

Advancing Sustainability

Forward

CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM



Sequoia National Park,
Central California

CALSTRS[®]

COMPREHENSIVE ANNUAL FINANCIAL REPORT
A COMPONENT UNIT OF THE STATE OF CALIFORNIA
FOR THE FISCAL YEAR ENDED JUNE 30, 2016

CALSTRS[®]

CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM

A Component Unit of the State of California
Comprehensive Annual Financial Report
for the Fiscal Year Ended June 30, 2016

Prepared by CalSTRS staff

MISSION

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

STRATEGIC GOALS

Financial

Ensure a financially sound retirement system.

Member/Employer

Enhance services to members and employers.

Business Transformation

Drive operational excellence.

Workforce Transformation

Grow an engaged, highly skilled and diverse workforce.

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



December 15, 2016

Advancing Sustainability Forward

The Comprehensive Annual Financial Report issued by the California State Teachers' Retirement System details the system's performance for the fiscal year beginning July 1, 2015, and ending June 30, 2016.

CalSTRS was established a little more than a century ago in 1913 as the pension plan administrator for California's public school educators and began by representing 120 retired members and 15,000 active members. Over the past 103 years, we have grown to represent more than 900,000 dedicated educators and their families by fulfilling our mission to help them reach a secure retirement future.

And, as a global institutional investor with portfolio assets of \$188.7 billion at the end of fiscal year 2015–16, CalSTRS has a fiduciary duty to be principled and effective within our operations in order to meet the financial commitments to our membership for the next century and beyond. By modeling best practices in corporate governance, shareholder influence through proxy voting, risk-mitigating investment strategies, and providing the highest level of customer service for our members, CalSTRS consistently advocates for the importance of corporate sustainability and long-term value creation.

Risk Mitigation Strategies and Investment Returns

This fiscal year's investment returns of 1.4 percent (net) continued to dip below the actuarially assumed rate of 7.5 percent (net) and emphasize the ongoing importance of implementing risk mitigation strategies within the portfolio. However, the three-year (7.8 percent) and five-year (7.7 percent) performances for the Defined Benefit Fund still surpassed the 7.5 percent assumed return. Slow U.S. and global growth, along with market volatility, left the fund virtually even to where it started the fiscal year in July 2015.

Nonetheless, CalSTRS continues to underscore and emphasize the long-term nature of pension funding as it pertains to investment performance and the need to look beyond the immediate impacts of any single year's returns. And, although meeting investment assumptions is very important to the overall funding picture, it is just one factor in keeping the plan on track. Factors such as member earnings and career and lifetime longevity also play important roles.

Additionally, as part of the 2015 Asset Allocation Study, in February 2016, the Teachers' Retirement Board adopted an investment policy and implementation plan allocating up to 9 percent of the investment portfolio to a Risk Mitigating Strategies asset class. Combined, these strategies play an important and complementary role to ensure a stable, risk-adjusted return profile through portfolio diversification. The Risk Mitigating Strategies allocation is also expected to help the portfolio recover losses suffered during a protracted market downturn or recession, as well as provide greater flexibility to adapt to shifting market conditions.

Implementation of the Defined Benefit Program Funding

CalSTRS continues to implement the various elements of the Funding Plan enacted on July 1, 2014, through Chapter 47, Statutes of 2014 (Assembly Bill 1469—Bonta). The 32-year plan includes a model of shared responsibility through fair and gradual contribution rate increases among CalSTRS members, employers and the state. And, due to the parameters outlined in AB 1469, CalSTRS no longer projects a fund depletion date and instead is making progress toward full funding by the year 2046.

While CalSTRS continues to deal with a gap between its current assets and the obligations facing the system, known as the unfunded actuarial obligation (or unfunded liability), the system is still on track to close its shortfall. A snapshot of the Defined Benefit Program's assets and liabilities as reported in the June 30, 2015, actuarial valuation (released in April 2016) reflects an increase of \$3.5 billion in the unfunded liability, now at \$76.2 billion. Even though the current funding gap has increased by \$3.5 billion since the previous valuation, it is \$8.9 billion less than originally forecast when the long-term funding plan was developed in 2013–14. Because of this, the actual funding status has remained stable at 68.5 percent, unchanged since 2014.

