

California State Teachers' Retirement System

(A component unit of the State of California)

Independent auditor's report

Basic financial statements

Notes to the basic financial statements

Required supplementary information

Other supplementary information

For the fiscal year ended June 30, 2024

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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 respective 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 4 - 20 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 59 - 66 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.

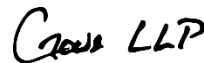
We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency 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 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

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 ¹	\$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%
Total assets	392,142,048	359,758,032	9.0%
Deferred outflows of resources	165,165	174,427	(5.3%)
Total assets and deferred outflows of resources	392,307,213	359,932,459	9.0%
Liabilities and deferred inflows of resources			
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%
Total liabilities	50,965,709	42,742,914	19.2%
Deferred inflows of resources	323,828	271,035	19.5%
Total liabilities and deferred inflows of resources	51,289,537	43,013,949	19.2%
NET POSITION RESTRICTED FOR PENSIONS	\$341,017,676	\$316,918,510	7.6%

¹ 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%
Total additions	43,830,538	35,748,672	22.6%
Deductions			
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%)
Total deductions	19,731,372	18,886,447	4.5%
Increase in net position	24,099,166	16,862,225	42.9%
Net position restricted for pensions			
Beginning of the year	316,918,510	300,056,285	5.6%
END OF THE YEAR	\$341,017,676	\$316,918,510	7.6%

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.

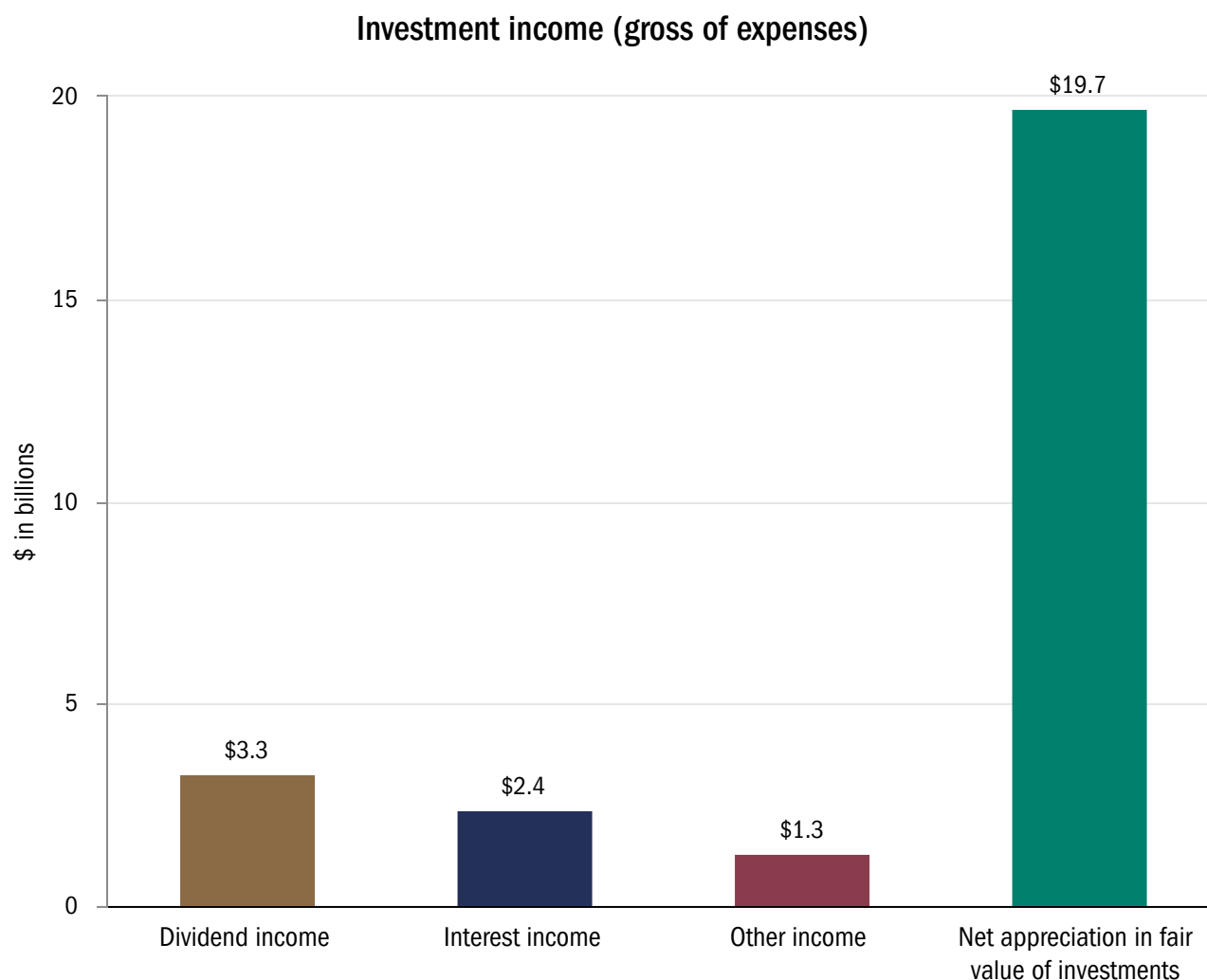
For the fiscal year ended June 30, 2024, our time-weighted return calculated on a net-of-fees basis was 8.4%. CalSTRS is a long-term investor with a goal of achieving an average return of 7.0% over a multiyear horizon to meet pension obligations. Our returns (net of fees) reflect the following long-term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

