                        | <b>\$14,214</b> |

## Notes to the basic financial statements

---

### Derivative instruments

As of June 30, 2024, the derivative instruments held by CalSTRS are considered investments and not hedges for accounting purposes. The term hedging, as it is used elsewhere in the notes to these financial statements, denotes an economic activity and not an accounting method. The gains and losses arising from this activity are recognized as incurred in the statement of changes in fiduciary net position.

All investment derivative instruments discussed below are included within the investment risk schedules. Investments in derivative instruments are disclosed separately to provide a comprehensive view of this activity and its impact on the overall investment portfolio.

Derivative instrument fair values are reported as investments in the statement of fiduciary net position with changes in fair values reported as investment income (loss) in the statement of changes in fiduciary net position.

## Notes to the basic financial statements

The table below presents the related net change in fair value, fair value, and notional amount of derivative instruments outstanding as of June 30, 2024.

### Derivative instruments disclosure

(dollars in thousands)

| Derivative instruments               | Net change in fair value<br>for the fiscal year ended<br>June 30, 2024 | Fair value        | Notional amount <sup>1</sup> |
|--------------------------------------|--|-------------------|------------------------------|
| <b>Forwards</b>                      |  |                   |                              |
| Foreign currency forward contracts   | \$105,834  | (\$40,744)        | 19,581,836                   |
| <b>Total forwards</b>                | <b>105,834</b>   | <b>(40,744)</b>   |                              |
| <b>Futures</b>                       |  |                   |                              |
| Commodity futures long               | 17,029   | (7,121)           | 23,559                       |
| Commodity futures short              | (55,265)   | 13,192            | (47,270)                     |
| Fixed income futures long            | (195,092)  | 21,213            | 2,977,915                    |
| Fixed income futures short           | 13,019   | (2,648)           | (539,168)                    |
| Index futures long                   | 621,156  | 2,787             | 232,215                      |
| Index futures short                  | (39,736)   | (7,859)           | (1,693)                      |
| <b>Total futures</b>                 | <b>361,111</b>   | <b>19,564</b>     |                              |
| <b>Options</b>                       |  |                   |                              |
| Commodity futures options bought     | (862)  | 35                | 655                          |
| Commodity futures options written    | 12,003   | (1,660)           | (6,065)                      |
| Credit default swap options written  | 2  | –                 | –                            |
| Fixed income futures options bought  | (13,241)   | 841               | 2,591                        |
| Fixed income futures options written | 4,646  | (415)             | (4,549)                      |
| Foreign currency options bought      | (5,712)  | –                 | –                            |
| Foreign currency options written     | 346  | –                 | –                            |
| Index options written                | 20   | –                 | –                            |
| <b>Total options</b>                 | <b>(2,798)</b>   | <b>(1,199)</b>    |                              |
| <b>Rights and warrants</b>           |  |                   |                              |
| Rights                               | 703  | 161               | 305 units                    |
| Warrants                             | 3,425  | 102               | 705 units                    |
| <b>Total rights and warrants</b>     | <b>4,128</b>   | <b>263</b>        |                              |
| <b>Swaps</b>                         |  |                   |                              |
| Commodity forward swaps              | 96,481   | (8,318)           | 2,723,479                    |
| Credit default swaps bought          | (19,571)   | (28,799)          | 580,119                      |
| Credit default swaps written         | 12,281   | 20,380            | 765,972                      |
| Pay-fixed interest rate swaps        | 7,092  | 3,780             | 125,464                      |
| Receive-fixed interest rate swaps    | (1,790)  | (1,842)           | 33,996                       |
| Total return swaps                   | 16,024   | 5,396             | 176,621                      |
| Variance swaps                       | 1,301  | 4,016             | 119,896                      |
| <b>Total swaps</b>                   | <b>111,818</b>   | <b>(5,387)</b>    |                              |
| <b>TOTAL DERIVATIVE INSTRUMENTS</b>  | <b>\$580,093</b>   | <b>(\$27,503)</b> |                              |

<sup>1</sup> In U.S. dollars unless otherwise indicated.

## Notes to the basic financial statements

### Counterparty credit risk

The table below depicts the counterparty credit ratings of CalSTRS non-exchange traded investment derivative instruments outstanding and subject to loss as of June 30, 2024.

### Counterparty credit rating

(dollars in thousands)

| S&P rating   | Commodity forward swaps | Credit default swaps written | Foreign currency forwards | Total return swaps | Variance swaps | Total            |
|--------------|-------------------------|------------------------------|---------------------------|--------------------|----------------|------------------|
| AA           | \$—                     | \$—                          | \$9,895                   | \$—                | \$—            | \$9,895          |
| A            | 1,700                   | 11                           | 209,614                   | 4,394              | 4,016          | 219,735          |
| BBB          | —                       | —                            | —                         | 7,356              | —              | 7,356            |
| <b>TOTAL</b> | <b>\$1,700</b>          | <b>\$11</b>                  | <b>\$219,509</b>          | <b>\$11,750</b>    | <b>\$4,016</b> | <b>\$236,986</b> |

The ratings used to determine the quality of the individual counterparty are S&P ratings. The aggregate fair value of investment derivative instruments in an asset position subject to counterparty credit risk as of June 30, 2024, was \$237.0 million. This represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform as contracted. However, master agreements exist that call for daily exchange of collateral for the mark-to-market to minimize this risk.

CalSTRS may enter into a master netting arrangement with a counterparty. In the event of default or early termination, the master agreement permits the non-defaulting party the right to close-out all transactions in a single net settlement to one

net amount payable by one counterparty to the other. As of June 30, 2024, there were assets of \$119.4 million, including collateral pledged by CalSTRS, and liabilities of \$276.6 million from non-exchange traded derivative instruments subject to master netting agreements. As of June 30, 2024, CalSTRS did not have any significant exposure to counterparty credit risk with any single party.

### Custodial credit risk

As of June 30, 2024, all of CalSTRS' investments in derivative instruments are held in CalSTRS' name or CalSTRS' nominee's name and are not exposed to custodial credit risk.

### Interest rate risk

As of June 30, 2024, CalSTRS is exposed to interest rate risk on its derivative instruments described below by maturity period.

### Investment maturities

(dollars in thousands)

| Investment type                      | Fair value      | Investment maturities (in years) |                  |                  |                |
|--------------------------------------|-----------------|----------------------------------|------------------|------------------|----------------|
|                                      |                 | Less than 1                      | 1-5              | 6-10             | More than 10   |
| Commodity forward swaps              | (\$9,977)       | (\$5,754)                        | (\$705)          | (\$3,518)        | \$—            |
| Fixed income futures long            | 21,213          | 21,241                           | (28)             | —                | —              |
| Fixed income futures short           | (2,648)         | (2,648)                          | —                | —                | —              |
| Fixed income futures options bought  | 841             | 841                              | —                | —                | —              |
| Fixed income futures options written | (415)           | (415)                            | —                | —                | —              |
| Pay-fixed interest rate swaps        | 3,780           | —                                | —                | (612)            | 4,392          |
| Receive-fixed interest rate swaps    | (1,842)         | (80)                             | —                | (1,762)          | —              |
| Total return swaps                   | 998             | (304)                            | (806)            | —                | 2,108          |
| <b>TOTAL</b>                         | <b>\$11,950</b> | <b>\$12,881</b>                  | <b>(\$1,539)</b> | <b>(\$5,892)</b> | <b>\$6,500</b> |

## Notes to the basic financial statements

The table below shows swaps that are highly sensitive to changes in interest rates. The table below details the reference rate, fair value and notional amount of these derivative instruments as of June 30, 2024.

### Derivative instruments highly sensitive to interest rate changes

(dollars in thousands)

| Investment type                      | Reference rate/asset  | Fair value       | Notional amount    |
|--------------------------------------|---|------------------|--------------------|
| Interest rate swap                   | Receive Fixed 3.50%, Pay Variable Secured Overnight Financing Rate  | (\$80)           | \$13,075           |
| Interest rate swap                   | Receive Fixed 7.44%, Pay Variable 1-month Mexico Interbank Equilibrium Interest Rate                      | (901)            | 10,670             |
| Interest rate swap                   | Receive Fixed 7.45%, Pay Variable 1-month Mexico Interbank Equilibrium Interest Rate                      | (861)            | 10,251             |
| Interest rate swap                   | Receive Variable Secured Overnight Financing Rate, Pay Fixed 2.60%  | 2,456            | 13,067             |
| Interest rate swap                   | Receive Variable Secured Overnight Financing Rate, Pay Fixed 3.05%  | 662              | 5,572              |
| Interest rate swap                   | Receive Variable Secured Overnight Financing Rate, Pay Fixed 3.15%  | 1,274            | 12,347             |
| Interest rate swap                   | Receive Variable Secured Overnight Financing Rate, Pay Fixed 3.87%  | 247              | 40,831             |
| Interest rate swap                   | Receive Variable Secured Overnight Financing Rate, Pay Fixed 4.20%  | (859)            | 53,647             |
| <b>Interest rate swaps total</b>     |   | <b>\$1,938</b>   | <b>\$159,460</b>   |
| Commodity forward swap               | Receive 3-month U.S. Treasury Bill minus 0.08%, Pay BCOMTR Index  | \$19             | (\$2,529)          |
| Commodity forward swap               | Receive BCOMF1NTC Index, Pay 3-month U.S. Treasury Bill plus 0.20%  | (9)              | 7,564              |
| Commodity forward swap               | Receive BCOMF1TC Index, Pay 3-month U.S. Treasury Bill plus 0.14%   | (1,575)          | 197,631            |
| Commodity forward swap               | Receive BCOMTR Index, Pay 3-month U.S. Treasury Bill plus 0.10%   | (331)            | 44,764             |
| Commodity forward swap               | Receive BCOMTR Index, Pay 3-month U.S. Treasury Bill plus 0.11%   | (253)            | 34,199             |
| Commodity forward swap               | Receive BCOMTR Index, Pay 3-month U.S. Treasury Bill plus 0.12%   | (1,252)          | 169,504            |
| Commodity forward swap               | Receive BCOMTR Index, Pay 3-month U.S. Treasury Bill plus 0.13%   | (2,542)          | 343,799            |
| Commodity forward swap               | Receive BCOMTR1 Index, Pay 3-month U.S. Treasury Bill plus 0.14%  | (1,449)          | 195,989            |
| Commodity forward swap               | Receive BCOMTR2 Index, Pay 3-month U.S. Treasury Bill plus 0.14%  | (1,588)          | 220,729            |
| Commodity forward swap               | Receive RBCAECTO Index, Pay 3-month U.S. Treasury Bill plus 0.10%   | (997)            | 132,019            |
| <b>Commodity forward swaps total</b> |   | <b>(\$9,977)</b> | <b>\$1,343,669</b> |
| Total return swap                    | Receive 1-month Johannesburg Interbank Agreed Rate minus 1.40%, Pay MSCI South Africa Net Return Index    | (\$2,436)        | (\$52,608)         |
| Total return swap                    | Receive 1-month Mexico Interbank Equilibrium Interest Rate minus 1.00%, Pay MSCI Mexico Net Return Index  | (52)             | (29,622)           |
| Total return swap                    | Receive 1-month Singapore Interbank Offered Rate plus 0.20%, Pay MSCI Singapore Net Return Index          | (430)            | (42,770)           |
| Total return swap                    | Receive 1-month U.S. Overnight Bank Rate minus 0.90%, Pay MSCI Daily TR Net Emerging Markets Thailand USD | 435              | (47,563)           |
| Total return swap                    | Receive 1-month Warsaw Interbank Offered Rate minus 0.80%, Pay MSCI Poland Net Return Index               | (275)            | (4,706)            |
| Total return swap                    | Receive Equity, Pay Secured Overnight Financing Rate minus 0.90%  | (441)            | 56,361             |
| Total return swap                    | Receive Equity, Pay Secured Overnight Financing Rate plus 0.40%   | 1,743            | 36,166             |
| Total return swap                    | Receive MSCI Brazil Net Return Index, Pay 1-month Brazil CETIP IB Deposit Rate minus 0.40%                | 1,974            | 51,315             |
| Total return swap                    | Receive MSCI Daily TR Net Emerging Markets Taiwan USD, Pay 1-month U.S. Overnight Bank Rate minus 0.15%   | 531              | 9,927              |
| Total return swap                    | Receive Tel Aviv 35 Index, Pay 1-month Tel Aviv Interbank Rate plus 0.35%                                 | (51)             | 19,078             |
| <b>Total return swaps total</b>      |   | <b>\$998</b>     | <b>(\$4,422)</b>   |

# Notes to the basic financial statements

## Investment allocation policy

In accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25*, and GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, CalSTRS discloses investment policies pertaining to asset allocation and changes to any significant investment policies. The board approves the allocation of investment assets as described in the board governance manual. The key goal of the asset allocation process is to develop an asset allocation policy that maximizes the likelihood that the investment portfolio's assets will, over the planning horizon, fund plan benefits. CalSTRS conducts an asset allocation study every four years, or more frequently if there is a significant change in the liabilities or assets.

The asset allocation study involves a comprehensive review of the financial condition of the plan, including the actuarial requirements of the plan, such as future benefit payments and expected cash flow of contributions. The board adopted the current long-term asset allocation targets in May 2023. The long-term allocation plan is implemented in stages and includes a current target allocation for each asset class with ranges to keep the actual allocation close to the target while minimizing the transaction costs that result from rebalancing.

The following table displays the previous and current board-approved target allocation, the policy range and the actual allocation for the STRP per the portfolio allocation and management structure as of June 30, 2024.

| Asset class/Strategy                  | Previous target allocation as of June 30, 2023 | Current target allocation as of June 30, 2024 | Policy range | Actual allocation as of June 30, 2024 |
|---------------------------------------|--|---|--------------|---------------------------------------|
| Public Equity <sup>1</sup>            | 42.0%  | 41.0%   | +/- 8.0%     | 41.4%                                 |
| Real Estate <sup>1</sup>              | 15.0%  | 15.0%   | +/- 5.0%     | 13.9%                                 |
| Private Equity <sup>1</sup>           | 13.0%  | 14.0%   | +/- 5.0%     | 15.5%                                 |
| Fixed Income                          | 12.0%  | 12.0%   | +/- 5.0%     | 11.2%                                 |
| Risk Mitigating Strategies            | 10.0%  | 10.0%   | +/- 5.0%     | 8.4%                                  |
| Inflation Sensitive                   | 6.0%   | 6.0%  | +/- 5.0%     | 6.3%                                  |
| Cash/Liquidity                        | 2.0%   | 2.0%  | 0 - 5.0%     | 1.7%                                  |
| Collaborative Strategies <sup>1</sup> | 0.0%   | 0.0%  | 0 - 5.0%     | 1.6%                                  |
| Strategic Overlay <sup>2</sup>        | 0.0%   | 0.0%  |              | 0.0%                                  |
| <b>TOTAL ASSET ALLOCATION</b>         | <b>100.0%</b>                                  | <b>100.0%</b>                                 |              | <b>100.0%</b>                         |

<sup>1</sup> Includes Sustainable Investment and Stewardship Strategies public and private investments totaling \$4.6 billion. Effective for fiscal year 2023-24, Innovative Strategies was renamed to Collaborative Strategies per the CalSTRS Investment Policy Statement.

<sup>2</sup> Represents 0.02% of the actual portfolio allocation, which is 0.0% when rounded for presentation purposes.

Bond proceeds investment is excluded from the asset allocation table and asset allocation process that is approved by the board. All excess monies from the MPP Program and TDCF are invested into the SMIF.

# Notes to the basic financial statements

---

## 6. Fair value measurements

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (the exit price). Fair value is a market-based measurement, not a CalSTRS-specific measurement; hence, valuation assumptions reflect those that market participants would use to price assets and liabilities at the measurement date.

U.S. Generally Accepted Accounting Principles (GAAP) as promulgated by GASB establish a hierarchy that prioritizes and ranks the inputs to valuation techniques used to measure fair value based on observability. Market price observability may be affected by a number of factors, including the investment type, investment-specific characteristics, state of the marketplace, and existence and transparency of transactions between market participants.

CalSTRS follows the fair value measurement and disclosure guidance under U.S. GAAP, which establishes a hierarchical disclosure framework. This framework prioritizes and ranks the level of market price observability used in measuring investments at fair value. U.S. GAAP also allows investments to be valued at cost or net asset value (NAV). The Fair Value Leveling Hierarchy table on the following page presents CalSTRS' investments at their fair value level but also includes certain investments at cost or NAV.

Investments with readily available active quoted prices or for which fair value can be measured from actively quoted prices in an orderly market generally will have a higher degree of market price observability and a lesser degree of judgment used in measuring fair value. In all cases, an instrument's level within the hierarchy is based upon the market pricing transparency of the instrument and does not necessarily correspond to CalSTRS' perceived risk or the liquidity of the instrument.

Assets and liabilities measured at fair value are classified into one of the following categories:

Level 1 – Fair value is determined using unadjusted quoted prices in active markets for identical assets or liabilities accessible on the measurement date.

Level 2 – Fair value is determined using quoted prices in inactive markets or significant observable inputs (including, but not limited to, quoted prices for similar investments, interest rates, foreign exchange rates, volatility and credit spreads), either directly or indirectly. These inputs may be derived principally from, or corroborated by, observable market data through correlation or by other means.

Level 3 – Fair value is determined using unobservable inputs, including situations where there is little market activity, if any, for the asset or liability.

The fair value hierarchy level within which a fair value measurement falls is determined based on the lowest level input that is significant to the fair value measurement. The availability of valuation techniques and observable inputs may vary and is affected by factors such as the type of security, whether the security is established in the marketplace and market liquidity. Inputs used to measure fair value may require significant judgment or estimation, and CalSTRS may use models or other valuation methodologies to estimate fair value. Accordingly, the degree of judgment exercised by CalSTRS in estimating fair value is greatest for assets and liabilities categorized in Level 3.

# Notes to the basic financial statements

## Fair value leveling hierarchy

(dollars in thousands)

|  | Fair value measurements using |  |   |   |
|--|-------------------------------|--|---|---|
|  | June 30, 2024                 | Quoted prices in active markets for identical assets (Level 1) | Significant other observable inputs (Level 2) | Significant unobservable inputs (Level 3) |
| <b>Assets</b>  |                               |  |   |   |
| <b>Investments by fair value level</b>                     |                               |  |   |   |
| <b>Debt securities</b>                                     |                               |  |   |   |
| Asset-backed securities                                    | \$847,171                     | \$—  | \$845,708                                     | \$1,463                                   |
| Corporate bonds  | 11,740,175                    | —  | 11,734,090                                    | 6,085                                     |
| Foreign government issues                                  | 803,166                       | —  | 803,166                                       | —   |
| Mortgage-backed securities                                 | 10,593,233                    | —  | 10,578,777                                    | 14,456                                    |
| Municipal securities                                       | 85,655                        | —  | 85,655  | —   |
| U.S. government and agency obligations                     | 27,178,957                    | —  | 27,178,957                                    | —   |
| Short-term securities                                      | 10,347,991                    | 1,885,185  | 7,900,084                                     | 562,722                                   |
| Mutual funds-bond funds                                    | 174,654                       | 174,654  | —   | —   |
| Guaranteed annuity contracts                               | 788,540                       | —  | —   | 788,540                                   |
| <b>Total debt securities</b>                               | <b>62,559,542</b>             | <b>2,059,839</b>   | <b>59,126,437</b>                             | <b>1,373,266</b>                          |
| <b>Equity securities</b>                                   |                               |  |   |   |
| Common stocks  | 133,893,712                   | 133,545,536  | 337,520                                       | 10,656                                    |
| Depository receipts  | 1,590,249                     | 1,590,184  | —   | 65  |
| Mutual funds-stock funds                                   | 1,505,398                     | 1,505,398  | —   | —   |
| Preferred stocks   | 360,719                       | 360,719  | —   | —   |
| Real estate investment trusts                              | 2,584,415                     | 2,573,433  | 10,478  | 504                                       |
| <b>Total equity securities</b>                             | <b>139,934,493</b>            | <b>139,575,270</b>   | <b>347,998</b>                                | <b>11,225</b>                             |
| <b>Alternative investments</b>                             |                               |  |   |   |
| Debt-privately held  | 2,678,654                     | —  | —   | 2,678,654                                 |
| Equity-privately held                                      | 768,800                       | —  | —   | 768,800                                   |
| Real estate-directly held                                  | 28,367,320                    | —  | —   | 28,367,320                                |
| <b>Total alternative investments</b>                       | <b>31,814,774</b>             | <b>—</b>   | <b>—</b>                                      | <b>31,814,774</b>                         |
| <b>Derivative instruments</b>                              |                               |  |   |   |
| Forwards   | 219,509                       | —  | 219,509                                       | —   |
| Futures  | 53,224                        | 53,224   | —   | —   |
| Options  | 876                           | —  | 876   | —   |
| Rights and warrants  | 263                           | 253  | —   | 10  |
| Swaps  | 46,676                        | —  | 46,676  | —   |
| <b>Total derivative instruments</b>                        | <b>320,548</b>                | <b>53,477</b>  | <b>267,061</b>                                | <b>10</b>                                 |
| <b>Securities lending collateral</b>                       | <b>26,372,260</b>             | <b>1,145,707</b>   | <b>25,226,553</b>                             | <b>—</b>                                  |
| <b>Bond proceeds investment</b>                            | <b>14,214</b>                 | <b>—</b>   | <b>14,214</b>                                 | <b>—</b>                                  |
| <b>Total investment assets recorded at fair value</b>      | <b>261,015,831</b>            | <b>142,834,293</b>   | <b>84,982,263</b>                             | <b>33,199,275</b>                         |
| <b>Investments measured at cost</b>                        |                               |  |   |   |
| Short-term securities                                      | 1,365,000                     | —  | —   | —   |
| Securities lending collateral                              | 6,192,023                     | —  | —   | —   |
| <b>Total investments measured at cost</b>                  | <b>7,557,023</b>              | <b>—</b>   | <b>—</b>                                      | <b>—</b>                                  |
| <b>Investments measured at NAV</b>                         |                               |  |   |   |
| Debt-privately held  | 9,156,943                     | —  | —   | —   |
| Equity-privately held                                      | 88,144,630                    | —  | —   | —   |
| Real estate-directly held                                  | 451,713                       | —  | —   | —   |
| Real estate-non-directly held                              | 14,612,174                    | —  | —   | —   |
| <b>Total investments measured at NAV</b>                   | <b>112,365,460</b>            | <b>—</b>   | <b>—</b>                                      | <b>—</b>                                  |
| <b>Total investment assets</b>                             | <b>\$380,938,314</b>          | <b>—</b>   | <b>—</b>                                      | <b>—</b>                                  |
| <b>Liabilities</b>   |                               |  |   |   |
| <b>Investments by fair value level</b>                     |                               |  |   |   |
| <b>Derivative instruments</b>                              |                               |  |   |   |
| Forwards   | \$260,253                     | \$—  | \$260,253                                     | \$—                                       |
| Futures  | 33,660                        | 33,660   | —   | —   |
| Options  | 2,075                         | —  | 2,075   | —   |
| Swaps  | 52,063                        | —  | 52,063  | —   |
| <b>Total derivative instruments</b>                        | <b>348,051</b>                | <b>33,660</b>  | <b>314,391</b>                                | <b>—</b>                                  |
| <b>Total investment liabilities recorded at fair value</b> | <b>\$348,051</b>              | <b>\$33,660</b>  | <b>\$314,391</b>                              | <b>\$—</b>                                |
| <b>TOTAL NET INVESTMENTS</b>                               | <b>\$380,590,263</b>          | <b>—</b>   | <b>—</b>                                      | <b>—</b>                                  |



## Notes to the basic financial statements

---

The \$487.3 million in securities sold short are not represented in the fair value leveling hierarchy table because they represent obligations to deliver borrowed securities to a lender. The obligations were valued using Level 1 measurements in the fair value hierarchy as of June 30, 2024.

Level 1 measurements are generally valued at the official closing price (usually the last trade price) or the last bid price on the security's primary exchange. Such investments generally include common stocks, REITs, depository receipts and mutual funds.

Level 2 measurements are generally valued using indicative prices from vendors, brokers or ask prices. These indicative measurements often use matrix pricing, the Black-Scholes-Merton model or a lattice model and incorporate observable inputs such as yield, prepayment speeds, credit spreads, volatility curves or currency curves. Such investments generally include debt securities, bonds and over-the-counter derivative instruments. Other factors such as infrequent trading, inactive market or adjusted quoted prices may also result in Level 2 measurements.

Level 3 measurements are generally valued using significant inputs that are unobservable to the marketplace. This may occur if an investment is illiquid or is internally estimated. For CalSTRS, such investments primarily include directly held real estate. Properties are appraised using discounted cash flows, income capitalization, adjusted comparable sales and replacement cost (if recent) methods. The method chosen is the one most relevant to how an investor would assess a property as a potential buyer. Additionally, debt associated with real estate properties is valued using income approach methods such as cash equivalency (gross method) or leveraged equity (net method).

CalSTRS measures certain investments that do not have a readily determinable fair value using NAV as a practical expedient. These investments are generally structured as limited partnerships with an investment manager and are created by raising pools of capital from investors that will be invested according to one or more specific investment strategies. Investors commit capital to the fund, and as the investment manager identifies investment opportunities, the committed capital is called to purchase the investments.

NAV is calculated using measurement principles similar to investment companies. CalSTRS updates the NAV for cash contributions, cash distributions and changes in the fair value of the underlying investments using capital account statements and estimates if the NAV is not updated as of the reporting date. CalSTRS does not currently have plans to sell any of these investments before their stated term.

## Notes to the basic financial statements

The following table displays information regarding investments that use NAV per share (or equivalent) as their fair value measurement:

### NAV practical expedient

(dollars in thousands)

|   | Fair value<br>June 30, 2024 | Total unfunded<br>commitments | Redemption frequency<br>(if currently eligible) | Redemption notice<br>period |
|---|-----------------------------|-------------------------------|---|-----------------------------|
| <b>Debt–privately held</b>  |                             |                               |   |                             |
| Debt-privately held <sup>1</sup>  | \$8,384,515                 | \$5,570,494                   | N/A   | N/A                         |
| Real Estate funds <sup>2</sup>  | 232,773                     | 348,791                       | N/A   | N/A                         |
| Other <sup>3</sup>  | 539,655                     | 368,118                       | Quarterly, Annually                             | 45-180 days                 |
| <b>Equity–privately held</b>  |                             |                               |   |                             |
| Private Equity funds <sup>4</sup>                                       | 63,138,280                  | 15,637,423                    | N/A   | N/A                         |
| Risk Mitigating Strategies funds <sup>5</sup>                           | 20,787,708                  | –                             | Monthly, Quarterly                              | 2-60 days                   |
| Sustainable Investment and Stewardship<br>Strategies funds <sup>6</sup> | 1,786,083                   | 599,792                       | Monthly, Quarterly, Annually,<br>N/A            | 45-120 days                 |
| Other <sup>7</sup>  | 2,432,559                   | –                             | Daily, Quarterly                                | 3-90 days                   |
| <b>Real Estate–directly held</b>  | <b>451,713</b>              | <b>94,338</b>                 | <b>N/A</b>                                      | <b>N/A</b>                  |
| <b>Real Estate–non-directly held</b>                                    |                             |                               |   |                             |
| Real Estate funds <sup>2</sup>  | 10,846,628                  | 7,011,058                     | N/A   | N/A                         |
| Sustainable Investment and Stewardship<br>Strategies funds <sup>8</sup> | 7,649                       | 15,857                        | N/A   | N/A                         |
| Other <sup>9</sup>  | 3,757,897                   | 52,195                        | Quarterly                                       | 30-90 days                  |
| <b>TOTAL INVESTMENTS MEASURED AT NAV</b>                                | <b>\$112,365,460</b>        | <b>\$29,698,066</b>           |   |                             |

<sup>1</sup> This category includes private equity and debt funds that invest in privately held debt. CalSTRS investment in each fund is generally not subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying assets over a weighted-average period of approximately 10 years as of June 30, 2024.

<sup>2</sup> This category includes funds that invest directly in real estate and real estate-related assets, including retail, industrial, office, residential and hotels. Generally, CalSTRS investment in each fund in this category may not be subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying assets over a weighted-average period of approximately five years as of June 30, 2024.

<sup>3</sup> This category includes funds that invest in direct lending and open-ended funds that invest directly in real estate loans. Investments representing 75.4% in this category can be redeemed quarterly upon written notice. The remaining 24.6% of the value of the investment in this category can be redeemed at the end of a three-year or rolling three-year period, are not subject to redemption and are normally returned through distributions as a result of the liquidation of the underlying assets.

<sup>4</sup> This category includes private equity funds that invest in nonmarketable securities of private companies, which ultimately may become public in the future and whose strategies include leveraged buyouts and venture capital. Generally, CalSTRS investment in each fund in this category may not be subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying assets over a weighted-average period of approximately nine years as of June 30, 2024.

<sup>5</sup> This category includes funds that include investment strategies with structural aspects that provide improved diversification and potential protection in negative equity markets. Investments representing 84.5% and 7.8% in this category can be redeemed monthly and quarterly, respectively, upon written notice. The remaining 7.7% of the value of the investments in this category is subject to a lockup period before a one-time full redemption is permissible.

<sup>6</sup> This category includes private assets funds and funds that invest strategically in publicly traded equities of companies on U.S. and non-U.S. exchanges to achieve capital appreciation and income. The funds in this category are generally subject to a lockup period before redemption is permissible. Investments representing 24.1%, 22.1% and 19.1% of the value of investments in this category can be redeemed monthly, annually and at the end of a three-year or rolling three-year period, respectively. The remaining 34.7% of the value of the investments in this category is not subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying assets.

<sup>7</sup> This category includes funds that invest primarily in equities, fixed income securities, opportunistic and other funds. Investments representing 48.6% and 51.4% in this category can be redeemed daily and quarterly, respectively, upon written notice.

<sup>8</sup> This category includes funds that invest indirectly in real estate and real estate-related assets, including retail, industrial, office, residential and hotels. Generally, CalSTRS investment in each fund in this category may not be subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying assets over a weighted-average period of approximately eight years as of June 30, 2024.

<sup>9</sup> This category includes open-ended funds that invest directly in real estate and real estate-related assets, including retail, industrial, office, residential and hotels. Investments in this category can be redeemed quarterly upon written notice.

# Notes to the basic financial statements

---

## Debt securities

Certain debt securities have an active market for identical securities and are valued using the close or last-traded price on a specific date. Debt securities that are not as actively traded are valued by pricing vendors using modeling techniques that include market observable inputs as well as unobservable inputs required to develop a fair value. Typical inputs include recent trades, yields, price quotes, cash flows, maturity, credit ratings and other assumptions based upon the specifics of the investment type.

Short-term investments are reported at fair value or at cost or amortized cost. For those investments that are reported at fair value, the investments are valued using similar methodologies as debt securities traded in active markets.

Bond mutual funds offered by Voya and TIAA are open-ended funds that are priced daily at NAV based generally upon the exchange-traded official closing price of the securities held by the funds. CalSTRS' allocation in the Voya annuity contracts is carried at contract value, which approximates fair value.

## Equity securities

The majority of equity securities held by CalSTRS are actively traded on major stock exchanges. These exchanges make information on trades of securities available daily on a last trade or official close basis. If such information is not available, other preestablished means are used to determine a price. Short sales of common stocks are valued at the last quoted sales price or exchange-traded official closing price. Stock mutual funds, held in the STRP and Pension2, are open-ended funds that are priced daily at NAV by the fund sponsor based generally upon the exchange-traded official closing price of the securities held by the fund.

## Alternative investments

Partnership interests are valued using their respective NAV calculated in accordance with the general partner's valuation policy as of the measurement date and are audited annually. The most significant input into the NAV of such an entity is the fair value of its investment holdings, which is typically valued on a quarterly or semiannual basis by the general partners. The valuation assumptions are based upon the nature of the investment and the underlying business. The valuation techniques vary by investment type and involve a certain degree of expert judgment.

Certain SISS funds structured as limited partnerships have been valued using the NAV of the entity, with the most significant input into the NAV being the value of its investment holdings. The general partners obtain prices for their holdings in a manner similar to that described above for equity securities.

Investments in directly held real estate assets are subject to independent third-party appraisals performed annually in accordance with the Uniform Standards of Professional Appraisal Practice. On a quarterly basis, fair values are estimated by the third-party advisor or operating partner using general market and property-specific assumptions, which are reviewed by CalSTRS' valuation consultant. Leverage may be used to enhance investment returns as set forth in the CalSTRS Real Estate Investment Policy.

Real estate investments in non-directly held limited partnership interests in commingled funds are valued by CalSTRS using the NAV of the partnership provided by the general partner. The most significant input into the NAV of such an entity is the fair value of its investment holdings. These holdings are valued using the general partners' valuation policy on a continuous basis, audited annually and periodically appraised by an independent third party as directed by the governing document for each commingled fund investment. The valuation assumptions use both market and property-specific inputs.

## Derivative instruments

The fair value of exchange-traded derivative instruments, such as futures, options, rights and warrants, are determined based on the quoted market prices or mean prices. The fair value of derivative instruments that are not exchange-traded, such as swaps, is determined by external pricing services.

Futures contracts are exchange-traded financial instruments that derive their value from underlying securities, indices or reference rates and are marked-to-market at the end of each day. The fair value of futures is accounted for as unrealized appreciation or depreciation until the contract is closed.

The fair value of the foreign currency forward contracts is the unrealized gain or loss calculated based on the difference between the specified exchange rate and the closing forward rate as of the reporting period.

# Notes to the basic financial statements

## 7. Loans and bonds payable

As of June 30, 2024, CalSTRS' outstanding debt obligations consist of amounts under the Master Credit Facility Portfolio, the Series 2019 Bonds and the Series 2022 Bonds.

### Master Credit Facility Portfolio

CalSTRS Master Credit Facility Portfolio consists of unsecured revolving lines of credit and unsecured term loans. The proceeds from the Master Credit Facility Portfolio provide the source of funds for managing capital flows of investment strategies.

As of June 30, 2024, the total lender commitments available under the credit facilities was \$9.1 billion. The principal amount of draws and repayments for the fiscal year ended June 30, 2024, were \$1.4 billion and \$1.3 billion, respectively. As of June 30, 2024, there was approximately \$5.8 billion of principal outstanding under the credit facilities, while approximately \$3.3 billion remained available. These credit facilities will mature between September 2024 and April 2027, although certain instruments may have the option to extend.

Pursuant to the terms and conditions of the loan agreements, upon an event of default, all outstanding amounts shall become due immediately, and any commitments of the lenders to fund additional borrowings shall automatically terminate if CalSTRS is unable to make the required payments. The loan agreements may also contain a subjective acceleration clause that allows the lender to accelerate payment of the principal amount to become immediately due if the lender determines, with reasonable judgment, that a material, adverse change occurs.

### Bonds payable

In December 2019, CalSTRS issued \$340.6 million (\$272.6 million par and \$68.0 million original issue premium) in tax-exempt lease-revenue green bonds (Series 2019 Bonds). The Series 2019 Bonds, officially titled "California Infrastructure and Economic Development Bank Lease Revenue Bonds (California State Teachers' Retirement System Headquarters Expansion), Series 2019 (Green Bonds - Climate Bond Certified)," were issued through a conduit issuer, the California Infrastructure and Economic Development Bank (IBank), a public instrumentality of the State of California, which provides financing for business development and public improvements.

In December 2022, CalSTRS issued \$16.2 million (\$15.6 million par and \$0.6 million original issue premium) in tax-exempt lease-revenue green bonds (Series 2022 Bonds). The Series 2022 Bonds, officially titled "California Infrastructure and Economic Development Bank Lease Revenue Bonds (California State Teachers' Retirement System Headquarters Expansion), Series 2022 (Green Bonds - Climate Bond Certified)," were also issued through the IBank. The proceeds from the Series 2019 and Series 2022 Bonds are being used to construct, furnish and equip the expansion to CalSTRS' existing headquarters and pay costs of issuance.

The financing transaction is structured as a lease-leaseback transaction, whereby CalSTRS leased the project site to IBank pursuant to a Site Lease, dated as of December 1, 2019, and then contemporaneously leased back the project site and the newly constructed building from the IBank pursuant to a facility lease dated December 1, 2019 (amended on December 1, 2022, to facilitate the issuance of the Series 2022 Bonds), in exchange for annual base rental payments.

The annual base rental payments are in an amount sufficient to pay, when due, the annual principal and interest payments (debt service) of the Series 2019 and Series 2022 Bonds.

For the Series 2019 Bonds, CalSTRS made total debt service payments of \$18.5 million (consisting of approximately \$5.1 million principal payments and \$13.4 million interest payments) during fiscal year 2023-24. For the Series 2022 Bonds, CalSTRS made total debt service payments of \$1.3 million (consisting of approximately \$0.6 million principal payments and \$0.7 million interest payments) during fiscal year 2023-24.

As of June 30, 2024, the Series 2019 Bonds consisted of \$123.9 million in serial bonds with interest rates ranging from 4.00% to 5.00% and various maturity dates through 2039, and two term bonds in the amounts of \$63.1 million and \$80.5 million with interest rates at 5.00% and maturing in 2044 and 2049, respectively. The effective interest rates of the outstanding bonds range from 1.07% to 2.21%.

As of June 30, 2024, the Series 2022 Bonds consisted of \$8.6 million in serial bonds with interest rates ranging from 4.00% to 5.00% and various maturity dates through 2041, and three term bonds in the amounts of \$2.2 million, \$1.6 million and \$2.7 million with interest rates at 4.00% and maturing in 2044, 2046 and 2049, respectively. The effective interest rates of the outstanding bonds range from 2.30% to 4.11%.

## Notes to the basic financial statements

Generally, CalSTRS is considered to be in default if it fails to pay the principal of and interest on the outstanding bonds when due and payable. If an event of default has occurred and is continuing, the principal of the Series 2019 and Series 2022 Bonds, together with the accrued interest, may be declared due and payable immediately.

Bond activity for the Series 2019 and Series 2022 Bonds for the fiscal year ended June 30, 2024, is summarized as follows (dollars in thousands):

|  | Balance as of<br>June 30, 2023 | Increases  | Decreases        | Balance as of<br>June 30, 2024 | Due within one<br>year |
|--|--------------------------------|------------|------------------|--------------------------------|------------------------|
| Series 2019 Bonds - principal              | \$272,605                      | \$—        | (\$5,125)        | \$267,480                      | \$5,330                |
| Series 2019 Bonds - original issue premium | 59,868                         | —          | (2,295)          | 57,573                         | 2,295                  |
| Series 2022 Bonds - principal              | 15,640                         | —          | (550)            | 15,090                         | 310                    |
| Series 2022 Bonds - original issue premium | 585                            | —          | (22)             | 563                            | 22                     |
| <b>Bonds payable, net</b>                  | <b>\$348,698</b>               | <b>\$—</b> | <b>(\$7,992)</b> | <b>\$340,706</b>               | <b>\$7,957</b>         |

Future debt service payments for the combined Series 2019 and Series 2022 Bonds for each of the five fiscal years subsequent to June 30, 2024, and thereafter are presented below (dollars in thousands):

| Fiscal year<br>ending June 30 | Principal        | Interest         | Total debt<br>service |
|-------------------------------|------------------|------------------|-----------------------|
| 2025                          | \$5,640          | \$13,799         | \$19,439              |
| 2026                          | 5,870            | 13,565           | 19,435                |
| 2027                          | 6,110            | 13,293           | 19,403                |
| 2028                          | 6,415            | 12,981           | 19,396                |
| 2029                          | 6,735            | 12,651           | 19,386                |
| 2030 - 2034                   | 39,080           | 57,723           | 96,803                |
| 2035 - 2039                   | 49,840           | 46,701           | 96,541                |
| 2040 - 2044                   | 63,460           | 32,754           | 96,214                |
| 2045 - 2049                   | 80,790           | 14,995           | 95,785                |
| 2050                          | 18,630           | 462              | 19,092                |
| <b>TOTAL</b>                  | <b>\$282,570</b> | <b>\$218,924</b> | <b>\$501,494</b>      |

# Notes to the basic financial statements

## 8. Contingencies

CalSTRS is involved in litigation relating to various matters. In the opinion of management, after consultation with legal counsel, the outcome of these matters is not expected to have a material adverse effect on CalSTRS' basic financial statements.

## 9. Commitments

In connection with the purchase of partnership interests under various investment portfolios, CalSTRS has remaining unfunded commitments of approximately \$33.0 billion as of June 30, 2024.

The following table depicts the unfunded commitments by asset strategy:

| <b>Asset class/Strategy</b>                       | <b>Unfunded commitments</b><br>(dollars in thousands) |
|---|---|
| Collaborative Strategies                          | \$1,927,731   |
| Fixed Income                                      | 718,714   |
| Inflation Sensitive                               | 2,671,469   |
| Private Equity                                    | 19,249,167  |
| Real Estate                                       | 7,866,288   |
| Sustainable Investment and Stewardship Strategies | 615,649   |
| <b>TOTAL</b>                                      | <b>\$33,049,018</b>                                   |

These unfunded commitments include agreements for acquisitions not yet initiated, which are not included in the NAV practical expedient table in Note 6.

## Medicare Premium Payment Program

Under current board policy, assets are set aside from the future employer contributions to the DB Program to fund the MPP Program. Based on the funding actuarial valuation for the DB Program, as of June 30, 2023, the assets set aside are equal to the actuarial obligation of the MPP Program, less the value of any assets already in the program, and future employer contributions committed to funding the MPP Program totaled \$221.6 million. This, along with existing assets of the MPP Program, equals the projected cost of the program.