Also, it is important to note that these actuarial valuation numbers are computed differently than the Net Pension Liability (NPL) amounts as defined per Governmental Accounting Standards Board standards, which are reported in the Financial Statements (*Note 3—Net Pension Liability of Employers and Nonemployer Contributing Entity*) section of this report.

UC Berkeley Study Validates Teacher Defined Benefit Pensions Over 401(k) Plans

In February 2016, UC Berkeley released a study titled “*Are California Teachers Better Off With A Pension or a 401(k)?*,” authored by Nari Rhee, PhD, of the UC Berkeley Center for Labor Research and Education and William Forna, FSA, of Pension Trustee Advisors. The study, commissioned by CalSTRS and conducted independently by the two authors, focused on the active teaching workforce and evaluated the suitability of CalSTRS defined benefit pension benefits for California's educators (using current turnover and tenure patterns) in comparison to 401(k) and cash balance plans.

The study showed that for six out of seven teachers, or 86 percent of CalSTRS members, the CalSTRS defined benefit pension provides greater, more secure retirement income compared to a 401(k)-style plan. More specifically, switching to a 401(k) or cash balance plan would sharply reduce the retirement income security of teachers who account for a large majority of the educational workforce in California. In fact, 75 percent of classroom teaching is performed by teachers who will have been covered by CalSTRS for at least 20 years by the time they depart. The study also showed that for those who commit to teaching as a profession, the CalSTRS defined benefit plan is a powerful retention tool that serves their retirement needs well, while offering portability throughout California, the largest education labor market in the U.S.

Focus on Corporate Governance, Accountability and Transparency

The CalSTRS Corporate Governance Program has a suite of priorities that cover a variety of best-practice governance issues. The staff continually focus on executive compensation, diversity on corporate boards, director election standards, and sustainability risk awareness and integration. Corporate Governance staff also exercise CalSTRS' influence as a prominent shareholder by voting in more than 7,900 domestic and international proxies annually, in addition to evaluating, processing and monitoring securities class actions. These various programs provide yet another layer of risk management strategies and tactics across the portfolio.

In general, the market showed improved governance, accountability and transparency. Certain companies, however, remain outliers by retaining large executive pay packages, lack of board diversity, or archaic governance practices. As a long-term owner and lender to corporations around the world, CalSTRS' duty is to protect assets through the pursuit of good governance and operational accountability, and we are steadfastly pursuing this charge well into the future.

Transforming Sustainability with Investment Beliefs and Engagement Practices

This year, CalSTRS continued our journey toward transforming to a fully sustainable, global organization. Much of the growth focused on clean energy investments and expanded engagement efforts with stakeholders and business partners. Moreover, CalSTRS engaged our non-investment related business partners in an annual survey to assess levels of sustainable commitment within their organizations. The results were impressively positive, indicating that the shift to embrace sustainable business practices is more than just a trend.

From new legislation to grassroots movements, CalSTRS also continues to address the risk of stranded assets and carbon-based investments. These developments have led us to emphasize and encourage the understanding of the complexities that exist in the investment engagement process as well as to provide further education on divestment actions that were taken. Negotiating today's challenges requires thoughtful, transparent dialogue. Addressing risk within the portfolio is approached programmatically and methodically through the use of CalSTRS 21 Risk Factors, which assess environmental, social and governance (ESG) investment risks, such as climate change impacts related to coal production, in addition to formal divestment policies. As an influential shareholder, CalSTRS emphasizes engagement first in order to potentially enact change or improvements, an approach that is typically well received by the affected companies within our portfolio.

As a global investor, we recognize that environmental, social and governance factors can have a significant impact on a company's performance. As organizations such as the Sustainability Accounting Standards Board publish standards across all industry sectors detailing ESG issues of material relevance, that information will greatly enhance investors' abilities to incorporate the analysis of those risks into their investment strategies.