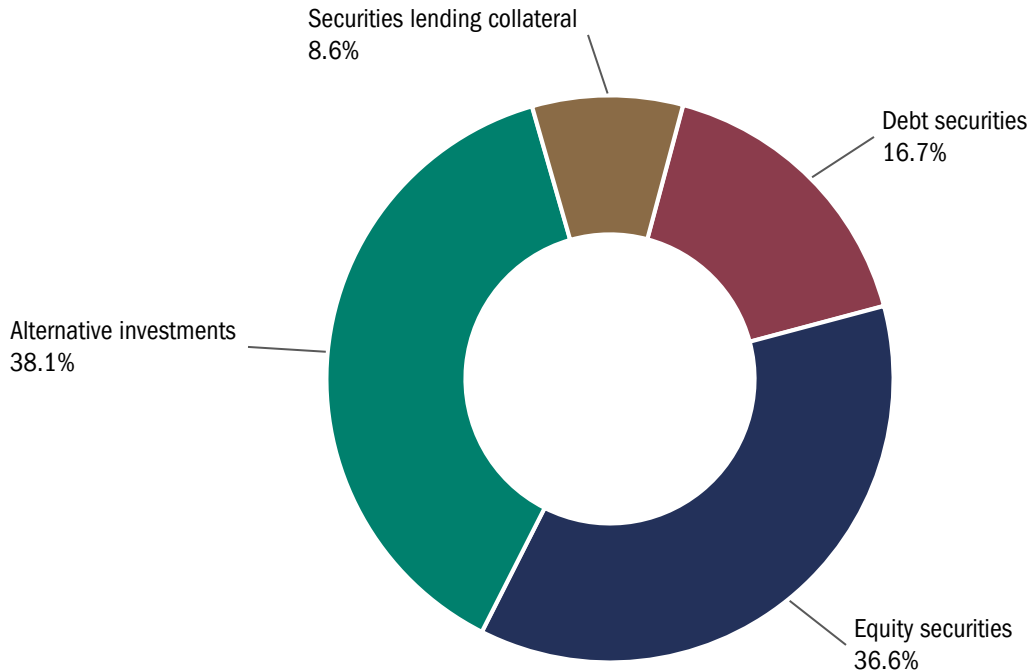
Other income consists primarily of distributed income from alternative investments (such as rent), term loans and securities litigation. Net appreciation consists of realized gains (losses) and unrealized appreciation (depreciation). Realized gains and losses are generally a result of investment sales, 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^{1,2,3}



¹ 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.

² 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.

³ 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 ¹	41.4%	Equity securities	97.5%
		Debt securities	1.3%
		Alternative investments	0.9%
		Other ²	0.3%
Private Equity ¹	15.5%	Alternative investments	100.0%
Real Estate ¹	13.9%	Alternative investments	99.7%
		Equity securities	0.4%
		Debt securities	(1.1%)
		Other ²	1.0%
Fixed Income	11.2%	Debt securities	101.9%
		Alternative investments	1.4%
		Other ²	(3.3%)
Risk Mitigating Strategies	8.4%	Alternative investments	72.3%
		Debt securities	27.4%
		Other ²	0.3%
Inflation Sensitive	6.3%	Alternative investments	67.9%
		Debt securities	31.6%
		Other ²	0.5%
Cash/Liquidity	1.7%	Debt securities	129.8%
		Other ²	(29.8%)
Collaborative Strategies ¹	1.6%	Alternative investments	99.1%
		Equity securities	0.9%
Strategic Overlay ³	0.0%	Debt securities	839.8%
		Derivative instruments	(4.2%)
		Other ²	(735.6%)
Total Fund	100.0%		

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

² 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%.