This amount is a funding measure that assumes the value of these contributions will be available to fund the MPP Program benefits in future periods, as the assets currently in the program are not sufficient to fund the projected future benefits. This differs from the net OPEB liability as of June 30, 2024, of \$266.5 million, which was measured in accordance with GASB Statement No. 74 and represents the actuarial present value of projected benefit payments that is attributable to the MPP Program participants.

# Required supplementary information (unaudited)

## Schedule of changes in net pension liability of employers and nonemployer contributing entity

Schedule I<sup>1</sup>

(dollars in millions)

### State Teachers' Retirement Plan

| Year ended June 30   | 2024            | 2023            | 2022            | 2021            | 2020            |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Total pension liability</b>   |                 |                 |                 |                 |                 |
| Service cost   | \$8,706         | \$8,175         | \$7,675         | \$7,612         | \$7,340         |
| Interest   | 27,856          | 26,177          | 25,196          | 24,373          | 23,334          |
| Changes in benefit terms   | 33              | 587             | 70              | –               | –               |
| Differences between expected and actual experience                       | 3,045           | 6,983           | (1,673)         | (3,369)         | (963)           |
| Changes of assumptions <sup>2</sup>                                      | (5,351)         | –               | –               | –               | 1,029           |
| Benefit payments, including refunds of member contributions              | (19,188)        | (18,384)        | (17,527)        | (16,708)        | (16,025)        |
| <b>Net change in total pension liability</b>                             | <b>15,101</b>   | <b>23,538</b>   | <b>13,741</b>   | <b>11,908</b>   | <b>14,715</b>   |
| <b>Beginning total pension liability</b>                                 | <b>393,080</b>  | <b>369,542</b>  | <b>355,801</b>  | <b>343,893</b>  | <b>329,178</b>  |
| <b>Ending total pension liability (a)</b>                                | <b>408,181</b>  | <b>393,080</b>  | <b>369,542</b>  | <b>355,801</b>  | <b>343,893</b>  |
| <b>Plan fiduciary net position</b>                                       |                 |                 |                 |                 |                 |
| Member contributions   | 4,735           | 4,305           | 4,068           | 3,743           | 3,735           |
| Employer contributions   | 8,585           | 7,746           | 6,521           | 5,758           | 6,080           |
| State of California contributions  | 3,946           | 3,720           | 4,280           | 3,731           | 4,447           |
| Net investment income (loss)   | 26,173          | 19,675          | (7,390)         | 67,039          | 10,103          |
| Other income   | 391             | 304             | 130             | 90              | 101             |
| Benefit payments, including refunds of member contributions              | (19,188)        | (18,384)        | (17,527)        | (16,708)        | (16,025)        |
| Administrative expenses  | (203)           | (222)           | (191)           | (252)           | (219)           |
| Borrowing costs  | (333)           | (272)           | (123)           | (90)            | (95)            |
| Other expenses   | (7)             | (9)             | (5)             | (2)             | (5)             |
| <b>Net change in plan fiduciary net position</b>                         | <b>24,099</b>   | <b>16,863</b>   | <b>(10,237)</b> | <b>63,309</b>   | <b>8,122</b>    |
| <b>Beginning plan fiduciary net position-as previously reported</b>      | <b>316,919</b>  | <b>300,056</b>  | <b>310,293</b>  | <b>246,984</b>  | <b>238,862</b>  |
| Adjustment for application of new GASB statements                        | –               | –               | –               | –               | –               |
| <b>Beginning plan fiduciary net position-as adjusted</b>                 | <b>316,919</b>  | <b>300,056</b>  | <b>310,293</b>  | <b>246,984</b>  | <b>238,862</b>  |
| <b>Ending plan fiduciary net position (b)</b>                            | <b>341,018</b>  | <b>316,919</b>  | <b>300,056</b>  | <b>310,293</b>  | <b>246,984</b>  |
| <b>ENDING NET PENSION LIABILITY OF EMPLOYERS AND THE STATE (a) – (b)</b> | <b>\$67,163</b> | <b>\$76,161</b> | <b>\$69,486</b> | <b>\$45,508</b> | <b>\$96,909</b> |

<sup>1</sup> Some numbers in this schedule are rounded for presentation purposes and may differ slightly from those presented in the statement of changes in fiduciary net position.

<sup>2</sup> Assumptions used in determining the total pension liability (TPL) of the State Teachers' Retirement Plan (STRP) changed due to actuarial experience studies. Changes in assumptions effective in fiscal year 2023–24 were to expected mortality improvement based on the 2024 experience analysis report, while changes in assumptions effective in fiscal year 2019–20 were to termination rates and service retirement rates based on the 2020 experience analysis report.

# Required supplementary information (unaudited)

## Schedule of changes in net pension liability of employers and nonemployer contributing entity (continued)

Schedule I<sup>1</sup>

(dollars in millions)

### State Teachers' Retirement Plan

| Year ended June 30   | 2019            | 2018            | 2017            | 2016            | 2015            |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Total pension liability</b>   |                 |                 |                 |                 |                 |
| Service cost   | \$7,055         | \$7,142         | \$6,064         | \$5,874         | \$5,556         |
| Interest   | 22,458          | 21,496          | 20,227          | 19,332          | 18,556          |
| Changes in benefit terms   | 32              | –               | –               | –               | –               |
| Differences between expected and actual experience                                   | (1,847)         | (94)            | 399             | (1,209)         | (1,312)         |
| Changes of assumptions <sup>2</sup>  | –               | –               | 19,988          | –               | –               |
| Benefit payments, including refunds of member contributions                          | (15,296)        | (14,537)        | (13,903)        | (13,149)        | (12,565)        |
| <b>Net change in total pension liability</b>   | <b>12,402</b>   | <b>14,007</b>   | <b>32,775</b>   | <b>10,848</b>   | <b>10,235</b>   |
| <b>Beginning total pension liability</b>   | <b>316,776</b>  | <b>302,769</b>  | <b>269,994</b>  | <b>259,146</b>  | <b>248,911</b>  |
| <b>Ending total pension liability (a)</b>  | <b>329,178</b>  | <b>316,776</b>  | <b>302,769</b>  | <b>269,994</b>  | <b>259,146</b>  |
| <b>Plan fiduciary net position</b>   |                 |                 |                 |                 |                 |
| Member contributions   | 3,648           | 3,496           | 3,441           | 2,957           | 2,510           |
| Employer contributions   | 5,644           | 4,867           | 4,173           | 3,391           | 2,678           |
| State of California contributions  | 5,335           | 2,797           | 2,478           | 1,940           | 1,426           |
| Net investment income  | 14,898          | 18,674          | 25,165          | 2,305           | 7,612           |
| Other income   | 127             | 106             | 72              | 42              | 4               |
| Benefit payments, including refunds of member contributions                          | (15,296)        | (14,537)        | (13,903)        | (13,149)        | (12,565)        |
| Administrative expenses  | (254)           | (216)           | (182)           | (180)           | (145)           |
| Borrowing costs <sup>3</sup>   | (105)           | (94)            | (58)            | –               | –               |
| Other expenses   | (4)             | (2)             | (10)            | (15)            | (10)            |
| <b>Net change in plan fiduciary net position</b>                                     | <b>13,993</b>   | <b>15,091</b>   | <b>21,176</b>   | <b>(2,709)</b>  | <b>1,510</b>    |
| <b>Beginning plan fiduciary net position-as previously reported</b>                  | <b>224,869</b>  | <b>210,289</b>  | <b>189,113</b>  | <b>191,822</b>  | <b>190,474</b>  |
| Adjustment for application of new GASB statements <sup>4</sup>                       | –               | (511)           | –               | –               | (162)           |
| <b>Beginning plan fiduciary net position-as adjusted</b>                             | <b>224,869</b>  | <b>209,778</b>  | <b>189,113</b>  | <b>191,822</b>  | <b>190,312</b>  |
| <b>Ending plan fiduciary net position (b)</b>  | <b>238,862</b>  | <b>224,869</b>  | <b>210,289</b>  | <b>189,113</b>  | <b>191,822</b>  |
| <b>ENDING NET PENSION LIABILITY OF EMPLOYERS AND THE STATE<sup>5</sup> (a) - (b)</b> | <b>\$90,316</b> | <b>\$91,907</b> | <b>\$92,480</b> | <b>\$80,881</b> | <b>\$67,324</b> |

<sup>1</sup> Some numbers in this schedule are rounded for presentation purposes and may differ slightly from those presented in the statement of changes in fiduciary net position.

<sup>2</sup> Assumptions used in determining the TPL of the STRP changed due to actuarial experience studies. Changes in assumptions effective in fiscal year 2016-17 were to price inflation, wage growth, discount rate and mortality tables based on the 2017 experience analysis report.

<sup>3</sup> Borrowing costs of \$58 million associated with the Master Credit Facility Portfolio, which were previously recorded within net investment income, have been reclassified beginning in the fiscal year ended June 30, 2017.

<sup>4</sup> Adjustments were made to the STRP's beginning net position in fiscal years 2017-18 and 2014-15 due to the implementation of requirements from GASB Statements No. 75 and No. 68, respectively.

<sup>5</sup> The net pension liability (NPL) for fiscal year 2016-17 excludes the \$511 million reduction to net position as a result of CalSTRS' implementation of GASB Statement No. 75.



## Required supplementary information (unaudited)

### Schedule of net pension liability of employers and nonemployer contributing entity

Schedule II<sup>1</sup>

(dollars in millions)

#### State Teachers' Retirement Plan

| Year ended<br>June 30 | (a)<br>Total pension<br>liability | (b)<br>Plan fiduciary<br>net position | (a - b)<br>NPL of employers<br>and the state | (b / a)<br>Plan fiduciary net<br>position as a % of<br>total pension<br>liability | (c)<br>Covered payroll | (a - b) / c<br>NPL of employers<br>and the state<br>as a % of<br>covered payroll |
|-----------------------|-----------------------------------|---------------------------------------|--|---|------------------------|--|
| 2024                  | \$408,181                         | \$341,018                             | \$67,163                                     | 83.5%   | \$46,652               | 144.0%   |
| 2023                  | 393,080                           | 316,919                               | 76,161                                       | 80.6%   | 42,552                 | 179.0%   |
| 2022                  | 369,542                           | 300,056                               | 69,486                                       | 81.2%   | 40,103                 | 173.3%   |
| 2021                  | 355,801                           | 310,293                               | 45,508                                       | 87.2%   | 36,737                 | 123.9%   |
| 2020                  | 343,893                           | 246,984                               | 96,909                                       | 71.8%   | 36,668                 | 264.3%   |
| 2019                  | 329,178                           | 238,862                               | 90,316                                       | 72.6%   | 35,805                 | 252.2%   |
| 2018                  | 316,776                           | 224,869                               | 91,907                                       | 71.0%   | 34,753                 | 264.5%   |
| 2017                  | 302,769                           | 210,289                               | 92,480 <sup>2</sup>                          | 69.5%   | 34,126                 | 271.0%   |
| 2016                  | 269,994                           | 189,113                               | 80,881                                       | 70.0%   | 31,910                 | 253.5%   |
| 2015                  | 259,146                           | 191,822                               | 67,324                                       | 74.0%   | 32,026 <sup>3</sup>    | 210.2%   |

<sup>1</sup> Some numbers in this schedule are rounded for presentation purposes and may differ slightly from those presented in the statement of fiduciary net position.

<sup>2</sup> The NPL for fiscal year 2016-17 excludes the \$511 million reduction to net position as a result of CalSTRS implementation of GASB Statement No. 75.

<sup>3</sup> In fiscal year 2014-15, CalSTRS reported covered-employee payroll (which includes both pensionable and non-pensionable compensation) in line with GASB's clarification of the requirements of GASB Statement No. 67. In fiscal year 2015-16, GASB Statement No. 82 was issued (which amended GASB Statements No. 67 and No. 68) to instead require the presentation of covered payroll, which is pensionable compensation. The covered payroll amount for fiscal year 2014-15 is \$30.5 billion.

# Required supplementary information (unaudited)

## Schedule of pension contributions from employers and nonemployer contributing entity

Schedule III

(dollars in millions)

### State Teachers' Retirement Plan

| Year ended June 30 | (a)<br>Actuarially determined contributions | Legally required contributions for employers and the state | (b)<br>Employer contributions <sup>1,2</sup> | (c)<br>State contributions <sup>3</sup> | (b + c)<br>Total contributions | a - (b + c)<br>Contribution deficiency (excess) | (d)<br>Covered payroll | (b + c) / d<br>Contributions as a % of covered payroll |
|--------------------|---|--|--|---|--------------------------------|---|------------------------|--|
| 2024               | \$11,399                                    | \$12,523   | \$8,577                                      | \$3,946                                 | \$12,523                       | (\$1,124)                                       | \$46,652               | 26.8%  |
| 2023               | 10,634                                      | 11,458   | 7,738  | 3,720                                   | 11,458                         | (824)   | 42,552                 | 26.9%  |
| 2022               | 11,059                                      | 10,793   | 6,513  | 4,280                                   | 10,793                         | 266   | 40,103                 | 26.9%  |
| 2021               | 10,245                                      | 9,475  | 5,744  | 3,731                                   | 9,475                          | 770   | 36,737                 | 25.8%  |
| 2020               | 10,849                                      | 10,512   | 6,065  | 4,447                                   | 10,512                         | 337   | 36,668                 | 28.7%  |
| 2019               | 10,790                                      | 10,968   | 5,633  | 5,335                                   | 10,968                         | (178)   | 35,805                 | 30.6%  |
| 2018               | 9,577                                       | 7,654  | 4,857  | 2,797                                   | 7,654                          | 1,923   | 34,753                 | 22.0%  |
| 2017               | 7,959                                       | 6,638  | 4,160  | 2,478                                   | 6,638                          | 1,321   | 34,126                 | 19.5%  |
| 2016               | 7,748                                       | 5,318  | 3,378  | 1,940                                   | 5,318                          | 2,430   | 31,910                 | 16.7%  |
| 2015               | 7,707                                       | 4,093  | 2,667  | 1,426                                   | 4,093                          | 3,614   | 32,026 <sup>4</sup>    | 12.8%  |

<sup>1</sup> Excludes \$8.4 million, \$8.2 million, \$8.1 million, \$13.7 million, \$14.7 million, \$10.7 million, \$10.3 million, \$13.3 million, \$13.5 million and \$11.2 million for fiscal years 2023-24, 2022-23, 2021-22, 2020-21, 2019-20, 2018-19, 2017-18, 2016-17, 2015-16 and 2014-15, respectively, in contributions to separately finance specific liabilities, such as benefit enhancements, of an individual employer.

<sup>2</sup> Includes employer contributions under Education Code sections 22711, 22713, 22905, 22950, 22950.5, 22951, 24260, 26503 and 26504.

<sup>3</sup> Includes state contributions under Education Code sections 22954, 22955, and 22955.1 as well as Public Resources Code section 6217. State contributions for fiscal years 2021-22, 2020-21, 2019-20 and 2018-19 include supplemental contribution payments from the state of \$583.7 million, \$297.0 million, \$1.1 billion and \$2.2 billion, respectively.

<sup>4</sup> In fiscal year 2014-15, CalSTRS reported covered-employee payroll (which includes both pensionable and non-pensionable compensation) in line with GASB's clarification of the requirements of GASB Statement No. 67. In fiscal year 2015-16, GASB Statement No. 82 was issued (which amended GASB Statements No. 67 and No. 68) to instead require the presentation of covered payroll, which is pensionable compensation. The covered payroll amount for fiscal year 2014-15 is \$30.5 billion.

### Methods and assumptions used in calculations of actuarially determined contributions

The actuarially determined contribution (ADC) for the STRP for 2024 presented in this schedule of pension contributions from employers and nonemployer contributing entity was determined based on the assumptions used in the June 30, 2022, funding actuarial valuation. The following actuarial methods and assumptions were used to determine the ADC:

#### Actuarial methods for the STRP

|                        |                                     |
|------------------------|-------------------------------------|
| Actuarial cost method  | Entry age actuarial cost method     |
| Amortization method    | Level percentage of payroll, closed |
| Amortization period    | Ending June 30, 2046                |
| Asset valuation method | Adjustment to fair value            |

#### Actuarial assumptions for the STRP<sup>1</sup>

|                                  |                    |
|----------------------------------|--------------------|
| Investment rate of return        | 7.00% <sup>2</sup> |
| Interest on accounts             | 3.00%              |
| Wage growth                      | 3.50%              |
| Payroll growth                   | 3.50% <sup>3</sup> |
| Consumer price inflation         | 2.75%              |
| Postretirement benefit increases | 2.00% simple       |

<sup>1</sup> The assumptions shown are for the ADC of the Defined Benefit (DB) Program. The ADC for the year ended June 30, 2024, is the statutory contribution rate as of the June 30, 2022, funding actuarial valuation applied to actual DB Program payroll for the fiscal year ended June 30, 2024. For the Defined Benefit Supplement Program, Cash Balance Benefit Program and Supplemental Benefit Maintenance Account, the ADC reflects the contributions recognized on an accrual basis for the fiscal year ended June 30, 2024.

<sup>2</sup> The ADC for the fiscal year ended June 30, 2024, was calculated based on the economic and demographic assumptions in place for the funding actuarial valuation as of June 30, 2022. This valuation was performed using a 7.00% assumed investment rate of return, net of investment and administrative expenses. For financial reporting purposes, the NPL (shown in Note 3 of the basic financial statements) was calculated using actuarial assumptions adopted in 2024, which included an assumed rate of return of 7.10%, net of investment expenses but gross of administrative expenses.

<sup>3</sup> The ADC for the fiscal year ended June 30, 2024, was calculated based on the economic and demographic assumptions in place for the funding actuarial valuation as of June 30, 2022. The payroll growth assumption was updated to 3.25% in the June, 30, 2023, funding actuarial valuation.

## Required supplementary information (unaudited)

### Schedule of money-weighted rate of return for the State Teachers' Retirement Plan and Medicare Premium Payment Program

Schedule IV

#### State Teachers' Retirement Plan

| Fiscal year ended June 30 | Money-weighted rate of return,<br>net of investment expenses |
|---------------------------|--|
| 2024                      | 8.3%   |
| 2023                      | 6.6%   |
| 2022                      | (2.4%)   |
| 2021                      | 27.2%  |
| 2020                      | 4.2%   |
| 2019                      | 6.6%   |
| 2018                      | 8.9%   |
| 2017                      | 13.4%  |
| 2016                      | 1.2%   |
| 2015                      | 4.1%   |

#### Medicare Premium Payment Program<sup>1</sup>

| Fiscal year ended June 30 <sup>2</sup> | Money-weighted rate of return,<br>net of investment expenses |
|--|--|
| 2024                                   | 4.3%   |
| 2023                                   | 2.1%   |
| 2022                                   | 0.1%   |
| 2021                                   | 0.4%   |
| 2020                                   | 1.9%   |
| 2019                                   | 2.3%   |
| 2018                                   | 1.3%   |
| 2017                                   | 0.9%   |

<sup>1</sup> Any funds within the Medicare Premium Payment (MPP) Program as of June 30, 2024, were to manage differences between estimated and actual amounts to be paid and were invested in the Surplus Money Investment Fund, which is a pooled investment program administered by the California State Treasurer.

<sup>2</sup> This is a 10-year schedule. However, the information in this schedule is not available for periods prior to fiscal year 2016-17. Years will be added to this schedule in future fiscal years until 10 years of information is available.

# Required supplementary information (unaudited)

## Schedule of changes in net OPEB liability of employers

Schedule V

(dollars in thousands)

### Medicare Premium Payment Program

| Year ended June 30 <sup>1</sup>  | 2024             | 2023             | 2022             | 2021             |
|--|------------------|------------------|------------------|------------------|
| <b>Total OPEB liability</b>  |                  |                  |                  |                  |
| Interest   | \$10,553         | \$11,111         | \$8,270          | \$9,009          |
| Differences between expected and actual experience                     | (16,899)         | (9,070)          | (9,627)          | (9,598)          |
| Changes of assumptions <sup>2</sup>                                    | (7,266)          | (2,717)          | (42,212)         | 1,874            |
| Premiums paid  | (23,094)         | (25,103)         | (25,776)         | (26,377)         |
| <b>Net change in total OPEB liability</b>                              | <b>(36,706)</b>  | <b>(25,779)</b>  | <b>(69,345)</b>  | <b>(25,092)</b>  |
| <b>Beginning total OPEB liability</b>                                  | <b>300,566</b>   | <b>326,345</b>   | <b>395,690</b>   | <b>420,782</b>   |
| <b>Ending total OPEB liability (a)</b>                                 | <b>263,860</b>   | <b>300,566</b>   | <b>326,345</b>   | <b>395,690</b>   |
| <b>Program fiduciary net position</b>                                  |                  |                  |                  |                  |
| Employer contributions   | 23,590           | 25,812           | 26,352           | 26,988           |
| Net investment income  | 56               | 31               | 1                | 6                |
| Premiums paid  | (23,094)         | (25,103)         | (25,776)         | (26,377)         |
| Administrative expenses  | (368)            | (544)            | (468)            | (788)            |
| Other expenses   | (1)              | (1)              | (1)              | —                |
| <b>Net change in program fiduciary net position</b>                    | <b>183</b>       | <b>195</b>       | <b>108</b>       | <b>(171)</b>     |
| <b>Beginning program fiduciary net position-as previously reported</b> | <b>(2,871)</b>   | <b>(3,066)</b>   | <b>(3,174)</b>   | <b>(3,003)</b>   |
| Adjustment for application of new GASB statements                      | —                | —                | —                | —                |
| <b>Beginning program fiduciary net position-as adjusted</b>            | <b>(2,871)</b>   | <b>(3,066)</b>   | <b>(3,174)</b>   | <b>(3,003)</b>   |
| <b>Ending program fiduciary net position (b)</b>                       | <b>(2,688)</b>   | <b>(2,871)</b>   | <b>(3,066)</b>   | <b>(3,174)</b>   |
| <b>ENDING NET OPEB LIABILITY OF EMPLOYERS (a) - (b)</b>                | <b>\$266,548</b> | <b>\$303,437</b> | <b>\$329,411</b> | <b>\$398,864</b> |

<sup>1</sup> This is a 10-year schedule. However, the information in this schedule is not available for periods prior to fiscal year 2016-17. Years will be added to this schedule in future fiscal years until 10 years of information is available.

<sup>2</sup> Changes of assumptions include changes to the discount rate, Medicare costs trend rate, mortality and future enrollment in the MPP Program.

## Required supplementary information (unaudited)

### Schedule of changes in net OPEB liability of employers (continued)

Schedule V

(dollars in thousands)

#### Medicare Premium Payment Program

| Year ended June 30 <sup>1</sup>  | 2020             | 2019             | 2018             | 2017             |
|--|------------------|------------------|------------------|------------------|
| <b>Total OPEB liability</b>  |                  |                  |                  |                  |
| Interest   | \$12,457         | \$14,225         | \$14,567         | \$12,928         |
| Differences between expected and actual experience                     | (4,288)          | (10,605)         | (15,759)         | (41)             |
| Changes of assumptions <sup>2</sup>                                    | 70,417           | 12,111           | (10,293)         | (31,240)         |
| Premiums paid  | (27,217)         | (27,546)         | (28,036)         | (28,929)         |
| <b>Net change in total OPEB liability</b>                              | <b>51,369</b>    | <b>(11,815)</b>  | <b>(39,521)</b>  | <b>(47,282)</b>  |
| <b>Beginning total OPEB liability</b>                                  | <b>369,413</b>   | <b>381,228</b>   | <b>420,749</b>   | <b>468,031</b>   |
| <b>Ending total OPEB liability (a)</b>                                 | <b>420,782</b>   | <b>369,413</b>   | <b>381,228</b>   | <b>420,749</b>   |
| <b>Program fiduciary net position</b>                                  |                  |                  |                  |                  |
| Employer contributions   | 27,685           | 27,977           | 28,218           | 29,117           |
| Net investment income  | 25               | 29               | 18               | 11               |
| Premiums paid  | (27,217)         | (27,546)         | (28,036)         | (28,929)         |
| Administrative expenses  | (510)            | (1,901)          | (578)            | (168)            |
| Other expenses   | (2)              | (1)              | —                | —                |
| <b>Net change in program fiduciary net position</b>                    | <b>(19)</b>      | <b>(1,442)</b>   | <b>(378)</b>     | <b>31</b>        |
| <b>Beginning program fiduciary net position-as previously reported</b> | <b>(2,984)</b>   | <b>(1,542)</b>   | <b>41</b>        | <b>10</b>        |
| Adjustment for application of new GASB statements <sup>3</sup>         | —                | —                | (1,205)          | —                |
| <b>Beginning program fiduciary net position-as adjusted</b>            | <b>(2,984)</b>   | <b>(1,542)</b>   | <b>(1,164)</b>   | <b>10</b>        |
| <b>Ending program fiduciary net position (b)</b>                       | <b>(3,003)</b>   | <b>(2,984)</b>   | <b>(1,542)</b>   | <b>41</b>        |
| <b>ENDING NET OPEB LIABILITY OF EMPLOYERS<sup>4</sup> (a) - (b)</b>    | <b>\$423,785</b> | <b>\$372,397</b> | <b>\$382,770</b> | <b>\$420,708</b> |

<sup>1</sup> This is a 10-year schedule. However, the information in this schedule is not available for periods prior to fiscal year 2016-17. Years will be added to this schedule in future fiscal years until 10 years of information is available.

<sup>2</sup> Changes of assumptions include changes to the discount rate, Medicare costs trend rate, mortality and future enrollment in the MPP Program.

<sup>3</sup> An adjustment was made to the MPP Program's beginning net position in fiscal year 2017-18 due to the implementation of requirements from GASB Statement No. 75.

<sup>4</sup> The net OPEB liability for fiscal year 2016-17 excludes the \$1.2 million reduction to the net position as a result of CalSTRS' implementation of GASB Statement No. 75.

## Required supplementary information (unaudited)

### Schedule of net OPEB liability of employers

Schedule VI<sup>1</sup>

(dollars in thousands)

#### Medicare Premium Payment Program

| Year ended<br>June 30 <sup>2</sup> | (a)<br>Total OPEB<br>liability | (b)<br>Program fiduciary<br>net position | (a - b)<br>Net OPEB liability<br>of employers | (b / a)<br>Program fiduciary net<br>position as a % of<br>total OPEB liability |
|------------------------------------|--------------------------------|--|---|--|
| 2024                               | \$263,860                      | (\$2,688)                                | \$266,548                                     | (1.02%)  |
| 2023                               | 300,566                        | (2,871)                                  | 303,437                                       | (0.96%)  |
| 2022                               | 326,345                        | (3,066)                                  | 329,411                                       | (0.94%)  |
| 2021                               | 395,690                        | (3,174)                                  | 398,864                                       | (0.80%)  |
| 2020                               | 420,782                        | (3,003)                                  | 423,785                                       | (0.71%)  |
| 2019                               | 369,413                        | (2,984)                                  | 372,397                                       | (0.81%)  |
| 2018                               | 381,228                        | (1,542)                                  | 382,770                                       | (0.40%)  |
| 2017                               | 420,749                        | 41                                       | 420,708                                       | 0.01%  |

<sup>1</sup> Contributions to the MPP Program are not based on a measure of pay; as such, covered payroll and net OPEB liability as a percentage of covered payroll are not applicable for this schedule.

<sup>2</sup> This is a 10-year schedule. However, the information in this schedule is not available for periods prior to fiscal year 2016-17. Years will be added to this schedule in future fiscal years until 10 years of information is available.

## Other supplementary information

### Schedule of administrative expenses

Schedule VII

(dollars in thousands)

|   | State<br>Teachers'<br>Retirement<br>Plan | Pension2<br>403(b)<br>Plan | Pension2<br>457(b)<br>Plan | Medicare<br>Premium<br>Payment<br>Program | Teachers'<br>Deferred<br>Compensation<br>Fund | Totals           |
|---|--|----------------------------|----------------------------|---|---|------------------|
| <b>Personnel services</b>                     |  |                            |                            |   |   |                  |
| Salaries and wages                            | \$96,357                                 | \$—                        | \$—                        | \$220                                     | \$728   | \$97,305         |
| Staff benefits                                | 19,954                                   | —                          | —                          | 70  | 216   | 20,240           |
| Accrued pension and OPEB expense <sup>1</sup> | (14,294)                                 | —                          | —                          | (121)                                     | (261)   | (14,676)         |
| <b>Total personnel services</b>               | <b>102,017</b>                           | <b>—</b>                   | <b>—</b>                   | <b>169</b>                                | <b>683</b>                                    | <b>102,869</b>   |
| <b>Operating expenses and equipment</b>       |  |                            |                            |   |   |                  |
| General                                       | 3,304                                    | —                          | —                          | 156                                       | 128   | 3,588            |
| Depreciation/amortization                     | 8,054                                    | —                          | —                          | —   | —   | 8,054            |
| Printing                                      | 457                                      | —                          | —                          | —   | 1   | 458              |
| Communications                                | 1,754                                    | —                          | —                          | —   | —   | 1,754            |
| Postage                                       | 1,205                                    | —                          | —                          | —   | —   | 1,205            |
| Insurance                                     | 1,121                                    | —                          | —                          | —   | —   | 1,121            |
| Travel  | 704                                      | —                          | —                          | —   | 19  | 723              |
| Training                                      | 678                                      | —                          | —                          | —   | —   | 678              |
| Facilities operations                         | 10,468                                   | —                          | —                          | —   | —   | 10,468           |
| Consultants and professional services         | 40,335                                   | 5,972                      | 412                        | —   | 77  | 46,796           |
| Information technology                        | 18,261                                   | —                          | —                          | —   | —   | 18,261           |
| Indirect state central services               | 12,020                                   | —                          | —                          | 43  | 105   | 12,168           |
| Equipment                                     | 2,601                                    | —                          | —                          | —   | —   | 2,601            |
| Other   | 61                                       | —                          | —                          | —   | —   | 61               |
| <b>Total operating expenses and equipment</b> | <b>101,023</b>                           | <b>5,972</b>               | <b>412</b>                 | <b>199</b>                                | <b>330</b>                                    | <b>107,936</b>   |
| <b>TOTAL ADMINISTRATIVE EXPENSES</b>          | <b>\$203,040</b>                         | <b>\$5,972</b>             | <b>\$412</b>               | <b>\$368</b>                              | <b>\$1,013</b>                                | <b>\$210,805</b> |

<sup>1</sup> Negative amount in accrued pension and OPEB expense is due to changes in CalSTRS' proportionate share of the state's net pension liability and net OPEB liability.

## Other supplementary information

### Schedule of investment expenses

Schedule VIII

(dollars in thousands)

|  | Contract start date | Amount         |
|--|---------------------|----------------|
| <b>Investment management fees</b>            |                     |                |
| Acadian Asset Management, LLC                | 2/1/18              | \$1,567        |
| AGF Investments America, Inc.                | 3/19/07             | 1,759          |
| AQR Capital Management Holdings, LLC         | 12/1/14             | 18,653         |
| Ares Capital Management III, LLC             | 5/1/22              | 1,032          |
| Arrowstreet Capital, Ltd.                    | 8/1/15              | 11,167         |
| Baillie Gifford Overseas, Ltd.               | 1/15/06             | 10,098         |
| Bivium Capital Partners, LLC                 | 2/15/08             | 2,934          |
| BlackRock Financial Management, Inc.         | 3/12/07             | 1,716          |
| CIBC Asset Management, Inc.                  | 11/21/19            | 1,638          |
| Credit Suisse Asset Management, LLC          | 9/1/11              | 1,561          |
| Fidelity Institutional Asset Management, Co. | 2/1/00              | 1,324          |
| FIS Group, Inc.                              | 9/1/16              | 4,486          |
| Generation Investment Management             | 3/19/07             | 5,775          |
| Hermes Investment Managers, Ltd.             | 2/1/19              | 1,856          |
| Impax Asset Management Limited               | 2/1/19              | 1,640          |
| Jacobs Levy Equity Management, Inc.          | 3/1/19              | 7,019          |
| JP Morgan Investment Management, Inc.        | 1/1/14              | 7,259          |
| Lazard Asset Management, LLC                 | 1/15/06             | 5,167          |
| Leading Edge Investment Advisors, LLC        | 9/1/16              | 3,057          |
| Lee Overlay Partners, Ltd.                   | 10/15/09            | 2,675          |
| LM Capital Group, LLC                        | 10/30/06            | 723            |
| Millennium Global Investments, Ltd.          | 7/1/10              | 449            |
| Mondrian Investment Partners, Ltd.           | 5/13/99             | 12,371         |
| Ninety One North America, Inc.               | 5/15/24             | 57             |
| Nordea Investment Management                 | 5/15/24             | 123            |
| Northern Trust Global Advisors, Inc.         | 1/23/04             | 141            |
| PanAgora Asset Management, Inc.              | 11/1/18             | 2,294          |
| PIMCO  | 2/28/17             | 5,452          |
| Principal Global Investors, LLC              | 11/1/17             | 949            |
| Principal Real Estate Investors, LLC         | 1/1/14              | 695            |
| Pyrford International Limited                | 8/15/18             | 1,697          |
| Pzena Investment Management, LLC             | 7/1/15              | 5,063          |
| RBC Global Asset Management US, Inc.         | 2/1/22              | 2,186          |
| Schroder Investment Management               | 9/1/14              | 11,941         |
| Silvercrest Asset Management                 | 7/1/11              | 1,885          |
| State Street Global Advisors Trust Company   | 7/1/18              | 1,429          |
| Templeton Asset Management, Ltd.             | 5/18/99             | 2,549          |
| Western Asset Management, Co.                | 10/30/06            | 2,747          |
| William Blair Investment Management, LLC     | 11/1/22             | 4,045          |
| Wilshire Advisors, LLC                       | 8/1/22              | 10,434         |
| <b>Total investment management fees</b>      |                     | <b>159,613</b> |



## Other supplementary information

### Schedule of investment expenses (continued)

Schedule VIII

(dollars in thousands)

|  | Contract start date | Amount        |
|--|---------------------|---------------|
| <b>Advisors and consultants</b>                        |                     |               |
| Albert Risk Management Consultants                     | 12/1/21             | \$139         |
| Albourne America, LLC                                  | 11/1/19             | 1,152         |
| Bard Consulting, LLC                                   | 11/15/22            | 1,472         |
| Callan Holdings, Inc.                                  | 12/15/22            | 83            |
| Cambridge Associates, LLC                              | 5/15/19             | 2,690         |
| Colmore, Inc.  | 4/1/19              | 303           |
| Eigen10 Advisors, LLC                                  | 10/1/22             | 109           |
| Ernst & Young U.S. LLP                                 | 1/1/21              | 389           |
| Longevity Partners, Inc.                               | 10/10/22            | 23            |
| Meketa Investment Group, Inc.                          | 5/1/16              | 3,116         |
| Mercer Investments, LLC                                | 3/1/18              | 229           |
| Principal Real Estate Investors, LLC                   | 1/1/14              | 1,200         |
| R.V. Kuhns & Associates, Inc.                          | 4/1/19              | 46            |
| RCLCO Fund Advisors, LLC                               | 11/15/22            | 819           |
| SitusAMC   | 9/20/07             | 6,318         |
| Stout Risius Ross, LLC                                 | 3/1/18              | 150           |
| Valuation Research Corporation                         | 8/1/01              | 820           |
| <b>Total advisors and consultants</b>                  |                     | <b>19,058</b> |
| <b>External services-legal and attorney fees</b>       |                     |               |
| BLA Schwartz, PC                                       | 11/1/13             | 848           |
| Cohen Milstein Sellers & Toll, PLLC                    | 7/1/20              | 52            |
| Cox, Castle & Nicholson, LLP                           | 11/30/09            | 4,759         |
| DLA Piper, LLP (US)                                    | 3/1/18              | 2,032         |
| Mayer Brown, LLP                                       | 8/1/23              | 24            |
| Morgan, Lewis & Bockius, LLP                           | 12/9/10             | 491           |
| Proskauer, LLP   | 3/9/11              | 383           |
| Sheppard Mullin Richter & Hampton, LLP                 | 4/1/19              | 254           |
| Step toe & Johnson, LLP                                | 3/1/17              | 28            |
| Williams & Jensen, PLLC                                | 7/1/22              | 182           |
| Winston & Strawn, LLP                                  | 10/1/22             | 68            |
| Miscellaneous  | Various             | 5             |
| <b>Total external services-legal and attorney fees</b> |                     | <b>9,126</b>  |
| <b>Global custodian</b>                                |                     |               |
| State Street Bank & Trust, Co.                         | 10/1/21             | 5,266         |
| <b>Total global custodian</b>                          |                     | <b>5,266</b>  |

## Other supplementary information

### Schedule of investment expenses (continued)

Schedule VIII

(dollars in thousands)

|  | Contract start date | Amount            |
|--|---------------------|-------------------|
| <b>Research and rating services</b>        |                     |                   |
| Abel Noser Holdings, LLC                   | 10/1/22             | \$55              |
| AcadiaSoft, Inc.                           | 1/1/23              | 27                |
| AlternativeSoft AG                         | 10/1/22             | 87                |
| CEM Benchmarking, Inc.                     | 1/1/23              | 86                |
| Equilar, Inc.                              | 7/1/23              | 119               |
| eVestment Alliance, LLC                    | 8/1/23              | 68                |
| FactSet Research System, Inc.              | 7/1/23              | 1,069             |
| Fitch Ratings, Inc.                        | 12/30/23            | 305               |
| Glass Lewis & Co., LLC                     | 6/1/22              | 386               |
| HFR, Inc.                                  | 7/1/23              | 10                |
| ICE Benchmark Administration               | 1/1/24              | 53                |
| Institutional Shareholder Services         | 1/1/24              | 66                |
| KDP Investment Advisors, LLC               | 10/1/23             | 41                |
| London Stock Exchange PLC                  | 1/1/24              | 49                |
| Mergermarket Limited US                    | 1/28/24             | 22                |
| Moody's Investors Service                  | 12/29/23            | 578               |
| Morningstar, Inc.                          | 3/15/23             | 15                |
| MSCI, Inc.                                 | 12/1/22             | 1,863             |
| Nomura Research Institute                  | 1/1/24              | 18                |
| PEI Media, Ltd.                            | 7/10/23             | 98                |
| Piper Sandler & Co.                        | 1/1/23              | 70                |
| Pitchbook Data, Inc.                       | 1/1/24              | 40                |
| Preqin Limited                             | 5/31/23             | 70                |
| Refinitiv US, LLC                          | 7/1/22              | 116               |
| Russell Investment Group                   | 7/1/22              | 82                |
| Standard & Poor's                          | 1/1/24              | 473               |
| StarCompliance Operating, LLC              | 3/28/24             | 56                |
| State Street Global Advisors Trust Company | 7/1/22              | 45                |
| Strategas Securities, LLC                  | 7/1/23              | 75                |
| Technical Analysis Group, LLC              | 2/3/24              | 35                |
| The Investment Integration Project         | 10/10/23            | 10                |
| The Spaulding Group                        | 3/7/14              | 64                |
| The University of Cambridge                | 1/1/24              | 19                |
| TradeWeb, LLC                              | 7/1/23              | 38                |
| Trahan Macro Research, LLC                 | 12/1/22             | 40                |
| Trivium TAE, LLC                           | 5/1/24              | 15                |
| Miscellaneous                              | Various             | (23) <sup>1</sup> |
| <b>Total research and rating services</b>  |                     | <b>6,240</b>      |

## Other supplementary information

### Schedule of investment expenses (continued)

Schedule VIII

(dollars in thousands)

|   | Contract start date | Amount           |
|---|---------------------|------------------|
| <b>Risk management systems</b>                              |                     |                  |
| BlackRock Financial Management, Inc.                        | 7/1/06              | \$7,842          |
| MSCI, Inc. d/b/a Barra, LLC                                 | 4/1/24              | 183              |
| <b>Total risk management systems</b>                        |                     | <b>8,025</b>     |
| <b>Trading systems</b>                                      |                     |                  |
| Bloomberg, LP   | 7/1/22              | 2,257            |
| Fixed Income Clearing Corp                                  | 7/1/22              | 14               |
| Intex Solutions, Inc.                                       | 9/1/23              | 168              |
| Omgeo, LLC  | 7/1/22              | 78               |
| Society for Worldwide Interbank Financial Telecommunication | 1/1/23              | 43               |
| TSX, Inc.   | 1/1/23              | 17               |
| Miscellaneous   | Various             | 7                |
| <b>Total trading systems</b>                                |                     | <b>2,584</b>     |
| <b>Operating expenses</b>                                   |                     |                  |
| Administrative costs  |                     | 63,195           |
| Aon Risk Insurance  |                     | 3,739            |
| Council of Institutional Investors                          |                     | 38               |
| <b>Total operating expenses</b>                             |                     | <b>66,972</b>    |
| <b>Subtotal</b>   |                     | <b>276,884</b>   |
| <b>Other investment expenses</b>                            |                     |                  |
| Foreign tax withheld  |                     | 117,785          |
| Real estate   |                     | 3,181            |
| Broker commissions  |                     | 20,962           |
| Securities sold short expense                               |                     | 9,257            |
| Miscellaneous   |                     | 7,279            |
| <b>Total other investment expenses</b>                      |                     | <b>158,464</b>   |
| <b>TOTAL INVESTMENT EXPENSES</b>                            |                     | <b>\$435,348</b> |

<sup>1</sup> Negative amounts are due to a refund of expenses incurred in the prior fiscal year.