INTRODUCTION

Advancing Sustainability Forward

This past year was a productive one in further establishing our sustainable practices and confirming a secure future for California's educators. There is still much work ahead. Diligence remains essential to maintain our viability in perpetuity.

We at CalSTRS are stewards of the hard-earned savings that dedicated California educators contribute toward their retirement and entrust to us. CalSTRS is a long-term investor, and ultimately our goal is to generate returns that are sufficient to meet the plan's liabilities for the benefit of our members.

As with any large, mature financial services organization, the challenges of balancing assets and liabilities, investment gains and losses, and operational growth and long-term value creation guide our business strategies as CalSTRS looks to advance sustainability forward well into the future. An appropriate long-term strategy and vision serve to strengthen our success, with our priority focused on the long-term financial health of the fund.

Member Profile

Established 103 years ago, CalSTRS, with a \$189.8 billion in net position as of June 30, 2016, is the largest educator-only pension fund in the world. It administers retirement, disability and survivor benefits for California's public school educators and their beneficiaries, from prekindergarten through community college. The Teachers' Retirement Law, part of the California Education Code, established the programs with CalSTRS as the administrator. The law sets required member, employer and state contribution rates. CalSTRS members include employees of approximately 1,700 school districts, community college districts, county offices of education and regional occupational programs as of June 30, 2016. Our membership spans from the new teacher just starting out to the retired educator enjoying the fruits of decades of teaching in the classroom.

The median CalSTRS pension replaced less than 60 percent of final salary for the members who retired last year. CalSTRS recommends income replacement of 80 percent to 90 percent to maintain a similar lifestyle in retirement. Public educators do not receive Social Security benefits for their CalSTRS service. Moreover, due to the federal Government Pension Offset and Windfall Elimination Provision, retirees often have their Social Security benefits reduced when receiving a CalSTRS benefit. Most retired educators also do not have employer-funded health insurance after age 65.

We continue to reach members in their communities—from Crescent City to San Diego—with online services, counseling services and workshops that explain retirement options and stress the need for early savings. With web-based information and more than 40 publications, we strive to be members' trusted guide to retirement.

Financial Statements

The financial statements and notes along with the Management Discussion and Analysis in this report present and analyze the changes in CalSTRS fiduciary net position for the fiscal year ended June 30, 2016. The markets are dynamic and fluid; any judgment of the financial statements should also consider current market conditions.

Management Responsibility for Financial Reporting and Internal Controls

The financial statements were prepared in accordance with accounting principles generally accepted in the United States. Management is responsible for the integrity and fairness of the information presented in the financial statements, including data that, out of necessity, is based on estimates and judgments. Management is also responsible for establishing and maintaining an effective internal control structure. A system of internal controls provides reasonable, but not absolute, assurance that assets are properly safeguarded and that financial statements are reliable. The concept of reasonable assurance recognizes that first, the cost of a control should not exceed the benefits likely to be derived, and second, the valuation of the cost and benefits requires estimates and judgments by management. We believe that the internal controls currently in place support this purpose, and that the financial statements, accompanying schedules and statistical tables are fairly presented in all material respects.

Investments Overview

The CalSTRS portfolio is broadly diversified, holding investments ranging from publicly traded short-term bonds to privately held partnerships. The scale and breadth of investments make the management and oversight of these assets highly complex. In light of these factors, CalSTRS has been effective in using its resources in a cost-efficient manner to ensure that benefits continue to flow to CalSTRS participants. Over the last year, the CalSTRS Investment Portfolio generated a 1.4 percent net one-year return calculated on a time-weighted performance basis.

See the Investments section for more detailed information on the performance of the CalSTRS Investment Portfolio.

Actuarial Reports

A summary of demographic and economic assumptions adopted from experience studies that CalSTRS conducts every four years is highlighted in this section. These assumptions are applied to an actuarial valuation that is generally performed on an annual basis. The actuarial valuation provides a picture of the overall funding health of our programs, including the Defined Benefit, Defined Benefit Supplement, Cash Balance Benefit and Medicare Premium Payment programs.