³ 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/ Strategy	Effective date				Long-term target
	7/1/23 Step 1	7/1/24 Step 2	TBD Step 3	TBD 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 Strategies	10.0%	10.0%	10.0%	10.0%	10.0%
Inflation 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

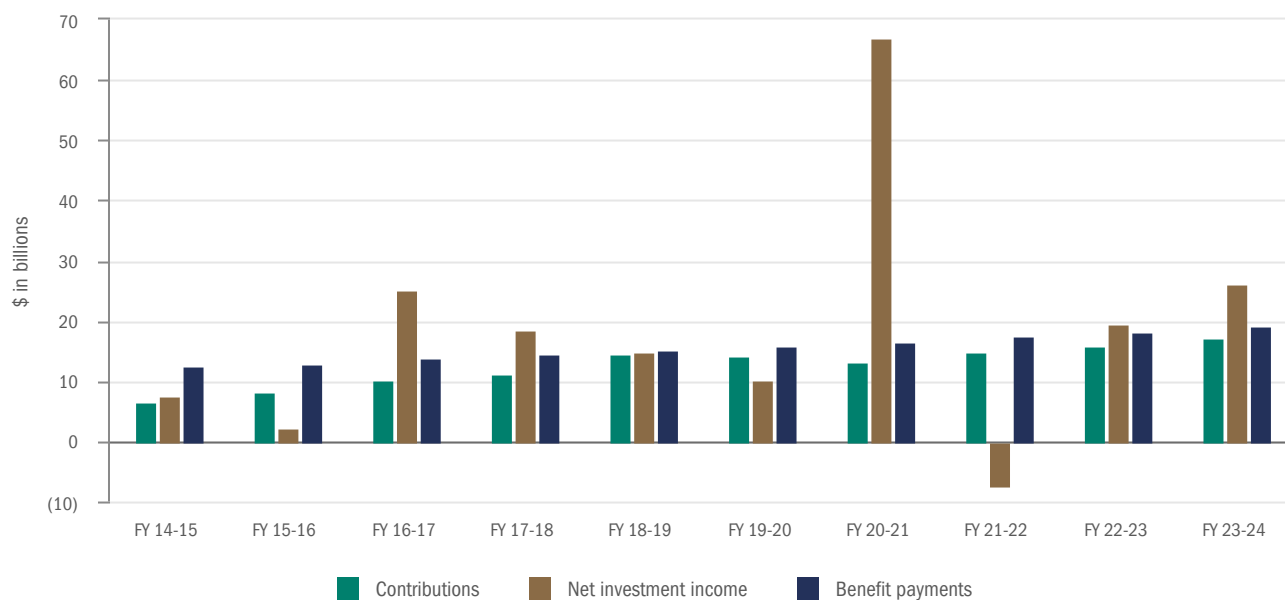
average rating of AA/Aa or higher. The discount rate as of June 30, 2024, for the MPP Program OPEB liability was 3.93% as measured by the Bond Buyer's 20-Bond GO Index as of June 30, 2024.

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.