## Other supplementary information

### Schedule of consultant and professional services expenses

Schedule IX

(dollars in thousands)

| Individual or firm                                | Amount       |
|---|--------------|
| <b>State Teachers' Retirement Plan</b>            |              |
| <b>Actuarial services</b>                         |              |
| Milliman, Inc.                                    | \$1,002      |
| The Segal Company (Western States), Inc.          | 110          |
| <b>Total actuarial services</b>                   | <b>1,112</b> |
| <b>Auditing services</b>                          |              |
| Clifton Larson Allen, LLP                         | 130          |
| Crowe LLP   | 2,730        |
| Grant Thornton, LLP                               | 24           |
| Macias, Gini & O'Connell, LLP                     | 73           |
| Weaver and Tidwell, LLP                           | 1,758        |
| <b>Total auditing services</b>                    | <b>4,715</b> |
| <b>Consultant and other professional services</b> |              |
| 110 Holdings, LLC                                 | 182          |
| 22nd Century Technologies, Inc.                   | 111          |
| A1 Consulting Services, LLC                       | 182          |
| Accenture, LLP                                    | 1,380        |
| Accuity, Inc.                                     | 117          |
| Acuity Technical Solutions                        | 474          |
| Agile Global Solutions, Inc.                      | 281          |
| AgreeYa Solutions, Inc.                           | 772          |
| Alight Holding Company, LLC                       | 816          |
| American Unit, Inc.                               | 162          |
| Aptakrit Technology Solutions, LLC                | 190          |
| Articulate Global, LLC                            | 59           |
| Aspire HR, LLC                                    | 228          |
| Astute Solutions, LLC                             | 186          |
| AT&T Corp.  | 324          |
| Avante Solutions, Inc.                            | 92           |
| AVI-SPL, LLC                                      | 267          |
| DirectApps, Inc.                                  | 16           |
| BM Associates, Inc.                               | 737          |
| California State Treasurer's Office               | 23           |
| Capio Group                                       | 205          |
| Carahsoft Technology Corp.                        | 659          |
| Carbon Solutions Group, LLC                       | 82           |
| Cardio Partners, Inc.                             | 12           |
| Celer Systems, Inc.                               | 227          |
| CGI Technologies and Solutions, Inc.              | 601          |
| CommFitness                                       | 322          |
| Deloitte Consulting, LLP                          | 3,006        |
| Department of Forestry and Fire Protection        | 341          |
| Department of Human Resources                     | 16           |
| Digital Deployment, Inc.                          | 55           |
| Diligent Corporation                              | 56           |
| DiLytics, Inc.                                    | 132          |

## Other supplementary information

### Schedule of consultant and professional services expenses (continued)

Schedule IX

(dollars in thousands)

| Individual or firm                     | Amount |
|--|--------|
| Elegant Enterprise-Wide                | \$129  |
| Ellis & Ellis Sign Systems             | 213    |
| Employers Choice Online, Inc.          | 12     |
| Entisys Solutions, Inc.                | 419    |
| Estrada Consulting, Inc.               | 174    |
| ExamWorks, LLC                         | 43     |
| eXchange IT, LLC                       | 71     |
| Forrester Research, Inc.               | 325    |
| Fortuna Business Management            | 228    |
| Gartner, Inc.                          | 458    |
| Global Governance Advisors, LLC        | 35     |
| GoldLink Pacific, Inc.                 | 1,429  |
| Government Operations Agency           | 226    |
| Guidehouse, Inc.                       | 1,713  |
| HHS Technology Group, LLC              | 46     |
| Icon General Contractors, Inc.         | 41     |
| Info-Tech Research Group, Inc.         | 126    |
| Integrated Consulting and Management   | 172    |
| IntelliSurvey, Inc.                    | 90     |
| International Network Consulting       | 454    |
| International Projects Consultancy     | 127    |
| ISOS Group, Inc.                       | 37     |
| IT Foundation Services, LLC            | 169    |
| Jayson Carpenter Photography           | 29     |
| JR Hobbs Group, Inc.                   | 221    |
| Kanini Infotech Consultants            | 219    |
| Kreait, LLC                            | 26     |
| Legato Solutions                       | 190    |
| Linea Solutions, Inc.                  | 2,040  |
| Lucas Public Affairs                   | 431    |
| Matthew Bender & Company, Inc.         | 17     |
| Maximus Human Services, Inc.           | 932    |
| Maximus US Services, Inc.              | 703    |
| McLagan Partners, Inc.                 | 75     |
| Mentis Solutions, LLC                  | 437    |
| Metro Mailing Service, Inc.            | 76     |
| MG Systems and Software, LLC           | 660    |
| Microsan Consultancy Services LLC      | 16     |
| Miles Treaster & Associates            | 457    |
| Mosaic Governance Advisors, LLC        | 250    |
| MRC Smart Technology Solutions         | 72     |
| Msys, Inc.                             | 161    |
| National Association for Public Health | 32     |
| National Disability Evaluations Inc    | 50     |
| Natix, Inc.                            | 157    |
| NWN Corporation                        | 12     |

## Other supplementary information

### Schedule of consultant and professional services expenses (continued)

Schedule IX

(dollars in thousands)

| Individual or firm                                      | Amount         |
|---|----------------|
| O.C. Tanner Recognition Company                         | \$60           |
| OnCore Consulting, LLC                                  | 419            |
| Ope Technology, LLC                                     | 251            |
| Pacific Storage Company                                 | 23             |
| Pension Benefit Information, LLC                        | 205            |
| Peraton State & Local, Inc.                             | 3,589          |
| Pinnacle Consulting                                     | 294            |
| Presidio Holdings, Inc.                                 | 389            |
| Providence Technology Group, Inc.                       | 823            |
| QualApps, Inc.  | 185            |
| Quest Media & Supplies, Inc.                            | 1,499          |
| RELX, Inc.  | 25             |
| Resiliensoft  | 253            |
| Ridge Capital, Inc.                                     | 24,604         |
| RMA Consulting Group, Inc.                              | 196            |
| Robert J. Yetman  | 108            |
| R Systems, Inc.   | 728            |
| Sagitec Solutions, LLC                                  | 37,126         |
| Schetter Electric, LLC                                  | 15             |
| Solutions Simplified                                    | 92             |
| Speridian Technologies, LLC                             | 486            |
| State Controller's Office                               | 2,538          |
| SupportFocus, Inc.                                      | 584            |
| Taborda Solutions, Inc.                                 | 396            |
| TEKsystems, Inc.  | 88             |
| The Centre for Organization                             | 31             |
| Thomas/Ferrous, Inc.                                    | 35             |
| University Enterprises, Inc.                            | 1,121          |
| Vector Consulting, Inc.                                 | 161            |
| Vianey Rubio  | 387            |
| Visionary Integration Professionals                     | 2,373          |
| West Advanced Technologies, Inc.                        | 133            |
| Williams & Jensen, PLLC                                 | 198            |
| Workiva, Inc.   | 96             |
| xFusion Technologies, Inc.                              | 381            |
| <b>Total consultant and other professional services</b> | <b>106,205</b> |
| <b>Legal services</b>                                   |                |
| Baker & Hostetler, LLP                                  | 80             |
| California Department of Justice                        | 454            |
| Cox, Castle & Nicholson, LLP                            | 23             |
| Cuyler & Tufts, LLP                                     | 131            |
| Department of General Services                          | 80             |
| Department of Human Services                            | 18             |
| Klinedinst, PC  | 204            |
| Morgan, Lewis & Bockius, LLP                            | 41             |

## Other supplementary information

### Schedule of consultant and professional services expenses (continued)

Schedule IX

(dollars in thousands)

| Individual or firm   | Amount          |
|--|-----------------|
| Nossaman, LLP  | \$34            |
| Olson Remcho, LLP  | 53              |
| Pillsbury Winthrop Shaw Pittman, LLP   | 686             |
| RELX, Inc.   | 21              |
| Shaw Law Group, PC   | 36              |
| Sheppard Mullin Richter & Hampton  | 1,050           |
| State Personnel Board  | 59              |
| <b>Total legal services</b>  | <b>2,970</b>    |
| <b>Regional counseling services</b>  |                 |
| Santa Barbara County Office of Education   | 32              |
| <b>Total regional counseling services</b>  | <b>32</b>       |
| <b>Various services under \$10K</b>  |                 |
| Others   | 138             |
| <b>Total various services under \$10K</b>  | <b>138</b>      |
| <b>Gross consultant and professional services</b>  | <b>115,172</b>  |
| Less: amounts capitalized <sup>1</sup>   | 74,837          |
| <b>Total State Teachers' Retirement Plan – consultant and professional services net of amounts capitalized</b> | <b>\$40,335</b> |
| <b>Pension2 – IRC 403(b) Plan</b>  |                 |
| <b>Administrative services</b>   |                 |
| Voya Institutional Plan  | \$5,972         |
| <b>Total administrative services</b>   | <b>5,972</b>    |
| <b>Total Pension2–IRC 403(b) Plan – consultant and professional services</b>                                   | <b>\$5,972</b>  |
| <b>Pension2 – IRC 457(b) Plan</b>  |                 |
| <b>Administrative services</b>   |                 |
| Voya Institutional Plan  | \$412           |
| <b>Total administrative services</b>   | <b>412</b>      |
| <b>Total Pension2–IRC 457(b) Plan – consultant and professional services</b>                                   | <b>\$412</b>    |
| <b>Teachers' Deferred Compensation Fund</b>  |                 |
| <b>Consultant services</b>   |                 |
| Morningstar, Inc.  | \$76            |
| University Enterprises, Inc.   | 1               |
| <b>Total consultant services</b>   | <b>77</b>       |
| <b>Total Teachers' Deferred Compensation Fund – consultant and professional services</b>                       | <b>\$77</b>     |
| <b>TOTAL CONSULTANT AND PROFESSIONAL SERVICES</b>  | <b>\$46,796</b> |

<sup>1</sup> Vendor costs that meet the CalSTRS capitalization criteria are deducted from gross consultant and professional services expenses and reported as capital assets on the statement of fiduciary net position. Refer to Note 2 of the notes to the basic financial statements for discussion of CalSTRS' treatment of capital assets.

# Investment Section

The CalSTRS Investment Portfolio generated an 8.4% time-weighted return (net of fees) on its investments for the fiscal year ended June 30, 2024.

Over the past 30 years, the CalSTRS Investment Portfolio had an annualized time-weighted return (net of fees) of 8.1%.



|            |          |          |          |
|------------|----------|----------|----------|
| 13.69      | 3,433.47 | 32.0     | 62.0     |
| 923.98     | 475.84   | 2,609.07 | 1,906.00 |
| 1,093.28   | 3,829.44 | 971.90   | 1,816.79 |
| 227.60     | 1,426.49 | 2,960.23 | 1,984.37 |
| 1,604.31   | 4,344.85 | 2,821.66 | 1,984.37 |
| 1,421.37   | 4,141.47 | 3,081.94 | 1,886.19 |
| 272.18     | 4,523.49 | 1,186.19 | 42.58    |
| 56         | 531.05   | 62.49    | 613.54   |
| 0.06       | 1,585.57 | 900.51   | 1,402.87 |
| 18.67      | 1,605.63 | 2,058.97 | 26       |
| 7,764.45   | 262.90   | 382.52   | 1        |
| 21,574.49  | 1,238.16 | 1,629.11 | 1        |
| 101,608.85 | 71.15    | 884.72   | 1        |
| 839.05     | 1,283.45 | 322.90   | 1        |
|            | 74.12    |          |          |





5796 Armada Drive  
Suite 110  
Carlsbad, CA 92008

760.795.3450  
Meketa.com

The CalSTRS Investment Portfolio produced a positive 8.4% net-of-fees return over the latest fiscal year, which outpaced its benchmark return, but lagged the median fund return in the State Street Master Trust Universe. The portfolio increased by \$25.8 billion over the past 12 months, ending with a value of \$341.4 billion on June 30, 2024. As highlighted below, the portfolio continues to be broadly diversified, holding investments ranging from publicly traded short-term bonds to privately held partnerships.

## Investment Allocation

The Teachers' Retirement Board adopts long-term strategic allocation targets to be implemented over several years. The fiscal year-end report reflects strategic allocation guidelines for the 2023-24 fiscal year as adopted by the board. As of fiscal year-end, the portfolio's actual allocation was slightly different from policy (see table below). As of June 30, 2024, Public Equity was slightly overweight relative to its 41.0% target, at 41.4% of assets. Fixed Income was underweight relative to its 12.0% target, at 11.2% of assets. Private Equity was overweight, with 15.5% of assets, relative to a target of 14.0%. The Real Estate asset class was underweight relative to its 15.0% target, with 13.9% of assets. Inflation Sensitive was slightly overweight, with 6.3% of assets, relative to a target of 6.0%. Collaborative Strategies was overweight relative to its 0.0% target, at 1.6% of assets. The Risk Mitigating Strategies asset class was underweight relative to its 10.0% target, at 8.4%. Cash was at 1.7% as of June 30, slightly below its 2.0% target. All of these asset classes were, however, within policy ranges.

Asset allocation as of June 30, 2024

|                             | Cash (%)         | Public Equity (%) | Private Equity (%) | Real Estate (%) | Fixed Income (%) | Inflation Sensitive (%) | Collaborative Strategies <sup>1</sup> (%) | Risk Mitigating Strategies (%) |
|-----------------------------|------------------|-------------------|--------------------|-----------------|------------------|-------------------------|---|--------------------------------|
| CalSTRS policy              | 2.0              | 41.0              | 14.0               | 15.0            | 12.0             | 6.0                     | 0.0                                       | 10.0                           |
| CalSTRS actual <sup>2</sup> | 1.7 <sup>3</sup> | 41.4              | 15.5               | 13.9            | 11.2             | 6.3                     | 1.6                                       | 8.4                            |

## Fiscal year in review

As it turned out, fiscal year 2024 began right around the same time that the Fed last increased interest rates in the battle against pandemic-induced inflation. Where we stand today, following the end of fiscal year 2024, we could be close to the first interest rate cut in this cycle. It has been a year that, despite numerous predictions to the contrary, economic growth remained positive, inflation has leveled out or declined, depending on the measure, and the labor market has remained relatively strong despite some recent softening.

The last increase in the Federal Funds rate was in July of 2023, to a range of 5.25% - 5.5%. At the time, given the Fed's hawkish comments and above expectations economic data, investors started to recognize that rates could stay higher for longer, with no forthcoming interest rate cut. Combined with a downgrade in US debt and weakening economic data out of Europe and China, equity markets began to decline. Of the major asset classes, the US equity market (Russell 3000) fell by 3.3% in the first quarter of fiscal 2024. Outside the US, developed markets (MSCI EAFE) lost 4.1% and emerging market equities (MSCI Emerging Markets) were down 2.9%. Within emerging markets, Chinese equities (MSCI China) were down 1.9% in the first quarter of fiscal 2024.

<sup>1</sup> Innovative Strategies call prior to 5/1/2024.

<sup>2</sup> Additional assets are held in the Strategic Overlay/Futures Offset (0.02%) class.

<sup>3</sup> Percentages may be rounded to ensure that values add up to 100.0%.



Treasury rates continued to drift upward in the first quarter of fiscal 2024 with rates on longer-dated maturities increasing the most, driving a flattening of the yield curve. The two-year Treasury rose slightly from 4.9% to 5.1% while the ten-year Treasury increased from 3.8% to 4.6%. Higher rates resulted in negative returns for investment grade bonds. The broad US investment grade bond market (Bloomberg US Aggregate) fell 3.2%. Returns for High Yield bonds (Bloomberg High Yield) remained robust on few signs of distress and increased by 0.5% over the period.

As the second quarter of fiscal 2024 began, futures markets were still pricing in a small chance of an additional rate hike in the cycle, with two to three potential rate decreases in 2024. Markets continued searching for an overall direction though, on the path of inflation, growth, and interest rates both in the US and abroad. As the quarter progressed, economic data started to come in below expectations and optimism built that major central banks could start cutting rates in 2024. This shift in sentiment rekindled the broad risk-on environment experienced earlier in calendar year 2023.

Among equity asset classes, the US equity market (Russell 3000) returned an impressive 12.1% in the second quarter of fiscal 2024. Outside the US, developed markets (MSCI EAFE) increased by 10.4% in the second quarter of fiscal 2024 with more than half the gains coming from a depreciating US dollar. Emerging market equities (MSCI Emerging Markets) were up 7.9% over the same period. Within emerging markets, Chinese equities (MSCI China) were down 4.2%, despite the enthusiasm around the globe.

Following a softening in inflation and expectations of lower policy rates, interest rates fell significantly in the second quarter of fiscal 2024, resulting in positive returns for investment grade asset classes. The two-year Treasury fell from 5.1% to 4.3%<sup>1</sup> while the ten-year Treasury declined from 4.6% to 3.9%.<sup>1</sup> The broad US investment grade bond market (Bloomberg US Aggregate) was up 6.8%, the strongest quarterly performance on record for that benchmark. Returns for high yield bonds (Bloomberg High Yield) continued the positive trend and increased by 7.2% over the second quarter of fiscal 2024.

The third quarter of fiscal 2024 began with the same optimism from the end of the previous quarter that inflation was in decline and that interest rate cuts would be forthcoming. However, as we moved forward it was likely that the resilient economic data that was driving global equities higher was also pushing out the timing of the expected first Fed rate cut, weighing on bonds. At that time major central banks had largely paused interest rate hikes with expectations that many would eventually cut rates. The uneven pace of falling inflation and economic growth across countries led to speculation that the pace of rate cuts could vary between central banks.

Inflation pressures had significantly eased in most countries from their pandemic peaks, but levels were still above most central bank targets with questions about how inflation would track going forward. Headline inflation in the US rose in March 2024 (3.2% to 3.5%) by more than expected, while core inflation was unchanged (3.8%) when it was predicted to decline to 3.7%.

Among equity asset classes, US markets (Russell 3000 Index) rose 10.0% in the third quarter of fiscal 2024. The technology sector continued to perform well, with energy likely gaining on geopolitical tensions. Non-US developed equity markets (MSCI EAFE) increased 5.8% in the quarter, helped by Japanese equities which hit multi-decade highs. A strengthening US dollar drove the weaker relative results for US investors with returns in local currency terms (MSCI EAFE Local) 4.2% higher (10.0% versus 5.8%) over the third quarter of fiscal 2024.

---

<sup>1</sup> Source: Bloomberg.



During the third quarter of fiscal 2024, emerging market equities (MSCI Emerging Markets) had the weakest equity returns (+2.4%), depressed by China (MSCI China) at -2.2%. Slowing economic growth, lingering issues in the property sector, and efforts by the US to discourage investments in China all weighed on results. The stronger dollar also hurt performance in emerging markets for US investors with returns in local currency terms (MSCI Emerging Markets Local) 2.1% higher (4.5%) during the same quarter.

Higher inflation and rising interest rates weighed on bonds with the broad US bond market (Bloomberg Aggregate) returning -0.8% for the third quarter of fiscal 2024. High Yield Bonds (Barclays High Yield) remained positive, up 1.5% for the same quarter, as risk appetite remained strong and all-in yields attractive.

The final quarter of fiscal 2024 began with investors recognizing that interest rates may have to stay higher for longer given resilient economic data. Stronger than expected inflation and employment data in the US weighed on both stocks and bonds in April. However, by May and June, sentiment changed as the Fed confirmed it was unlikely they would increase interest rates and economic data started largely coming in below expectations. Headline year-over-year inflation in the US fell 0.5% over the quarter to 3.0% with several readings coming in below expectations. Core CPI also fell 0.5% in the quarter, finishing at 3.3%. Outside the US, inflation readings continued to decline in many developed markets, enough so that central banks in Canada, Sweden, Switzerland, and the EU all cut interest rates in the final quarter of fiscal 2024.

Among equity asset classes, US markets (Russell 3000 Index) rose 3.2% in the fourth quarter of fiscal 2024. Large capitalization technology companies again performed well driven by continued excitement over artificial intelligence. Enthusiasm surrounding artificial intelligence also benefited utilities, although to a lesser extent, with the market recognizing the massive computing power and energy needed to incorporate these technologies into many facets of everyday life. Non-US developed equity markets (MSCI EAFE) decreased 0.4% in the final quarter of fiscal 2024. A strengthening US dollar drove the weaker relative results for US investors with returns in local currency terms (MSCI EAFE Local) 1.4% higher (+1.0% versus -0.4%). Emerging market equities had the best returns in the final quarter of fiscal 2024, with the MSCI Emerging Markets Index returning +5.0%, partially attributed to China (MSCI China) at +7.1%.

Rising interest rates weighed on bonds with income balancing capital losses. The broad US bond market (Bloomberg Aggregate) returned 0.1% for the final quarter of fiscal 2024. High Yield Bonds (Barclays High Yield) remained positive, up 1.1% for the quarter.

Surprisingly for many, the 2024 fiscal year saw continued high policy rates with many economies avoiding recessions. In the US the Fed kept policy rates steady at 5.25%-5.50%, a level not seen in decades, for almost the entire fiscal year. Despite that, GDP growth in the US remained robust, with growth rates at 4.9%,<sup>1</sup> 3.4%,<sup>1</sup> 1.4%,<sup>1</sup> and 2.8%<sup>1</sup> for the first, second, third, and fourth quarters of fiscal year 2024, respectively. Unemployment increased 0.5% over the fiscal year, starting at 3.6% and ending at 4.1%,<sup>2</sup> but remained low relative to history. All of this occurred while the headline year-over-year inflation number ended where it began, at 3.0%,<sup>2</sup> while the core CPI number declined from 4.8% to 3.3%.<sup>2</sup>

Outside the US, unemployment and inflation painted a stable picture. The Eurozone ended fiscal year 2024 with unemployment numbers at 6.5%,<sup>3</sup> the same level as the beginning of the fiscal year. Japan ended with an unemployment figure of 2.5%,<sup>3</sup> slightly down from where it started for the year. Inflation in the Eurozone ended the fiscal year at 2.5%,<sup>3</sup> down from 5.5%<sup>3</sup> a year earlier. Inflation in Japan ended fiscal year 2024 at 2.8%<sup>3</sup> versus 2.6%<sup>3</sup> at the beginning of the fiscal year. China notably had inflation levels at the end of the fiscal year at 0.2%,<sup>3</sup> up slightly from 0.0% at the beginning of the fiscal year, given a disappointing reopening after Covid, issues in the property sector, geopolitical tensions, and increasingly protectionist trade measures around the globe.

---

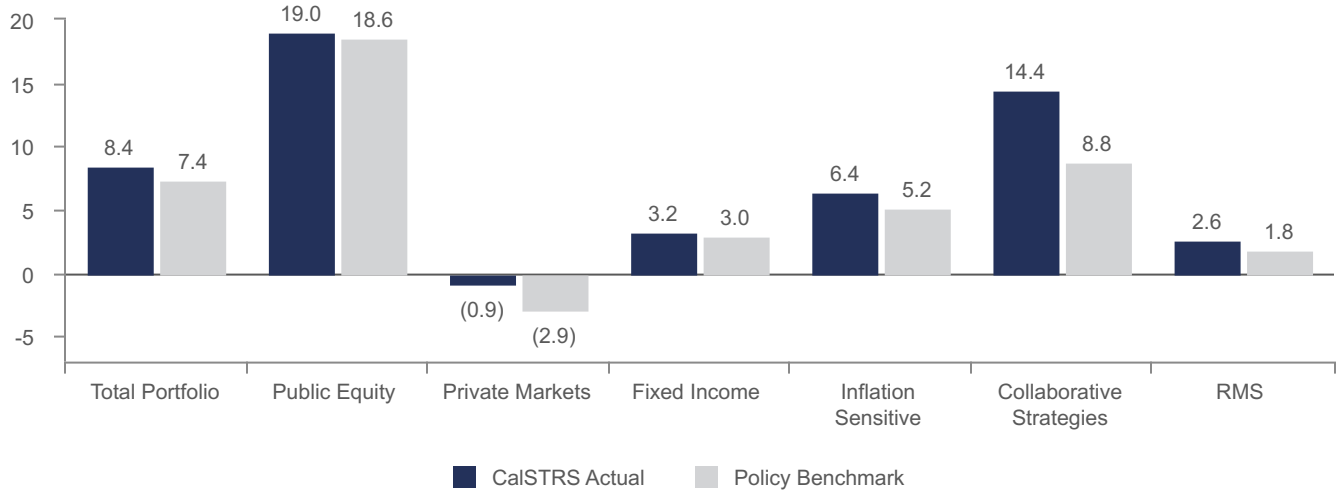
<sup>1</sup> Source: Bureau of Economic Analysis.

<sup>2</sup> Source: Bureau of Labor Statistics.

<sup>3</sup> Source: Bloomberg.

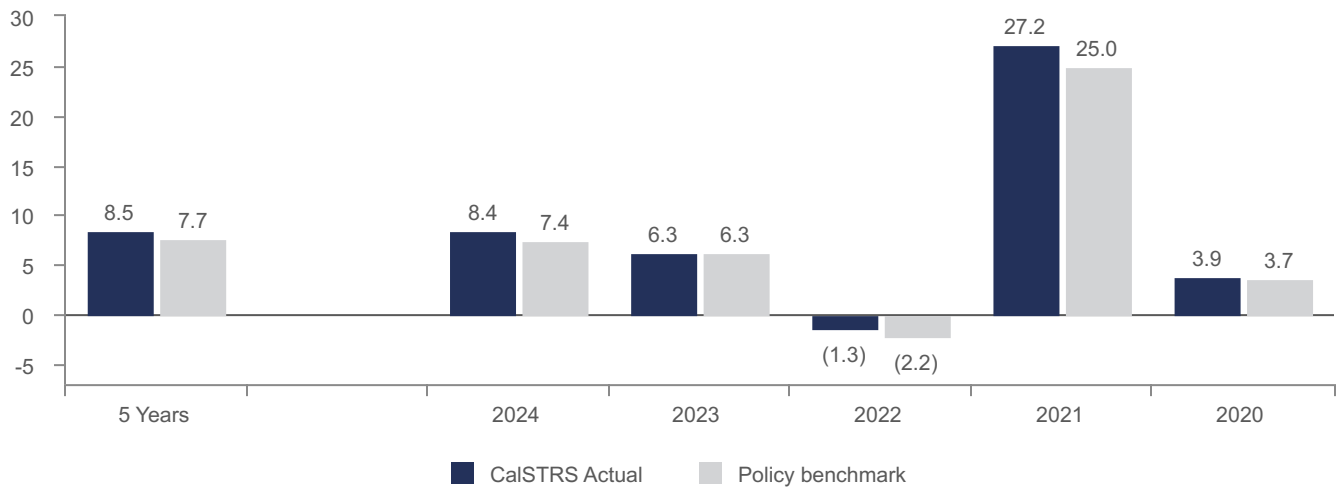


**Last 12 months ended June 30 (net of manager fees)**



Note: Private Markets consists of the Private Equity and Real Estate sub-asset classes.

**Periods ended June 30 (net of manager fees)**



The Charts above show performance by asset class as well as for the full portfolio, for various time periods.



## Investment results (net of manager fees)

Over the last year, the CalSTRS Investment Portfolio produced an absolute return of +8.4% (net of manager fees)—lagging the median return of its large public pension fund peers, which returned +10.6% according to the State Street Master Trust Universe of Funds over \$10 billion. During this period, the portfolio outperformed the policy benchmark<sup>1</sup> return (see the top chart on the previous page). Positive contributors to absolute results consisted of asset classes outperforming their benchmarks in many areas, primarily driven by the Real Estate and Private Equity asset classes.

During the last three years, CalSTRS generated a +4.3% annualized investment return, net of manager fees, ahead of its benchmark by 50 basis points but lagged the median return of its peer group 20 basis points. Three-year returns were dominated by Public Equity performance (+5.0%), as well as the returns of Private Markets and Inflation Sensitive asset classes as they produced notable returns (+7.0% and +8.3%, respectively). Longer-term performance has also been strong, with CalSTRS posting an 8.5% return over the last five years, and 7.7% over the last ten years. Five-year performance of 8.5% was ahead of the policy benchmark by 0.8%, and notably exceeded the long-term actuarial assumption for the portfolio.<sup>2</sup>

Sincerely,

A handwritten signature in blue ink that reads "Stephen P. McCourt".

Stephen P. McCourt  
Managing Principal, Co-CEO  
Meketa Investment Group

---

1 The policy benchmark consists of passively managed strategic class portfolios weighted by CalSTRS policy allocations. The difference between actual results and the benchmark are due to two factors: deviations from policy, and active decisions on the part of CalSTRS and our investment managers.

2 CalSTRS investment performance is calculated using a daily time-weighted return geometrically linked to calculate a monthly return. Periods longer than one month are geometrically linked to calculate annualized “time-weighted” rates of return.

## Investment objectives

CalSTRS' main goal is to maintain a financially sound retirement system. The following general investment objectives, adopted as part of the Investment Policy Statement, establish a framework for the operation of the CalSTRS Investment Portfolio.

- 1. Provide for present and future benefit payments**—The CalSTRS Investment Program shall provide liquidity to pay benefits to CalSTRS members and their beneficiaries in the amounts and at the times called for through the investment of contributions and other fund assets, aim to meet the assumptions built into the actuarial model and strive to maintain a fully funded pension system.
- 2. Diversify assets**—Seek to diversify the assets to achieve the desired rate of return at a prudent level of risk. The asset structure must provide for diversification of risk between asset classes to manage the risk/return relationship through strategic asset allocation.
- 3. Reduce funding costs**—Within prudent levels of risk, the reduction of CalSTRS' funding costs shall be a consideration in the organization and structure of the portfolio.
- 4. Maintain the trust of our members and the public**—Manage the investment program in such a manner that will enhance the member and public's confidence in the CalSTRS Investment Program.
- 5. Establish policy and objective review process**—A formal review of the CalSTRS *Investment Policy Statement* will be conducted annually, with an updated financial projection developed every two years.
- 6. Create reasonable pension investments relative to other pension funds**—The selection of investment vehicles and policies will be judged against other private and public pension funds. Investment performance, asset management costs, staffing and overall expenses will be compared to other public and corporate pension plans, with special emphasis on comparisons with other large public funds.
- 7. Minimize costs**—Management fees, trading costs and other expenses will be diligently monitored and controlled.
- 8. Comply with state and federal laws**—The CalSTRS investment program must operate in compliance with all applicable state and federal laws and regulations concerning the investment of pension assets.

## Basis of presentation

Investment values and related returns for the CalSTRS Investment Portfolio (total fund) are presented differently within the Investment and Financial sections of this publication for various reasons. Therefore, it's important to understand the methodology presented in each section. In the Investment section, our news releases and online, investment values and related returns are presented using common investment industry practices that reflect the way we manage our portfolio. This method of presentation provides timely information that is easily compared to benchmarks and peer results.

In the Financial section, the same information is reported in accordance with U.S. Generally Accepted Accounting Principles. The primary difference between the presentations is the categorization of the investments. In this section, amortization from securities lending is included in earned net income. In the Financial section, amortization from securities lending is reported within net appreciation/ (depreciation) in fair value of investments. Additional differences result from the timing of recognition of performance for certain investments in the portfolio. In accordance with investment industry practices, private asset performance is reported with a quarter lag; for financial reporting purposes, adjustments are made to bring results current. Both sets of numbers are relevant but reflect different methodologies and serve different purposes.

Performance information in this section is reported net of fees and is calculated using a time-weighted return methodology. The investment information on the CalSTRS website is consistent with investment industry standards and is comparable to the global financial markets, other pension plans and institutional investors. For more information, visit [CalSTRS.com](https://www.calstrs.com).

# Investment

---

## Investment overview and results

CalSTRS' diversified portfolio generated a return of 8.4% for the fiscal year, which was above the 7.0% actuarial rate of return for funding purposes and 1.0% above CalSTRS' policy benchmark.

Despite the historic rise in interest rates engineered by the Federal Reserve, the U.S. economy remains robust while inflation has moderated. This is being called a “soft landing” for the U.S. economy and now appears to be the most likely outcome. For these reasons, stock indices rose significantly higher for the second year in a row and drove the solid fiscal year returns. It is unclear how much higher equities have room to run because of two reasons: 1) much of the good news of a “soft landing” and lower interest rates are priced into the valuations of equities; and 2) higher equity returns have been uniquely concentrated with a group of large capitalization U.S. technology stocks dubbed “The Magnificent 7” that are poised to benefit from the future of artificial intelligence (AI). In contrast, higher interest rates and continued slow demand for office space led to another year of significant declines in the real estate sector.

Toward the end of calendar year 2024, investors began to focus on a tight U.S. presidential election race. Regardless of who wins, the investing landscape will still be dominated by long-term trends with significant risk, opportunities and uncertainties, including: 1) the energy transition, which necessitates massive infrastructure investments; 2) geopolitical risk, including the wars in Ukraine and the Middle East; 3) significant deficits in the U.S. and most developed nations, which could keep interest rates higher; 4) the rapid advancement of AI and technology innovation, which could bolster technology and also displace jobs; and 5) “on-shoring” or realigning manufacturing and supply chains back to the U.S. as well as East Asia and India over regions such as China.

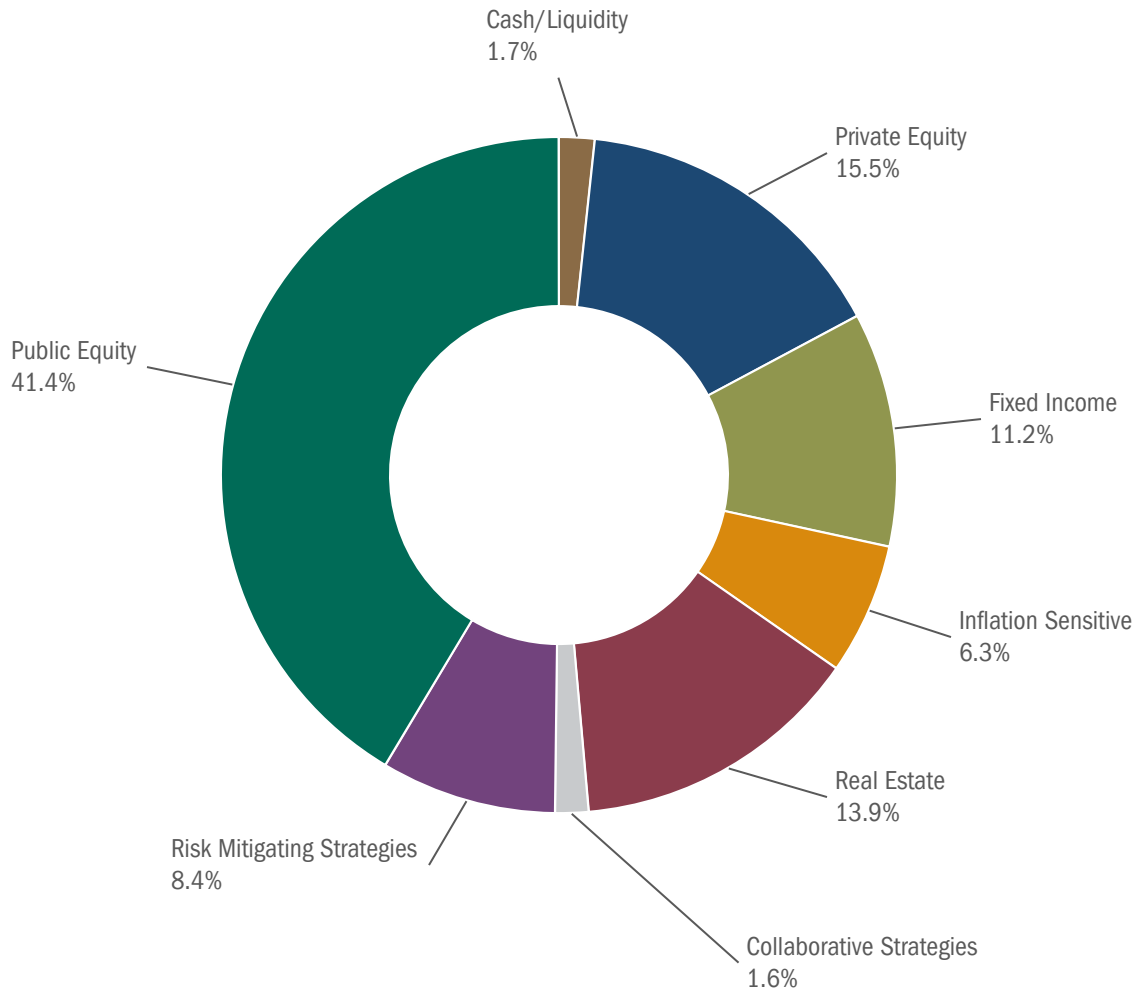
To face the potential opportunities, risks and challenges that lie ahead, the CalSTRS Investment team will continue to develop a world-class portfolio of assets that are diversified according to the board's approved strategic asset allocation and are prepared to weather a variety of different market environments.

CalSTRS' one-year return exceeded the actuarial assumed rate of return; however, one year is a short time period for a mature defined benefit plan. As a long-term investor, it's more meaningful to review CalSTRS' investment performance over longer time periods. At June 30, 2024, the total fund generated 8.5% return net of fees over the past five years, 7.7% over the last 10 years and 8.1% over the past 30 years.

While this annual report provides a significant amount of information regarding the CalSTRS Investment Portfolio, only one point in time is represented: June 30, 2024. It is difficult to compare this time measurement to the movement and complexity of the portfolio in this highly dynamic global financial market. For more current investment information, including additional information about specific asset classes and strategies, as well as videos detailing key aspects of the CalSTRS Investment Portfolio, visit [CalSTRS.com](https://www.calstrs.com).

## Asset allocation as of June 30, 2024

Total Investment Portfolio of \$341.4 billion<sup>1,2</sup>



<sup>1</sup> Public Equity, Private Equity and Collaborative Strategies include Sustainable Investment and Stewardship Strategies public and private investments of \$4.6 billion.

<sup>2</sup> Strategic Overlay represents 0.02% of the total portfolio allocation, which rounds to 0.0% for presentation purposes and, therefore, is not presented in the above chart.