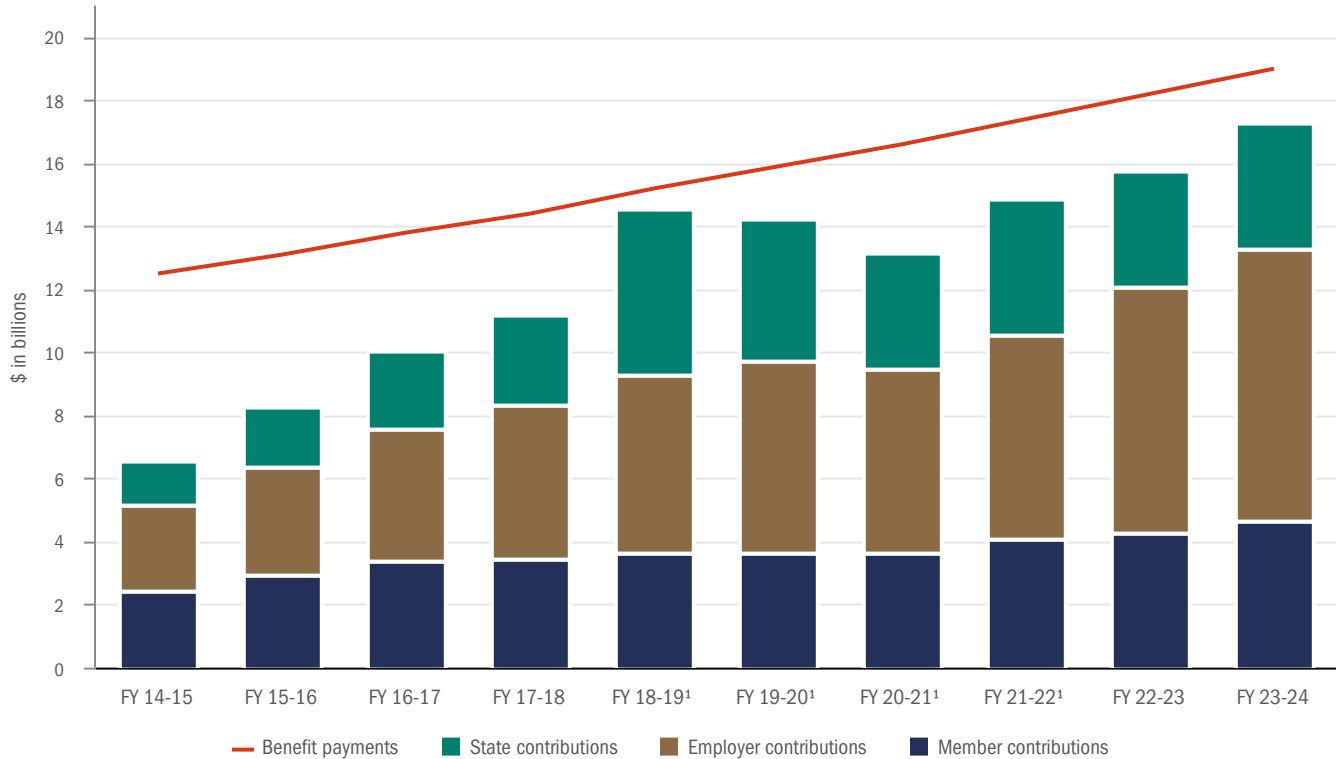


Note: Each data set shown by fiscal year in the chart above is presented in the order of contributions on the left, net investment income in the middle and benefit payments on the right.

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.

¹ 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 Teachers' Retirement Plan	Pension2 403(b) Plan	Pension2 457(b) Plan	Medicare Premium Payment Program	Teachers' Deferred Compensation Fund	Total
Assets and deferred outflows of resources						
Investments						
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
Total investment assets	378,439,722	2,321,776	171,948	340	4,528	380,938,314
Cash	280,459	—	—	—	—	280,459
Receivables						
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
Total receivables	12,607,517	23,889	2,114	16	51	12,633,587
Other assets						
Capital assets, net of accumulated depreciation	813,975	—	—	—	—	813,975
Other	375	—	—	—	2	377
Total other assets	814,350	—	—	—	2	814,352
Total assets	392,142,048	2,345,665	174,062	356	4,581	394,666,712
Deferred outflows of resources	165,165	—	—	370	895	166,430
Total assets and deferred outflows of resources	392,307,213	2,345,665	174,062	726	5,476	394,833,142
Liabilities and deferred inflows of resources						
Investments						
Derivative instruments	348,051	—	—	—	—	348,051
Total investment liabilities	348,051	—	—	—	—	348,051
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
Total liabilities	50,965,709	7,796	314	2,385	4,465	50,980,669
Deferred inflows of resources	323,828	—	—	1,029	2,006	326,863
Total liabilities and deferred inflows of resources	51,289,537	7,796	314	3,414	6,471	51,307,532
NET POSITION RESTRICTED FOR PENSIONS/OPEB	\$341,017,676	\$2,337,869	\$173,748	(\$2,688)	(\$995)	\$343,525,610

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 Teachers' Retirement Plan	Pension2 403(b) Plan	Pension2 457(b) Plan	Medicare Premium Payment Program	Teachers' Deferred Compensation Fund	Total
Additions						
Contributions						
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
Total contributions	17,266,130	289,057	29,113	23,590	—	17,607,890
Investment income						
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
Investment expenses						
Cost of lending securities	(1,652,274)	—	—	—	—	(1,652,274)
Reverse repurchase agreements	(26,325)	—	—	—	—	(26,325)
Other investment expenses	(435,348)	—	—	—	—	(435,348)
Net investment income	26,173,060	247,306	19,567	56	214	26,440,203
Other income	391,348	540	23	—	1,977	393,888
Total additions	43,830,538	536,903	48,703	23,646	2,191	44,441,981
Deductions						
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
Total deductions	19,731,372	140,832	6,101	23,463	1,018	19,902,786
Increase in net position	24,099,166	396,071	42,602	183	1,173	24,539,195
Net position restricted for pensions/OPEB						
Beginning of the year	316,918,510	1,941,798	131,146	(2,871)	(2,168)	318,986,415
END OF THE YEAR	\$341,017,676	\$2,337,869	\$173,748	(\$2,688)	(\$995)	\$343,525,610

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.