# Investment

Table 1

## Net asset value of investments

(fiscal years ended June 30)

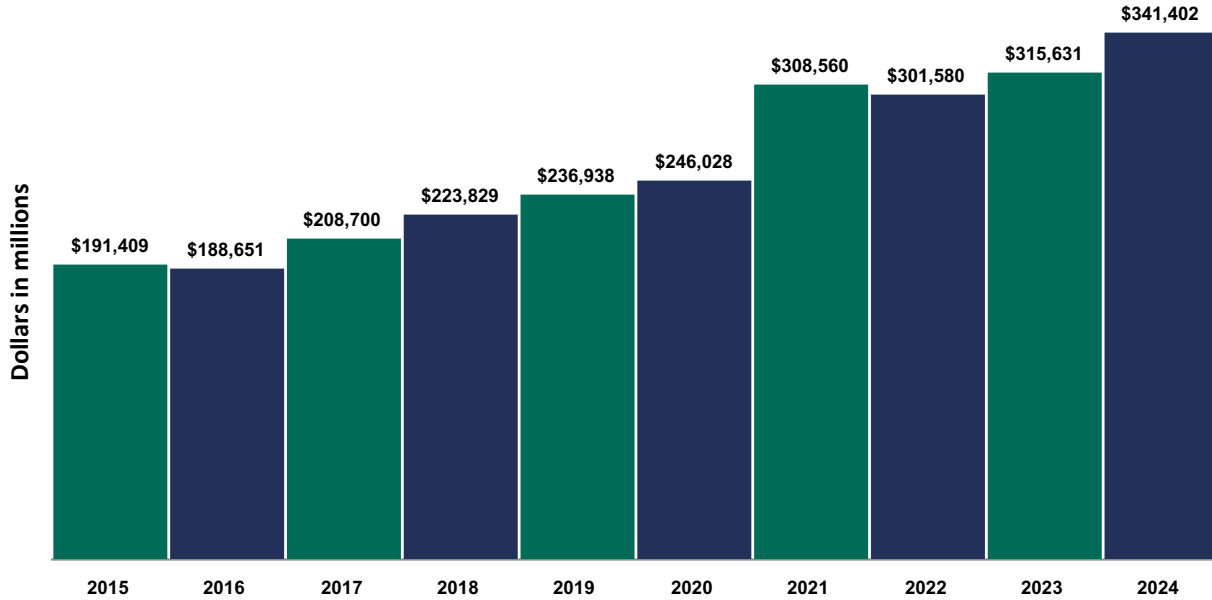
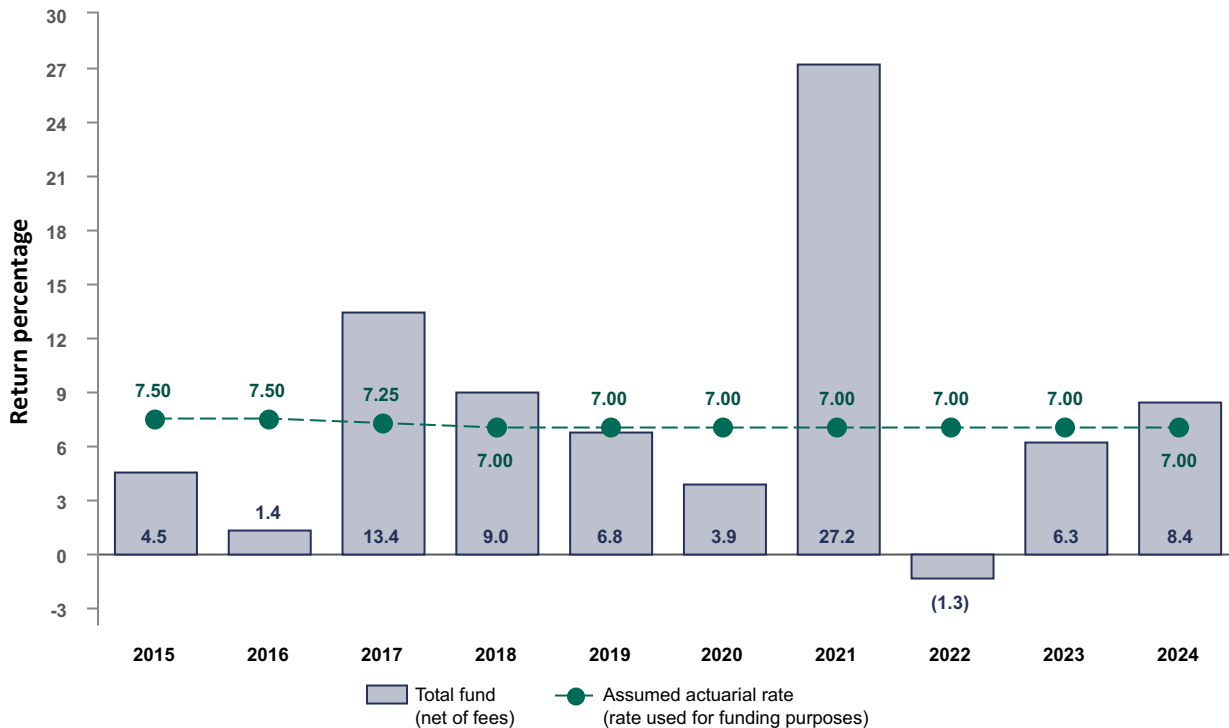


Table 2

## 10 years of time-weighted annual returns

(fiscal years ended June 30)



# Investment

Table 3

## Time-weighted returns net of fees

(as of June 30, 2024)

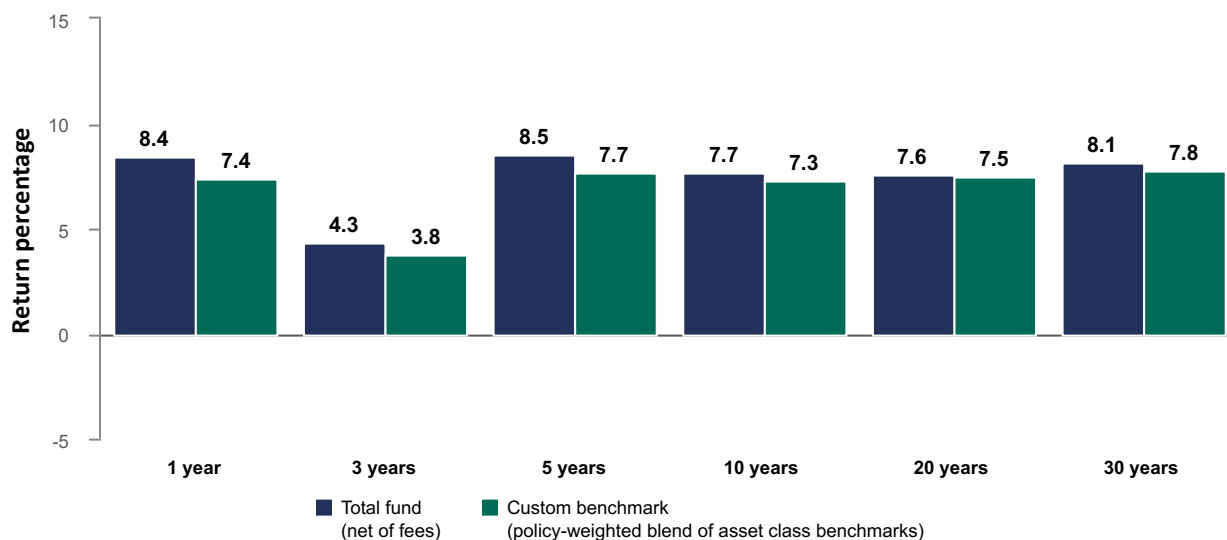


Table 4

## Time-weighted returns net of fees by portfolio types

(as of June 30, 2024)

CalSTRS' investment performance is calculated using a daily time-weighted return geometrically linked to calculate a monthly return. Periods longer than one month are geometrically linked to calculate annualized "time-weighted" rates of return.

| Portfolio type/Associated index <sup>1</sup>  | 1 year        | 3 years       | 5 years      | 10 years     |
|---|---------------|---------------|--------------|--------------|
| <b>Public Equity</b>                          | <b>19.0%</b>  | <b>5.0%</b>   | <b>10.7%</b> | <b>8.9%</b>  |
| Public Equity Custom Index                    | 18.6%         | 4.7%          | 10.5%        | 8.8%         |
| <b>Fixed Income</b>                           | <b>3.2%</b>   | <b>(2.5%)</b> | <b>0.4%</b>  | <b>1.9%</b>  |
| U.S. Debt Custom Index                        | 3.0%          | (2.8%)        | (0.0%)       | 1.5%         |
| <b>Real Estate</b>                            | <b>(9.8%)</b> | <b>4.0%</b>   | <b>5.1%</b>  | <b>7.5%</b>  |
| Real Estate Custom Index                      | (12.0%)       | 2.5%          | 2.6%         | 5.8%         |
| <b>Private Equity</b>                         | <b>8.6%</b>   | <b>10.0%</b>  | <b>15.1%</b> | <b>12.8%</b> |
| Private Equity Custom Index                   | 6.6%          | 9.4%          | 13.2%        | 11.5%        |
| <b>Risk Mitigating Strategies<sup>2</sup></b> | <b>2.6%</b>   | <b>2.3%</b>   | <b>4.1%</b>  | <b>2.8%</b>  |
| Risk Mitigating Strategies Custom Index       | 1.8%          | 2.2%          | 4.5%         | 2.6%         |
| <b>Inflation Sensitive</b>                    | <b>6.4%</b>   | <b>8.3%</b>   | <b>8.7%</b>  | <b>6.6%</b>  |
| Inflation Sensitive Custom Index              | 5.2%          | 6.2%          | 6.4%         | 4.8%         |
| <b>Collaborative Strategies<sup>3</sup></b>   | <b>14.4%</b>  | <b>12.2%</b>  | <b>8.9%</b>  | <b>7.4%</b>  |
| Collaborative Strategies Custom Index         | 8.8%          | 4.2%          | 3.3%         | 4.1%         |
| <b>Cash/Liquidity</b>                         | <b>5.3%</b>   | <b>3.3%</b>   | <b>2.4%</b>  | <b>1.8%</b>  |
| Bloomberg 3-Month Treasury Bill               | 5.5%          | 3.1%          | 2.2%         | 1.5%         |

<sup>1</sup> Index benchmarks are as of June 30, 2024, and contain history based on changes within asset class/strategy policies over the prior 10 years. Custom public indices are updated quarterly in accordance with CalSTRS' restricted securities list, Committee on Responsible Investment mandates and the Portfolio Restrictions Investment Policy. For additional information on benchmarks, please refer to the respective investment policies on [CalSTRS.com](https://www.calstrs.com).

<sup>2</sup> Asset class approved by the board in November 2015 and established in July 2016. Prior to July 2016, the assets in this program were part of Absolute Return (now known as Collaborative Strategies).

<sup>3</sup> Returns prior to July 2016 reflect the Absolute Return composite, which included multiple strategies (including Innovation). The composite was restructured and renamed to Innovative Strategies in July 2016. Collaborative Strategies was established in May 2024 and formed from the Innovative Strategies and SISS Directed Private Asset (SISS Private Portfolio) portfolios.

# Investment

## Public Equity

For the fiscal year ended June 30, 2024, the Public Equity Portfolio had total assets of \$141.2 billion, representing 41.4% of the total fund. As shown in Table 4, the Public Equity Portfolio generated a 19.0% one-year return net of fees. The Public Equity Portfolio consists of two main strategies, Global Equity and the Sustainable Investment and Stewardship Strategies (SISS) Public Portfolio.

Table 5 lists the largest public equity holdings as of June 30, 2024, which represent 20.6% of the Public Equity Portfolio.

**Table 5**

### Largest Public Equity holdings

(as of June 30, 2024)

| Security name                              | Shares     | Fair value      |
|--|------------|-----------------|
| Microsoft Corp.                            | 12,269,882 | \$5,484,023,760 |
| NVIDIA Corp.                               | 42,599,723 | 5,262,769,779   |
| Apple, Inc.                                | 24,791,184 | 5,221,519,174   |
| Alphabet, Inc.                             | 18,263,391 | 3,337,313,326   |
| Amazon.com, Inc.                           | 16,021,199 | 3,096,096,707   |
| Meta Platforms, Inc.                       | 3,701,343  | 1,866,291,167   |
| Taiwan Semiconductor Manufacturing Co Ltd. | 41,899,297 | 1,409,175,286   |
| Eli Lilly and Company                      | 1,345,256  | 1,217,967,877   |
| Broadcom Inc.                              | 711,272    | 1,141,968,534   |
| JP Morgan Chase & Co.                      | 4,895,219  | 989,669,247     |

Note: CalSTRS maintains a complete list of portfolio holdings.

### Global Equity

For the fiscal year ended June 30, 2024, the \$137.1 billion Global Equity Portfolio represented 40.2% of the total fund. Approximately 80.8% of the portfolio's assets are internally managed in passively implemented index strategies in the U.S., developed and emerging markets. The remaining assets are managed by external investment managers in active strategies. As of June 30, 2024, the portfolio had 51.7% of its assets in U.S. equity and 48.3% in non-U.S. equity.

The Global Equity Portfolio generated a 19.3% one-year return net of fees, outperforming its policy benchmark by 64 basis points. All regions outperformed their respective benchmarks. The Emerging Market portfolios, in aggregate, delivered particularly strong performance and outperformed their benchmark by 142 basis points.

### Sustainable Investment and Stewardship Strategies

The Sustainable Investment and Stewardship Strategies (SISS) unit leads CalSTRS' activities to transform the financial markets to focus on long-term value creation that fully integrates sustainability—or environmental, social and governance—considerations. The SISS unit has three core pillars of activity: 1) the SISS Investment Portfolio, which includes the SISS Public Portfolio and the SISS Private Portfolio, 2) stewardship and 3) strategic relations. The unit also leads and coordinates the implementation of CalSTRS

net zero portfolio emissions pledge to measure and reduce emissions, increase investments in climate solutions and accelerate the global transition to a net zero emissions economy.

Within the SISS Public Portfolio, the team oversees approximately \$4.1 billion of assets under management in two public equity strategies: activist strategies and sustainability-focused strategies. The activist strategies seek to enhance long-term shareholder value by engaging management to transform governance practices, strategy and operations. The sustainability-focused strategies integrate sustainability factors into their investment philosophy and process as a means of identifying and driving market outperformance.

For the fiscal year ended June 30, 2024, the SISS Public Portfolio generated a 10.5% one-year return net of fees, underperforming its benchmark by 461 basis points. The SISS Public Portfolio was negatively impacted by a year of significant portfolio construction transition as well as the high interest rate environment and the portfolio's structural underweight to large cap technology companies.

The SISS Private Portfolio is an opportunistic and unconstrained allocation designed to source and invest in sustainable investment opportunities and low-carbon solutions across the risk-return spectrum from opportunistic infrastructure to venture capital. The portfolio invests in opportunities additive to the total fund and investments that

# Investment

---

demonstrate positive contributions to a more sustainable global economy. The SISS Private Portfolio consists of a Scaling sub-portfolio, where the SISS team invests alongside CalSTRS' other private asset classes, and the New Opportunities sub-portfolio, where the SISS team independently sources and researches opportunities that may not fit neatly into other asset classes. As of June 30, 2024, the SISS Private Portfolio had committed more than \$2.1 billion across 22 investments.

The SISS team also leads CalSTRS' stewardship activities, that seek to influence and promote sustainable business practices and public policies with a focus on advancing corporate and market accountability, supporting CalSTRS' pledge to achieve a net zero global economy by 2050 or sooner, and encouraging companies to be good stewards in the communities they operate in, which includes responsible firearms, while maintaining a healthy and engaged workforce. Proxy voting is an important component of CalSTRS stewardship activities as these votes can affect necessary changes designed to enhance a company's long-term value. Over the last fiscal year, CalSTRS voted at more than 10,000 global company meetings, which included over 100,000 individual ballot items. Each year, these voting activities cover a variety of proposals integral to the successful management of companies, including the election of board directors and executive compensation. This year, CalSTRS continued to escalate voting tactics against companies that have moved too slowly to achieve greater board diversity or significantly address the risks associated with climate change.

The SISS team's strategic relations activities provide expert and consistent messaging to advance Investments Branch priority initiatives, including the Collaborative Model; diversity, equity and inclusion; and the transition to a net zero economy. Additionally, strategic relations activities seek to build relationships with both internal and external stakeholders, the media and other financial market participants with the intent of preserving CalSTRS' global reputation as a respected leader in the investment management industry.

## Fixed Income

For the fiscal year ended June 30, 2024, the Fixed Income Portfolio had total assets of \$38.3 billion, representing 11.2% of the total fund. The Fixed Income unit operates a hybrid model portfolio that takes advantage of the benefits and efficiencies of both internal and external asset management. Internal staff manages 90.1% of the portfolio's assets using enhanced indexing for core and high yield strategies with a moderate level of risk as well as a core plus portfolio with a higher level of active risk and return. The remaining 9.9% is managed by external managers using broader opportunistic strategies that assume a higher level of risk and, therefore, a higher level of expected return.

As shown in Table 4, the Fixed Income Portfolio generated a 3.2% one-year return net of fees, outperforming its benchmark by 17 basis points. An overweight allocation to spread sectors within the Opportunistic sleeve was the main source of outperformance. During the fiscal year, investment grade credit spreads tightened by 26 basis points and added 338 basis points of excess returns versus U.S. Treasuries. High yield spreads tightened by 81 basis points and added 625 basis points of excess returns versus U.S. Treasuries. Leverage loan spreads tightened by 92 basis points, with excess returns versus the Bloomberg U.S. Aggregate Index exceeded by 898 basis points. The three-, five- and 10-year net returns have outperformed the benchmark by 26, 40 and 39 basis points, respectively. The portfolio's overweight to credit, investment grade and high yield, accounted for much of the longer-term outperformance.

Table 6 lists the largest fixed income holdings as of June 30, 2024, which represent 8.8% of the Fixed Income Portfolio.

# Investment

Table 6

## Largest Fixed Income holdings

(as of June 30, 2024)

| Security name    | Maturity date | Interest rate | Par value     | Fair value    |
|------------------|---------------|---------------|---------------|---------------|
| US TREASURY N/B  | 12/31/2028    | 3.750%        | \$397,100,000 | \$387,017,385 |
| US TREASURY N/B  | 4/30/2031     | 4.625%        | 370,000,000   | 376,012,500   |
| US TREASURY N/B  | 3/15/2027     | 4.250%        | 370,000,000   | 367,051,563   |
| FNMA TBA 30 YR 3 | 7/15/2054     | 3.000%        | 428,990,000   | 364,846,986   |
| US TREASURY N/B  | 1/15/2027     | 4.000%        | 340,000,000   | 335,085,939   |
| US TREASURY N/B  | 12/31/2030    | 3.750%        | 335,000,000   | 323,641,406   |
| US TREASURY N/B  | 4/30/2030     | 3.500%        | 320,000,000   | 306,000,000   |
| US TREASURY N/B  | 7/31/2028     | 4.125%        | 305,000,000   | 301,783,205   |
| US TREASURY N/B  | 8/15/2053     | 4.125%        | 322,740,000   | 300,602,053   |
| US TREASURY N/B  | 10/15/2026    | 4.625%        | 300,000,000   | 299,765,625   |

Note: CalSTRS maintains a complete list of portfolio holdings.

The Fixed Income unit manages two additional programs: Securities Lending and Currency Management, discussed in the following sections.

### Securities Lending Program

The Securities Lending Program is a low-risk strategy that allows the fund to use its existing asset base and lending expertise to generate additional income.

For the fiscal year ended June 30, 2024, the Securities Lending Program earned approximately \$92.5 million in additional net income for the fund, which was an increase of \$0.8 million compared to the previous year. The increase in earnings is attributed to several factors, including higher overall intrinsic revenue opportunities and increased return spreads from investing end-of-day cash.

### Currency Management Program

The Currency Management Program is designed to address the global nature of all the fund's assets and attempts to add value on a fund-wide basis. The currency markets are some of the most liquid and volatile markets CalSTRS operates within.

The internally managed core strategy underperformed its benchmark by 4 basis points for the year ended June 30, 2024, while the opportunistic external strategy outperformed its benchmark by 49 basis points for the same period. For the internally managed portion, the bulk of underperformance came as a result of carrying long USD positions when the Federal Reserve unexpectedly switched to a dovish policy stance around the turn of the 2024 calendar year.

For the externally managed program, the outperformance can be attributed to gains in developed markets as well as Latin American emerging markets currencies. For fiscal year

2023–24, the total combined outperformance of the Currency Management Program was 2 basis points. Since inception, the Currency Management Program has outperformed its benchmark by 38 basis points on an annualized basis.

### Home Loan Program

The CalSTRS Home Loan Program was established by legislation in 1984 and provided home ownership to qualified participants, which contributed to CalSTRS' investment mortgage asset objectives. New home loan origination activity was suspended by the Teachers' Retirement Board on October 1, 2011. Staff continues to manage the existing assets of \$16.9 million for the fiscal year ended June 30, 2024.

### Real Estate

The Real Estate Portfolio ended fiscal year 2023–24 with a net asset value of approximately \$47.4 billion, or 13.9% of the total fund. Over the last several years, staff has embraced the Collaborative Model approach with an increase in strategies that provide CalSTRS more discretion with the direction and management of investments. This model allows for an increase in control and provides a better alignment of interests between CalSTRS and our partners. As of June 30, 2024, the implementation of the CalSTRS Collaborative Model has increased CalSTRS' direct control to approximately 72% of the Real Estate Portfolio.

Real estate is a long-term asset with performance results influenced by various factors. As shown in Table 4, the Real Estate Portfolio had a -9.8% one-year return net of fees, outperforming its policy benchmark by 219 basis points. The 10-year return is outperforming the policy benchmark by 165 basis points as it continues to liquidate pre-crisis, higher risk strategies from the portfolio. For Ex-Legacy

# Investment

---

investments, Real Estate outperformed the benchmark by 188 basis points and 250 basis points, for the one-year and 10-year periods, respectively.

In addition to the improved structure and increased alignment through the Collaborative Model, Real Estate continues to evaluate and invest in higher control vehicles with low to moderate leverage and risk.

## Private Equity

The Private Equity Portfolio ended fiscal year 2023–24 with a net asset value of \$52.9 billion, or 15.5% of the total fund. The portfolio consists primarily of investments in limited partnerships, which account for 78% of the allocation, with the remaining assets consisting of co-investments. Over the last several years, CalSTRS has increased the percentage of overall new commitments going to co-investments from under 5% to over 21%.

As shown in Table 4, the Private Equity Portfolio had a one-year net return of 8.6%, outperforming its policy benchmark by 200 basis points. Net returns of 10.0%, 15.1% and 12.8% for the three-year, five-year and 10-year time periods exceeded the policy benchmark by 60, 190 and 137 basis points, respectively. The one-, three-, and five-year benchmark is a peer-based benchmark. The long-term benchmark is a public market index plus a spread.

## Risk Mitigating Strategies

For the fiscal year ended June 30, 2024, the Risk Mitigating Strategies (RMS) Portfolio had total assets of \$28.8 billion, representing 8.4% of the total fund. The RMS Portfolio was established on July 1, 2016. In November 2019, the Teachers' Retirement Board Investment Committee approved an increase to the long-term strategic allocation to RMS from 9% to 10%.

The RMS Portfolio invests in strategies that further diversify CalSTRS' overall investment portfolio, primarily our significant equity exposure. These strategies include trend following, long-duration U.S. Treasuries, global macro and systematic risk premia. The four strategies within the RMS Portfolio are expected to have low correlations to equity markets and generate positive returns at different times during the business cycle. Rather than focusing on achieving a specific return objective, the RMS Portfolio is expected to help the total fund achieve its return objective by protecting capital during equity downturns or volatile periods.

The RMS Portfolio had a 2.6% one-year return net of fees for the fiscal year ended June 30, 2024, outperforming its policy benchmark by 89 basis points.

The outperformance was driven by positive relative performance across all the strategies. Notably, global macro and systematic risk premia outperformed their benchmarks by 453 basis points and 343 basis points, respectively. The long-duration U.S. Treasuries return was -6.9% for the period but still outperformed its benchmark by 26 basis points.

## Inflation Sensitive

For the fiscal year ended June 30, 2024, the \$21.6 billion Inflation Sensitive Portfolio represented 6.3% of the total fund. The Inflation Sensitive Portfolio invests in strategies that include infrastructure, commodities, U.S. Treasury inflation protected securities, timberland and agriculture.

For the fiscal year ended June 30, 2024, the Inflation Sensitive Portfolio generated a 6.4% one-year return net of fees, outperforming its policy benchmark return of 5.2% by 128 basis points.

The infrastructure strategy returned a net 7.6%, underperforming its benchmark by 3 basis points. The commodities strategy had a net return of 7.7%, beating its benchmark by 814 basis points. The U.S. Treasury inflation protected securities strategy had a net return of 2.9%, beating its benchmark by 16 basis points. The timberland strategy returned 10.1%, beating its benchmark by 113 basis points. The agriculture strategy had a net return of -5.1%, lagging its benchmark by 1,163 basis points. Over the previous three years, the Inflation Sensitive Portfolio outperformed its benchmark by 211 basis points.

# Investment

---

## Collaborative Strategies

For the fiscal year ended June 30, 2024, the \$5.5 billion Collaborative Strategies Portfolio represented 1.6% of the total fund.

Collaborative Strategies was established in May 2024 and formed from the Innovative Strategies and SISS Directed Private Asset (SISS Private Portfolio) portfolios. The Teachers' Retirement Board Investment Committee approved an allocation range of 0% to 5% of the overall CalSTRS portfolio.

The objective of the portfolio is to add flexibility for the investment team to pursue new and/or compelling strategies and investments that may be beyond the specific frameworks or expertise of existing asset classes. The portfolio provides a structure for investing in multi-asset investment strategies, co-investing with other CalSTRS asset classes, and incubating new investment ideas to improve the diversification of the total fund, enhance its risk-adjusted total return, provide new sources of current income, and explore innovative investment structures with better alignment of economic interests.

Over the long term, the portfolio seeks to produce a positive real return greater than the CalSTRS assumed actuarial rate of return, while testing out new investment strategies and groups of assets for potential growth within the total fund.

As shown in Table 4, for the fiscal year ended June 30, 2024, the Collaborative Strategies Portfolio generated a one-year return net of fees of 14.4%, outperforming its policy benchmark of 8.8%.

## Cash/Liquidity

For the fiscal year ended June 30, 2024, the \$5.6 billion Cash/Liquidity Portfolio represented 1.7% of the total fund. The portfolio invests in short-term highly liquid securities used to manage cash available for benefit payments and cash flows for the asset classes. As shown in Table 4, for the fiscal year ended June 30, 2024, the Cash/Liquidity Portfolio generated a 5.3% one-year return net of fees, underperforming its policy benchmark of 5.5%.

# Investment

## Other investment tables

The following tables summarize investment activity. Table 7 represents the investment summary by portfolio type compared to the prior fiscal year. Table 8 reflects the investment expenses by portfolio type as of June 30, 2024. Investment expenses reflected in Table 8 generally represent direct costs associated with investing. Certain expenses,

such as carried interest and management fees related to private assets, are not included; however, these expenses may be reflected within the net asset value. The total investment expenses shown also exclude certain items such as foreign tax withheld and broker commissions. Table 9 displays the broker commissions for the fiscal year ended June 30, 2024.

**Table 7**

### Investment summary for the current and previous fiscal year

(dollars in millions)

| Portfolio type                                 | June 30, 2023    |                  | June 30, 2024    |                  | % of net asset value | Net value change |
|--|------------------|------------------|------------------|------------------|----------------------|------------------|
|  | Book value       | Net asset value  | Book value       | Net asset value  |                      |                  |
| Public Equity                                  | \$115,129        | \$127,347        | \$117,798        | \$141,223        | 41.4%                | \$13,876         |
| Fixed Income                                   | 35,409           | 31,825           | 42,397           | 38,264           | 11.2%                | 6,439            |
| Real Estate                                    | 43,318           | 50,763           | 46,870           | 47,404           | 13.9%                | (3,359)          |
| Private Equity                                 | 44,618           | 48,951           | 46,907           | 52,949           | 15.5%                | 3,998            |
| Risk Mitigating Strategies                     | 23,358           | 27,780           | 23,406           | 28,769           | 8.4%                 | 989              |
| Inflation Sensitive                            | 17,999           | 19,245           | 19,416           | 21,591           | 6.3%                 | 2,346            |
| Collaborative Strategies <sup>1</sup>          | 4,186            | 4,524            | 4,979            | 5,535            | 1.6%                 | 1,011            |
| Cash/Liquidity                                 | 4,813            | 4,838            | 5,603            | 5,606            | 1.7%                 | 768              |
| Strategic Overlay                              | 830              | 358              | 546              | 61               | 0.0%                 | (297)            |
| <b>PORTFOLIO TOTAL</b>                         | <b>\$289,660</b> | <b>\$315,631</b> | <b>\$307,922</b> | <b>\$341,402</b> | <b>100.0%</b>        | <b>\$25,771</b>  |
| <b>Adjustments</b>                             |                  |                  |                  |                  |                      |                  |
| Securities lending collateral                  |                  | 27,276           |                  | 32,564           |                      |                  |
| Bond proceeds investment                       |                  | 58               |                  | 14               |                      |                  |
| Accruals                                       |                  | 2,783            |                  | 2,690            |                      |                  |
| Obligation under reverse repurchase agreements |                  | —                |                  | 1,702            |                      |                  |
| Cash   |                  | (206)            |                  | (280)            |                      |                  |
| <b>STRP NET INVESTMENTS</b>                    |                  | <b>\$345,542</b> |                  | <b>\$378,092</b> |                      |                  |

<sup>1</sup> Collaborative Strategies was established in May 2024 and formed from the Innovative Strategies and SISS Directed Private Asset (SISS Private Portfolio) portfolios.



# Investment

**Table 8**

## Investment expenses by portfolio type

July 1, 2023, through June 30, 2024 (dollars in thousands)

| Portfolio type                              | Net asset value      | Investment expenses | Basis points |
|---|----------------------|---------------------|--------------|
| Public Equity                               | \$141,223,529        | \$173,679           | 12.3         |
| Fixed Income                                | 38,263,815           | 20,016              | 5.2          |
| Real Estate                                 | 47,403,903           | 28,449              | 6.0          |
| Private Equity                              | 52,949,033           | 18,492              | 3.5          |
| Risk Mitigating Strategies                  | 28,768,669           | 18,538              | 6.4          |
| Inflation Sensitive                         | 21,591,080           | 11,459              | 5.3          |
| Collaborative Strategies                    | 5,535,572            | 1,568               | 2.8          |
| Cash/Liquidity                              | 5,605,581            | 1,540               | 2.7          |
| Strategic Overlay                           | 60,924               | 3,143               | <sup>1</sup> |
| <b>TOTAL INVESTMENT ASSETS AND EXPENSES</b> | <b>\$341,402,106</b> | <b>\$276,884</b>    | <b>8.1</b>   |

<sup>1</sup> Strategic Overlay calculates basis points using notional values instead of net asset values.

**Table 9**

## Broker commissions

July 1, 2023, through June 30, 2024

| Broker name               | Commission          | Shares                | Average commission per share |
|---------------------------|---------------------|-----------------------|------------------------------|
| Goldman Sachs             | \$2,646,872         | 1,744,774,909         | \$0.002                      |
| Merrill Lynch             | 2,593,846           | 2,346,807,321         | 0.001                        |
| Morgan Stanley            | 2,084,652           | 1,103,115,043         | 0.002                        |
| JP Morgan                 | 1,747,960           | 796,891,007           | 0.002                        |
| Instinet                  | 1,375,243           | 1,652,852,782         | 0.001                        |
| UBS                       | 1,302,473           | 866,247,612           | 0.002                        |
| Jefferies Financial Group | 1,184,590           | 923,865,226           | 0.001                        |
| Macquarie Bank Limited    | 742,595             | 1,165,834,821         | 0.001                        |
| RBC Capital Markets, LLC  | 674,758             | 23,616,402            | 0.029                        |
| Pershing LLC              | 660,244             | 100,678,646           | 0.007                        |
| All other brokers         | 5,948,692           | 1,755,269,396         | 0.003                        |
| <b>TOTAL COMMISSIONS</b>  | <b>\$20,961,925</b> | <b>12,479,953,165</b> | <b>\$0.002</b>               |

# Actuarial Section

The actuarial valuation report for the Defined Benefit Program as of June 30, 2023, reported a funded ratio of 75.9%.



|            |          |          |          |
|------------|----------|----------|----------|
| 13.69      | 3,433.47 | 32.0     | 62.0     |
| 923.98     | 475.84   | 2,609.07 | 1,906.00 |
| 1,093.28   | 3,829.44 | 971.90   | 1,816.79 |
| 227.60     | 1,426.49 | 2,960.23 | 1,984.37 |
| 1,604.31   | 4,344.85 | 2,821.66 | 1,984.37 |
| 1,421.37   | 4,141.47 | 3,081.94 | 78.0     |
| 272.18     | 4,523.49 | 1,186.19 | 78.0     |
| 56         | 531.05   | 62.49    | 42.58    |
| 0.06       | 1,585.57 | 900.51   | 613.54   |
| 118.67     | 1,605.63 | 2,058.97 | 1,402.87 |
| 7,764.45   | 262.90   | 382.52   | 28.0     |
| 21,574.49  | 1,238.16 | 1,629.11 | 1.0      |
| 101,608.85 | 71.15    | 884.72   | 1.0      |
| 839.05     | 1,283.45 | 322.90   | 1.0      |
|            | 74.12    |          |          |

# Actuary's certification letter



1301 Fifth Avenue  
Suite 3800  
Seattle, WA 98101-2605  
USA  
Tel +1 206 624 7940  
milliman.com

November 1, 2024

Teachers' Retirement Board  
California State Teachers' Retirement System

## Re: Valuation of the DB, DBS, CBB, and MPP Programs

Dear Members of the Board:

Annual valuations are performed for four benefit programs administered by the California State Teachers' Retirement System (CalSTRS).

### Defined Benefit Program

The basic financial goal of the CalSTRS Defined Benefit Program is to establish contributions which fully fund the obligations and which, as a percent of payroll, remain level for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

CalSTRS measures its funding status as the Funded Ratio of the actuarial value of assets over the actuarial obligation. The funding status based on the past three actuarial valuations is shown below:

| Valuation Date | Funded Ratio |
|----------------|--------------|
| June 30, 2021  | 73.0%        |
| June 30, 2022  | 74.4%        |
| June 30, 2023  | 75.9%        |

Based on the June 30, 2023 actuarial valuation, the scheduled income from member, employer, and state contributions is projected to finance the DB Program on an actuarially sound basis. The DB Program is projected to reach a 100% Funded Ratio by 2046.

### Defined Benefit Supplement and Cash Balance Benefit Programs

The basic financial goal of the Defined Benefit Supplement (DBS) Program and the Cash Balance Benefit (CBB) Program is to maintain sufficient resources to fully fund the obligations. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

CalSTRS measures its funding status as the Funded Ratio of the actuarial value of assets over the actuarial obligation. The funding status based on the past three actuarial valuations is shown below:

| Valuation Date | DBS Funded Ratio | CBB Funded Ratio |
|----------------|------------------|------------------|
| June 30, 2021  | 135.7%           | 131.2%           |
| June 30, 2022  | 124.1%           | 111.0%           |
| June 30, 2023  | 123.5%           | 112.8%           |

As of June 30, 2023, the fair value of assets for the DBS and CBB Programs exceeded the respective program's actuarial obligation. Additional interest credits were granted based on the respective programs' funded levels and are reflected in the Funded Ratio shown above. For the DBS Program, the actual return was less than the assumed return for the fiscal year ended in 2023 which caused a decrease in the Funded Ratio. For the CBB Program, the actual return was greater than the assumed return for the fiscal year ended in 2023 which caused an increase in the Funded Ratio.



## **Medicare Premium Payment Program**

The basic financial goal of the Medicare Premium Payment (MPP) Program is to maintain sufficient resources to fully fund the obligations. Actuarial valuations are performed every year and measure the progress toward this goal, as well as test the adequacy of the contribution rates. The most recent valuation was as of June 30, 2023.

The MPP Program is essentially funded on a pay-as-you-go basis with a portion of contributions to the DB Program diverted to the Teachers' Health Benefit Fund to make MPP Program payments. As of June 30, 2023, \$222 million of future employer contributions to the DB Program have been allocated to pay the MPP Program benefits; however, this amount is not included as an asset for GASB 74 reporting. This gives the appearance that the MPP Program is significantly underfunded in the GASB 74 results. However, based on the commitment to transfer a portion of future contributions from the DB Program to fund the MPP Program, it is our opinion that the MPP Program continues in sound financial condition as of June 30, 2023.

## **Data, Assumptions and Methods Applicable to All Programs**

The June 30, 2023 valuation results are based on the membership data and the asset information provided by CalSTRS. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised. The valuation results were developed using models intended for valuations that use standard actuarial techniques. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice.

Milliman did not prepare the summaries or schedules shown in the Financial and Actuarial Sections. However, the actuarial information contained in the Financial Section and in this Actuarial Section was derived from our June 30, 2023 actuarial valuation reports for funding and our 2024 GASB 67/68 and GASB 74/75 reports that communicated the actuarial results for financial reporting for June 30, 2024.

The actuarial computations presented in the valuation reports are for purposes of determining the recommended funding amounts for CalSTRS consistent with our understanding of their funding requirements and goals. For the DB and MPP Programs, the Actuarial Obligation is determined by using the entry age actuarial cost method; the traditional unit credit method is used for the DBS and CBB Programs. For the DB Program, the actuarial assets are determined by using a one-third smoothed recognition method of the difference between the actual fair value to the expected actuarial value. For the other programs the fair value was used with no smoothing applied.

The valuations are based on our understanding of the current benefit provisions for the respective programs and the actuarial assumptions adopted by the Board. The assumptions are reviewed annually for reasonableness, with a detailed experience analysis generally completed every four years as per Board policy. Note that experience studies could be completed off cycle if deemed necessary. The last detailed experience analysis was completed in January of 2024 when the Board adopted the current assumptions. The assumptions are scheduled to be reviewed in detail again for use in the June 30, 2027 funding valuation and the GASB valuations for reporting date June 30, 2028. The assumptions and methods used for financial reporting under GASB 67/68 and GASB 74/75 are the same as the funding valuation assumptions with the following exceptions:

1. The discount rate of 7.10% (gross of administrative expenses) is used for the DB, DBS & CBB Programs;
2. The discount rate of 3.93% is used for the MPP Program based on the rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher;
3. The fair value of assets is used for the Fiduciary Net Position (i.e., there is no smoothing of the DB Program assets for GASB 67/68), and;
4. The individual entry age actuarial cost method, as specified by GASB, is used for all programs.

# Actuary's certification letter

---



Teachers' Retirement Board

November 1, 2024

Page 3

For financial reporting purposes, all programs within the State Teachers' Retirement Plan are reported in aggregate. This includes the obligation, and associated assets, for purchasing power benefits financed through the Supplemental Benefit Maintenance Account.

We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement Numbers 67, 68, 74, 75 and 82 for fulfilling financial reporting requirements and meet the parameters set forth in the relevant Actuarial Standards of Practice (ASOPs). We believe that the assumptions and methods used for funding purposes meet the parameters set by the ASOPs and that these assumptions offer a reasonable estimate of anticipated CalSTRS experience and are expected to have no significant bias. Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements as presented in the valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Our valuation report and this letter have been prepared exclusively for CalSTRS for a specific and limited purpose. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. It is a complex, technical analysis that assumes a high level of knowledge concerning CalSTRS operations, and uses CalSTRS data, which Milliman has not audited. No third-party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on these assignments are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel. The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

We certify that the June 30, 2023 valuations were performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Respectfully submitted,

Nick J. Collier, ASA, EA, MAAA  
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary

Julie Smith, FSA, EA, MAAA  
Consulting Actuary

Daniel Wade, FSA, EA, MAAA  
Principal and Consulting Actuary

## Actuarial methods

CalSTRS administers the Defined Benefit (DB), Defined Benefit Supplement (DBS), Cash Balance Benefit (CBB) and Medicare Premium Payment (MPP) programs. The DB Program and the MPP Program are cost-sharing multiple employer programs. The DBS and CBB programs are cash balance plans. CalSTRS has adopted actuarial methods with the objective of funding these programs in a manner that minimizes year-to-year variation in cost while ensuring sufficient assets are accumulated over each member's working career. The following is a summary of the various methods used for each program.

### Actuarial cost method

For funding purposes, the entry age actuarial cost method was selected for both the DB and MPP programs since it provides for a cost allocation that remains fairly level over time as a percentage of payroll, which can be beneficial for budget planning purposes. The traditional unit credit actuarial cost method was selected for the DBS and the CBB programs since the projected benefits of each individual member are allocated by a consistent formula to valuation years. As a result, the actuarial obligation is equal to the accumulated account balances, and the normal cost is equal to the total annual contribution. Neither the DBS Program nor the CBB Program provide a cost-of-living adjustment for benefit recipients.

### Asset valuation method

The DB Program uses an asset smoothing method, as adopted by the Teachers' Retirement Board, which projects an Expected Actuarial Value of Assets using the assumed rate of investment return, then one-third of the difference between the expected value and the fair value is recognized in the Actuarial Value of Assets. The DBS Program and the CBB Program use the fair value of assets for actuarial valuation purposes, and asset smoothing is not used for these two programs. Because the MPP Program was created using surplus assets of the DB Program, the MPP Program is considered fully funded for funding purposes. Assets are equal to the actuarial obligation of the MPP Program, and asset smoothing is not used for this program.

### Funding method

#### Defined Benefit Program

The DB Program is funded through contributions from members, employers and the State of California under the rules established in 2014 when the California Legislature and the Governor enacted the CalSTRS Funding Plan, a joint commitment set forth in statute with the goal of achieving full funding of the DB Program by 2046. The funding plan

provided additional contributions to amortize actuarial gains and losses and the unfunded actuarial obligation over a closed period ending June 30, 2046.

**Member DB contributions:** For members covered by the CalSTRS 2% at 60 benefit formula, the contribution rate is 10.250% of creditable compensation. For members covered by the CalSTRS 2% at 62 benefit formula, the contribution rate is equal to one-half of the normal cost rate determined in the valuation rounded to the nearest quarter percent, plus a supplemental amount. The contribution rate for CalSTRS 2% at 62 members only changes when the normal cost rate changes by more than 1% of creditable compensation as compared to the normal cost rate at the time of the last adjustment. For the fiscal year ended June 30, 2024, the contribution rate for CalSTRS 2% at 62 members is equal to 10.205% of creditable compensation.

**Employer DB contributions:** Employers pay a base contribution rate of 8.25% of creditable compensation. Additionally, employers contribute a supplemental contribution rate pursuant to the CalSTRS Funding Plan for the purpose of amortizing the employers' share of the unfunded actuarial obligation by the fixed date of June 30, 2046. In addition, beginning in fiscal year 2021-22, the board has had limited authority to adjust the supplemental contribution rate by no more than 1% a year to a maximum total rate of 20.25% to amortize the remaining unfunded actuarial obligation by the 2046 deadline. For fiscal year 2024-25, the board elected to maintain the total employer contribution rate at 19.1% of creditable compensation.

**State DB contributions:** The state's base and supplemental contribution to the DB Program is calculated based on creditable compensation from two fiscal years prior. The state contributes at a base contribution rate of 2.017% of creditable compensation. Additionally, the state contributes a supplemental contribution pursuant to the CalSTRS Funding Plan for the purpose of amortizing the state's share of the unfunded actuarial obligation by the fixed date of June 30, 2046. The board currently has limited authority to adjust the supplemental state contribution rate by no more than 0.5% a year to amortize the unfunded actuarial obligation by the 2046 deadline. For fiscal year 2024-25, the board elected to maintain the state supplemental contribution rate at 6.311%. The state also contributes an additional 2.5% of members' creditable compensation, minus \$72 million, to protect retirees' purchasing power.

Overall, the total state contribution rate for fiscal year 2024-25 is 10.828%.

## Other programs

For the DBS Program, member and employer contributions are credited to the member's account for service credit that exceeds one year during a single school year. For CalSTRS 2% at 60 members, compensation for limited-term payments and compensation determined to have been paid to enhance their DB Program benefits are also credited to the member's DBS account. CalSTRS 2% at 60 members and employers each contribute 8% for a total of 16% of salary for service creditable to DBS. For members under CalSTRS 2% at 62, members contribute 9% and employers contribute an additional 8% for a total of 17% of salary for service creditable to DBS. Generally, for the CBB Program, participants and employers each contribute 4% of salary. Rules for contribution rates may differ for participants covered by a collective bargaining agreement, but the sum of participant and employer contributions must equal or exceed 8% of salary. The employer contribution rate cannot be less than 4% of salary, and the participant rate cannot be less than the employer rate. The board may adjust employer contributions for a fixed number of years, but the adjustment cannot exceed 0.25% of salaries in any plan year.

For both the DBS and CBB programs, there is currently no provision in the Education Code to increase contributions to make up for any future shortfalls (if they were to occur). However, the assumed return on investments currently exceeds the minimum interest rate. To the extent that the assets earn more than the accounts are credited in the future, this may be sufficient to make up any potential shortfall.