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

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 2% at 60 members	CalSTRS 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 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%	1	1
July 1, 2046	8.250%	Increase from AB 1469 not applicable in 2046-47 and beyond	

¹ 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

- 1 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%.
- 2 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:

Reserve type	Reserve balance
	(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
TOTAL	\$343,525,610

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
NPL of employers and the State of California	\$67,163
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 ¹	July 1, 2007–June 30, 2022
Actuarial cost method	Entry age actuarial cost method
Investment rate of return ²	7.10%
Consumer price inflation	2.75%
Wage growth	3.50%
Payroll growth	3.25%
Postretirement benefit increases	2% simple for DB (annually) Maintain 85% purchasing power level for DB, not applicable for DBS/CBB

¹ 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.

² 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/ Strategy	Assumed asset allocation	Long-term expected rate of return ¹	Long-term expected real rate of return ^{1,2}
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 Strategies	10.0%	5.00%	2.25%
Inflation Sensitive	7.0%	6.40%	3.65%
Cash/Liquidity	2.0%	2.80%	0.05%

¹ 20- to 30-year geometric average.

² 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 (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 (dollars in thousands)	
Total OPEB liability	\$263,860
Less: MPP Program fiduciary net position	(2,688)
Net OPEB liability of employers	\$266,548
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 ¹	July 1, 2007– June 30, 2022
Actuarial cost method	Entry age actuarial cost method
Investment rate of return	3.93%
Medicare Part A premium costs trend rate ²	5.0%
Medicare Part B premium costs trend rate ²	6.5%

¹ 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.

² 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 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 Years ¹	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%

¹ 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 of employers
	(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 Teachers' Retirement Plan	Pension2 403(b) Plan	Pension2 457(b) Plan	Medicare Premium Payment Program	Teachers' Deferred Compensation	Total
Assets						
Debt securities						
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
Total debt securities	62,931,246	937,846	50,582	340	4,528	63,924,542
Equity securities						
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
Total equity securities	138,429,197	1,383,930	121,366	—	—	139,934,493
Alternative investments						
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
Total alternative investments	144,180,234	—	—	—	—	144,180,234
Derivative instruments						
Forwards	219,509	—	—	—	—	219,509
Futures	53,224	—	—	—	—	53,224
Options	876	—	—	—	—	876
Rights and warrants	263	—	—	—	—	263
Swaps	46,676	—	—	—	—	46,676
Total derivative instruments	320,548	—	—	—	—	320,548
Securities lending collateral	32,564,283	—	—	—	—	32,564,283
Bond proceeds investment	14,214	—	—	—	—	14,214
Total investment assets	378,439,722	2,321,776	171,948	340	4,528	380,938,314
Liabilities						
Derivative instruments						
Forwards	260,253	—	—	—	—	260,253
Futures	33,660	—	—	—	—	33,660
Options	2,075	—	—	—	—	2,075
Swaps	52,063	—	—	—	—	52,063
Total derivative instruments	348,051	—	—	—	—	348,051
Total investment liabilities	348,051	—	—	—	—	348,051
TOTAL NET INVESTMENTS	\$378,091,671	\$2,321,776	\$171,948	\$340	\$4,528	\$380,590,263

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
Long-term ratings										
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
Short-term ratings										
A-1	-	-	-	-	-	-	-	112,130	-	112,130
N/R	-	-	-	-	-	-	8,059,904	-	-	8,059,904
N/A	-	-	-	-	-	-	3,653,087	-	-	3,653,087
TOTAL	\$847,171	\$11,740,175	\$803,166	\$10,593,233	\$85,655	\$27,178,957	\$11,712,991	\$174,654	\$788,540	\$63,924,542

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
Long-term ratings						
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
Short-term ratings						
A-1	—	—	—	—	8,702,176	8,702,176
N/R	—	—	—	—	18,545,222	18,545,222
TOTAL	\$2,146,761	\$2,857,980	\$318	\$311,826	\$27,247,398	\$32,564,283

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
Core portfolio				
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
Debt opportunistic				
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)
TOTAL	\$37,637,990			

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
TOTAL	\$6,020,209	\$3,134,138	\$1,571,727	\$1,098,690	\$378,197	\$—	\$12,202,961
WEIGHTINGS	49.3%	25.7%	12.9%	9.0%	3.1%	0.0%	100.0%

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
TOTAL	\$18,233,784	\$1,775,663	\$2,706,024	\$1,487,882	\$1,779,035	\$6,581,895	\$32,564,283
WEIGHTINGS	56.0%	5.4%	8.3%	4.6%	5.5%	20.2%	100.0%

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
TOTAL		\$199,888

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 ¹	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
Total	\$873,901	\$10,114,539	\$47,905,930	(\$37,726)	\$202,573	\$59,059,217

¹ 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
TOTAL	\$14,214	\$-	\$-	\$-	\$-	\$-	\$14,214
WEIGHTINGS	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

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
Short-term ratings		
N/A	\$14,214	\$14,214
TOTAL	\$14,214	\$14,214

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 for the fiscal year ended June 30, 2024	Fair value	Notional amount ¹
Forwards			
Foreign currency forward contracts	\$105,834	(\$40,744)	19,581,836
Total forwards	105,834	(40,744)	
Futures			
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)
Total futures	361,111	19,564	
Options			
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	–	–
Total options	(2,798)	(1,199)	
Rights and warrants			
Rights	703	161	305 units
Warrants	3,425	102	705 units
Total rights and warrants	4,128	263	
Swaps			
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
Total swaps	111,818	(5,387)	
TOTAL DERIVATIVE INSTRUMENTS	\$580,093	(\$27,503)	

¹ 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
TOTAL	\$1,700	\$11	\$219,509	\$11,750	\$4,016	\$236,986

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
TOTAL	\$11,950	\$12,881	(\$1,539)	(\$5,892)	\$6,500

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
Interest rate swaps total		\$1,938	\$159,460
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
Commodity forward swaps total		(\$9,977)	\$1,343,669
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
Total return swaps total		\$998	(\$4,422)

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 ¹	42.0%	41.0%	+/- 8.0%	41.4%
Real Estate ¹	15.0%	15.0%	+/- 5.0%	13.9%
Private Equity ¹	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 ¹	0.0%	0.0%	0 - 5.0%	1.6%
Strategic Overlay ²	0.0%	0.0%		0.0%
TOTAL ASSET ALLOCATION	100.0%	100.0%		100.0%

¹ 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.

² 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)
Assets				
Investments by fair value level				
Debt securities				
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
Total debt securities	62,559,542	2,059,839	59,126,437	1,373,266
Equity securities				
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
Total equity securities	139,934,493	139,575,270	347,998	11,225
Alternative investments				
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
Total alternative investments	31,814,774	—	—	31,814,774
Derivative instruments				
Forwards	219,509	—	219,509	—
Futures	53,224	53,224	—	—
Options	876	—	876	—
Rights and warrants	263	253	—	10
Swaps	46,676	—	46,676	—
Total derivative instruments	320,548	53,477	267,061	10
Securities lending collateral	26,372,260	1,145,707	25,226,553	—
Bond proceeds investment	14,214	—	14,214	—
Total investment assets recorded at fair value	261,015,831	142,834,293	84,982,263	33,199,275
Investments measured at cost				
Short-term securities	1,365,000	—	—	—
Securities lending collateral	6,192,023	—	—	—
Total investments measured at cost	7,557,023	—	—	—
Investments measured at NAV				
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	—	—	—
Total investments measured at NAV	112,365,460	—	—	—
Total investment assets	\$380,938,314	—	—	—
Liabilities				
Investments by fair value level				
Derivative instruments				
Forwards	\$260,253	\$—	\$260,253	\$—
Futures	33,660	33,660	—	—
Options	2,075	—	2,075	—
Swaps	52,063	—	52,063	—
Total derivative instruments	348,051	33,660	314,391	—
Total investment liabilities recorded at fair value	\$348,051	\$33,660	\$314,391	\$—
TOTAL NET INVESTMENTS	\$380,590,263	—	—	—

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

¹ 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.

² 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.

³ 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.

⁴ 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.

⁵ 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.

⁶ 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.

⁷ 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.

⁸ 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.

⁹ 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 June 30, 2023	Increases	Decreases	Balance as of June 30, 2024	Due within one 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
Bonds payable, net	\$348,698	\$—	(\$7,992)	\$340,706	\$7,957

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 ending June 30	Principal	Interest	Total debt 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
TOTAL	\$282,570	\$218,924	\$501,494

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:

Asset class/Strategy	Unfunded commitments (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
TOTAL	\$33,049,018

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 I¹

(dollars in millions)

State Teachers' Retirement Plan

Year ended June 30	2024	2023	2022	2021	2020
Total pension liability					
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 ²	(5,351)	–	–	–	1,029
Benefit payments, including refunds of member contributions	(19,188)	(18,384)	(17,527)	(16,708)	(16,025)
Net change in total pension liability	15,101	23,538	13,741	11,908	14,715
Beginning total pension liability	393,080	369,542	355,801	343,893	329,178
Ending total pension liability (a)	408,181	393,080	369,542	355,801	343,893
Plan fiduciary net position					
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)
Net change in plan fiduciary net position	24,099	16,863	(10,237)	63,309	8,122
Beginning plan fiduciary net position-as previously reported	316,919	300,056	310,293	246,984	238,862
Adjustment for application of new GASB statements	–	–	–	–	–
Beginning plan fiduciary net position-as adjusted	316,919	300,056	310,293	246,984	238,862
Ending plan fiduciary net position (b)	341,018	316,919	300,056	310,293	246,984
ENDING NET PENSION LIABILITY OF EMPLOYERS AND THE STATE (a) – (b)	\$67,163	\$76,161	\$69,486	\$45,508	\$96,909

¹ 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.