The MPP Program is funded on a pay-as-you-go basis from a portion of monthly employer contributions of the DB Program. In accordance with Education Code section 25930 and board policy, contributions of the DB Program that would otherwise be credited to the DB Program each month are instead credited to the MPP Program to fund monthly program and administrative costs. For funding purposes, the MPP Program is assumed to be 100% funded by including the value of future employer contributions that have been allocated to fully fund the MPP Program obligations. As a result, the funding method does not require an amortization method for any unfunded actuarial obligation or surplus. Actuarial gains and losses are funded as they occur through the pay-as-you-go method described above.

There are no retiree contributions, per capita claims costs or pay increase assumptions.

## Financial reporting method

Under Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25*, financial reporting for the State Teachers' Retirement Plan (STRP) includes the DB (including the Purchasing Power Protection program), DBS, CBB and Replacement Benefits programs. For financial reporting, the aggregate assets of all programs in the STRP on a fair value basis are used in the determination of the net pension liability. GASB Statement No. 67 also specifies that, for financial reporting purposes, the entry age actuarial cost method should be used to calculate total pension liability.

For financial reporting purposes of the MPP Program, the actuarial cost method used is the entry age actuarial cost method as specified by GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other than Pension Plans*. The asset valuation method is fair value of assets.

## Actuarial assumptions

The actuarial valuations use two types of assumptions: economic and demographic. Economic assumptions are related to the general economy and its impact on CalSTRS. Demographic assumptions predict the future experience of the membership with respect to eligibility and benefits and are directly related to the specific experience of CalSTRS members. As the DB Program and the DBS Program share the same population, it's reasonable to use most of the same assumptions for both programs. The assumptions for the DBS Program and the CBB Program will have minimal impact under the traditional unit credit actuarial cost method or only have significance when participants elect to annuitize the account balance. Under the DBS Program and the CBB Program, a member must have at least \$3,500 in their account to elect to annuitize the account balance.

CalSTRS, through our consulting actuary, generally performs an experience study every four years to determine appropriate demographic and economic assumptions. These assumptions are then applied when the consulting actuary performs actuarial valuations to monitor the funding status of the DB, DBS, CBB and MPP programs.

The most recent experience study was completed and presented to the board in January 2024. The board approved several adjustments to the economic and demographic assumptions. Following is a summary of the different types of assumptions used.

### Economic assumptions

The two major economic assumptions for the DB, DBS and CBB programs are investment return and wage growth, and each is affected by the underlying assumed rate of inflation. The assumption for investment return, also known as the discount rate, is 7.00% for the DB, DBS and CBB programs (net of investment and administrative expenses). The assumption for general wage increase is 3.50%, of which 2.75% is due to inflation and 0.75% is due to expected gain in productivity. The payroll growth assumption is 3.25%, which assumes the active members population will decline by 5% by 2046.

The major economic assumptions used for the MPP Program valuation are the investment return, medical inflation and rate of inflation. The investment return assumption for the MPP Program is 7.00% (net of investment and administrative expenses). The assumption for premium cost trend rates varies by years; however, the increases are approximately equivalent to a 5.0% and 6.5% increase each year for Medicare Part A and Part B, respectively. The assumption for price inflation is also 2.75%.

As required by GASB Statement No. 67 for financial reporting for the STRP, the discount rate of 7.10% is net of investment expenses but gross of administrative expenses. The MPP Program is funded on a pay-as-you-go basis, and the other postemployment benefit plan's fiduciary net position was not projected to be sufficient to make projected future benefit payments. As such, GASB Statement No. 74 requires the MPP Program's discount rate be based on 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher. The board has adopted The Bond Buyer 20-Bond GO Index for this purpose. The MPP Program's discount rate as of June 30, 2024, is 3.93%. Table 6 provides a summary of the economic actuarial assumptions for these programs as reflected in the most recent actuarial valuations.

### Demographic assumptions

Demographic assumptions are based on the most recent CalSTRS experience study adopted by the board in January 2024 and include assumptions for postretirement mortality; probabilities of retirement, disability or withdrawal from the system; assumptions for pay increases due to promotions; and various other assumptions needed to value the DB, DBS and CBB program benefits. Members whose retirement date is on or after July 1, 2012, are not eligible for coverage under the MPP Program. As such, no active members are eligible for benefits under the MPP Program, and the assumptions related to active members are not applicable to this program. The primary MPP Program demographic assumptions are postretirement mortality rates and program enrollment rates. Tables 1 through 5 and 7 through 9 provide a summary of the demographic assumption information for these programs as reflected in the most recent actuarial valuations.

## Changes since prior valuation

### Changes in actuarial methods

There were no changes in the actuarial methods for the DB, DBS, CBB and MPP programs.

### Changes in actuarial assumptions

In January 2024, the board adopted new actuarial assumptions for use in the funding valuations of the DB, DBS, CBB and MPP programs. These new assumptions were reflected in the June 30, 2023, actuarial valuation of each program. For full details on changes to the assumptions see the CalSTRS 2024 Experience Analysis report, available at [CalSTRS.com](https://www.calstrs.com).



# Actuarial

---

The discount rate used for financial reporting for the MPP Program for the fiscal year ended June 30, 2024, was 3.93%, an increase of 0.28% from prior year.

## Changes in plan provisions

There were no changes in plan provisions for the DB, DBS, CBB and MPP programs that were reflected in the June 30, 2023, actuarial valuations. In May 2024, the board adopted 5.81% and 4.91% additional earnings credits for the fiscal year ended June 30, 2023, for the DBS Program and the CBB Program, respectively. These additional earnings credits have been reflected in the June 30, 2023, valuations of both the DBS and CBB programs.

## Valuation results

The most recent DB, DBS, CBB and MPP program actuarial valuations were completed as of June 30, 2023. All actuarial valuations were presented to the board in May 2024.

The DB Program valuation showed a decrease of \$2.0 billion in the unfunded actuarial obligation of the DB Program to a total of \$86.6 billion and an increase in the funded ratio from 74.4% to 75.9%. The increase in the funded ratio is primarily due to the contributions received to pay down the unfunded actuarial obligation as well as the new assumptions that were reflected in the valuation.

The DB Program is projected to reach 100% funding by 2046, the target set by the funding plan. The DB Program actuarial valuation provides the best estimate of the program's long-term financing by using the actuarial methods and assumptions adopted by the board. Comparing the unfunded actuarial obligation as of two valuation dates does not provide enough information to determine if there were actuarial gains or losses. A better comparison is between the unfunded actuarial obligation on the valuation date and the expected unfunded actuarial obligation projected from the prior valuation date using the actuarial assumptions in effect for the period of comparison.

Actuarial gains reduce the DB Program's unfunded actuarial obligation as of the valuation date, and actuarial losses increase the DB Program's unfunded actuarial obligation.

Most actuarial gains and losses are a result of short-term fluctuations in experience. Because of the long-term nature of actuarial assumptions, future patterns of emerging experience may offset these short-term fluctuations.

The DBS Program valuation determined there was an actuarial surplus of approximately \$4.1 billion before the awarding of any additional earnings credit. After awarding

the 5.81% additional earnings credit, the actuarial surplus was reduced to \$3.5 billion.

The CBB Program valuation determined there was an actuarial surplus of approximately \$73.5 million before the awarding of any additional earnings credit. After awarding the 4.91% additional earnings credit, the actuarial surplus was reduced to \$54.3 million.

The MPP Program valuation indicated that the current program assets, along with MPP Program-allocated funding from future employer contributions that would otherwise have been credited to the DB Program, were sufficient to finance the future MPP Program obligations of \$221.9 million for both Medicare Part A premiums and Medicare Parts A and B late enrollment surcharges.

Tables 10 through 14 provide summaries of all the valuation results. The data displayed in Table 10 is as of June 30 of the specified year. Other information, specifically annual payroll amounts, reported in the Financial section of this report will generally not be consistent with this data as the financial data reflects payroll for all individuals who were active during the year, while Table 10 only includes those individuals who are active as of June 30. It does not include those individuals who were active at some point during the year but not as of June 30.

In addition, amounts provided in Table 11 represent the status of the population as of June 30 of the indicated year. For the DB Program, information provided in the "Removed from rolls" and "Rolls end of year" columns include the application of the noncompounded 2% annual postretirement benefit adjustment.

The data provided for each year in Table 11 is a snapshot of the population taken following year-end closing for the indicated period. It's likely adjustments will be made subsequent to this closing. No attempt is made to update the data in Table 11 for these adjustments.

## Independent actuarial review

Actuarial services for CalSTRS are provided by a qualified independent actuarial firm (currently Milliman) with additional review provided by CalSTRS actuarial staff.

In addition to the review performed by CalSTRS actuarial staff, all actuarial services are subject to a periodic independent review. The selection of the firm performing the independent review is done through the competitive bid process. In 2023, CalSTRS selected the actuarial firm Segal to perform the most recent independent review of all actuarial work performed by Milliman.

# Actuarial

---

In the spring of 2024, Segal completed its review of the 2024 actuarial experience study. Segal found the recommendations made by Milliman in the Actuarial Experience Study to be reasonable, and they agreed with the rationales and processes that led to Milliman's recommendations.

Segal is currently in the process of reviewing the June 30, 2023, actuarial valuations for all programs, and this review will be available by December 2024. In the fall of 2020, Cheiron, an actuarial consulting firm, completed a review of the June 30, 2019, actuarial valuations for all programs. Overall, Cheiron was able to replicate the results of all of the actuarial valuations with no material differences. Cheiron commented that the actuarial valuations were performed by qualified actuaries and in accordance with generally accepted actuarial principles. Both independent review reports are available on [CalSTRS.com](https://www.calstrs.com).

## Summary of plan provisions—DB Program

The plan provisions of the DB Program are detailed in the Teachers' Retirement Law. The following is a summary of these provisions, which were used in the June 30, 2023, valuation of the DB Program.

### Normal retirement

**Eligibility requirement**—CalSTRS 2% at 60 members: Age 60 with five years of credited service.

CalSTRS 2% at 62 members: Age 62 with five years of credited service.

**Benefit**—2% of final compensation for each year of credited service.

### Benefit factors

**Credited service**—For each year of membership, credited service is granted based on the ratio of salary earned to the member's annualized pay rate. No more than one full year of service credit is allowed during any school year; however, the contributions for any service in excess of one school year are deposited to the member and employer contribution accounts within the DBS Program. Members can earn compensation for service in excess of one school year by taking on coaching positions or other extra-duty assignments, teaching summer school, or working in multiple positions or at multiple school sites, districts or community colleges.

Since the contribution rate for the DB Program is higher than the contribution rate for the DBS Program, CalSTRS must return the excess contributions earned for service in excess of one school year to school district employers. School district employers return excess member contributions to their employees, and the returned pre-tax contributions will be considered taxable income in the year they are received by the employee.

**Final compensation**—CalSTRS 2% at 60 members: Highest average annual compensation earnable for 36 consecutive months of credited service. For members with 25 or more years of service, the calculation is based on the highest average annual compensation earnable for 12 consecutive months.

CalSTRS 2% at 62 members: Final compensation is based on the highest average annual compensation earnable for 36 consecutive months of credited service. The annual compensation limit in 2023–24 was \$176,614 and is adjusted annually based on changes to the Consumer Price Index for All Urban Consumers. CalSTRS 2% at 62 members are not eligible for the one-year final compensation benefit enhancement.

**Internal Revenue Code (IRC) section 401(a)(17)**—Compensation is limited under IRC section 401(a)(17) and assumed to increase at the rate of inflation. The annual compensation limit effective in fiscal year 2023–24 was \$330,000.

**Sick leave service credit**—Credited service is granted for unused sick leave at the time of retirement. Up to 0.2 years of credited service for sick leave may be used for eligibility for one-year final compensation or to attain the career factor or the longevity bonus for eligible members.

**Career factor**—If a CalSTRS 2% at 60 member has 30 or more years of credited service, the age factor is increased by 0.2%. However, the age factor, after adding the career factor, cannot exceed 2.4%. The career factor does not apply to CalSTRS 2% at 62 members.

**Longevity bonus**—If a CalSTRS 2% at 60 member attains 30 years of service before January 1, 2011, a longevity bonus of \$200 per month is added to the Member-Only Benefit. The bonus is increased to \$300 per month with 31 years of service and \$400 per month with 32 or more years of service. The longevity bonus does not apply to CalSTRS 2% at 62 members.

## Postretirement benefit adjustment

**Annual benefit adjustment**—2% simple increase on September 1 following the first anniversary of the effective date of the benefit, applied to all continuing benefits.

**IRC Section 415(b)**—For all CalSTRS members, benefits are subject to federal limits imposed under IRC section 415(b). When performing the actuarial valuation of the DB Program, the 415(b) limits are ignored in order to address the potential pay-as-you-go funding needs of the Teachers' Replacement Benefits Program Fund. Note that CalSTRS 2% at 62 members are not eligible to receive benefits from the Teachers' Replacement Benefits Program Fund and are not expected to ever receive benefits in excess of the federal limit as a result of limits on creditable compensation as per the California Public Employees' Pension Reform Act of 2013.

## Early retirement

**Eligibility requirement**—CalSTRS 2% at 60 members: Age 55 with five years of credited service, or age 50 with 30 years of credited service.

CalSTRS 2% at 62 members: Age 55 with five years of credited service.

**Benefit reduction**—CalSTRS 2% at 60 members:

A 0.5% reduction in the normal retirement allowance for each full month or partial month the member is younger than age 60, plus a reduction of 0.25% for each full month or partial month the member is younger than age 55.

CalSTRS 2% at 62 members: A 0.5% reduction in the normal retirement allowance for each full month or partial month the member is younger than age 62.

## Late retirement

**Benefit**—CalSTRS 2% at 60 members: For members who continue to earn additional service credit after age 60, the 2% age factor increases by 0.033% for each quarter year of age that the member is over age 60, up to a maximum of 2.4%.

CalSTRS 2% at 62 members: For members who continue to earn additional service credit after age 62, the 2% age factor increases by 0.033% for each quarter year of age that the member is over age 62, up to a maximum of 2.4%.

## Deferred retirement

**Benefit**—Any time after satisfying the minimum service requirement, a member may cease active service, leave the accumulated contributions on deposit and later retire upon attaining the minimum age requirement.

## Disability Allowance—Coverage A

**Eligibility requirement**—Applicable only to members who became a member before October 16, 1992, who did not elect Coverage B. Member has five years of credited California service and has not attained age 60, or a member has earned one year of creditable service and is disabled due to an unlawful act of bodily harm committed by another person while performing creditable service.

**Benefit**—50% of earned final compensation.

- or -

5% of final compensation for each year of service credit if over age 45 with fewer than 10 years of service credit.

**Children's benefit**—10% for each eligible dependent child, up to a maximum of 40% of earned final compensation. The increment for each eligible child continues until the child marries or attains age 22.

**Offsets**—Benefit, including children's increment, is reduced by disability benefits payable under Social Security, workers' compensation and employer-paid income protection plans.

## Disability Allowance—Coverage B

**Eligibility requirement**—Applicable to members who became members on or after October 16, 1992, and to certain other members who elected Coverage B. Member has five years of credited California service, or a member has earned one year of creditable service and is disabled due to an unlawful act of bodily harm committed by another person while performing creditable service.

**Benefit**—50% of earned final compensation, regardless of age and service credit.

**Children's benefit**—10% for each eligible child up to four children, for a maximum of 40% of earned final compensation. The increment for each child continues until the child attains age 21, regardless of student, marital or employment status.

**Offsets**—The member's benefit is reduced by disability benefits payable under workers' compensation.

## Death before retirement—Coverage A

**Eligibility requirement**—Applicable only to members who became a member before October 16, 1992, who did not elect Coverage B. One or more years of service credit for active members or members receiving a disability benefit.

**Lump-sum payment**—\$6,903 lump-sum to the designated beneficiary. If there is no surviving spouse, domestic partner or eligible children, the contributions and interest are paid to the designated beneficiary.

**Benefit**—The surviving spouse or registered domestic partner with eligible children will receive a family benefit of 40% of final compensation for as long as there is at least one eligible child. An additional 10% of earned final compensation is payable for each eligible child up to a maximum benefit of 90%.

If there is no surviving spouse or registered domestic partner, a benefit of 10% of earned final compensation is payable to eligible children up to a maximum benefit of 50%.

When there are no eligible children, the spouse or registered domestic partner may elect to receive one-half of a 50% joint and survivor benefit projected to age 60 or take a lump-sum payment of the remaining contributions and interest.

## Death before retirement—Coverage B

**Eligibility**—Applicable to members who became members on or after October 16, 1992, and to certain other members who elected Coverage B. One or more years of service credit for active members.

**Lump-sum payment**—\$27,612 lump-sum to the designated beneficiary. If there is no surviving spouse or domestic partner, the contributions and interest are paid to the designated beneficiary.

**Benefit**—A lump-sum payment of the contributions and interest.

- or -

One-half of a 50% joint and survivor benefit, beginning on the member's 60th birthday or immediately with a reduction based on the member's age and that of the spouse or registered domestic partner at the time the benefit begins.

If the surviving spouse or registered domestic partner elects a monthly benefit, or there is no surviving spouse, each eligible child would receive 10% of the member's earned final compensation, with a maximum benefit of 50%.

## Death after retirement

**Lump-sum payment**—\$6,903 lump-sum to the designated beneficiary.

**Benefit**—Members of retirement age may make a preretirement election of an option to designate a beneficiary.

**Annuity form**—If the retired member had elected one of the joint and survivor options, the option beneficiary's benefit would be reduced in accordance with the option elected.

If no option was elected, payment of the unpaid contributions and interest, if any, remaining in the member's account will be made to the beneficiary, if one is named, or to the deceased member's estate.

## Termination from CalSTRS

**Refund**—Refund of the member's contributions with interest as credited to the member's account to date of withdrawal. A refund terminates membership and all rights to future benefits from the program.

**Re-entry after refund**—Former members who re-enter the program may redeposit all amounts previously refunded plus regular interest. The member must earn one year of credited service after re-entry before becoming eligible for program benefits.

## Summary of plan provisions—DBS Program

The plan provisions of the DBS Program are detailed in the Teachers' Retirement Law. The following is a summary of these provisions, which were used in the June 30, 2023, valuation of the DBS Program.

### Membership

**Eligibility requirement**—All members of the DB Program have an account under the DBS Program and are eligible to receive a DBS benefit based on the amount of funds contributed to their DBS account.

**Member**—An eligible employee with creditable service subject to coverage who has contributions credited in the program or is receiving an annuity from the program.

### Account balance

**Account balance**—Nominal accounts are established for the purpose of determining DBS benefits payable to the member. Accounts are credited with contributions, interest at the minimum interest rate and, if applicable, additional earnings credits.

**Contributions**—Member and employer contributions are credited to the member's DBS account for service credit in excess of one year during a single school year, and for CalSTRS 2% at 60 members, compensation for limited-term payments and compensation determined to have been paid to enhance their DB Program benefits are credited.

**Minimum interest rate**—Annual rate determined for the plan year by the board in accordance with federal laws and regulations. The minimum interest rate is equal to the average of the yields on 30-year Treasury Notes for the 12 months ending in February preceding the beginning of the

# Actuarial

---

plan year, rounded to the next highest 0.01%. The minimum interest rate is not less than the rate at which interest is credited under the DB Program.

**Additional earnings credit**—Annual rate determined for the plan year by the board based on the actual earnings during the plan year but only to the extent the earnings are sufficient to credit the minimum interest rate and provide any additions to the gain and loss reserve deemed warranted by the board.

The board adopted an additional earnings credit of 5.81% for the fiscal year ended June 30, 2023. The credit is applied to the June 30, 2023, account balance for members who have not yet retired as of the board adoption date of May 2, 2024.

## Normal retirement

**Eligibility requirement**—Receipt of a corresponding benefit under the DB Program.

**Benefit**—The account balance at the benefit effective date subject to limits imposed under IRC section 415(b).

**Form of payment**—The normal form of payment is a lump-sum distribution. Annuity options are available if the account balance is at least \$3,500.

## Early retirement

**Eligibility requirement**—Same as normal retirement.

**Benefit and form of payment**—Same as normal retirement.

## Late retirement

**Benefit and form of payment**—Same as normal retirement.

Contributions and interest continue to be credited to the account balance.

## Deferred retirement

**Benefit**—A member must receive a DBS Program benefit when the corresponding benefit is received under the DB Program.

## Disability benefit

**Eligibility requirement**—Receipt of a corresponding benefit under the DB Program.

**Benefit**—The account balance at the date the disability benefit becomes payable.

**Form of payment**—Same as normal retirement. An annuity benefit is discontinued upon termination of the corresponding DB Program benefit.

## Death before retirement

**Eligibility requirement**—Deceased member has an account balance.

**Benefit**—The account balance at the date of death is payable to the designated beneficiary.

**Form of payment**—Same as normal retirement, except annuity options are limited to a period certain annuity.

## Death after retirement

**Eligibility requirement**—The deceased member was receiving an annuity.

**Benefit**—According to the terms of the annuity elected by the member.

## Termination from the program

**Eligibility requirement**—Termination of all CalSTRS-covered employment.

More than five years has elapsed since the most recent termination benefit, if any, has been paid.

**Benefit and form of payment**—Lump-sum distribution of the account balance as of the date of distribution.

## Summary of plan provisions—CBB Program

The plan provisions of the CBB Program are detailed in the Teachers' Retirement Law. The following is a summary of these provisions, which were used in the June 30, 2023, valuation of the CBB Program.

## Membership

**Eligibility requirement**—Membership if employed at less than 50% of a full-time position, or on a substitute, part-time hourly or part-time daily basis, for a California school district or county office of education that has elected to offer the CBB Program.

Extended eligibility to employees hired by a community college district to perform creditable service on a part-time or temporary basis or for not more than 67% of the hours per week considered a regular full-time assignment.

# Actuarial

---

**Participant**—An eligible employee with creditable service subject to coverage who has contributions credited in the program or is receiving an annuity from the program or has not yet received their lump-sum benefit.

## Account balance

**Account balance**—Nominal accounts established for the purpose of determining benefits payable to the participant. Accounts are credited with contributions, minimum interest rate and, if applicable, additional earnings credits.

**Contributions**—Generally, for the CBB Program, participants and employers each contribute 4% of salary.

Rules for contribution rates may differ for participants covered by a collective bargaining agreement, but the sum of the participant and employer contributions must equal or exceed 8% of salary. The employer contribution rate cannot be less than 4% of salary, and the participant rate cannot be less than the employer rate.

The board may adjust the employer contributions for a fixed number of years, but the adjustment shall not exceed 0.25% of salaries in any plan year, up to a maximum mandatory employer contribution of 4.25%.

**Minimum interest rate**—Annual rate determined for the plan year by the board in accordance with federal laws and regulations. The minimum interest rate is equal to the average of the yields on 30-year Treasury Notes for the 12 months ending in February preceding the beginning of the plan year, rounded to the next highest 0.01%.

**Additional earnings credit**—Annual rate determined for the plan year by the board based on the actual earnings during the plan year but only to the extent the earnings are sufficient to credit the minimum interest rate and provide any additions to the gain and loss reserve deemed warranted by the board.

The board adopted an additional earnings credit of 4.91% for the fiscal year ended June 30, 2023. The credit is applied to the June 30, 2023, account balance for participants who have not yet retired as of the board adoption date of May 2, 2024.

## Normal retirement

**Eligibility requirement**—Age 60, or age 62 for participants hired on or after January 1, 2013.

**Benefit**—The account balance at the retirement date subject to limits imposed under IRC section 415(b).

**Form of payment**—The normal form of payment is a lump-sum distribution. Annuity options are available if the sum of the employer and employee accounts equals or exceeds \$3,500.

## Early retirement

**Eligibility requirement**—Age 55.

**Benefit and form of payment**—Same as normal retirement.

## Late retirement

**Benefit and form of payment**—Same as normal retirement. Contributions and interest continue to be credited to the account balances until distributed.

## Deferred retirement

**Benefit**—A participant may cease active service, leave the accumulated account balance on deposit and later retire upon attaining the minimum age requirement.

## Disability benefit

**Eligibility requirement**—Determination by the board that the participant has a total and permanent disability.

**Benefit**—The account balance at the date of disability. An annuity benefit is discontinued if the participant is re-employed and performs service creditable under the program.

**Form of payment**—Same as normal retirement.

## Death before retirement

**Eligibility requirement**—Deceased participant has an account balance.

**Benefit**—The account balance at the date of death payable to the designated beneficiary.

**Form of payment**—Normal distribution is a lump-sum benefit. A participant's beneficiary may elect to receive the benefit in the form of a period-certain annuity if the sum of the balance of credits to the participant's employee and employer accounts is \$3,500 or more.

## Death after retirement

**Eligibility requirement**—The deceased participant was receiving an annuity.

**Benefit**—According to the terms of the annuity elected by the participant.

## Termination from the program

**Eligibility requirement**—More than five years has elapsed since the most recent termination benefit, if any, has been paid.

# Actuarial

---

**Benefit and form of payment**—Lump-sum distribution of the account balance as of the date of distribution. The benefit is payable six months from the termination of creditable service.

## Summary of plan provisions—MPP Program

The plan provisions of the MPP Program are detailed in the Teachers' Retirement Law. The following is a summary of these provisions, which were used in the June 30, 2023, valuation of the MPP Program.

### Membership

#### Eligibility requirement – Part A

**DB member**—satisfies either:

1. Retired or disabled prior to January 1, 2001; hired prior to April 1, 1986; age 65 or above; enrolled in Medicare Part A and Part B; and not eligible for Part A without premium payment.  
– or –
2. Meet all above requirements, except retired or disabled before July 1, 2012; district completed a Medicare Division election prior to retirement; and active member voted yes if they were less than 58 years of age at the time of the election.

**Spouse eligibility**—Spouses of members are not eligible to participate in the program.

Members who retire on or after July 1, 2012, are not eligible for coverage under the MPP Program.

#### Eligibility requirement – Part A and B late enrollment surcharges

Only those currently enrolled are eligible.

### Benefits paid

Premium payments are made directly to the Centers for Medicare and Medicaid Services on a monthly basis. Medicare Part A premium rates for fiscal year 2023–24 are as follows:

#### Medicare Part A premium rate

|                                    |       |
|------------------------------------|-------|
| July 1, 2023, to December 31, 2023 | \$506 |
| January 1, 2024, to June 30, 2024  | \$505 |

Individuals with 30 to 39 quarters of Medicare-covered employment pay a reduced monthly premium rate, which was \$278 for July 1, 2023 to June 30, 2024.

Part A late enrollment surcharge is generally 10% of the respective monthly premium rates, and Part B late enrollment surcharge is usually 10% of the respective monthly premium rates for each full 12-month period the person is late enrolling; however, the fees charged to individual participants may be higher based on certain income thresholds.

Based on the published premium rates during fiscal year 2023–24, Part A late enrollment surcharges were \$50.60 and \$50.50 for the period of July 1, 2023, to December 31, 2023, and January 1, 2024, to June 30, 2024, respectively. Each 10% of Part B late enrollment surcharges were \$16.49 and \$17.47 for the period of July 1, 2023, to December 31, 2023, and January 1, 2024, to June 30, 2024, respectively.

# Actuarial

All demographic assumptions used in the actuarial valuations were adopted by the board when the experience study was adopted in January 2024. The following are the assumptions adopted by the board for the DB, DBS, CBB and MPP programs unless stated otherwise. Where indicated, duration is based on elapsed service since membership date.

**Table 1A**

## Preretirement mortality for sample ages—DB Program only

| Age | Active members and participants <sup>1</sup> |        |
|-----|--|--------|
|     | Male   | Female |
| 25  | 0.014%                                       | 0.008% |
| 30  | 0.023%                                       | 0.014% |
| 35  | 0.033%                                       | 0.022% |
| 40  | 0.044%                                       | 0.031% |
| 45  | 0.063%                                       | 0.042% |
| 50  | 0.106%                                       | 0.065% |
| 55  | 0.184%                                       | 0.099% |
| 60  | 0.279%                                       | 0.146% |
| 65  | 0.400%                                       | 0.211% |

**Table 1B**

## Postretirement mortality for sample ages

| Age | Retired members, participants and beneficiaries <sup>1</sup> |         | Disabled members and participants (after third year) <sup>1</sup> |         |
|-----|--|---------|---|---------|
|     | Male   | Female  | Male  | Female  |
| 50  | 0.195%   | 0.141%  | 1.446%  | 0.929%  |
| 55  | 0.312%   | 0.226%  | 1.971%  | 1.187%  |
| 60  | 0.445%   | 0.289%  | 2.447%  | 1.397%  |
| 65  | 0.575%   | 0.369%  | 2.720%  | 1.577%  |
| 70  | 0.903%   | 0.602%  | 3.573%  | 2.016%  |
| 75  | 1.754%   | 1.195%  | 4.981%  | 3.206%  |
| 80  | 3.482%   | 2.416%  | 7.139%  | 5.421%  |
| 85  | 6.893%   | 5.007%  | 10.794%   | 9.021%  |
| 90  | 12.924%  | 9.999%  | 16.596%   | 14.059% |
| 95  | 22.529%  | 17.907% | 24.286%   | 20.081% |

### Select minimum rates for disability

|                           | Male | Female |
|---------------------------|------|--------|
| First year of disability  | 4.0% | 4.0%   |
| Second year of disability | 3.5% | 3.0%   |
| Third year of disability  | 3.0% | 2.0%   |

<sup>1</sup> The mortality assumption uses a generational mortality approach with a base year of 2023 for the mortality rates. Projected improvement is based on the MP-2021 Ultimate Projection Scale. The rates shown reflect mortality improvement through June 30, 2023. The projection scale does not apply to the select minimum rates.



# Actuarial

Table 2

## Probabilities of service retirement for sample ages and years of service<sup>1</sup>—DB Program only

| Male | Age | CalSTRS 2% at 60 |          |             |                  | CalSTRS 2% at 62 |             |                  |
|------|-----|------------------|----------|-------------|------------------|------------------|-------------|------------------|
|      |     | 20-24 years      | 25 years | 26-29 years | 30 or more years | 20-24 years      | 25-29 years | 30 or more years |
|      | 55  | 3.0%             | 3.5%     | 3.0%        | 5.0%             | 2.5%             | 2.5%        | 3.0%             |
|      | 60  | 8.0%             | 13.0%    | 11.0%       | 25.0%            | 6.0%             | 8.5%        | 10.0%            |
|      | 65  | 24.0%            | 25.0%    | 25.0%       | 32.5%            | 24.0%            | 25.0%       | 25.0%            |
|      | 70  | 21.5%            | 25.0%    | 25.0%       | 25.0%            | 21.5%            | 25.0%       | 25.0%            |
|      | 75+ | 100.0%           | 100.0%   | 100.0%      | 100.0%           | 100.0%           | 100.0%      | 100.0%           |

| Female | Age | CalSTRS 2% at 60 |          |             |                  | CalSTRS 2% at 62 |             |                  |
|--------|-----|------------------|----------|-------------|------------------|------------------|-------------|------------------|
|        |     | 20-24 years      | 25 years | 26-29 years | 30 or more years | 20-24 years      | 25-29 years | 30 or more years |
|        | 55  | 4.5%             | 4.5%     | 4.0%        | 6.5%             | 3.5%             | 3.0%        | 3.5%             |
|        | 60  | 10.0%            | 16.0%    | 14.0%       | 26.0%            | 7.5%             | 11.0%       | 13.0%            |
|        | 65  | 26.5%            | 33.5%    | 32.0%       | 35.0%            | 26.5%            | 32.5%       | 32.5%            |
|        | 70  | 25.0%            | 29.5%    | 28.0%       | 30.0%            | 25.0%            | 28.5%       | 28.5%            |
|        | 75+ | 100.0%           | 100.0%   | 100.0%      | 100.0%           | 100.0%           | 100.0%      | 100.0%           |

<sup>1</sup> The assumptions shown above are for retirement from active status. It is assumed that all vested terminated CalSTRS 2% at 60 members retire at age 60 and CalSTRS 2% at 62 members retire at age 62.

Table 3

## Probabilities of withdrawal from active service for sample years of service—DB Program only

| Year <sup>1</sup> | Male   | Female |
|-------------------|--------|--------|
| 0                 | 10.00% | 9.00%  |
| 1                 | 8.25%  | 7.00%  |
| 2                 | 6.25%  | 5.50%  |
| 3                 | 4.50%  | 4.25%  |
| 4                 | 4.00%  | 3.60%  |
| 5                 | 3.10%  | 3.00%  |
| 10                | 1.60%  | 1.35%  |
| 15                | 1.00%  | 0.90%  |
| 20                | 0.75%  | 0.75%  |
| 25                | 0.60%  | 0.60%  |
| 30+               | 0.50%  | 0.50%  |

<sup>1</sup> Based on elapsed service since membership date.

# Actuarial

**Table 4**

## Probabilities of refund by sample entry ages and years of service—DB Program only

| Year <sup>1</sup> | Entry age |       |       |       |       |           |
|-------------------|-----------|-------|-------|-------|-------|-----------|
|                   | Under 25  | 25-29 | 30-34 | 35-39 | 40-44 | 45 and up |
| Under 5           | 100%      | 100%  | 100%  | 100%  | 100%  | 100%      |
| 5                 | 44%       | 42%   | 39%   | 36%   | 30%   | 29%       |
| 10                | 32%       | 29%   | 26%   | 23%   | 13%   | 12%       |
| 15                | 21%       | 18%   | 16%   | 13%   | 3%    | 2%        |
| 20                | 13%       | 10%   | 8%    | 5%    | —%    | —%        |
| 25                | 6%        | 4%    | 2%    | —%    | —%    | —%        |
| 30                | 1%        | —%    | —%    | —%    | —%    | —%        |

<sup>1</sup> Assumption applied at the time of assumed termination based on credited service. Members who terminate with less than five years of credited service are assumed to have 100% probability of refund.

**Table 5**

## Assumption for pay increase due to promotions and longevity for sample ages in years<sup>1</sup>—DB Program only

| Year <sup>2</sup> | Entry age |       |       |       |       |           |
|-------------------|-----------|-------|-------|-------|-------|-----------|
|                   | Under 25  | 25-29 | 30-34 | 35-39 | 40-44 | 45 and up |
| 0                 | 8.0%      | 7.5%  | 7.0%  | 6.5%  | 6.0%  | 5.5%      |
| 1                 | 7.0%      | 6.5%  | 6.0%  | 5.5%  | 5.0%  | 4.5%      |
| 2                 | 6.3%      | 5.8%  | 5.3%  | 5.0%  | 4.5%  | 3.8%      |
| 3                 | 5.8%      | 5.3%  | 4.8%  | 4.5%  | 4.0%  | 3.0%      |
| 4                 | 5.3%      | 4.8%  | 4.4%  | 4.1%  | 3.8%  | 2.8%      |
| 5                 | 4.8%      | 4.5%  | 4.1%  | 3.8%  | 3.5%  | 2.6%      |
| 10                | 3.2%      | 3.0%  | 2.6%  | 2.3%  | 2.1%  | 1.6%      |
| 15                | 1.9%      | 1.8%  | 1.6%  | 1.4%  | 1.3%  | 1.1%      |
| 20                | 1.6%      | 1.4%  | 1.1%  | 1.0%  | 0.9%  | 0.9%      |
| 25                | 1.3%      | 1.1%  | 0.9%  | 0.8%  | 0.8%  | 0.8%      |
| 30                | 0.8%      | 0.7%  | 0.7%  | 0.7%  | 0.7%  | 0.7%      |
| 35+               | 0.6%      | 0.6%  | 0.6%  | 0.5%  | 0.5%  | 0.5%      |

<sup>1</sup> The total expected increase in salary includes both merit (shown above) and the general wage increase assumption of 3.50% per annum. The total result is compounded rather than additive. For example, the total assumed increase for service less than one year (Year 0 above) is 11.178% (1.080 x 1.035) for members in the entry age under 25 group.

<sup>2</sup> Based on elapsed service since membership date.

# Actuarial

**Table 6**

## Economic assumptions

|   | <b>DB<br/>Program</b> | <b>DBS<br/>Program</b> | <b>CBB<br/>Program</b> | <b>MPP<br/>Program</b> |
|---|-----------------------|------------------------|------------------------|------------------------|
| Investment yield (net of expenses) <sup>1</sup>             | 7.00%                 | 7.00%                  | 7.00%                  | 7.00%                  |
| Consumer price inflation                                    | 2.75%                 | 2.75%                  | 2.75%                  | 2.75%                  |
| Wage inflation  | 3.50%                 | 3.50%                  | 3.50%                  | N/A                    |
| Payroll growth  | 3.25%                 | N/A                    | N/A                    | N/A                    |
| Interest on member accounts                                 | 3.00%                 | 7.00%                  | 7.00%                  | N/A                    |
| Standard deviation of portfolio                             | N/A                   | 11.30%                 | 11.30%                 | N/A                    |
| Medical inflation (varies by year—average percentage below) |                       |                        |                        |                        |
| Part A premiums   | N/A                   | N/A                    | N/A                    | 5.00%                  |
| Part B premiums   | N/A                   | N/A                    | N/A                    | 6.50%                  |

<sup>1</sup> For financial reporting purposes, the investment rate of return for the STRP (which includes the DB, DBS and CBB programs) is 7.10% (net of investment expenses but gross of administrative expenses) in accordance with GASB Statement No. 67. The MPP Program uses an investment rate of return of 3.93% as of June 30, 2024, which represents the yield or index rate for the 20-year tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher in accordance with GASB Statement No. 74.

**Table 7**

## Probabilities of disability retirement for sample ages—DB Program only

| <b>Coverage A</b> |             |               |             | <b>Coverage B</b> |             |               |             |
|-------------------|-------------|---------------|-------------|-------------------|-------------|---------------|-------------|
| <b>Male</b>       |             | <b>Female</b> |             | <b>Male</b>       |             | <b>Female</b> |             |
| <b>Age</b>        | <b>Rate</b> | <b>Age</b>    | <b>Rate</b> | <b>Age</b>        | <b>Rate</b> | <b>Age</b>    | <b>Rate</b> |
| 25                | 0.015%      | 25            | 0.015%      | 25                | 0.010%      | 25            | 0.015%      |
| 30                | 0.025%      | 30            | 0.025%      | 30                | 0.010%      | 30            | 0.015%      |
| 35                | 0.040%      | 35            | 0.050%      | 35                | 0.020%      | 35            | 0.030%      |
| 40                | 0.065%      | 40            | 0.075%      | 40                | 0.040%      | 40            | 0.055%      |
| 45                | 0.090%      | 45            | 0.090%      | 45                | 0.070%      | 45            | 0.095%      |
| 50                | 0.130%      | 50            | 0.180%      | 50                | 0.105%      | 50            | 0.165%      |
| 55                | 0.170%      | 55            | 0.225%      | 55                | 0.200%      | 55            | 0.270%      |
|                   |             |               |             | 60                | 0.275%      | 60            | 0.305%      |
|                   |             |               |             | 65                | 0.305%      | 65            | 0.325%      |
|                   |             |               |             | 70                | 0.305%      | 70            | 0.325%      |

# Actuarial

**Table 8**

## Supplemental assumptions—DB Program only

|                                      |  |                                   |
|--------------------------------------|--|-----------------------------------|
| <b>PEPRA coverage</b>                | All members hired on or after the valuation date are assumed to be subject to the provisions of PEPRA.   |                                   |
| <b>Unused sick leave</b>             | Credited service is increased by 1.6%.   |                                   |
| <b>Optional forms</b>                | Active and inactive: Based on single-life annuity assumed. Retirees and beneficiaries: Based on optional form in data.   |                                   |
| <b>Probability of marriage</b>       | Male: 85%<br>Female: 65%<br>Male spouses are assumed to be three years older than female spouses.  |                                   |
| <b>Number of children</b>            | Married members under age 60 are assumed to have the number of children shown in the following table. Children are assumed to receive benefits until the member would have turned age 60.  |                                   |
|                                      | <b>Member's gender</b>   | <b>Assumed number of children</b> |
|                                      | Male   | 0.70                              |
|                                      | Female   | 0.50                              |
| <b>Assumed offsets</b>               | No offsets to disability and survivor benefits are assumed.  |                                   |
| <b>Valuation of inactive members</b> | Salary and benefit information is not available on the valuation data provided for inactive members. Therefore, we estimate the projected retirement benefits for inactive members as follows:   |                                   |
|                                      | <ol style="list-style-type: none"> <li>1. The inactive member's annualized pay rate information is retrieved from when they were active by matching with a database of active valuation data back to 2001 and taking the highest annualized pay rate for the member during the period.</li> <li>2. For those members who cannot be located on the active database (because they terminated prior to 2001 or another reason), their annualized pay rate is estimated based on 120% of the average annualized pay rate for all active members in the year the member terminated.</li> <li>3. The annualized pay rate amount from the prior steps is treated as the member's final compensation with two additional adjustments. <ol style="list-style-type: none"> <li>a. An additional load of 5% for all inactive members is applied to their salary amount to account for potential post-termination increases in salary due to factors such as reciprocity.</li> <li>b. Final compensation is increased by an additional 4.1% if the member has 25 or more years of credited service.</li> </ol> </li> <li>4. Based on the salary data described above and the birth date and credited service from the current year's valuation data, the projected benefit amount is calculated and valued as a deferred service retirement.</li> <li>5. Non-vested members who have been inactive for less than two years are assumed to take an immediate refund of their member contributions.</li> </ol> |                                   |

**Table 9**

## Schedule of Medicare Part A enrollment rates<sup>1</sup>—MPP Program only

| <b>Assumption</b>   |            | <b>Rate</b> |
|---|------------|-------------|
| Percentage of under age 65 retirees enrolling (all years) <sup>2</sup>                                |            | 2.00%       |
| Percentage of over age 65 retirees enrolling (for those not currently enrolled) at age <sup>3</sup> : | 65         | 0.20%       |
|   | 66         | 0.02%       |
|   | 67         | 0.02%       |
|   | 68         | 0.02%       |
|   | 69         | 0.02%       |
|   | 70-84      | 0.02%       |
|   | 85 & above | 0.00%       |
| Percentage of over age 65 retirees enrolling (for those already enrolled)                             |            | 100.00%     |

<sup>1</sup> Only current enrollees are assumed to receive Part B payments.

<sup>2</sup> For under age 65 retirees, the enrollment percent applies upon reaching age 65. No enrollment is assumed after age 65 for retirees currently under age 65.

<sup>3</sup> For over age 65 retirees, the enrollment percent applies in each future year.

# Actuarial

**Table 10**

## Schedule of active member valuation data

| Valuation date<br>(as of June 30) <sup>1</sup> | Number of participating<br>employers <sup>2</sup> | Active number | Annual payroll   | Annual average pay | Percent increase<br>in average pay |
|--|---|---------------|------------------|--------------------|------------------------------------|
| <b>DB Program</b>                              |   |               |                  |                    |                                    |
| 2023   | 1,791   | 458,645       | \$38,916,248,180 | \$84,850           | 5.9%                               |
| 2022   | 1,791   | 449,418       | 36,017,483,385   | 80,143             | 1.5%                               |
| 2021   | 1,795   | 429,681       | 33,914,004,303   | 78,928             | 4.7%                               |
| 2020   | 1,782   | 448,419       | 33,811,320,984   | 75,401             | 3.5%                               |
| 2019   | 1,776   | 451,429       | 32,896,686,907   | 72,872             | 2.8%                               |
| 2018   | 1,752   | 449,595       | 31,884,303,004   | 70,918             | 1.6%                               |
| 2017   | 1,746   | 445,935       | 31,136,104,704   | 69,822             | 2.7%                               |
| 2016   | 1,739   | 438,537       | 29,826,149,337   | 68,013             | 4.3%                               |
| 2015   | 1,724   | 429,460       | 28,013,191,853   | 65,229             | 3.7%                               |
| 2014   | 1,690   | 420,887       | 26,469,883,008   | 62,891             | 2.8%                               |
| <b>DBS Program</b>                             |   |               |                  |                    |                                    |
| 2023   | 1,791   | 458,645       | \$38,916,248,180 | \$84,850           | 5.9%                               |
| 2022   | 1,791   | 449,418       | 36,017,483,385   | 80,143             | 1.5%                               |
| 2021   | 1,795   | 429,681       | 33,914,004,303   | 78,928             | 4.7%                               |
| 2020   | 1,782   | 448,419       | 33,811,320,984   | 75,401             | 3.5%                               |
| 2019   | 1,776   | 451,429       | 32,896,686,907   | 72,872             | 2.8%                               |
| 2018   | 1,752   | 449,595       | 31,884,303,004   | 70,918             | 1.6%                               |
| 2017   | 1,746   | 445,935       | 31,136,104,704   | 69,822             | 2.7%                               |
| 2016   | 1,739   | 438,537       | 29,826,149,337   | 68,013             | 4.3%                               |
| 2015   | 1,724   | 429,460       | 28,013,191,853   | 65,229             | 3.7%                               |
| 2014   | 1,690   | 420,887       | 26,469,883,008   | 62,891             | 2.8%                               |
| <b>CBB Program</b>                             |   |               |                  |                    |                                    |
| 2023   | 29  | 8,175         | \$231,461,029    | \$28,313           | 5.1%                               |
| 2022   | 29  | 8,229         | 221,581,284      | 26,927             | 2.7%                               |
| 2021   | 29  | 7,940         | 208,273,967      | 26,231             | 10.4%                              |
| 2020   | 29  | 9,471         | 225,022,559      | 23,759             | 4.2%                               |
| 2019   | 29  | 10,029        | 228,618,038      | 22,796             | 3.0%                               |
| 2018   | 29  | 10,469        | 231,621,196      | 22,124             | 5.0%                               |
| 2017   | 30  | 10,480        | 220,767,125      | 21,066             | 6.5%                               |
| 2016   | 30  | 10,676        | 211,259,529      | 19,788             | 6.8%                               |
| 2015   | 33  | 10,416        | 193,075,185      | 18,536             | 5.4%                               |
| 2014   | 32  | 9,955         | 175,058,251      | 17,585             | 6.1%                               |
| <b>MPP Program<sup>3</sup></b>                 |   |               |                  |                    |                                    |
| N/A  | N/A   | N/A           | N/A              | N/A                | N/A                                |

<sup>1</sup> The data provided in this table is as of the most recent actuarial valuation (June 30, 2023) for each respective program. Actuarial valuation results as of June 30, 2024, are expected to be available by May 2025.

<sup>2</sup> Number of employers is based on employers who submit the last contribution line for the active member in each respective fiscal year; however, the number of the employers in the Financial section is based on contributing employers as of the end of the respective fiscal year.

<sup>3</sup> The MPP Program is a closed program for members whose retirement date is on or after July 1, 2012, and active members are not currently eligible for coverage.

# Actuarial

**Table 11**

## Schedule of retired members, participants and beneficiaries added to and removed from rolls<sup>1</sup>

| Valuation date<br>(as of June 30) <sup>2</sup> | Added to rolls |                   | Removed from rolls |                   | Rolls – end of year |                   | Percent<br>change in<br>annual<br>allowances | Average<br>annual<br>allowances |
|--|----------------|-------------------|--------------------|-------------------|---------------------|-------------------|--|---------------------------------|
|  | Number         | Annual allowances | Number             | Annual allowances | Number              | Annual allowances |  |                                 |
| <b>DB Program</b>                              |                |                   |                    |                   |                     |                   |  |                                 |
| 2023   | 10,772         | \$630,062,000     | 10,204             | \$441,478,000     | 328,932             | \$17,273,129,000  | 3.4%   | \$52,513                        |
| 2022   | 12,194         | 666,935,000       | 9,979              | 422,850,000       | 325,468             | 16,699,806,000    | 3.8%   | 51,310                          |
| 2021   | 13,217         | 724,410,000       | 9,981              | 406,459,000       | 320,413             | 16,086,094,000    | 4.3%   | 50,204                          |
| 2020   | 12,139         | 637,229,000       | 8,843              | 342,648,000       | 314,518             | 15,420,155,000    | 4.3%   | 49,028                          |
| 2019   | 12,867         | 633,138,000       | 8,656              | 319,809,000       | 308,639             | 14,788,565,000    | 4.8%   | 47,915                          |
| 2018   | 13,340         | 682,533,000       | 8,606              | 300,558,000       | 301,859             | 14,114,787,000    | 5.0%   | 46,760                          |
| 2017   | 12,823         | 649,503,000       | 8,381              | 289,955,000       | 294,874             | 13,439,239,000    | 5.1%   | 45,576                          |
| 2016   | 12,014         | 591,902,000       | 7,871              | 262,170,000       | 288,195             | 12,792,104,000    | 4.9%   | 44,387                          |
| 2015   | 11,952         | 558,655,000       | 7,759              | 247,766,000       | 282,100             | 12,197,828,000    | 4.9%   | 43,239                          |
| 2014   | 11,383         | 507,801,000       | 7,299              | 221,733,000       | 275,627             | 11,624,220,000    | 4.8%   | 42,174                          |
| <b>DBS Program</b>                             |                |                   |                    |                   |                     |                   |  |                                 |
| 2023   | 6,046          | \$43,161,027      | 4,728              | \$28,687,144      | 80,975              | \$322,552,346     | 5.0%   | \$3,983                         |
| 2022   | 6,633          | 44,951,182        | 4,764              | 28,017,067        | 79,468              | 307,180,840       | 6.2%   | 3,865                           |
| 2021   | 7,142          | 44,696,206        | 4,284              | 25,415,637        | 77,369              | 289,240,352       | 7.4%   | 3,738                           |
| 2020   | 6,988          | 40,002,030        | 4,307              | 23,823,406        | 74,312              | 269,201,680       | 6.7%   | 3,623                           |
| 2019   | 7,275          | 40,953,264        | 4,019              | 21,433,419        | 71,408              | 252,321,939       | 8.8%   | 3,534                           |
| 2018   | 7,873          | 40,794,850        | 3,535              | 19,256,485        | 68,194              | 231,963,834       | 10.6%  | 3,402                           |
| 2017   | 7,813          | 39,827,784        | 3,444              | 18,242,423        | 63,653              | 209,657,263       | 11.9%  | 3,294                           |
| 2016   | 7,324          | 35,828,397        | 3,335              | 17,497,131        | 59,075              | 187,434,597       | 11.6%  | 3,173                           |
| 2015   | 7,097          | 31,304,181        | 3,423              | 18,040,255        | 54,901              | 167,972,370       | 9.5%   | 3,060                           |
| 2014   | 6,753          | 27,678,797        | 3,115              | 16,285,428        | 50,963              | 153,375,082       | 8.7%   | 3,010                           |
| <b>CBB Program</b>                             |                |                   |                    |                   |                     |                   |  |                                 |
| 2023   | 71             | \$423,239         | 38                 | \$303,877         | 550                 | \$2,349,564       | 5.1%   | \$4,272                         |
| 2022   | 63             | 368,147           | 26                 | 127,937           | 519                 | 2,235,666         | 11.6%  | 4,308                           |
| 2021   | 65             | 421,084           | 44                 | 316,800           | 482                 | 2,004,082         | 6.8%   | 4,158                           |
| 2020   | 72             | 401,075           | 23                 | 146,754           | 458                 | 1,875,819         | 14.8%  | 4,096                           |
| 2019   | 69             | 272,865           | 30                 | 198,936           | 410                 | 1,633,925         | 6.1%   | 3,985                           |
| 2018 <sup>3</sup>                              | 85             | 475,148           | 25                 | 159,001           | 370                 | 1,539,585         | 25.8%  | 4,161                           |
| 2017   | 80             | 430,331           | 22                 | 87,768            | 310                 | 1,223,947         | 45.5%  | 3,948                           |
| 2016   | 62             | 261,067           | 10                 | 43,035            | 252                 | 841,230           | 27.7%  | 3,338                           |
| 2015   | 52             | 164,451           | 11                 | 74,583            | 200                 | 658,550           | 15.8%  | 3,293                           |
| 2014   | 42             | 212,087           | 10                 | 43,746            | 159                 | 568,682           | 41.8%  | 3,577                           |
| <b>MPP Program</b>                             |                |                   |                    |                   |                     |                   |  |                                 |
| 2023   | 17             | \$50,000          | 358                | \$909,000         | 4,400               | \$23,884,000      | (3.4%)                                       | \$5,428                         |
| 2022   | 12             | 57,000            | 350                | 821,000           | 4,726               | 24,737,000        | (2.5%)                                       | 5,234                           |
| 2021   | 12             | 45,000            | 380                | 888,000           | 5,042               | 25,374,000        | (3.0%)                                       | 5,033                           |
| 2020   | 23             | 91,000            | 377                | 747,000           | 5,383               | 26,148,000        | (1.8%)                                       | 4,858                           |
| 2019   | 43             | 153,000           | 245                | 623,000           | 5,686               | 26,626,000        | (1.2%)                                       | 4,683                           |
| 2018   | 119            | 451,000           | 281                | 751,000           | 5,917               | 26,947,000        | (2.5%)                                       | 4,554                           |
| 2017   | 102            | 211,000           | 273                | 766,000           | 6,124               | 27,632,000        | (2.5%)                                       | 4,512                           |
| 2016   | 166            | 404,000           | 264                | 768,000           | 6,324               | 28,345,000        | (4.7%)                                       | 4,482                           |
| 2015   | 178            | 443,000           | 254                | 772,000           | 6,474               | 29,729,000        | (7.2%)                                       | 4,592                           |
| 2014   | 235            | 751,000           | 259                | 703,000           | 6,684               | 32,047,000        | (4.8%)                                       | 4,795                           |

<sup>1</sup> Each year's data population is a snapshot taken following year-end closings; subsequent adjustments made to snapshots of data prior to the current period are not reflected in the table.

<sup>2</sup> The data provided in this table is as of the most recent actuarial valuation (June 30, 2023) for each respective program. Actuarial valuation results as of June 30, 2024, are expected to be available by May 2025.

<sup>3</sup> Numbers revised in 2019.

# Actuarial

Table 12

## Solvency test

| Valuation date<br>(as of June 30) <sup>1</sup>       | Aggregate accrued liabilities for                |   |  | Actuarial value of<br>assets | Funding of liabilities |        |       |
|--|--|---|--|------------------------------|------------------------|--------|-------|
|  | (1)<br>Active member<br>contributions on deposit | (2)<br>Future benefits to<br>benefit recipients | (3)<br>Service already rendered<br>by active members<br>(financed by employer) |                              | (1)                    | (2)    | (3)   |
| <b>DB Program (dollars in millions)</b>              |  |   |  |                              |                        |        |       |
| 2023   | \$43,156   | \$186,055                                       | \$130,530  | \$273,155                    | 100.0%                 | 100.0% | 33.7% |
| 2022   | 40,913   | 185,051   | 120,125  | 257,537                      | 100.0%                 | 100.0% | 26.3% |
| 2021   | 39,262   | 179,598   | 113,222  | 242,363                      | 100.0%                 | 100.0% | 20.8% |
| 2020   | 37,345   | 173,268   | 111,514  | 216,252                      | 100.0%                 | 100.0% | 5.1%  |
| 2019   | 34,903   | 167,716   | 108,100  | 205,016                      | 100.0%                 | 100.0% | 2.2%  |
| 2018   | 33,012   | 161,219   | 103,372  | 190,451                      | 100.0%                 | 97.7%  | 0.0%  |
| 2017   | 31,523   | 154,618   | 100,809  | 179,689                      | 100.0%                 | 95.8%  | 0.0%  |
| 2016   | 30,046   | 145,108   | 91,550   | 169,976                      | 100.0%                 | 96.4%  | 0.0%  |
| 2015   | 28,935   | 131,451   | 81,367   | 165,553                      | 100.0%                 | 100.0% | 6.4%  |
| 2014   | 28,290   | 126,235   | 76,688   | 158,495                      | 100.0%                 | 100.0% | 5.2%  |
| <b>DBS Program (dollars in thousands)</b>            |  |   |  |                              |                        |        |       |
| 2023   | \$12,530,925                                     | \$2,175,831                                     | \$—  | \$18,162,899                 | 100.0%                 | 100.0% | 0.0%  |
| 2022   | 11,751,868                                       | 2,081,045                                       | —  | 17,171,981                   | 100.0%                 | 100.0% | 0.0%  |
| 2021   | 11,164,339                                       | 1,950,617                                       | —  | 17,789,853                   | 100.0%                 | 100.0% | 0.0%  |
| 2020   | 9,866,874  | 1,824,609                                       | —  | 14,243,827                   | 100.0%                 | 100.0% | 0.0%  |
| 2019   | 9,433,196  | 1,692,848                                       | —  | 13,904,497                   | 100.0%                 | 100.0% | 0.0%  |
| 2018   | 9,426,949  | 1,541,170                                       | —  | 13,173,522                   | 100.0%                 | 100.0% | 0.0%  |
| 2017   | 9,020,170  | 1,381,932                                       | —  | 12,269,382                   | 100.0%                 | 100.0% | 0.0%  |
| 2016   | 8,604,042  | 1,200,485                                       | —  | 10,943,296                   | 100.0%                 | 100.0% | 0.0%  |
| 2015   | 8,532,216  | 1,021,092                                       | —  | 10,940,917                   | 100.0%                 | 100.0% | 0.0%  |
| 2014   | 8,077,762  | 942,945   | —  | 10,493,062                   | 100.0%                 | 100.0% | 0.0%  |
| <b>CBB Program (dollars in thousands)</b>            |  |   |  |                              |                        |        |       |
| 2023   | \$408,821  | \$14,803  | \$—  | \$477,960                    | 100.0%                 | 100.0% | 0.0%  |
| 2022   | 380,770  | 13,936  | —  | 438,121                      | 100.0%                 | 100.0% | 0.0%  |
| 2021   | 355,596  | 12,435  | —  | 482,983                      | 100.0%                 | 100.0% | 0.0%  |
| 2020   | 306,987  | 11,448  | —  | 375,450                      | 100.0%                 | 100.0% | 0.0%  |
| 2019   | 283,382  | 10,449  | —  | 357,273                      | 100.0%                 | 100.0% | 0.0%  |
| 2018   | 270,269  | 9,433   | —  | 328,022                      | 100.0%                 | 100.0% | 0.0%  |
| 2017   | 253,572  | 7,411   | —  | 302,448                      | 100.0%                 | 100.0% | 0.0%  |
| 2016   | 230,864  | 4,974   | —  | 256,675                      | 100.0%                 | 100.0% | 0.0%  |
| 2015   | 215,851  | 3,843   | —  | 248,699                      | 100.0%                 | 100.0% | 0.0%  |
| 2014   | 194,792  | 3,061   | —  | 231,671                      | 100.0%                 | 100.0% | 0.0%  |
| <b>MPP Program<sup>2</sup> (dollars in millions)</b> |  |   |  |                              |                        |        |       |
| 2023   | \$—  | \$222   | \$—  | \$222                        | 0.0%                   | 100.0% | 0.0%  |
| 2022   | —  | 243   | —  | 243                          | 0.0%                   | 100.0% | 0.0%  |
| 2021   | —  | 259   | —  | 259                          | 0.0%                   | 100.0% | 0.0%  |
| 2020   | —  | 274   | —  | 274                          | 0.0%                   | 100.0% | 0.0%  |
| 2019   | —  | 288   | —  | 288                          | 0.0%                   | 100.0% | 0.0%  |
| 2018   | —  | 286   | —  | 286                          | 0.0%                   | 100.0% | 0.0%  |
| 2017   | —  | 302   | —  | 302                          | 0.0%                   | 100.0% | 0.0%  |
| 2016   | —  | 315   | —  | 315                          | 0.0%                   | 100.0% | 0.0%  |
| 2014   | —  | 342   | —  | 342                          | 0.0%                   | 100.0% | 0.0%  |
| 2012   | —  | 424   | —  | 424                          | 0.0%                   | 100.0% | 0.0%  |

<sup>1</sup> The data provided in this table is as of the most recent actuarial valuation (June 30, 2023) for each respective program. Actuarial valuation results as of June 30, 2024, are expected to be available by May 2025.

<sup>2</sup> For funding purposes, the assets are valued as the allocated value of DB Program assets. This figure is equal to the actuarial obligation of the MPP Program benefits.

# Actuarial

**Table 13**

## Analysis of financial experience

(Gains and losses in unfunded actuarial obligation resulting from differences between assumed and actual experience. Dollars in millions.)

|   | Actuarial valuation as of June 30 <sup>1,2</sup> |                  |
|---|--|------------------|
|   | DB Program                                       |                  |
|   | 2023   | 2022             |
| <b>Actuarial obligation as of June 30</b>                     | <b>\$346,089</b>                                 | <b>\$332,082</b> |
| Normal cost   | 7,612  | 7,159            |
| Benefit payments  | (17,247)   | (16,676)         |
| Expected interest   | 23,895   | 22,918           |
| <b>Expected actuarial obligation as of June 30</b>            | <b>360,349</b>                                   | <b>345,483</b>   |
| <b>Less: expected actuarial value of assets as of June 30</b> | <b>272,241</b>                                   | <b>255,658</b>   |
| <b>Expected UAO as of June 30</b>                             | <b>88,108</b>                                    | <b>89,825</b>    |
| <b>Actuarial (gains) or losses</b>                            |  |                  |
| Change in assumptions   | (5,160)  | –                |
| Investment return assumptions                                 | (516)  | (1,361)          |
| Demographic assumptions                                       | 4,552  | 606              |
| Net change other sources                                      | (398)  | (518)            |
| Change in actuarial asset method                              | –  | –                |
| <b>Total actuarial (gains) or losses</b>                      | <b>(1,522)</b>                                   | <b>(1,273)</b>   |
| <b>Unfunded actuarial obligation as of June 30</b>            | <b>\$86,586</b>                                  | <b>\$88,552</b>  |
| <b>Funded ratio</b>   | <b>75.9%</b>                                     | <b>74.4%</b>     |

|   | Actuarial valuation as of June 30 <sup>1,2</sup> |                  |
|---|--|------------------|
|   | DBS Program                                      |                  |
|   | 2023   | 2022             |
| <b>Actuarial obligation as of June 30</b>                     | <b>\$13,833</b>                                  | <b>\$13,115</b>  |
| <b>Expected changes</b>                                       |  |                  |
| Contributions   | 514  | 404              |
| Benefits paid   | (627)  | (584)            |
| Expected earnings/credits                                     | 964  | 912              |
| <b>Expected actuarial obligation as of June 30</b>            | <b>14,684</b>                                    | <b>13,847</b>    |
| <b>Less: expected actuarial value of assets as of June 30</b> | <b>18,257</b>                                    | <b>18,849</b>    |
| <b>Expected UAO as of June 30</b>                             | <b>(3,573)</b>                                   | <b>(5,002)</b>   |
| <b>Actuarial (gains) or losses</b>                            |  |                  |
| (Gain) on actuarial obligation                                | (665)  | (624)            |
| (Gain) or loss on assets                                      | 94   | 1,677            |
| Assumption change (treatment of GASB expenses)                | –  | –                |
| <b>Total actuarial (gains) or losses</b>                      | <b>(571)</b>                                     | <b>1,053</b>     |
| Additional earnings credits                                   | 688  | 609              |
| <b>Unfunded actuarial obligation as of June 30</b>            | <b>(\$3,456)</b>                                 | <b>(\$3,340)</b> |
| <b>Funded ratio</b>   | <b>123.5%</b>                                    | <b>124.1%</b>    |

<sup>1</sup> The data provided in this table is as of the most recent actuarial valuation (June 30, 2023) for each respective program. Actuarial valuation results as of June 30, 2024, are expected to be available by May 2025.

<sup>2</sup> Numbers may not align with actuarial valuation report due to rounding.



# Actuarial

Table 13

## Analysis of financial experience (continued)

(Gains and losses in unfunded actuarial obligation resulting from differences between assumed and actual experience. Dollars in millions.)

|   | Actuarial valuation as of June 30 <sup>1,2</sup> |               |
|---|--|---------------|
|   | CBB Program                                      |               |
|   | 2023   | 2022          |
| <b>Actuarial obligation as of June 30</b>                     | <b>\$395</b>                                     | <b>\$368</b>  |
| <b>Expected changes</b>                                       |  |               |
| Contributions   | 18   | 18            |
| Benefits paid   | (21)   | (13)          |
| Expected earnings/credits                                     | 26   | 24            |
| <b>Expected actuarial obligation as of June 30</b>            | <b>418</b>                                       | <b>397</b>    |
| <b>Less: expected actuarial value of assets as of June 30</b> | <b>464</b>                                       | <b>519</b>    |
| <b>Expected UA0 as of June 30</b>                             | <b>(46)</b>                                      | <b>(122)</b>  |
| <b>Actuarial (gains) or losses</b>                            |  |               |
| (Gain) on actuarial obligation                                | (13)   | (17)          |
| (Gain) or loss on assets                                      | (14)   | 81            |
| Assumption change (treatment of GASB expenses)                | —  | —             |
| <b>Total actuarial (gains) or losses</b>                      | <b>(27)</b>                                      | <b>64</b>     |
| Additional earnings credits                                   | 19   | 15            |
| <b>Unfunded actuarial obligation as of June 30</b>            | <b>(\$54)</b>                                    | <b>(\$43)</b> |
| <b>Funded ratio</b>   | <b>112.8%</b>                                    | <b>111.0%</b> |

|  | Actuarial valuation as of June 30 <sup>1</sup> |                       |
|--|--|-----------------------|
|  | MPP Program                                    |                       |
|  | 2023   | 2022                  |
| <b>Actuarial obligation as of June 30</b>                      | <b>not calculated</b>                          | <b>not calculated</b> |
| <b>Expected changes</b>  |  |                       |
| Eligibility extended   | not calculated                                 | not calculated        |
| Benefits paid  | (\$25)   | (\$26)                |
| Interest   | not calculated                                 | not calculated        |
| <b>Expected actuarial obligation as of June 30</b>             | <b>not calculated</b>                          | <b>not calculated</b> |
| <b>Less: expected actuarial value of assets as of June 30</b>  | <b>not calculated</b>                          | <b>not calculated</b> |
| <b>Expected UA0 as of June 30</b>                              | <b>not calculated</b>                          | <b>not calculated</b> |
| <b>Actuarial (gains) or losses</b>                             |  |                       |
| (Gain) on medical trend assumption                             | not calculated                                 | not calculated        |
| (Gain) on premium/penalty                                      | not calculated                                 | not calculated        |
| (Gain) on Part B Premium for higher earners                    | not calculated                                 | not calculated        |
| (Gain) other sources   | not calculated                                 | not calculated        |
| <b>Total actuarial gains or losses</b>                         | <b>not calculated</b>                          | <b>not calculated</b> |
| <b>Unfunded actuarial obligation as of June 30<sup>3</sup></b> | <b>\$—</b>                                     | <b>\$—</b>            |
| <b>Funded ratio</b>  | <b>100.0%</b>                                  | <b>100.0%</b>         |

<sup>1</sup> The data provided in this table is as of the most recent actuarial valuation (June 30, 2023) for each respective program. Actuarial valuation results as of June 30, 2024, are expected to be available by May 2025.

<sup>2</sup> Numbers may not align with actuarial valuation report due to rounding.

<sup>3</sup> Based on the actuarial value of assets. For funding purposes, the MPP Program assets are valued as the allocated value of DB Program assets, which are equal to the actuarial obligation of the MPP Program benefits.

# Actuarial

Table 14

## Schedule of funding progress<sup>1</sup>

(dollars in millions)

| Valuation date as of June 30 <sup>2</sup> | Actuarial value of assets (a) | Actuarial accrued liability (AAL) (b) | Unfunded AAL (funding excess) (UAAL) (b-a) | Funded ratio (a/b) | Covered payroll (c) | UAAL as a % of covered payroll ((b-a)/c) |
|---|-------------------------------|---------------------------------------|--|--------------------|---------------------|--|
| <b>DB Program</b>                         |                               |                                       |  |                    |                     |  |
| 2023                                      | \$273,155                     | \$359,741                             | \$86,586                                   | 75.9%              | \$39,139            | 221.2%                                   |
| 2022                                      | 257,537                       | 346,089                               | 88,552                                     | 74.4%              | 37,260              | 237.7%                                   |
| 2021                                      | 242,363                       | 332,082                               | 89,719                                     | 73.0%              | 34,668              | 258.8%                                   |
| 2020                                      | 216,252                       | 322,127                               | 105,875                                    | 67.1%              | 34,617              | 305.8%                                   |
| 2019                                      | 205,016                       | 310,719                               | 105,703                                    | 66.0%              | 33,679              | 313.9%                                   |
| 2018                                      | 190,451                       | 297,603                               | 107,152                                    | 64.0%              | 32,613              | 328.6%                                   |
| 2017                                      | 179,689                       | 286,950                               | 107,261                                    | 62.6%              | 31,961              | 335.6%                                   |
| 2016                                      | 169,976                       | 266,704                               | 96,728                                     | 63.7%              | 30,324              | 319.0%                                   |
| 2015                                      | 165,553                       | 241,753                               | 76,200                                     | 68.5%              | 28,640              | 266.1%                                   |
| 2014                                      | 158,495                       | 231,213                               | 72,718                                     | 68.5%              | 26,398              | 275.5%                                   |
| <b>DBS Program</b>                        |                               |                                       |  |                    |                     |  |
| 2023                                      | \$18,163                      | \$14,707                              | (\$3,456)                                  | 123.5%             | \$37,173            | (9.3%)                                   |
| 2022                                      | 17,172                        | 13,833                                | (3,339)                                    | 124.1%             | 34,496              | (9.7%)                                   |
| 2021                                      | 17,790                        | 13,115                                | (4,675)                                    | 135.6%             | 32,740              | (14.3%)                                  |
| 2020                                      | 14,244                        | 11,692                                | (2,552)                                    | 121.8%             | 32,450              | (7.9%)                                   |
| 2019                                      | 13,904                        | 11,126                                | (2,778)                                    | 125.0%             | 31,501              | (8.8%)                                   |
| 2018                                      | 13,173                        | 10,968                                | (2,205)                                    | 120.1%             | 30,650              | (7.2%)                                   |
| 2017                                      | 12,269                        | 10,402                                | (1,867)                                    | 117.9%             | 29,971              | (6.2%)                                   |
| 2016                                      | 10,943                        | 9,805                                 | (1,138)                                    | 111.6%             | 28,788              | (4.0%)                                   |
| 2015                                      | 10,941                        | 9,553                                 | (1,388)                                    | 114.5%             | 27,143              | (5.1%)                                   |
| 2014                                      | 10,493                        | 9,021                                 | (1,472)                                    | 116.3%             | 25,805              | (5.7%)                                   |
| <b>CBB Program</b>                        |                               |                                       |  |                    |                     |  |
| 2023                                      | \$478                         | \$424                                 | (\$54)                                     | 112.8%             | \$231               | (23.4%)                                  |
| 2022                                      | 438                           | 395                                   | (43)                                       | 111.0%             | 222                 | (19.4%)                                  |
| 2021                                      | 483                           | 368                                   | (115)                                      | 131.3%             | 208                 | (55.3%)                                  |
| 2020                                      | 375                           | 318                                   | (57)                                       | 117.9%             | 225                 | (25.3%)                                  |
| 2019                                      | 357                           | 294                                   | (63)                                       | 121.4%             | 229                 | (27.5%)                                  |
| 2018                                      | 328                           | 280                                   | (48)                                       | 117.1%             | 232                 | (20.7%)                                  |
| 2017                                      | 302                           | 261                                   | (41)                                       | 115.7%             | 218                 | (18.8%)                                  |
| 2016                                      | 257                           | 236                                   | (21)                                       | 108.9%             | 209                 | (10.0%)                                  |
| 2015                                      | 249                           | 220                                   | (29)                                       | 113.2%             | 192                 | (15.1%)                                  |
| 2014                                      | 232                           | 198                                   | (34)                                       | 117.2%             | 174                 | (19.5%)                                  |
| <b>MPP Program<sup>3</sup></b>            |                               |                                       |  |                    |                     |  |
| 2023                                      | \$222                         | \$222                                 | \$—  | 100.0%             | N/A                 | N/A                                      |
| 2022                                      | 243                           | 243                                   | —  | 100.0%             | N/A                 | N/A                                      |
| 2021                                      | 259                           | 259                                   | —  | 100.0%             | N/A                 | N/A                                      |
| 2020                                      | 274                           | 274                                   | —  | 100.0%             | N/A                 | N/A                                      |
| 2019                                      | 288                           | 288                                   | —  | 100.0%             | N/A                 | N/A                                      |
| 2018                                      | 286                           | 286                                   | —  | 100.0%             | N/A                 | N/A                                      |
| 2017                                      | 302                           | 302                                   | —  | 100.0%             | N/A                 | N/A                                      |
| 2016                                      | 315                           | 315                                   | —  | 100.0%             | N/A                 | N/A                                      |
| 2014                                      | 342                           | 342                                   | —  | 100.0%             | N/A                 | N/A                                      |
| 2012                                      | 424                           | 424                                   | —  | 100.0%             | N/A                 | N/A                                      |

Note: Information regarding actuarially determined and actual contributions for the State Teachers' Retirement Plan is provided in the Financial section, Schedule III, "Contributions of employer and nonemployer contributing entity" table.

<sup>1</sup> Recalculation of numbers may not align with actuarial valuation report due to rounding.

<sup>2</sup> The data provided in this table is as of the most recent actuarial valuation (June 30, 2023) for each respective program. Actuarial valuation results as of June 30, 2024, are expected to be available by May 2025.

<sup>3</sup> For funding purposes, the assets are valued as the allocated value of DB Program assets. This figure is equal to the actuarial obligation of the MPP Program benefits.

# Statistical Section

In fiscal year 2023–24, CalSTRS members, on average, retired at age 63 after about 25 years of service with a pension replacing approximately 58% of the final average compensation.



## Statistical overview

---

The Statistical section presents additional detailed information to assist users of the basic financial statements, notes to the basic financial statements and required supplementary information in assessing the economic condition of CalSTRS. The section provides financial trend information for the State Teachers' Retirement Plan (STRP), which includes Defined Benefit (DB), Defined Benefit Supplement (DBS), Cash Balance Benefit (CBB) and Replacement Benefits (RB) programs, as well as operating information for Pension2, the Medicare Premium Payment (MPP) Program and the Teachers' Deferred Compensation Fund. Financial trend information for the DB, DBS, CBB and RB programs has been consolidated and presented as the STRP to be consistent with the basic financial statements. Operating information for STRP programs continues to be presented separately because consolidation would not provide meaningful information due to the unique characteristics of those programs.

The financial trend schedules assist users in understanding and assessing how the system's financial position has changed over time and include:

- Changes in fiduciary net position.
- Benefit and refund deductions from net position by type.

The operating information schedules provide data about the system's operations and resources to assist users in understanding CalSTRS benefits and services and include:

- Member and benefit recipient statistics.
- Participating employer statistics.

The information in this section was derived from the Financial section and the CalSTRS pension administration system, START, except where noted. Due to the timing of when membership numbers were pulled, there will be a difference between the membership numbers reported in this section and the Financial section of this report.

Supplemental statistical tables are available on request.

# State Teachers' Retirement Plan schedules

**Table 1**

## Changes in fiduciary net position for the State Teachers' Retirement Plan

(dollars in millions)

|  | Fiscal year ended June 30 |                 |                   |                 |                 |                 |                 |                 |                  |                 |
|--|---------------------------|-----------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|
|  | 2024                      | 2023            | 2022              | 2021            | 2020            | 2019            | 2018            | 2017            | 2016             | 2015            |
| <b>Additions</b>                         |                           |                 |                   |                 |                 |                 |                 |                 |                  |                 |
| Member contributions                     | \$4,735                   | \$4,305         | \$4,068           | \$3,743         | \$3,735         | \$3,648         | \$3,496         | \$3,441         | \$2,958          | \$2,510         |
| Employer contributions                   | 8,585                     | 7,746           | 6,521             | 5,758           | 6,080           | 5,644           | 4,867           | 4,173           | 3,391            | 2,678           |
| State of California contributions        | 3,946                     | 3,720           | 4,280             | 3,731           | 4,447           | 5,335           | 2,797           | 2,478           | 1,940            | 1,426           |
| Net investment income (loss)             | 26,173                    | 19,675          | (7,390)           | 67,039          | 10,103          | 14,898          | 18,674          | 25,165          | 2,305            | 7,612           |
| Other income                             | 391                       | 303             | 130               | 90              | 101             | 128             | 105             | 72              | 42               | 4               |
| <b>Total additions</b>                   | <b>\$43,830</b>           | <b>\$35,749</b> | <b>\$7,609</b>    | <b>\$80,361</b> | <b>\$24,466</b> | <b>\$29,653</b> | <b>\$29,939</b> | <b>\$35,329</b> | <b>\$10,636</b>  | <b>\$14,230</b> |
| <b>Deductions</b>                        |                           |                 |                   |                 |                 |                 |                 |                 |                  |                 |
| Benefit payments <sup>1</sup>            | \$18,410                  | \$17,764        | \$17,173          | \$16,415        | \$15,707        | \$15,002        | \$14,271        | \$13,626        | \$12,892         | \$12,284        |
| Purchasing power benefits                | 636                       | 481             | 242               | 191             | 215             | 194             | 162             | 161             | 172              | 193             |
| Refunds of member contributions          | 142                       | 139             | 112               | 102             | 103             | 100             | 104             | 116             | 84               | 88              |
| Administrative expenses                  | 203                       | 222             | 191               | 252             | 219             | 254             | 216             | 182             | 180              | 145             |
| Borrowing costs <sup>2</sup>             | 333                       | 272             | 123               | 90              | 95              | 105             | 94              | 58              | –                | –               |
| Other expenses                           | 7                         | 9               | 5                 | 1               | 6               | 4               | 2               | 10              | 15               | 9               |
| <b>Total deductions</b>                  | <b>\$19,731</b>           | <b>\$18,887</b> | <b>\$17,846</b>   | <b>\$17,051</b> | <b>\$16,345</b> | <b>\$15,659</b> | <b>\$14,849</b> | <b>\$14,153</b> | <b>\$13,343</b>  | <b>\$12,719</b> |
| <b>Changes in fiduciary net position</b> | <b>\$24,099</b>           | <b>\$16,862</b> | <b>(\$10,237)</b> | <b>\$63,310</b> | <b>\$8,121</b>  | <b>\$13,994</b> | <b>\$15,090</b> | <b>\$21,176</b> | <b>(\$2,707)</b> | <b>\$1,511</b>  |

Note: There may be immaterial rounding differences between the figures presented in this table and in the statement of changes in fiduciary net position presented in the Financial section.

<sup>1</sup> Includes member-elected administrative transfers to purchase service credit in the DB Program.

<sup>2</sup> Beginning in fiscal year 2016–17, borrowing costs associated with the master facility credit portfolio, which were previously reported in “net investment income,” were reclassified to “deductions” for financial reporting purposes.

# State Teachers' Retirement Plan schedules

**Table 2**

## Benefit and refund deductions from changes in fiduciary net position by type

(dollars in millions)

| Type of benefit                 | Fiscal year ended June 30 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|---------------------------------|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                 | 2024                      | 2023            | 2022            | 2021            | 2020            | 2019            | 2018            | 2017            | 2016            | 2015            |
| <b>Age and service benefits</b> |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Retired members <sup>1</sup>    | \$16,882                  | \$16,272        | \$15,725        | \$15,067        | \$14,430        | \$13,797        | \$13,121        | \$12,538        | \$11,869        | \$11,306        |
| Survivors                       | 1,055                     | 996             | 943             | 876             | 820             | 768             | 732             | 686             | 634             | 591             |
| Death                           | 91                        | 115             | 129             | 101             | 93              | 80              | 72              | 66              | 63              | 76              |
| Purchasing power benefits       | 636                       | 481             | 242             | 191             | 215             | 194             | 162             | 161             | 172             | 193             |
| <b>Disability benefits</b>      |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Disability                      | 382                       | 381             | 376             | 371             | 364             | 357             | 346             | 336             | 326             | 311             |
| <b>Total benefits</b>           | <b>\$19,046</b>           | <b>\$18,245</b> | <b>\$17,415</b> | <b>\$16,606</b> | <b>\$15,922</b> | <b>\$15,196</b> | <b>\$14,433</b> | <b>\$13,787</b> | <b>\$13,064</b> | <b>\$12,477</b> |
| <b>Type of refund</b>           |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Separation                      | \$142                     | \$139           | \$112           | \$102           | \$103           | \$100           | \$104           | \$116           | \$84            | \$88            |
| <b>Total refunds</b>            | <b>\$142</b>              | <b>\$139</b>    | <b>\$112</b>    | <b>\$102</b>    | <b>\$103</b>    | <b>\$100</b>    | <b>\$104</b>    | <b>\$116</b>    | <b>\$84</b>     | <b>\$88</b>     |

Note: There may be immaterial rounding differences between the figures presented in this table and in the statement of changes in fiduciary net position presented within the Financial section.

<sup>1</sup> Includes member-elected administrative transfers to purchase service credit in the DB Program.

# Defined Benefit Program schedules

**Table 1**

## Active member characteristics

| Fiscal year ended June 30 | Count   | Average annualized pay rate <sup>1</sup> | Average age | Average years of service credit | Average service projected to age 60 |
|---------------------------|---------|--|-------------|---------------------------------|-------------------------------------|
| 2024                      | 467,449 | \$96,260                                 | 45.1        | 12.4                            | 27.3                                |
| 2023                      | 458,645 | 90,481                                   | 45.1        | 12.5                            | 27.3                                |
| 2022                      | 449,418 | 85,302                                   | 45.1        | 12.5                            | 27.4                                |
| 2021                      | 429,681 | 83,289                                   | 45.4        | 12.9                            | 27.5                                |
| 2020                      | 448,419 | 80,182                                   | 45.3        | 12.4                            | 27.1                                |
| 2019                      | 451,429 | 77,736                                   | 45.2        | 12.2                            | 27.0                                |
| 2018                      | 449,595 | 75,604                                   | 45.2        | 12.1                            | 26.9                                |
| 2017                      | 445,935 | 74,346                                   | 45.3        | 12.1                            | 26.8                                |
| 2016                      | 438,537 | 72,550                                   | 45.4        | 12.1                            | 26.7                                |
| 2015                      | 429,460 | 69,597                                   | 45.5        | 12.2                            | 26.7                                |

<sup>1</sup> Salary or wages that would be paid if members worked on a full-time basis.

**Table 2**

## Members retired for service during fiscal year 2023–24, classified by Member-Only Benefit<sup>1,2</sup>

| Monthly Member-Only Benefit | Count         | Average age at retirement | Average years of service credit | Average final compensation <sup>3</sup> | Average allowance payable <sup>4</sup> |
|-----------------------------|---------------|---------------------------|---------------------------------|---|--|
| Less than \$500             | 320           | 63.2                      | 4.6                             | \$4,490                                 | \$320                                  |
| 500–1,000                   | 603           | 63.5                      | 8.1                             | 4,877                                   | 719                                    |
| 1,000–1,500                 | 442           | 63.4                      | 11.2                            | 5,850                                   | 1,209                                  |
| 1,500–2,000                 | 383           | 63.5                      | 13.7                            | 6,647                                   | 1,702                                  |
| 2,000–2,500                 | 428           | 62.2                      | 16.1                            | 7,363                                   | 2,178                                  |
| 2,500–3,000                 | 398           | 62.5                      | 18.2                            | 7,723                                   | 2,649                                  |
| 3,000–3,500                 | 446           | 62.3                      | 20.1                            | 8,198                                   | 3,165                                  |
| 3,500–4,000                 | 560           | 62.5                      | 21.4                            | 8,690                                   | 3,637                                  |
| 4,000–4,500                 | 607           | 62.4                      | 23.0                            | 8,969                                   | 4,115                                  |
| 4,500–5,000                 | 667           | 62.5                      | 24.6                            | 9,244                                   | 4,573                                  |
| 5,000–5,500                 | 651           | 62.7                      | 25.9                            | 9,495                                   | 5,091                                  |
| 5,500–6,000                 | 655           | 63.1                      | 27.1                            | 9,802                                   | 5,554                                  |
| 6,000 and greater           | 5,244         | 63.1                      | 32.6                            | 11,242                                  | 8,067                                  |
| <b>Total</b>                | <b>11,404</b> | <b>63.0</b>               | <b>25.2</b>                     | <b>\$9,419</b>                          | <b>\$5,433</b>                         |

<sup>1</sup> Does not include formerly disabled members.