² 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 I¹

(dollars in millions)

State Teachers' Retirement Plan

Year ended June 30	2019	2018	2017	2016	2015
Total pension liability					
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 ²	–	–	19,988	–	–
Benefit payments, including refunds of member contributions	(15,296)	(14,537)	(13,903)	(13,149)	(12,565)
Net change in total pension liability	12,402	14,007	32,775	10,848	10,235
Beginning total pension liability	316,776	302,769	269,994	259,146	248,911
Ending total pension liability (a)	329,178	316,776	302,769	269,994	259,146
Plan fiduciary net position					
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 ³	(105)	(94)	(58)	–	–
Other expenses	(4)	(2)	(10)	(15)	(10)
Net change in plan fiduciary net position	13,993	15,091	21,176	(2,709)	1,510
Beginning plan fiduciary net position-as previously reported	224,869	210,289	189,113	191,822	190,474
Adjustment for application of new GASB statements ⁴	–	(511)	–	–	(162)
Beginning plan fiduciary net position-as adjusted	224,869	209,778	189,113	191,822	190,312
Ending plan fiduciary net position (b)	238,862	224,869	210,289	189,113	191,822
ENDING NET PENSION LIABILITY OF EMPLOYERS AND THE STATE⁵ (a) - (b)	\$90,316	\$91,907	\$92,480	\$80,881	\$67,324

¹ 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.

² 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.

³ 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.

⁴ 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.

⁵ 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 II¹

(dollars in millions)

State Teachers' Retirement Plan

Year ended June 30	(a) Total pension liability	(b) Plan fiduciary net position	(a - b) NPL of employers and the state	(b / a) Plan fiduciary net position as a % of total pension liability	(c) Covered payroll	(a - b) / c NPL of employers and the state as a % of 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 ²	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 ³	210.2%

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

² 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.

³ 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) Actuarially determined contributions	Legally required contributions for employers and the state	(b) Employer contributions ^{1,2}	(c) State contributions ³	(b + c) Total contributions	a - (b + c) Contribution deficiency (excess)	(d) Covered payroll	(b + c) / d 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 ⁴	12.8%

¹ 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.

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

³ 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.

⁴ 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 STRP¹

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

¹ 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.

² 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.

³ 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, 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 Program¹

Fiscal year ended June 30 ²	Money-weighted rate of return, 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%

¹ 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.

² 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 ¹	2024	2023	2022	2021
Total OPEB liability				
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 ²	(7,266)	(2,717)	(42,212)	1,874
Premiums paid	(23,094)	(25,103)	(25,776)	(26,377)
Net change in total OPEB liability	(36,706)	(25,779)	(69,345)	(25,092)
Beginning total OPEB liability	300,566	326,345	395,690	420,782
Ending total OPEB liability (a)	263,860	300,566	326,345	395,690
Program fiduciary net position				
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)	—
Net change in program fiduciary net position	183	195	108	(171)
Beginning program fiduciary net position-as previously reported	(2,871)	(3,066)	(3,174)	(3,003)
Adjustment for application of new GASB statements	—	—	—	—
Beginning program fiduciary net position-as adjusted	(2,871)	(3,066)	(3,174)	(3,003)
Ending program fiduciary net position (b)	(2,688)	(2,871)	(3,066)	(3,174)
ENDING NET OPEB LIABILITY OF EMPLOYERS (a) - (b)	\$266,548	\$303,437	\$329,411	\$398,864

¹ 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.