<sup>2</sup> Member-Only Benefit includes longevity bonus.

<sup>3</sup> Excludes new retirees with no final compensation data.

<sup>4</sup> Includes cumulative application of annual 2% benefit improvement factor.

## Defined Benefit Program schedules

Table 3

### Members retired for service during fiscal year 2023–24, classified by age and joint and survivor option elected<sup>1,2</sup>

| Age               | Total         | Member-Only  | Option types |             |             |             |              |              |             |             |  |
|-------------------|---------------|--------------|--------------|-------------|-------------|-------------|--------------|--------------|-------------|-------------|--|
|                   |               |              | 2            | 3           | 4           | 5           | 6            | 7            | 8           | 9           |  |
| Under 55          | 22            | 14           | –            | –           | –           | –           | 3            | 2            | 1           | 2           |  |
| 55                | 495           | 342          | –            | –           | –           | –           | 79           | 44           | 9           | 21          |  |
| 56                | 320           | 212          | –            | –           | –           | –           | 53           | 32           | 7           | 16          |  |
| 57                | 364           | 214          | –            | –           | –           | –           | 66           | 52           | 4           | 28          |  |
| 58                | 476           | 294          | –            | –           | –           | –           | 71           | 66           | 8           | 37          |  |
| 59                | 564           | 335          | –            | –           | –           | –           | 94           | 74           | 6           | 55          |  |
| 60                | 1,074         | 650          | –            | –           | –           | –           | 169          | 139          | 14          | 102         |  |
| 61                | 1,333         | 689          | –            | –           | –           | –           | 243          | 221          | 31          | 149         |  |
| 62                | 1,406         | 786          | –            | –           | –           | –           | 243          | 220          | 28          | 129         |  |
| 63                | 1,341         | 799          | –            | –           | –           | –           | 202          | 185          | 32          | 123         |  |
| 64                | 793           | 449          | –            | –           | –           | –           | 137          | 113          | 20          | 74          |  |
| 65                | 677           | 407          | –            | –           | –           | –           | 113          | 80           | 16          | 61          |  |
| 66                | 562           | 362          | –            | –           | –           | –           | 99           | 55           | 15          | 31          |  |
| 67                | 460           | 285          | –            | –           | –           | –           | 73           | 49           | 14          | 39          |  |
| 68                | 325           | 210          | –            | –           | –           | –           | 56           | 23           | 12          | 24          |  |
| 69                | 279           | 172          | –            | –           | –           | –           | 47           | 35           | 4           | 21          |  |
| 70                | 248           | 154          | –            | –           | –           | –           | 42           | 26           | 4           | 22          |  |
| 71                | 155           | 102          | –            | –           | –           | –           | 19           | 22           | 4           | 8           |  |
| 72                | 117           | 71           | –            | –           | –           | –           | 20           | 10           | 3           | 13          |  |
| 73                | 85            | 53           | –            | –           | –           | –           | 18           | 7            | 2           | 5           |  |
| 74                | 70            | 47           | –            | –           | –           | –           | 11           | 4            | 3           | 5           |  |
| 75 and over       | 238           | 158          | 1            | –           | –           | –           | 38           | 19           | 10          | 12          |  |
| <b>Total</b>      | <b>11,404</b> | <b>6,805</b> | <b>1</b>     | <b>–</b>    | <b>–</b>    | <b>–</b>    | <b>1,896</b> | <b>1,478</b> | <b>247</b>  | <b>977</b>  |  |
| <b>% of total</b> | <b>100.0%</b> | <b>59.7%</b> | <b>0.0%</b>  | <b>0.0%</b> | <b>0.0%</b> | <b>0.0%</b> | <b>16.6%</b> | <b>13.0%</b> | <b>2.1%</b> | <b>8.6%</b> |  |

<sup>1</sup> Does not include formerly disabled members.

<sup>2</sup> Option elected:

Option 2 - Beneficiary receives 100% of member's modified allowance.

Option 3 - Beneficiary receives 50% of member's modified allowance.

Option 4 - Beneficiary receives two-thirds of member's modified allowance.

Option 5 - Survivor receives 50% of member's modified allowance upon death of either member or beneficiary.

Option 6 - Beneficiary receives 100% of member's modified allowance. If beneficiary predeceases the member, the allowance increases to the Member-Only Benefit.

Option 7 - Beneficiary receives 50% of member's modified allowance. If beneficiary predeceases the member, the allowance increases to the Member-Only Benefit.

Option 8 - Compound Option that allows the member to provide for more than one beneficiary.

Option 9 - Beneficiary receives 75% of member's modified allowance. If beneficiary predeceases the member, the allowance increases to the Member-Only Benefit.



## Defined Benefit Program schedules

Table 4

### Characteristics of members going on disability during target fiscal year

| Fiscal year ended June 30 | Count | Average disability allowance payable | Average years of service credit | Average final compensation | Average age at disability |
|---------------------------|-------|--------------------------------------|---------------------------------|----------------------------|---------------------------|
| 2024                      | 215   | \$3,574                              | 16.6                            | \$7,595                    | 54.0                      |
| 2023                      | 262   | 3,508                                | 16.8                            | 7,355                      | 53.3                      |
| 2022                      | 267   | 3,461                                | 17.1                            | 7,284                      | 53.8                      |
| 2021                      | 252   | 3,382                                | 16.9                            | 7,051                      | 54.1                      |
| 2020                      | 282   | 3,292                                | 16.7                            | 7,001                      | 53.5                      |
| 2019                      | 373   | 3,150                                | 16.4                            | 6,631                      | 54.5                      |
| 2018                      | 381   | 3,144                                | 16.4                            | 6,512                      | 54.9                      |
| 2017                      | 394   | 3,056                                | 16.0                            | 6,365                      | 54.4                      |
| 2016                      | 455   | 2,936                                | 14.9                            | 6,081                      | 54.1                      |
| 2015                      | 503   | 2,899                                | 15.2                            | 6,002                      | 54.3                      |

Table 5

### Total number of benefit recipients by type of benefit

| Fiscal year ended June 30 | Service retirement | Disability benefits | Benefits for survivors | Total benefit recipients <sup>1</sup> |
|---------------------------|--------------------|---------------------|------------------------|---------------------------------------|
| 2024                      | 292,386            | 9,671               | 31,353                 | 333,410                               |
| 2023                      | 288,494            | 9,809               | 30,629                 | 328,932                               |
| 2022                      | 285,704            | 9,885               | 29,879                 | 325,468                               |
| 2021                      | 281,302            | 9,973               | 29,138                 | 320,413                               |
| 2020                      | 276,070            | 10,095              | 28,353                 | 314,518                               |
| 2019                      | 270,835            | 10,152              | 27,652                 | 308,639                               |
| 2018                      | 264,780            | 10,089              | 26,990                 | 301,859                               |
| 2017                      | 258,550            | 10,023              | 26,301                 | 294,874                               |
| 2016                      | 252,672            | 9,940               | 25,583                 | 288,195                               |
| 2015                      | 247,353            | 9,848               | 24,899                 | 282,100                               |

<sup>1</sup> Benefit recipients reported in this section will differ from those reported in the Financial section due to timing of when membership numbers were pulled.

# Defined Benefit Program schedules

Table 6

## Members retired for service characteristics by year of retirement<sup>1</sup>

| Effective date of retirement by service credit | Number of retirements | Average years of service credit | Average Member-Only Benefit | Average final compensation | Average age at retirement |
|--|-----------------------|---------------------------------|-----------------------------|----------------------------|---------------------------|
| <b>7/1/2023 thru 6/30/2024<sup>2,3</sup></b>   |                       |                                 |                             |                            |                           |
| 0-5  | 180                   | 2.4                             | \$410                       | \$7,923                    | 63.8                      |
| 5-10   | 905                   | 7.4                             | 899                         | 5,528                      | 63.9                      |
| 10-15  | 793                   | 12.5                            | 1,802                       | 6,579                      | 63.7                      |
| 15-20  | 1,166                 | 17.8                            | 3,184                       | 8,092                      | 63.7                      |
| 20-25  | 1,691                 | 22.5                            | 4,464                       | 9,007                      | 63.5                      |
| 25-30  | 2,446                 | 27.2                            | 6,082                       | 10,236                     | 63.0                      |
| 30-35  | 2,645                 | 32.3                            | 7,760                       | 10,756                     | 61.5                      |
| 35-40  | 1,375                 | 36.9                            | 9,586                       | 11,145                     | 62.4                      |
| 40 and over                                    | 203                   | 43.5                            | 11,722                      | 11,307                     | 68.5                      |
| <b>Total</b>                                   | <b>11,404</b>         | <b>25.2</b>                     | <b>\$5,659</b>              | <b>\$9,419</b>             | <b>63.0</b>               |
| <b>7/1/2022 thru 6/30/2023<sup>2,3</sup></b>   |                       |                                 |                             |                            |                           |
| 0-5  | 161                   | 2.2                             | \$330                       | \$7,154                    | 63.5                      |
| 5-10   | 872                   | 7.4                             | 905                         | 5,561                      | 63.9                      |
| 10-15  | 761                   | 12.5                            | 1,757                       | 6,476                      | 63.4                      |
| 15-20  | 1,189                 | 17.6                            | 2,966                       | 7,739                      | 63.2                      |
| 20-25  | 1,750                 | 22.5                            | 4,217                       | 8,543                      | 63.4                      |
| 25-30  | 2,080                 | 27.1                            | 5,660                       | 9,560                      | 62.9                      |
| 30-35  | 2,227                 | 32.3                            | 7,308                       | 10,102                     | 61.5                      |
| 35-40  | 1,185                 | 37.0                            | 8,908                       | 10,342                     | 62.4                      |
| 40 and over                                    | 144                   | 43.5                            | 11,273                      | 11,065                     | 68.1                      |
| <b>Total</b>                                   | <b>10,369</b>         | <b>24.6</b>                     | <b>\$5,141</b>              | <b>\$8,806</b>             | <b>62.9</b>               |
| <b>7/1/2021 thru 6/30/2022<sup>2,3</sup></b>   |                       |                                 |                             |                            |                           |
| 0-5  | 199                   | 2.5                             | \$372                       | \$6,878                    | 63.9                      |
| 5-10   | 975                   | 7.4                             | 867                         | 5,328                      | 64.0                      |
| 10-15  | 928                   | 12.6                            | 1,748                       | 6,311                      | 63.6                      |
| 15-20  | 1,445                 | 17.6                            | 2,926                       | 7,544                      | 63.7                      |
| 20-25  | 2,158                 | 22.5                            | 4,115                       | 8,356                      | 63.3                      |
| 25-30  | 2,243                 | 27.1                            | 5,399                       | 9,106                      | 63.0                      |
| 30-35  | 2,470                 | 32.3                            | 6,878                       | 9,566                      | 61.4                      |
| 35-40  | 1,162                 | 36.9                            | 8,470                       | 9,883                      | 62.5                      |
| 40 and over                                    | 174                   | 42.8                            | 11,088                      | 10,786                     | 68.1                      |
| <b>Total</b>                                   | <b>11,754</b>         | <b>24.2</b>                     | <b>\$4,809</b>              | <b>\$8,403</b>             | <b>63.0</b>               |

<sup>1</sup> Does not include formerly disabled members.

<sup>2</sup> The average Member-Only Benefit for this fiscal year includes the longevity bonus.

<sup>3</sup> Excludes retirees with no final compensation data.

## Defined Benefit Program schedules

Table 6

### Members retired for service characteristics by year of retirement (continued)<sup>1</sup>

| Effective date of retirement by service credit | Number of retirements | Average years of service credit | Average Member-Only Benefit | Average final compensation | Average age at retirement |
|--|-----------------------|---------------------------------|-----------------------------|----------------------------|---------------------------|
| <b>7/1/2020 thru 6/30/2021<sup>2,3</sup></b>   |                       |                                 |                             |                            |                           |
| 0-5  | 166                   | 2.3                             | \$363                       | \$7,633                    | 63.2                      |
| 5-10   | 855                   | 7.3                             | 826                         | 5,097                      | 64.0                      |
| 10-15  | 953                   | 12.7                            | 1,711                       | 6,143                      | 63.6                      |
| 15-20  | 1,640                 | 17.7                            | 2,913                       | 7,418                      | 63.8                      |
| 20-25  | 2,453                 | 22.5                            | 4,065                       | 8,145                      | 63.8                      |
| 25-30  | 2,379                 | 27.2                            | 5,290                       | 8,763                      | 63.3                      |
| 30-35  | 2,848                 | 32.2                            | 6,639                       | 9,226                      | 61.8                      |
| 35-40  | 1,262                 | 36.9                            | 8,394                       | 9,836                      | 62.4                      |
| 40 and over                                    | 229                   | 42.9                            | 10,065                      | 9,567                      | 68.1                      |
| <b>Total</b>                                   | <b>12,785</b>         | <b>24.7</b>                     | <b>\$4,813</b>              | <b>\$8,240</b>             | <b>63.2</b>               |
| <b>7/1/2019 thru 6/30/2020<sup>2,3</sup></b>   |                       |                                 |                             |                            |                           |
| 0-5  | 209                   | 2.4                             | \$335                       | \$6,817                    | 63.4                      |
| 5-10   | 922                   | 7.4                             | 817                         | 5,027                      | 63.9                      |
| 10-15  | 939                   | 12.6                            | 1,689                       | 6,048                      | 63.8                      |
| 15-20  | 1,562                 | 17.6                            | 2,801                       | 7,195                      | 63.8                      |
| 20-25  | 2,157                 | 22.4                            | 3,953                       | 7,938                      | 63.7                      |
| 25-30  | 1,919                 | 27.2                            | 5,248                       | 8,692                      | 63.4                      |
| 30-35  | 2,536                 | 32.2                            | 6,525                       | 8,980                      | 62.1                      |
| 35-40  | 1,223                 | 36.9                            | 7,894                       | 9,152                      | 62.5                      |
| 40 and over                                    | 239                   | 42.9                            | 10,143                      | 9,606                      | 67.7                      |
| <b>Total</b>                                   | <b>11,706</b>         | <b>24.3</b>                     | <b>\$4,614</b>              | <b>\$7,948</b>             | <b>63.3</b>               |
| <b>7/1/2018 thru 6/30/2019<sup>2,3</sup></b>   |                       |                                 |                             |                            |                           |
| 0-5  | 216                   | 2.3                             | \$320                       | \$6,713                    | 62.9                      |
| 5-10   | 878                   | 7.3                             | 762                         | 4,658                      | 64.0                      |
| 10-15  | 1,072                 | 12.7                            | 1,725                       | 6,141                      | 63.7                      |
| 15-20  | 1,772                 | 17.7                            | 2,847                       | 7,252                      | 63.7                      |
| 20-25  | 2,309                 | 22.4                            | 3,883                       | 7,824                      | 63.5                      |
| 25-30  | 2,174                 | 27.4                            | 5,255                       | 8,578                      | 63.6                      |
| 30-35  | 2,543                 | 32.2                            | 6,457                       | 8,925                      | 61.9                      |
| 35-40  | 1,137                 | 37.1                            | 8,108                       | 9,225                      | 62.7                      |
| 40 and over                                    | 230                   | 42.8                            | 10,496                      | 9,978                      | 67.8                      |
| <b>Total</b>                                   | <b>12,331</b>         | <b>24.1</b>                     | <b>\$4,547</b>              | <b>\$7,880</b>             | <b>63.3</b>               |

<sup>1</sup> Does not include formerly disabled members.

<sup>2</sup> The average Member-Only Benefit for this fiscal year includes the longevity bonus.

<sup>3</sup> Excludes retirees with no final compensation data.

## Defined Benefit Program schedules

Table 6

### Members retired for service characteristics by year of retirement (continued)<sup>1</sup>

| Effective date of retirement by service credit | Number of retirements | Average years of service credit | Average Member-Only Benefit | Average final compensation | Average age at retirement |
|--|-----------------------|---------------------------------|-----------------------------|----------------------------|---------------------------|
| <b>7/1/2017 thru 6/30/2018<sup>2,3</sup></b>   |                       |                                 |                             |                            |                           |
| 0-5  | 190                   | 2.5                             | \$335                       | \$6,521                    | 63.2                      |
| 5-10   | 877                   | 7.3                             | 787                         | 4,830                      | 63.8                      |
| 10-15  | 1,091                 | 12.6                            | 1,676                       | 5,955                      | 63.7                      |
| 15-20  | 1,855                 | 17.7                            | 2,817                       | 7,110                      | 63.8                      |
| 20-25  | 2,362                 | 22.3                            | 3,832                       | 7,645                      | 63.9                      |
| 25-30  | 2,368                 | 27.5                            | 5,123                       | 8,379                      | 63.4                      |
| 30-35  | 2,530                 | 32.2                            | 6,308                       | 8,642                      | 62.0                      |
| 35-40  | 1,262                 | 37.1                            | 8,049                       | 9,057                      | 62.7                      |
| 40 and over                                    | 243                   | 43.2                            | 10,476                      | 9,956                      | 68.1                      |
| <b>Total</b>                                   | <b>12,778</b>         | <b>24.3</b>                     | <b>\$4,512</b>              | <b>\$7,729</b>             | <b>63.3</b>               |
| <b>7/1/2016 thru 6/30/2017<sup>2,3</sup></b>   |                       |                                 |                             |                            |                           |
| 0-5  | 155                   | 2.2                             | \$306                       | \$6,402                    | 63.6                      |
| 5-10   | 837                   | 7.4                             | 773                         | 4,709                      | 63.9                      |
| 10-15  | 1,075                 | 12.6                            | 1,628                       | 5,861                      | 63.5                      |
| 15-20  | 1,836                 | 17.7                            | 2,701                       | 6,857                      | 63.7                      |
| 20-25  | 1,932                 | 22.2                            | 3,628                       | 7,326                      | 63.6                      |
| 25-30  | 2,246                 | 27.3                            | 4,955                       | 8,082                      | 63.5                      |
| 30-35  | 2,423                 | 32.2                            | 6,126                       | 8,438                      | 62.1                      |
| 35-40  | 1,414                 | 37.3                            | 7,807                       | 8,711                      | 62.4                      |
| 40 and over                                    | 329                   | 42.6                            | 10,267                      | 9,986                      | 66.4                      |
| <b>Total</b>                                   | <b>12,247</b>         | <b>24.6</b>                     | <b>\$4,475</b>              | <b>\$7,527</b>             | <b>63.3</b>               |
| <b>7/1/2015 thru 6/30/2016<sup>2,3</sup></b>   |                       |                                 |                             |                            |                           |
| 0-5  | 170                   | 2.4                             | \$314                       | \$6,438                    | 62.7                      |
| 5-10   | 793                   | 7.4                             | 754                         | 4,637                      | 63.9                      |
| 10-15  | 1,046                 | 12.6                            | 1,608                       | 5,792                      | 63.5                      |
| 15-20  | 1,751                 | 17.6                            | 2,612                       | 6,664                      | 63.6                      |
| 20-25  | 1,652                 | 22.2                            | 3,534                       | 7,149                      | 63.4                      |
| 25-30  | 2,152                 | 27.3                            | 4,861                       | 7,928                      | 63.4                      |
| 30-35  | 2,034                 | 32.1                            | 5,899                       | 8,108                      | 62.0                      |
| 35-40  | 1,467                 | 37.2                            | 7,836                       | 8,624                      | 62.4                      |
| 40 and over                                    | 309                   | 42.5                            | 9,666                       | 9,215                      | 66.4                      |
| <b>Total</b>                                   | <b>11,374</b>         | <b>24.5</b>                     | <b>\$4,369</b>              | <b>\$7,329</b>             | <b>63.2</b>               |

<sup>1</sup> Does not include formerly disabled members.

<sup>2</sup> The average Member-Only Benefit for this fiscal year includes the longevity bonus.

<sup>3</sup> Excludes retirees with no final compensation data.

## Defined Benefit Program schedules

Table 6

### Members retired for service characteristics by year of retirement (continued)<sup>1</sup>

| Effective date of retirement by service credit | Number of retirements | Average years of service credit | Average Member-Only Benefit | Average final compensation | Average age at retirement |
|--|-----------------------|---------------------------------|-----------------------------|----------------------------|---------------------------|
| <b>7/1/2014 thru 6/30/2015<sup>2,3</sup></b>   |                       |                                 |                             |                            |                           |
| 0-5  | 168                   | 2.2                             | \$275                       | \$6,195                    | 62.6                      |
| 5-10   | 855                   | 7.4                             | 736                         | 4,517                      | 63.7                      |
| 10-15  | 1,125                 | 12.6                            | 1,554                       | 5,597                      | 63.4                      |
| 15-20  | 1,764                 | 17.6                            | 2,520                       | 6,467                      | 63.4                      |
| 20-25  | 1,585                 | 22.4                            | 3,415                       | 6,883                      | 63.0                      |
| 25-30  | 2,069                 | 27.2                            | 4,603                       | 7,576                      | 63.3                      |
| 30-35  | 1,948                 | 32.1                            | 5,709                       | 7,787                      | 62.0                      |
| 35-40  | 1,482                 | 37.1                            | 7,490                       | 8,207                      | 62.2                      |
| 40 and over                                    | 282                   | 42.4                            | 9,539                       | 9,166                      | 65.8                      |
| <b>Total</b>                                   | <b>11,278</b>         | <b>24.2</b>                     | <b>\$4,142</b>              | <b>\$7,013</b>             | <b>63.0</b>               |

<sup>1</sup> Does not include formerly disabled members.

<sup>2</sup> The average Member-Only Benefit for this fiscal year includes the longevity bonus.

<sup>3</sup> Excludes retirees with no final compensation data.

Table 7

### Members retired for service characteristics<sup>1</sup>

| Fiscal year ended June 30 | Average age at retirement | Average years of service credit | Average final compensation | Average monthly benefit <sup>2</sup> |
|---------------------------|---------------------------|---------------------------------|----------------------------|--------------------------------------|
| 2024                      | 61.8                      | 25.2                            | \$6,766                    | \$4,822                              |
| 2023                      | 61.8                      | 25.2                            | 6,615                      | 4,674                                |
| 2022                      | 61.8                      | 25.3                            | 6,490                      | 4,517                                |
| 2021                      | 61.7                      | 25.4                            | 6,365                      | 4,413                                |
| 2020                      | 61.7                      | 25.5                            | 6,229                      | 4,321                                |
| 2019                      | 61.6                      | 25.6                            | 6,110                      | 4,184                                |
| 2018                      | 61.5                      | 25.6                            | 5,981                      | 4,086                                |
| 2017                      | 61.4                      | 25.7                            | 5,846                      | 3,985                                |
| 2016                      | 61.3                      | 25.8                            | 5,716                      | 3,884                                |
| 2015                      | 61.3                      | 25.9                            | 5,597                      | 3,786                                |

<sup>1</sup> Does not include formerly disabled members.

<sup>2</sup> Prior to 2020, the average monthly benefit does not include supplemental benefits from the SBMA.

# Defined Benefit Program schedules

Table 8

## Benefit recipients by type of benefit and option elected

| Monthly Member-Only Benefit <sup>3</sup> | Total                      | Type of benefit <sup>1</sup> |              |               | Option elected <sup>2</sup> |               |              |              |            |               |               |              |               |
|--|----------------------------|------------------------------|--------------|---------------|-----------------------------|---------------|--------------|--------------|------------|---------------|---------------|--------------|---------------|
|  |                            | 1 <sup>4</sup>               | 2            | 3             | Member-Only                 | 2             | 3            | 4            | 5          | 6             | 7             | 8            | 9             |
| Less than \$500                          | 16,059                     | 14,065                       | 32           | 1,962         | 11,708                      | 707           | 206          | 37           | 49         | 2,168         | 649           | 248          | 287           |
| 500-1,000                                | 23,437                     | 20,984                       | 271          | 2,182         | 16,128                      | 877           | 366          | 60           | 65         | 3,608         | 1,489         | 187          | 657           |
| 1,000-1,500                              | 22,401                     | 19,071                       | 614          | 2,716         | 13,562                      | 1,179         | 551          | 91           | 89         | 3,826         | 2,091         | 192          | 820           |
| 1,500-2,000                              | 24,195                     | 19,810                       | 1,226        | 3,159         | 13,693                      | 1,247         | 509          | 253          | 102        | 3,998         | 3,035         | 237          | 1,121         |
| 2,000-2,500                              | 26,456                     | 20,934                       | 1,833        | 3,689         | 14,029                      | 1,320         | 531          | 220          | 135        | 4,745         | 3,856         | 295          | 1,325         |
| 2,500-3,000                              | 26,028                     | 20,639                       | 1,952        | 3,437         | 13,535                      | 1,157         | 402          | 178          | 92         | 4,911         | 4,007         | 311          | 1,435         |
| 3,000-3,500                              | 25,006                     | 20,304                       | 1,880        | 2,822         | 12,996                      | 928           | 276          | 169          | 48         | 4,721         | 3,875         | 366          | 1,627         |
| 3,500-4,000                              | 22,263                     | 19,047                       | 1,074        | 2,142         | 11,401                      | 686           | 232          | 116          | 42         | 4,291         | 3,591         | 363          | 1,541         |
| 4,000-4,500                              | 21,069                     | 18,855                       | 464          | 1,750         | 10,515                      | 649           | 198          | 76           | 33         | 4,031         | 3,667         | 383          | 1,517         |
| 4,500-5,000                              | 20,529                     | 18,721                       | 189          | 1,619         | 9,773                       | 643           | 184          | 58           | 25         | 4,240         | 3,617         | 407          | 1,582         |
| 5,000-5,500                              | 20,183                     | 18,708                       | 73           | 1,402         | 9,413                       | 623           | 160          | 60           | 18         | 4,272         | 3,592         | 370          | 1,675         |
| 5,500-6,000                              | 18,510                     | 17,337                       | 28           | 1,145         | 8,409                       | 538           | 137          | 53           | 14         | 4,024         | 3,269         | 384          | 1,682         |
| 6,000 and greater                        | 67,274                     | 63,911                       | 35           | 3,328         | 27,669                      | 2,023         | 317          | 139          | 39         | 16,007        | 11,356        | 2,183        | 7,541         |
| <b>Total</b>                             | <b>333,410<sup>5</sup></b> | <b>292,386</b>               | <b>9,671</b> | <b>31,353</b> | <b>172,831</b>              | <b>12,577</b> | <b>4,069</b> | <b>1,510</b> | <b>751</b> | <b>64,842</b> | <b>48,094</b> | <b>5,926</b> | <b>22,810</b> |

<sup>1</sup> Type of benefit: 1) Service retirement 2) Disability benefits 3) Survivor benefits.

<sup>2</sup> Option elected:

Option 2 - Beneficiary receives 100% of member's modified allowance.

Option 3 - Beneficiary receives 50% of member's modified allowance.

Option 4 - Beneficiary receives two-thirds of member's modified allowance.

Option 5 - Survivor receives 50% of member's modified allowance upon death of either member or beneficiary.

Option 6 - Beneficiary receives 100% of member's modified allowance. If beneficiary predeceases the member, the allowance increases to the Member-Only Benefit.

Option 7 - Beneficiary receives 50% of member's modified allowance. If beneficiary predeceases the member, the allowance increases to the Member-Only Benefit.

Option 8 - Compound option that allows the member to provide for more than one beneficiary.

Option 9 - Beneficiary receives 75% of member's modified allowance. If beneficiary predeceases the member, the allowance increases to the Member-Only Benefit.

<sup>3</sup> Member-Only Benefit includes longevity bonus.

<sup>4</sup> Does not include formerly disabled members.

<sup>5</sup> Benefit recipients reported in this section will differ from those reported in the Financial section due to the timing of when membership numbers were pulled.

## Defined Benefit Program schedules

Table 9

### Largest participating Defined Benefit and Defined Benefit Supplement employers for current year and nine years ago

#### Fiscal year 2023–24

| Participating employers                     | Covered employees <sup>1</sup> | Percentage of total system |
|---|--------------------------------|----------------------------|
| Los Angeles Unified School District         | 42,010                         | 7.9%                       |
| San Diego Unified School District           | 8,571                          | 1.6%                       |
| Fresno Unified School District              | 6,620                          | 1.3%                       |
| Long Beach Unified School District          | 5,553                          | 1.1%                       |
| San Francisco Unified School District       | 4,972                          | 0.9%                       |
| Elk Grove Unified School District           | 4,631                          | 0.9%                       |
| San Bernardino City Unified School District | 4,254                          | 0.8%                       |
| Corona-Norco Unified School District        | 3,401                          | 0.6%                       |
| Clovis Unified School District              | 3,331                          | 0.6%                       |
| Sacramento City Unified School District     | 3,182                          | 0.6%                       |
| <b>Top 10 total</b>                         | <b>86,525</b>                  | <b>16.3%</b>               |
| All other                                   | 444,971                        | 83.7%                      |
| <b>Total covered employees</b>              | <b>531,496</b>                 | <b>100.0%</b>              |

#### Fiscal year 2014–15

| Participating employers                     | Covered employees <sup>1</sup> | Percentage of total system |
|---|--------------------------------|----------------------------|
| Los Angeles Unified School District         | 38,454                         | 7.9%                       |
| San Diego Unified School District           | 8,600                          | 1.8%                       |
| Fresno Unified School District              | 5,389                          | 1.1%                       |
| Long Beach Unified School District          | 5,187                          | 1.1%                       |
| San Francisco Unified School District       | 5,009                          | 1.0%                       |
| Elk Grove Unified School District           | 4,062                          | 0.8%                       |
| San Bernardino City Unified School District | 3,636                          | 0.7%                       |
| Corona-Norco Unified School District        | 3,325                          | 0.7%                       |
| Santa Ana Unified School District           | 3,313                          | 0.7%                       |
| Oakland Unified School District             | 3,128                          | 0.6%                       |
| <b>Top 10 total</b>                         | <b>80,103</b>                  | <b>16.4%</b>               |
| All other                                   | 409,292                        | 83.6%                      |
| <b>Total covered employees</b>              | <b>489,395</b>                 | <b>100.0%</b>              |

<sup>1</sup> Covered employees are calculated as all employees for whom an employer reports service credit during the fiscal year. Covered employees in this table are counted more than once if they are reported by multiple employers. They are also counted if their employer reports service credit for a retired employee from prior fiscal years. Therefore, the total number of covered employees in this table is higher than the number of active members shown in Table 11 of the Actuarial section.

# Defined Benefit Program schedules

Table 10

## Restoration of purchasing power by year of retirement, fiscal year 2023–24<sup>1</sup>

| Calendar year of benefit effective date | CCPI increases since benefit effective date | Member retired before September 1              |   |                                   | Member retired on or after September 1 <sup>2</sup> |   |                                   |
|---|---|--|---|-----------------------------------|---|---|-----------------------------------|
|   |   | Benefit increases since benefit effective date | Purchasing power percentage (prior to SBMA) | Purchasing power restored by SBMA | Benefit increases since benefit effective date      | Purchasing power percentage (prior to SBMA) | Purchasing power restored by SBMA |
| 2023                                    | 0.0%  | 0.0%   | 100.0%                                      | 0.0%                              | 0.0%  | 100.0%                                      | 0.0%                              |
| 2022                                    | 3.1%  | 2.0%   | 98.9%                                       | 0.0%                              | 0.0%  | 97.0%                                       | 0.0%                              |
| 2021                                    | 11.6%                                       | 4.0%   | 93.2%                                       | 0.0%                              | 2.0%  | 91.4%                                       | 0.0%                              |
| 2020                                    | 16.6%                                       | 6.0%   | 90.9%                                       | 0.0%                              | 4.0%  | 89.2%                                       | 0.0%                              |
| 2019                                    | 18.2%                                       | 8.0%   | 91.4%                                       | 0.0%                              | 6.0%  | 89.7%                                       | 0.0%                              |
| 2018                                    | 21.9%                                       | 10.0%  | 90.3%                                       | 0.0%                              | 8.0%  | 88.6%                                       | 0.0%                              |
| 2017                                    | 26.6%                                       | 12.0%  | 88.5%                                       | 0.0%                              | 10.0%   | 86.9%                                       | 0.0%                              |
| 2016                                    | 29.9%                                       | 14.0%  | 87.7%                                       | 0.0%                              | 12.0%   | 86.2%                                       | 0.0%                              |
| 2015                                    | 32.6%                                       | 16.0%  | 87.5%                                       | 0.0%                              | 14.0%   | 86.0%                                       | 0.0%                              |
| 2014                                    | 34.3%                                       | 18.0%  | 87.9%                                       | 0.0%                              | 16.0%   | 86.4%                                       | 0.0%                              |
| 2013                                    | 37.2%                                       | 20.0%  | 87.4%                                       | 0.0%                              | 18.0%   | 86.0%                                       | 0.0%                              |
| 2012                                    | 39.6%                                       | 22.0%  | 87.4%                                       | 0.0%                              | 20.0%   | 85.9%                                       | 0.0%                              |
| 2011                                    | 42.3%                                       | 24.0%  | 87.1%                                       | 0.0%                              | 22.0%   | 85.7%                                       | 0.0%                              |
| 2010                                    | 46.2%                                       | 26.0%  | 86.2%                                       | 0.0%                              | 24.0%   | 84.8%                                       | 0.2%                              |
| 2009                                    | 47.6%                                       | 28.0%  | 86.7%                                       | 0.0%                              | 26.0%   | 85.4%                                       | 0.0%                              |
| 2008                                    | 45.4%                                       | 30.0%  | 89.4%                                       | 0.0%                              | 28.0%   | 88.0%                                       | 0.0%                              |
| 2007                                    | 52.7%                                       | 32.0%  | 86.4%                                       | 0.0%                              | 30.0%   | 85.1%                                       | 0.0%                              |
| 2006                                    | 57.4%                                       | 34.0%  | 85.1%                                       | 0.0%                              | 32.0%   | 83.8%                                       | 1.2%                              |
| 2005                                    | 64.9%                                       | 36.0%  | 82.5%                                       | 2.5%                              | 34.0%   | 81.2%                                       | 3.8%                              |
| 2004                                    | 69.6%                                       | 38.0%  | 81.4%                                       | 3.6%                              | 36.0%   | 80.2%                                       | 4.8%                              |
| 2003                                    | 74.8%                                       | 40.0%  | 80.1%                                       | 4.9%                              | 38.0%   | 78.9%                                       | 6.1%                              |
| 2002                                    | 78.6%                                       | 42.0%  | 79.5%                                       | 5.5%                              | 40.0%   | 78.4%                                       | 6.6%                              |
| 2001                                    | 81.2%                                       | 44.0%  | 79.5%                                       | 5.5%                              | 42.0%   | 78.3%                                       | 6.7%                              |
| 2000                                    | 90.8%                                       | 46.0%  | 76.5%                                       | 8.5%                              | 44.0%   | 75.5%                                       | 9.5%                              |
| 1999                                    | 97.9%                                       | 48.0%  | 74.8%                                       | 10.2%                             | 46.0%   | 73.8%                                       | 11.2%                             |
| 1998                                    | 103.0%                                      | 50.0%  | 73.9%                                       | 11.1%                             | 48.0%   | 72.9%                                       | 12.1%                             |
| 1997                                    | 107.5%                                      | 52.0%  | 73.2%                                       | 11.8%                             | 50.0%   | 72.3%                                       | 12.7%                             |
| 1996                                    | 112.0%                                      | 54.0%  | 72.6%                                       | 12.4%                             | 52.0%   | 71.7%                                       | 13.3%                             |
| 1995                                    | 115.3%                                      | 56.0%  | 72.4%                                       | 12.6%                             | 54.0%   | 71.5%                                       | 13.5%                             |
| 1994                                    | 120.3%                                      | 58.0%  | 71.7%                                       | 13.3%                             | 56.0%   | 70.8%                                       | 14.2%                             |
| 1993                                    | 123.0%                                      | 60.0%  | 71.8%                                       | 13.2%                             | 58.0%   | 70.9%                                       | 14.1%                             |

<sup>1</sup> The SBMA for fiscal year 2023–24 is based on June 2023 California Consumer Price Index (CCPI).

<sup>2</sup> Members who retired on or after September 1 have to wait an extra year to be eligible for the annual 2% benefit improvement factor.



## Defined Benefit Program schedules

Table 10

### Restoration of purchasing power by year of retirement, fiscal year 2023–24 (continued)

| Calendar year<br>of benefit<br>effective date | CCPI<br>increases<br>since benefit<br>effective date | Member retired before September 1                          |   |  | Member retired on or after September 1 <sup>1</sup>        |   |  |
|---|--|--|---|--|--|---|--|
|   |  | Benefit<br>increases<br>since<br>benefit<br>effective date | Purchasing<br>power<br>percentage<br>(prior to<br>SBMA) | Purchasing<br>power<br>restored<br>by SBMA | Benefit<br>increases<br>since<br>benefit<br>effective date | Purchasing<br>power<br>percentage<br>(prior to<br>SBMA) | Purchasing<br>power<br>restored<br>by SBMA |
| 1992  | 128.7%   | 62.0%  | 70.8%   | 14.2%                                      | 60.0%  | 70.0%   | 15.0%                                      |
| 1991  | 137.0%   | 64.0%  | 69.2%   | 15.8%                                      | 62.0%  | 68.4%   | 16.6%                                      |
| 1990  | 147.2%   | 66.0%  | 67.1%   | 17.9%                                      | 64.0%  | 66.3%   | 18.7%                                      |
| 1989  | 159.0%   | 68.0%  | 64.9%   | 20.1%                                      | 66.0%  | 64.1%   | 20.9%                                      |
| 1988  | 172.8%   | 70.0%  | 62.3%   | 22.7%                                      | 68.0%  | 61.6%   | 23.4%                                      |
| 1987  | 185.5%   | 72.0%  | 60.2%   | 24.8%                                      | 70.0%  | 59.5%   | 25.5%                                      |
| 1986  | 195.9%   | 74.0%  | 58.8%   | 26.2%                                      | 72.0%  | 58.1%   | 26.9%                                      |
| 1985  | 206.3%   | 76.0%  | 57.5%   | 27.5%                                      | 74.0%  | 56.8%   | 28.2%                                      |
| 1984  | 220.5%   | 78.0%  | 55.5%   | 29.5%                                      | 76.0%  | 54.9%   | 30.1%                                      |
| 1983  | 235.1%   | 80.0%  | 53.7%   | 31.3%                                      | 78.0%  | 53.1%   | 31.9%                                      |
| 1982  | 237.1%   | 82.0%  | 54.0%   | 31.0%                                      | 80.0%  | 53.4%   | 31.6%                                      |
| 1981  | 268.5%   | 84.0%  | 49.9%   | 35.1%                                      | 82.0%  | 49.4%   | 35.6%                                      |
| 1980  | 298.6%   | 86.0%  | 46.7%   | 38.3%                                      | 84.0%  | 46.2%   | 38.8%                                      |
| 1979  | 367.7%   | 88.0%  | 40.2%   | 44.8%                                      | 86.0%  | 39.8%   | 45.2%                                      |
| 1978  | 414.0%   | 90.0%  | 37.0%   | 48.0%                                      | 88.0%  | 36.6%   | 48.4%                                      |
| 1977  | 458.0%   | 92.0%  | 34.4%   | 50.6%                                      | 90.0%  | 34.0%   | 51.0%                                      |
| 1976  | 501.5%   | 94.0%  | 32.3%   | 52.7%                                      | 92.0%  | 31.9%   | 53.1%                                      |
| 1975  | 538.5%   | 96.0%  | 30.7%   | 54.3%                                      | 94.0%  | 30.4%   | 54.6%                                      |
| 1974  | 605.0%   | 98.0%  | 28.1%   | 56.9%                                      | 96.0%  | 27.8%   | 57.2%                                      |
| 1973  | 677.6%   | 100.0%   | 25.7%   | 59.3%                                      | 98.0%  | 25.5%   | 59.5%                                      |
| 1972  | 719.8%   | 102.0%   | 24.6%   | 60.4%                                      | 100.0%   | 24.4%   | 60.6%                                      |
| 1971  | 742.7%   | 104.0%   | 24.2%   | 60.8%                                      | 102.0%   | 24.0%   | 61.0%                                      |
| 1970  | 776.1%   | 106.0%   | 23.5%   | 61.5%                                      | 104.0%   | 23.3%   | 61.7%                                      |
| 1969  | 822.3%   | 108.0%   | 22.6%   | 62.4%                                      | 106.0%   | 22.3%   | 62.7%                                      |
| 1968  | 868.0%   | 110.0%   | 21.7%   | 63.3%                                      | 108.0%   | 21.5%   | 63.5%                                      |
| 1967  | 909.2%   | 112.0%   | 21.0%   | 64.0%                                      | 110.0%   | 20.8%   | 64.2%                                      |
| 1966  | 934.4%   | 114.0%   | 20.7%   | 64.3%                                      | 112.0%   | 20.5%   | 64.5%                                      |
| 1965  | 950.7%   | 116.0%   | 20.6%   | 64.4%                                      | 114.0%   | 20.4%   | 64.6%                                      |
| 1964  | 978.0%   | 118.0%   | 20.2%   | 64.8%                                      | 116.0%   | 20.0%   | 65.0%                                      |
| 1963  | 999.5%   | 120.0%   | 20.0%   | 65.0%                                      | 118.0%   | 19.8%   | 65.2%                                      |
| 1962  | 1006.8%  | 122.0%   | 20.1%   | 64.9%                                      | 120.0%   | 19.9%   | 65.1%                                      |
| 1961  | 1025.5%  | 124.0%   | 19.9%   | 65.1%                                      | 122.0%   | 19.7%   | 65.3%                                      |
| 1960  | 1041.0%  | 126.0%   | 19.8%   | 65.2%                                      | 124.0%   | 19.6%   | 65.4%                                      |
| 1959  | 1065.0%  | 128.0%   | 19.6%   | 65.4%                                      | 126.0%   | 19.4%   | 65.6%                                      |
| 1958  | 1081.6%  | 130.0%   | 19.5%   | 65.5%                                      | 128.0%   | 19.3%   | 65.7%                                      |
| 1957  | 1125.2%  | 132.0%   | 18.9%   | 66.1%                                      | 130.0%   | 18.8%   | 66.2%                                      |
| 1956  | 1167.3%  | 134.0%   | 18.5%   | 66.5%                                      | 132.0%   | 18.3%   | 66.7%                                      |
| 1955  | 1192.0%  | 136.0%   | 18.3%   | 66.7%                                      | 134.0%   | 18.1%   | 66.9%                                      |

<sup>1</sup> Members who retired on or after September 1 have to wait an extra year to be eligible for the annual 2% benefit improvement factor.

# Defined Benefit Program schedules

Table 11

## Restoration of allowance purchasing power through supplemental benefit payments

### Supplemental benefit payments

| Year  | Purchasing power          | Count   | Total \$ paid | Income source |                           |               |
|-------|---------------------------|---------|---------------|---------------|---------------------------|---------------|
|       |                           |         |               | School lands  | Teachers' Retirement Fund | SBMA          |
| 23-24 | 85.0%                     | 108,128 | \$636,398,506 | \$6,640,706   | \$—                       | \$629,757,800 |
| 22-23 | 85.0%                     | 111,680 | 481,022,910   | 6,803,272     | —                         | 474,219,638   |
| 21-22 | 85.0%                     | 67,900  | 241,702,281   | 5,377,819     | —                         | 236,324,462   |
| 20-21 | 85.0%                     | 65,704  | 191,089,318   | 5,640,203     | —                         | 185,449,115   |
| 19-20 | 85.0%                     | 70,862  | 215,025,823   | 6,169,540     | —                         | 208,856,283   |
| 18-19 | 85.0%                     | 72,216  | 194,467,089   | 5,454,757     | —                         | 189,012,332   |
| 17-18 | 85.0%                     | 61,476  | 161,932,385   | 4,409,980     | —                         | 157,522,405   |
| 16-17 | 85.0%                     | 49,519  | 160,729,280   | 4,675,196     | —                         | 156,054,084   |
| 15-16 | 85.0%                     | 47,764  | 172,292,148   | 5,256,886     | —                         | 167,035,262   |
| 14-15 | 85.0%                     | 52,474  | 192,831,167   | 4,386,099     | —                         | 188,445,068   |
| 13-14 | 85.0%                     | 50,331  | 202,231,778   | 10,297,864    | —                         | 191,933,914   |
| 12-13 | 85.0%                     | 54,847  | 221,451,056   | 10,277,064    | —                         | 211,173,992   |
| 11-12 | 85.0%                     | 57,337  | 234,612,294   | 5,227,046     | —                         | 229,385,248   |
| 10-11 | 85.0%                     | 53,870  | 237,572,962   | 1,929,606     | —                         | 235,643,356   |
| 09-10 | 85.0%                     | 63,949  | 272,579,522   | 6,334,670     | —                         | 266,244,852   |
| 08-09 | 85.0% <sup>1</sup>        | 89,142  | 348,105,380   | 7,036,201     | —                         | 341,069,179   |
| 07-08 | 80.0%                     | 53,122  | 229,860,349   | 6,522,856     | —                         | 223,337,493   |
| 06-07 | 80.0%                     | 56,002  | 230,336,754   | 6,205,860     | —                         | 224,130,894   |
| 05-06 | 80.0%                     | 54,360  | 215,257,813   | 4,301,959     | —                         | 210,955,854   |
| 04-05 | 80.0%                     | 57,079  | 221,271,470   | 3,318,095     | —                         | 217,953,375   |
| 03-04 | 80.0%                     | 55,779  | 223,501,415   | 2,922,844     | —                         | 220,578,571   |
| 02-03 | 80.0%                     | 58,591  | 233,814,578   | 3,543,362     | —                         | 230,271,216   |
| 01-02 | 80.0% <sup>2</sup>        | 60,428  | 256,976,204   | 7,967,992     | —                         | 249,008,212   |
| 00-01 | 75.0%                     | 44,699  | 189,388,495   | 4,023,007     | —                         | 185,365,488   |
| 99-00 | 75.0%                     | 41,048  | 190,478,334   | 2,704,171     | —                         | 187,774,163   |
| 98-99 | 75.0%                     | 42,624  | 197,860,324   | 4,168,363     | —                         | 193,691,961   |
| 97-98 | 68.2% <sup>3</sup> /75.0% | 44,887  | 179,308,000   | 2,586,920     | —                         | 176,721,080   |
| 96-97 | 68.2%                     | 38,939  | 159,786,521   | 1,870,825     | —                         | 157,915,696   |
| 95-96 | 68.2%                     | 41,703  | 168,517,183   | 1,171,779     | —                         | 167,345,404   |
| 94-95 | 68.2%                     | 46,459  | 168,359,918   | 4,973,687     | —                         | 163,386,231   |
| 93-94 | 68.2%                     | 49,113  | 178,886,980   | 4,225,808     | —                         | 174,661,172   |
| 92-93 | 68.2%                     | 54,029  | 184,551,442   | 6,658,800     | —                         | 177,892,642   |
| 91-92 | 68.2%                     | 48,650  | 178,057,887   | 2,913,338     | 56,985,521                | 118,159,028   |
| 90-91 | 68.2%                     | 52,199  | 168,922,827   | 2,964,211     | 111,103,596               | 54,855,020    |

### Retirees' purchasing power protection account payments

| Year  | Purchasing power | Count  | Total \$ paid | Income source |                     |                            |
|-------|------------------|--------|---------------|---------------|---------------------|----------------------------|
|       |                  |        |               | School lands  | Investment earnings | General Fund               |
| 89-90 | 68.2%            | 55,971 | \$158,274,048 | \$2,751,075   | N/A                 | \$155,522,973 <sup>4</sup> |
| 88-89 | 68.2%            | 58,037 | 143,061,285   | 4,479,266     | \$5,956,019         | 132,626,000                |
| 87-88 | 68.2%            | 59,092 | 128,231,357   | 6,083,374     | 5,317,456           | 116,830,527                |
| 86-87 | 68.2%            | 57,343 | 122,275,289   | 4,167,970     | 5,511,448           | 112,595,871                |
| 85-86 | 65.5%            | 56,811 | 85,675,243    | 7,770,757     | 3,994,458           | 73,910,028                 |
| 84-85 | 62.4%            | 57,189 | 54,306,976    | 10,119,124    | 2,426,456           | 41,761,396                 |
| 83-84 | 58.4%            | 35,654 | 21,394,183    | N/A           | 894,183             | 20,500,000                 |

<sup>1</sup> Percentage changed to 85% effective September 30, 2008, and payable October 1, 2008 (Chapter 751, Statutes of 2008).

<sup>2</sup> Percentage changed to 80% effective January 1, 2002, and payable October 1, 2001 (Chapter 840, Statutes of 2001).

<sup>3</sup> Percentage changed to 75% effective January 1, 1998, and payable April 1, 1998 (Chapter 939, Statutes of 1997).

<sup>4</sup> The appropriation for fiscal year 1989-90 was from the Teachers' Retirement Fund. This amount plus regular interest was repaid from General Fund contributions to the SBMA.

# Defined Benefit Supplement Program schedules

Table 1

**Members retired for service during fiscal year 2023–24,  
classified by age and option elected<sup>1</sup>**

| Age          | Total        | Regular annuity       |                         |                        |                        | Period-certain annuity |           |           |            |            |            |            |            |
|--------------|--------------|-----------------------|-------------------------|------------------------|------------------------|------------------------|-----------|-----------|------------|------------|------------|------------|------------|
|              |              | Single life with cash | 100% joint and survivor | 75% joint and survivor | 50% joint and survivor | 10 years               | 9 years   | 8 years   | 7 years    | 6 years    | 5 years    | 4 years    | 3 years    |
| Under 55     | 19           | 5                     | 3                       | 1                      | –                      | 4                      | –         | –         | –          | –          | 4          | –          | 2          |
| 55           | 297          | 76                    | 39                      | 4                      | 13                     | 77                     | 3         | 3         | 8          | 15         | 25         | 7          | 27         |
| 56           | 160          | 41                    | 14                      | 3                      | 6                      | 45                     | 5         | 2         | 3          | 8          | 12         | 6          | 15         |
| 57           | 233          | 55                    | 25                      | 3                      | 14                     | 49                     | 3         | 3         | 12         | 4          | 36         | 1          | 28         |
| 58           | 278          | 74                    | 26                      | 4                      | 15                     | 74                     | 4         | 3         | 15         | 14         | 22         | 4          | 23         |
| 59           | 355          | 93                    | 33                      | 8                      | 10                     | 103                    | 7         | 4         | 8          | 19         | 42         | 6          | 22         |
| 60           | 567          | 143                   | 46                      | 10                     | 29                     | 186                    | 9         | 4         | 11         | 15         | 66         | 15         | 33         |
| 61           | 742          | 155                   | 75                      | 21                     | 48                     | 240                    | 17        | 10        | 15         | 30         | 67         | 22         | 42         |
| 62           | 688          | 169                   | 73                      | 9                      | 47                     | 188                    | 9         | 12        | 26         | 14         | 71         | 13         | 57         |
| 63           | 531          | 139                   | 54                      | 13                     | 33                     | 142                    | 3         | 8         | 9          | 18         | 35         | 20         | 57         |
| 64           | 349          | 89                    | 31                      | 10                     | 18                     | 85                     | 8         | 5         | 7          | 17         | 41         | 4          | 34         |
| 65           | 317          | 90                    | 31                      | 9                      | 22                     | 69                     | 2         | 3         | 9          | 11         | 27         | 6          | 38         |
| 66           | 265          | 67                    | 26                      | 3                      | 17                     | 55                     | 7         | 1         | 9          | 11         | 37         | 1          | 31         |
| 67           | 197          | 65                    | 30                      | 8                      | 10                     | 36                     | 1         | 3         | 5          | 7          | 17         | 4          | 11         |
| 68           | 138          | 41                    | 18                      | 1                      | 9                      | 26                     | 1         | 4         | 2          | 7          | 12         | 1          | 16         |
| 69           | 119          | 37                    | 16                      | 3                      | 6                      | 25                     | 2         | 1         | 1          | 1          | 12         | –          | 15         |
| 70           | 112          | 27                    | 17                      | 4                      | 6                      | 33                     | 4         | –         | 2          | 3          | 8          | –          | 8          |
| 71           | 64           | 29                    | 2                       | 1                      | 2                      | 13                     | 1         | 1         | 3          | 3          | 4          | –          | 5          |
| 72           | 46           | 12                    | 8                       | –                      | 1                      | 10                     | 1         | 1         | –          | 1          | 5          | 2          | 5          |
| 73           | 30           | 8                     | 6                       | 2                      | 2                      | 4                      | –         | 1         | –          | –          | 3          | –          | 4          |
| 74           | 32           | 12                    | 4                       | –                      | 1                      | 5                      | –         | 2         | –          | 1          | 3          | 3          | 1          |
| 75 and over  | 104          | 31                    | 14                      | 2                      | 8                      | 24                     | 1         | 1         | 2          | 2          | 9          | 1          | 9          |
| <b>Total</b> | <b>5,643</b> | <b>1,458</b>          | <b>591</b>              | <b>119</b>             | <b>317</b>             | <b>1,493</b>           | <b>88</b> | <b>72</b> | <b>147</b> | <b>201</b> | <b>558</b> | <b>116</b> | <b>483</b> |

<sup>1</sup> Does not include formerly disabled members.

## Defined Benefit Supplement Program schedules

**Table 2**

### Characteristics of all members retired for service and receiving an annuity

| Fiscal year ended June 30 | Count  | Average monthly retirement annuity | Average accumulated credits <sup>1</sup> | Average age at retirement |
|---------------------------|--------|------------------------------------|--|---------------------------|
| 2024                      | 78,687 | \$349                              | \$29,249                                 | 62.7                      |
| 2023                      | 76,957 | 340                                | 28,538                                   | 62.7                      |
| 2022                      | 75,644 | 330                                | 27,956                                   | 62.7                      |
| 2021                      | 73,689 | 319                                | 27,280                                   | 62.7                      |
| 2020                      | 70,780 | 309                                | 26,555                                   | 62.7                      |
| 2019                      | 68,091 | 301                                | 25,750                                   | 62.7                      |
| 2018                      | 64,796 | 289                                | 24,883                                   | 62.6                      |
| 2017                      | 60,505 | 280                                | 23,873                                   | 62.5                      |
| 2016                      | 56,238 | 269                                | 16,590                                   | 62.4                      |
| 2015                      | 52,335 | 259                                | 15,659                                   | 62.3                      |

<sup>1</sup> Neither service credit nor final compensation are factors in determining a benefit from the DBS Program and, therefore, are not included in this table.

**Table 3**

### Characteristics of all members retired for disability and receiving an annuity

| Fiscal year ended June 30 | Count | Average monthly retirement annuity | Average accumulated credits <sup>1</sup> | Average age at retirement |
|---------------------------|-------|------------------------------------|--|---------------------------|
| 2024                      | 1,412 | \$243                              | \$21,344                                 | 54.5                      |
| 2023                      | 1,447 | 239                                | 21,447                                   | 54.5                      |
| 2022                      | 1,457 | 233                                | 21,079                                   | 54.7                      |
| 2021                      | 1,497 | 239                                | 20,873                                   | 54.9                      |
| 2020                      | 1,501 | 245                                | 20,776                                   | 55.0                      |
| 2019                      | 1,495 | 243                                | 20,441                                   | 55.2                      |
| 2018                      | 1,464 | 244                                | 20,232                                   | 55.2                      |
| 2017                      | 1,428 | 246                                | 19,793                                   | 55.3                      |
| 2016                      | 1,340 | 239                                | 13,953                                   | 55.5                      |
| 2015                      | 1,263 | 245                                | 13,237                                   | 55.6                      |

<sup>1</sup> Neither service credit nor final compensation are factors in determining a benefit from the DBS Program and, therefore, are not included in this table.

## Defined Benefit Supplement Program schedules

Table 4

### Benefit recipients by type of benefit and option elected

(as of June 30, 2024)

| Type of benefit | Monthly annuity amount |               |              |              |                     | Total         |
|-----------------|------------------------|---------------|--------------|--------------|---------------------|---------------|
|                 | Less than \$250        | \$250-500     | \$500-750    | \$750-1,000  | \$1,000 and greater |               |
| Retirement      | 41,804                 | 21,052        | 8,253        | 3,458        | 4,120               | 78,687        |
| Disability      | 1,012                  | 278           | 62           | 25           | 35                  | 1,412         |
| Survivors       | 1,883                  | 455           | 181          | 81           | 132                 | 2,732         |
| <b>Total</b>    | <b>44,699</b>          | <b>21,785</b> | <b>8,496</b> | <b>3,564</b> | <b>4,287</b>        | <b>82,831</b> |

### Type of payment

| Regular annuity          |               |               |              |              |              |               |
|--------------------------|---------------|---------------|--------------|--------------|--------------|---------------|
| Single life with cash    | 23,527        | 7,341         | 1,189        | 378          | 252          | 32,687        |
| Single life without cash | 931           | 1             | —            | —            | —            | 932           |
| 100% joint & survivor    | 11,689        | 3,029         | 533          | 179          | 145          | 15,575        |
| 75% joint & survivor     | 1,862         | 662           | 135          | 36           | 32           | 2,727         |
| 50% joint & survivor     | 3,972         | 1,704         | 310          | 97           | 74           | 6,157         |
| Period-certain annuity   |               |               |              |              |              |               |
| 10 year                  | 2,055         | 7,035         | 3,753        | 1,193        | 1,136        | 15,172        |
| 9 year                   | 94            | 465           | 303          | 112          | 111          | 1,085         |
| 8 year                   | 53            | 235           | 236          | 100          | 81           | 705           |
| 7 year                   | 70            | 324           | 419          | 194          | 180          | 1,187         |
| 6 year                   | 63            | 170           | 356          | 218          | 214          | 1,021         |
| 5 year                   | 228           | 526           | 969          | 743          | 913          | 3,379         |
| 4 year                   | 36            | 93            | 109          | 123          | 293          | 654           |
| 3 year                   | 119           | 200           | 184          | 191          | 856          | 1,550         |
| <b>Total</b>             | <b>44,699</b> | <b>21,785</b> | <b>8,496</b> | <b>3,564</b> | <b>4,287</b> | <b>82,831</b> |

# Cash Balance Benefit Program schedules

Table 1

Participants retired for service during fiscal year 2023-24,  
classified by age and type of annuity elected

| Age          | Total     | Regular annuity                   |                                  |                                 |                                 | Period-certain annuity |            |            |            |            |            |            |            |
|--------------|-----------|-----------------------------------|----------------------------------|---------------------------------|---------------------------------|------------------------|------------|------------|------------|------------|------------|------------|------------|
|              |           | Participant-<br>Only <sup>1</sup> | 100%<br>beneficiary <sup>2</sup> | 75%<br>beneficiary <sup>3</sup> | 50%<br>beneficiary <sup>4</sup> | 10<br>years            | 9<br>years | 8<br>years | 7<br>years | 6<br>years | 5<br>years | 4<br>years | 3<br>years |
| Under 55     | –         | –                                 | –                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | –          | –          |
| 55           | 1         | –                                 | –                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | –          | 1          |
| 56           | –         | –                                 | –                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | –          | –          |
| 57           | 1         | –                                 | –                                | –                               | –                               | –                      | –          | –          | 1          | –          | –          | –          | –          |
| 58           | –         | –                                 | –                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | –          | –          |
| 59           | 1         | 1                                 | –                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | –          | –          |
| 60           | 1         | –                                 | –                                | –                               | 1                               | –                      | –          | –          | –          | –          | –          | –          | –          |
| 61           | 2         | –                                 | –                                | –                               | –                               | –                      | –          | –          | –          | 1          | –          | –          | 1          |
| 62           | 1         | –                                 | –                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | 1          | –          |
| 63           | 2         | 1                                 | –                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | –          | 1          |
| 64           | 1         | –                                 | –                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | –          | 1          |
| 65           | 3         | –                                 | –                                | –                               | –                               | –                      | –          | –          | 1          | –          | 2          | –          | –          |
| 66           | 5         | –                                 | 1                                | –                               | 1                               | –                      | –          | –          | –          | –          | 1          | –          | 2          |
| 67           | 6         | 4                                 | –                                | –                               | –                               | 1                      | –          | –          | –          | –          | –          | –          | 1          |
| 68           | 1         | 1                                 | –                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | –          | –          |
| 69           | 6         | 3                                 | 1                                | –                               | –                               | –                      | 1          | –          | –          | –          | 1          | –          | –          |
| 70           | 3         | 2                                 | –                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | –          | 1          |
| 71           | 2         | –                                 | 1                                | –                               | –                               | –                      | –          | –          | –          | –          | –          | –          | 1          |
| 72           | 3         | 1                                 | 1                                | –                               | –                               | –                      | –          | –          | 1          | –          | –          | –          | –          |
| 73           | 4         | 1                                 | –                                | 1                               | –                               | –                      | –          | –          | –          | –          | 1          | 1          | –          |
| 74           | 5         | –                                 | –                                | –                               | 1                               | 2                      | –          | –          | –          | –          | –          | 1          | 1          |
| 75 and over  | 11        | 1                                 | 2                                | –                               | –                               | 4                      | –          | –          | 2          | –          | –          | –          | 2          |
| <b>Total</b> | <b>59</b> | <b>15</b>                         | <b>6</b>                         | <b>1</b>                        | <b>3</b>                        | <b>7</b>               | <b>1</b>   | <b>–</b>   | <b>5</b>   | <b>1</b>   | <b>5</b>   | <b>3</b>   | <b>12</b>  |

<sup>1</sup> Formerly known as the single life annuity with cash refund.

<sup>2</sup> Formerly known as the 100% joint and survivor annuity.

<sup>3</sup> New option available for selection effective January 1, 2007.

<sup>4</sup> Formerly known as the 50% joint and survivor annuity.

## Cash Balance Benefit Program schedules

**Table 2**

### Characteristics of all participants retired for service and receiving an annuity

| Fiscal year ended June 30 | Average age at retirement | Average annuitant reserve | Average monthly annuity |
|---------------------------|---------------------------|---------------------------|-------------------------|
| 2024                      | 68.9                      | \$35,041                  | \$378                   |
| 2023                      | 68.9                      | 33,857                    | 352                     |
| 2022                      | 68.9                      | 32,363                    | 354                     |
| 2021                      | 68.7                      | 31,205                    | 340                     |
| 2020                      | 68.7                      | 29,791                    | 338                     |
| 2019                      | 68.5                      | 28,665                    | 322                     |
| 2018 <sup>1</sup>         | 68.3                      | 27,869                    | 335                     |
| 2017                      | 68.0                      | 26,501                    | 308                     |
| 2016                      | 67.9                      | 21,700                    | 270                     |
| 2015                      | 67.6                      | 20,815                    | 251                     |

<sup>1</sup> Revised in 2019.

**Table 3**

### All participants receiving an annuity by type of benefit and type of annuity elected

(as of June 30, 2024)

| Type of benefit | Monthly annuity amount |            |           |             |                     | Total      |
|-----------------|------------------------|------------|-----------|-------------|---------------------|------------|
|                 | Less than \$250        | \$250-500  | \$500-750 | \$750-1,000 | \$1,000 and greater |            |
| Retirement      | 274                    | 137        | 61        | 23          | 34                  | 529        |
| Disability      | –                      | 2          | –         | –           | 2                   | 4          |
| Survivors       | 12                     | 9          | 3         | 1           | 1                   | 26         |
| <b>Total</b>    | <b>286</b>             | <b>148</b> | <b>64</b> | <b>24</b>   | <b>37</b>           | <b>559</b> |

#### Type of payment

| Regular annuity          |            |            |           |           |           |            |
|--------------------------|------------|------------|-----------|-----------|-----------|------------|
| Single life with cash    | 1          | –          | –         | –         | –         | 1          |
| Single life without cash | 1          | 1          | –         | –         | –         | 2          |
| Participant-Only         | 153        | 78         | 23        | 4         | 1         | 259        |
| 100% beneficiary annuity | 58         | 18         | 5         | 2         | 1         | 84         |
| 75% beneficiary annuity  | 4          | 3          | 3         | –         | –         | 10         |
| 50% beneficiary annuity  | 15         | 4          | 1         | –         | 1         | 21         |
| Period-certain annuity   |            |            |           |           |           |            |
| 10 year                  | 36         | 20         | 17        | 5         | 4         | 82         |
| 9 year                   | 3          | 4          | –         | 1         | 1         | 9          |
| 8 year                   | 1          | 2          | 1         | 2         | –         | 6          |
| 7 year                   | –          | 1          | 4         | 1         | 2         | 8          |
| 6 year                   | 2          | –          | 3         | –         | 1         | 6          |
| 5 year                   | 7          | 9          | 5         | 2         | 8         | 31         |
| 4 year                   | 1          | 3          | 1         | 2         | 3         | 10         |
| 3 year                   | 4          | 5          | 1         | 5         | 15        | 30         |
| <b>Total</b>             | <b>286</b> | <b>148</b> | <b>64</b> | <b>24</b> | <b>37</b> | <b>559</b> |

# Cash Balance Benefit Program schedules

Table 4

## Largest participating employers for the Cash Balance Benefit Program, current year and nine years ago

### Fiscal year 2023–24

| Participating employers                       | Covered employees <sup>1</sup> | Percentage of total system |
|---|--------------------------------|----------------------------|
| Los Angeles Community College District        | 6,644                          | 15.1%                      |
| Contra Costa Community College District       | 2,794                          | 6.3%                       |
| Peralta Community College District            | 2,696                          | 6.1%                       |
| West Contra Costa Unified School District     | 2,126                          | 4.8%                       |
| City College of San Francisco                 | 2,024                          | 4.6%                       |
| San Jose/Evergreen Community College District | 1,961                          | 4.5%                       |
| Foothill De Anza Community College District   | 1,862                          | 4.2%                       |
| Glendale Community College District           | 1,816                          | 4.1%                       |
| Chabot-Las Positas Community College District | 1,792                          | 4.1%                       |
| Grossmont Union High                          | 1,611                          | 3.7%                       |
| <b>Top 10 total</b>                           | <b>25,326</b>                  | <b>57.5%</b>               |
| All other                                     | 18,690                         | 42.5%                      |
| <b>Total covered employees</b>                | <b>44,016</b>                  | <b>100.0%</b>              |

### Fiscal year 2014–15

| Participating employers                       | Covered employees <sup>1</sup> | Percentage of total system |
|---|--------------------------------|----------------------------|
| Los Angeles Community College District        | 5,030                          | 13.4%                      |
| Contra Costa Community College District       | 2,508                          | 6.7%                       |
| Peralta Community College District            | 2,338                          | 6.2%                       |
| West Contra Costa Unified School District     | 2,129                          | 5.7%                       |
| City College of San Francisco                 | 1,961                          | 5.2%                       |
| San Jose/Evergreen Community College District | 1,871                          | 5.0%                       |
| Chabot-Las Positas Community College District | 1,762                          | 4.7%                       |
| Foothill De Anza Community College District   | 1,655                          | 4.4%                       |
| Glendale Community College District           | 1,516                          | 4.0%                       |
| Santa Rosa Junior College                     | 1,497                          | 4.0%                       |
| <b>Top 10 total</b>                           | <b>22,267</b>                  | <b>59.3%</b>               |
| All other                                     | 15,275                         | 40.7%                      |
| <b>Total covered employees</b>                | <b>37,542</b>                  | <b>100.0%</b>              |

<sup>1</sup> Covered employees are calculated as all employees for whom an employer reports service credit during the fiscal year. Covered employees in this table are counted more than once if they are reported by multiple employers. They are also counted if their employer reports service credit for a retired employee from prior fiscal years. Therefore, the total number of covered employees in this table is higher than the number of active members shown in Table 11 of the Actuarial section under the CBB Program.



## Programs administered or overseen by the retirement system (Pension2)

Table 1A

### Changes in fiduciary net position for the Pension2 IRC 403(b) Plan

(dollars in thousands)

|  | Fiscal year ended June 30 |                  |                  |                  |                  |                  |                  |                  |                  |                 |
|--|---------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
|  | 2024                      | 2023             | 2022             | 2021             | 2020             | 2019             | 2018             | 2017             | 2016             | 2015            |
| <b>Additions</b>                         |                           |                  |                  |                  |                  |                  |                  |                  |                  |                 |
| Participant contributions                | \$285,954                 | \$229,088        | \$226,996        | \$217,424        | \$198,217        | \$174,230        | \$122,113        | \$121,945        | \$96,347         | \$72,042        |
| Employer contributions                   | 3,103                     | 2,615            | 1,955            | 1,137            | 590              | 982              | 369              | 393              | 377              | 301             |
| Net investment income (loss)             | 247,306                   | 163,960          | (141,643)        | 291,739          | 35,903           | 51,467           | 65,104           | 77,730           | 9,548            | 19,363          |
| Other income                             | 540                       | 333              | 288              | 397              | 306              | 273              | 309              | 141              | 120              | 91              |
| <b>Total additions</b>                   | <b>\$536,903</b>          | <b>\$395,996</b> | <b>\$87,596</b>  | <b>\$510,697</b> | <b>\$235,016</b> | <b>\$226,952</b> | <b>\$187,895</b> | <b>\$200,209</b> | <b>\$106,392</b> | <b>\$91,797</b> |
| <b>Deductions</b>                        |                           |                  |                  |                  |                  |                  |                  |                  |                  |                 |
| Distributions and withdrawals            | \$127,531                 | \$111,059        | \$82,197         | \$79,744         | \$63,994         | \$67,772         | \$48,481         | \$36,322         | \$32,936         | \$32,648        |
| Refunds of participant contributions     | 7,329                     | 4,005            | 4,625            | 6,524            | 6,068            | 5,754            | 5,614            | 4,657            | 4,965            | 7,753           |
| Administrative expenses                  | 5,972                     | 4,945            | 4,765            | 4,065            | 3,179            | 2,739            | 2,406            | 1,975            | 1,583            | 1,405           |
| <b>Total deductions</b>                  | <b>\$140,832</b>          | <b>\$120,009</b> | <b>\$91,587</b>  | <b>\$90,333</b>  | <b>\$73,241</b>  | <b>\$76,265</b>  | <b>\$56,501</b>  | <b>\$42,954</b>  | <b>\$39,484</b>  | <b>\$41,806</b> |
| <b>Changes in fiduciary net position</b> | <b>\$396,071</b>          | <b>\$275,987</b> | <b>(\$3,991)</b> | <b>\$420,364</b> | <b>\$161,775</b> | <b>\$150,687</b> | <b>\$131,394</b> | <b>\$157,255</b> | <b>\$66,908</b>  | <b>\$49,991</b> |

Table 1B

### Changes in fiduciary net position for the Pension2 IRC 457(b) Plan

(dollars in thousands)

|  | Fiscal year ended June 30 |                 |                 |                 |                 |                 |                |                |                |                |
|--|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|
|  | 2024                      | 2023            | 2022            | 2021            | 2020            | 2019            | 2018           | 2017           | 2016           | 2015           |
| <b>Additions</b>                         |                           |                 |                 |                 |                 |                 |                |                |                |                |
| Participant contributions                | \$28,746                  | \$21,642        | \$21,312        | \$17,084        | \$13,302        | \$9,307         | \$7,038        | \$6,516        | \$4,898        | \$4,025        |
| Employer contributions                   | 367                       | 274             | 169             | 146             | 126             | 110             | 85             | 44             | 77             | 71             |
| Net investment income (loss)             | 19,567                    | 11,787          | (11,095)        | 17,771          | 1,343           | 2,432           | 2,555          | 3,338          | 426            | 547            |
| Other income                             | 23                        | 14              | 10              | 11              | 11              | 10              | 11             | 8              | 4              | 2              |
| <b>Total additions</b>                   | <b>\$48,703</b>           | <b>\$33,717</b> | <b>\$10,396</b> | <b>\$35,012</b> | <b>\$14,782</b> | <b>\$11,859</b> | <b>\$9,689</b> | <b>\$9,906</b> | <b>\$5,405</b> | <b>\$4,645</b> |
| <b>Deductions</b>                        |                           |                 |                 |                 |                 |                 |                |                |                |                |
| Distributions and withdrawals            | \$5,041                   | \$4,199         | \$2,757         | \$3,151         | \$2,358         | \$1,659         | \$1,411        | \$769          | \$905          | \$807          |
| Refunds of participant contributions     | 648                       | 121             | 1,302           | 89              | 54              | 141             | 88             | 36             | 266            | –              |
| Administrative expenses                  | 412                       | 309             | 278             | 222             | 152             | 122             | 100            | 79             | 56             | 47             |
| <b>Total deductions</b>                  | <b>\$6,101</b>            | <b>\$4,629</b>  | <b>\$4,337</b>  | <b>\$3,462</b>  | <b>\$2,564</b>  | <b>\$1,922</b>  | <b>\$1,599</b> | <b>\$884</b>   | <b>\$1,227</b> | <b>\$854</b>   |
| <b>Changes in fiduciary net position</b> | <b>\$42,602</b>           | <b>\$29,088</b> | <b>\$6,059</b>  | <b>\$31,550</b> | <b>\$12,218</b> | <b>\$9,937</b>  | <b>\$8,090</b> | <b>\$9,022</b> | <b>\$4,178</b> | <b>\$3,791</b> |

## Programs administered or overseen by the retirement system (Pension2)

Table 2

### Largest participating employers for CalSTRS Pension2, current year and nine years ago

| Fiscal year 2023–24                     |                                |                            |
|---|--------------------------------|----------------------------|
| Participating employers                 | Covered employees <sup>1</sup> | Percentage of total system |
| Los Angeles Unified School District     | 3,876                          | 11.4%                      |
| Los Angeles Community College District  | 761                            | 2.2%                       |
| Elk Grove Unified School District       | 687                            | 2.0%                       |
| San Diego Unified School District       | 665                            | 2.0%                       |
| San Francisco Unified School District   | 508                            | 1.5%                       |
| Los Rios Community College District     | 397                            | 1.2%                       |
| City College of San Francisco           | 308                            | 0.9%                       |
| Long Beach Unified School District      | 297                            | 0.9%                       |
| Oakland Unified School District         | 287                            | 0.8%                       |
| Sacramento City Unified School District | 272                            | 0.8%                       |
| <b>Top 10 total</b>                     | <b>8,058</b>                   | <b>23.7%</b>               |
| All other                               | 25,971                         | 76.3%                      |
| <b>Total covered employees</b>          | <b>34,029</b>                  | <b>100.0%</b>              |

| Fiscal year 2014–15                     |                                |                            |
|---|--------------------------------|----------------------------|
| Participating employers                 | Covered employees <sup>1</sup> | Percentage of total system |
| Los Angeles Unified School District     | 2,101                          | 17.0%                      |
| San Diego Unified School District       | 269                            | 2.2%                       |
| Los Angeles Community College District  | 268                            | 2.2%                       |
| Fremont Unified School District         | 196                            | 1.6%                       |
| San Francisco Unified School District   | 172                            | 1.4%                       |
| City College of San Francisco           | 153                            | 1.2%                       |
| Long Beach Unified School District      | 138                            | 1.1%                       |
| Elk Grove Unified School District       | 130                            | 1.1%                       |
| Sacramento City Unified School District | 126                            | 1.0%                       |
| San Juan Unified School District        | 108                            | 0.9%                       |
| <b>Top 10 total</b>                     | <b>3,661</b>                   | <b>29.7%</b>               |
| All other                               | 8,662                          | 70.3%                      |
| <b>Total covered employees</b>          | <b>12,323</b>                  | <b>100.0%</b>              |

<sup>1</sup> If employers offer a 403(b) or 457(b), they are counted twice; totals also include all accounts with or without balances.

# Medicare Premium Payment Program

**Table 1**

## Changes in fiduciary net position for the Medicare Premium Payment Program

(dollars in thousands)

|  | Fiscal year ended June 30 |                 |                 |                 |                 |                  |                 |                 |                 |                 |
|--|---------------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|  | 2024                      | 2023            | 2022            | 2021            | 2020            | 2019             | 2018            | 2017            | 2016            | 2015            |
| <b>Additions</b>                         |                           |                 |                 |                 |                 |                  |                 |                 |                 |                 |
| Employer contributions                   | \$23,590                  | \$25,812        | \$26,352        | \$26,988        | \$27,685        | \$27,977         | \$28,218        | \$29,117        | \$29,982        | \$30,527        |
| Net investment income                    | 56                        | 31              | 1               | 6               | 25              | 29               | 18              | 11              | 9               | –               |
| <b>Total additions</b>                   | <b>\$23,646</b>           | <b>\$25,843</b> | <b>\$26,353</b> | <b>\$26,994</b> | <b>\$27,710</b> | <b>\$28,006</b>  | <b>\$28,236</b> | <b>\$29,128</b> | <b>\$29,991</b> | <b>\$30,527</b> |
| <b>Deductions</b>                        |                           |                 |                 |                 |                 |                  |                 |                 |                 |                 |
| Premiums paid                            | \$23,094                  | \$25,103        | \$25,776        | \$26,377        | \$27,217        | \$27,546         | \$28,036        | \$28,929        | \$29,661        | \$30,615        |
| Administrative expenses                  | 368                       | 544             | 468             | 788             | 510             | 1,901            | 578             | 168             | 380             | 360             |
| Other expenses                           | 1                         | 1               | 1               | –               | 2               | 1                | –               | –               | –               | –               |
| <b>Total deductions</b>                  | <b>\$23,463</b>           | <b>\$25,648</b> | <b>\$26,245</b> | <b>\$27,165</b> | <b>\$27,729</b> | <b>\$29,448</b>  | <b>\$28,614</b> | <b>\$29,097</b> | <b>\$30,041</b> | <b>\$30,975</b> |
| <b>Changes in fiduciary net position</b> | <b>\$183</b>              | <b>\$195</b>    | <b>\$108</b>    | <b>(\$171)</b>  | <b>(\$19)</b>   | <b>(\$1,442)</b> | <b>(\$378)</b>  | <b>\$31</b>     | <b>(\$50)</b>   | <b>(\$448)</b>  |

**Table 2**

## Benefit deductions from changes in fiduciary net position by type

(dollars in thousands)

|                                  | Fiscal year ended June 30 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|----------------------------------|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                  | 2024                      | 2023            | 2022            | 2021            | 2020            | 2019            | 2018            | 2017            | 2016            | 2015            |
| <b>Type of benefit</b>           |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| <b>Age and services benefits</b> |                           |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Retired members                  | \$23,094                  | \$25,103        | \$25,776        | \$26,377        | \$27,217        | \$27,546        | \$28,036        | \$28,929        | \$29,661        | \$30,615        |
| <b>Total benefits</b>            | <b>\$23,094</b>           | <b>\$25,103</b> | <b>\$25,776</b> | <b>\$26,377</b> | <b>\$27,217</b> | <b>\$27,546</b> | <b>\$28,036</b> | <b>\$28,929</b> | <b>\$29,661</b> | <b>\$30,615</b> |

# Medicare Premium Payment Program

**Table 3**

**Retired members enrolled in Medicare Premium Payment Program during fiscal year 2023–24, classified by age at retirement**

| Age                | Count    |
|--------------------|----------|
| <55                | 1        |
| 55-56              | –        |
| 56-57              | 1        |
| 57-58              | 1        |
| 58-59              | –        |
| 59-60              | –        |
| 60-61              | 3        |
| 61-62              | –        |
| 62-63              | –        |
| 63-64              | –        |
| 64-75              | –        |
| 75 and over        | –        |
| <b>Grand total</b> | <b>6</b> |

**Table 4**

**Characteristics of all retired members enrolled in Medicare Premium Payment Program**

| Fiscal year ended June 30 | Average age at retirement | Average monthly Medicare premium |
|---------------------------|---------------------------|----------------------------------|
| 2024                      | 60.0                      | \$452                            |
| 2023                      | 60.0                      | 452                              |
| 2022                      | 60.1                      | 436                              |
| 2021                      | 60.0                      | 419                              |
| 2020                      | 60.1                      | 405                              |
| 2019                      | 60.1                      | 390                              |
| 2018                      | 60.1                      | 380                              |
| 2017                      | 60.2                      | 376                              |
| 2016                      | 60.2                      | 374                              |
| 2015                      | 60.2                      | 383                              |

# Teachers' Deferred Compensation Fund

Table 1

## Changes in fiduciary net position for the Teachers' Deferred Compensation Fund

(dollars in thousands)

|  | Fiscal year ended June 30 |                |                |                |                |                |                |                |                |                |
|--|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|  | 2024                      | 2023           | 2022           | 2021           | 2020           | 2019           | 2018           | 2017           | 2016           | 2015           |
| <b>Additions</b>                         |                           |                |                |                |                |                |                |                |                |                |
| Net investment income (loss)             | \$214                     | \$66           | (\$31)         | \$1            | \$40           | \$39           | \$17           | \$9            | \$6            | \$1            |
| Other income                             | 1,977                     | 1,960          | 1,964          | 2,089          | 1,893          | 1,743          | 1,607          | 1,453          | 1,339          | 1,072          |
| <b>Total additions</b>                   | <b>\$2,191</b>            | <b>\$2,026</b> | <b>\$1,933</b> | <b>\$2,090</b> | <b>\$1,933</b> | <b>\$1,782</b> | <b>\$1,624</b> | <b>\$1,462</b> | <b>\$1,345</b> | <b>\$1,073</b> |
| <b>Deductions</b>                        |                           |                |                |                |                |                |                |                |                |                |
| Administrative expenses                  | \$1,013                   | \$1,118        | \$1,001        | \$1,844        | \$1,502        | \$1,622        | \$2,198        | \$1,542        | \$1,433        | \$996          |
| Other expenses                           | 5                         | 4              | 2              | —              | 4              | 3              | —              | 22             | 14             | 14             |
| <b>Total deductions</b>                  | <b>\$1,018</b>            | <b>\$1,122</b> | <b>\$1,003</b> | <b>\$1,844</b> | <b>\$1,506</b> | <b>\$1,625</b> | <b>\$2,198</b> | <b>\$1,564</b> | <b>\$1,447</b> | <b>\$1,010</b> |
| <b>Changes in fiduciary net position</b> | <b>\$1,173</b>            | <b>\$904</b>   | <b>\$930</b>   | <b>\$246</b>   | <b>\$427</b>   | <b>\$157</b>   | <b>(\$574)</b> | <b>(\$102)</b> | <b>(\$102)</b> | <b>\$63</b>    |



**CALSTRS**  
HOW WILL YOU SPEND YOUR FUTURE?