² 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 ¹	2020	2019	2018	2017
Total OPEB liability				
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 ²	70,417	12,111	(10,293)	(31,240)
Premiums paid	(27,217)	(27,546)	(28,036)	(28,929)
Net change in total OPEB liability	51,369	(11,815)	(39,521)	(47,282)
Beginning total OPEB liability	369,413	381,228	420,749	468,031
Ending total OPEB liability (a)	420,782	369,413	381,228	420,749
Program fiduciary net position				
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)	—	—
Net change in program fiduciary net position	(19)	(1,442)	(378)	31
Beginning program fiduciary net position-as previously reported	(2,984)	(1,542)	41	10
Adjustment for application of new GASB statements ³	—	—	(1,205)	—
Beginning program fiduciary net position-as adjusted	(2,984)	(1,542)	(1,164)	10
Ending program fiduciary net position (b)	(3,003)	(2,984)	(1,542)	41
ENDING NET OPEB LIABILITY OF EMPLOYERS⁴ (a) - (b)	\$423,785	\$372,397	\$382,770	\$420,708

¹ 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.

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

³ 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.

⁴ 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 VI¹

(dollars in thousands)

Medicare Premium Payment Program

Year ended June 30 ²	(a) Total OPEB liability	(b) Program fiduciary net position	(a - b) Net OPEB liability of employers	(b / a) Program fiduciary net position as a % of 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%

¹ 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.

² 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 Teachers' Retirement Plan	Pension2 403(b) Plan	Pension2 457(b) Plan	Medicare Premium Payment Program	Teachers' Deferred Compensation Fund	Totals
Personnel services						
Salaries and wages	\$96,357	\$—	\$—	\$220	\$728	\$97,305
Staff benefits	19,954	—	—	70	216	20,240
Accrued pension and OPEB expense ¹	(14,294)	—	—	(121)	(261)	(14,676)
Total personnel services	102,017	—	—	169	683	102,869
Operating expenses and equipment						
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
Total operating expenses and equipment	101,023	5,972	412	199	330	107,936
TOTAL ADMINISTRATIVE EXPENSES	\$203,040	\$5,972	\$412	\$368	\$1,013	\$210,805

¹ 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
Investment management fees		
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
Total investment management fees		159,613

Other supplementary information

Schedule of investment expenses (continued)

Schedule VIII

(dollars in thousands)

	Contract start date	Amount
Advisors and consultants		
Albert Risk Management Consultants	12/1/21	\$139
Albourn 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
Total advisors and consultants		19,058
External services-legal and attorney fees		
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
Total external services-legal and attorney fees		9,126
Global custodian		
State Street Bank & Trust, Co.	10/1/21	5,266
Total global custodian		5,266

Other supplementary information

Schedule of investment expenses (continued)

Schedule VIII

(dollars in thousands)

	Contract start date	Amount
Research and rating services		
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) ¹
Total research and rating services		6,240

Other supplementary information

Schedule of investment expenses (continued)

Schedule VIII

(dollars in thousands)

	Contract start date	Amount
Risk management systems		
BlackRock Financial Management, Inc.	7/1/06	\$7,842
MSCI, Inc. d/b/a Barra, LLC	4/1/24	183
Total risk management systems		8,025
Trading systems		
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
Total trading systems		2,584
Operating expenses		
Administrative costs		63,195
Aon Risk Insurance		3,739
Council of Institutional Investors		38
Total operating expenses		66,972
Subtotal		276,884
Other investment expenses		
Foreign tax withheld		117,785
Real estate		3,181
Broker commissions		20,962
Securities sold short expense		9,257
Miscellaneous		7,279
Total other investment expenses		158,464
TOTAL INVESTMENT EXPENSES		\$435,348

¹ 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
State Teachers' Retirement Plan	
Actuarial services	
Milliman, Inc.	\$1,002
The Segal Company (Western States), Inc.	110
Total actuarial services	1,112
Auditing services	
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
Total auditing services	4,715
Consultant and other professional services	
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
Total consultant and other professional services	106,205
Legal services	
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
Total legal services	2,970
Regional counseling services	
Santa Barbara County Office of Education	32
Total regional counseling services	32
Various services under \$10K	
Others	138
Total various services under \$10K	138
Gross consultant and professional services	115,172
Less: amounts capitalized ¹	74,837
Total State Teachers' Retirement Plan – consultant and professional services net of amounts capitalized	\$40,335
Pension2 – IRC 403(b) Plan	
Administrative services	
Voya Institutional Plan	\$5,972
Total administrative services	5,972
Total Pension2–IRC 403(b) Plan – consultant and professional services	\$5,972
Pension2 – IRC 457(b) Plan	
Administrative services	
Voya Institutional Plan	\$412
Total administrative services	412
Total Pension2–IRC 457(b) Plan – consultant and professional services	\$412
Teachers' Deferred Compensation Fund	
Consultant services	
Morningstar, Inc.	\$76
University Enterprises, Inc.	1
Total consultant services	77
Total Teachers' Deferred Compensation Fund – consultant and professional services	\$77
TOTAL CONSULTANT AND PROFESSIONAL SERVICES	\$46,796

¹ 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.