Statistical Reports

This section includes tables that reflect financial trends of the State Teachers' Retirement Plan and demographic characteristics of the Defined Benefit, Defined Benefit Supplement, Cash Balance Benefit, CalSTRS Pension2, and Medicare Premium Payment programs. Also captured in the tables, when applicable, is information comparing the last nine years to the previous fiscal year. This look back reveals overall trends in our programs and membership demographics that help us accurately forecast our future ability to meet our members' retirement needs.

GFOA Award

The Government Finance Officers Association of the U.S. and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to CalSTRS for its comprehensive annual financial report for the year ended June 30, 2015. This is the 21st consecutive year CalSTRS has received this prestigious award. To be awarded the certificate, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. Our report must satisfy both generally accepted accounting principles and applicable legal requirements.

INTRODUCTION

PPCC Standards Award Program

The Public Pension Coordinating Council (PPCC) presented CalSTRS with its Recognition Award for Funding and Administration for meeting professional standards for funding and administration as set forth in the Public Pension Standards. The Public Pension Coordinating Council is a coalition of three national associations that represent public retirement systems and administrators. The associations that form the PPCC are the National Association of State Retirement Administrators, National Council on Teacher Retirement and National Conference on Public Employee Retirement Systems. Together, these associations represent more than 500 of the largest pension plans in the U.S.

Acknowledgements

The 2016 Comprehensive Annual Financial Report demonstrates our commitment to ensure the financial security of California's educators. The accuracy of the financial data reflects CalSTRS' executive leadership and is a duty performed with prudence in perpetuity. The notion that ideas of the future are influenced by the day-to-day interactions teachers have with students today drives the high quality of service we provide. I would like to thank the many staff, advisors and stakeholder organizations dedicated to serving and securing the financial future of our members. CalSTRS is a unique pension system and it is of utmost importance we continue to sustain the trust and financial integrity of our members in their retirement.

Respectfully submitted,



Jack Ehnes
Chief Executive Officer
CalSTRS

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Government Finance Officers Association

**Certificate of
Achievement
for Excellence
in Financial
Reporting**

Presented to

**California State Teachers'
Retirement System**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2015

A handwritten signature in black ink, reading "Jeffrey R. Egan".

Executive Director/CEO



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2016***

Presented to

California State Teachers' Retirement System

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

Presented by the Public Pension Coordinating Council, a confederation of

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

A handwritten signature in black ink, reading 'Alan H. Winkle'. The signature is written in a cursive, flowing style.

Alan H. Winkle
Program Administrator

TEACHERS' RETIREMENT BOARD (AS OF JUNE 30, 2016)



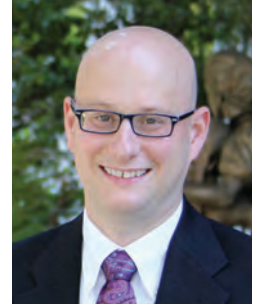
DANA DILLON
Board Chair
K-12 Classroom Teacher
Term: January 1, 2016 –
December 31, 2019



SHARON HENDRICKS
Board Vice Chair
Community College Instructor
Term: January 1, 2016 –
December 31, 2019



JOHN CHIANG
State Treasurer
Ex-Officio Member



MICHAEL COHEN
Director of Finance
Ex-Officio Member



JOY HIGA
Public Representative
Term: January 27, 2014 –
December 31, 2017



HARRY KEILEY
K-12 Classroom Teacher
Term: January 1, 2016 –
December 31, 2019



PAUL ROSENSTIEL
Public Representative
Term: January 1, 2015 –
December 31, 2018



TOM TORLAKSON
State Superintendent of
Public Instruction
Ex-Officio Member



THOMAS UNTERMAN
Public Representative
Term: January 1, 2016 –
December 31, 2019



NORA E. VARGAS
School Board Representative
Term: January 1, 2016 –
December 31, 2019



BETTY YEE
State Controller
Ex-Officio Member

EXECUTIVE STAFF (AS OF JUNE 30, 2016)

Executive



JACK EHNES
Chief Executive Officer

Investments



CHRISTOPHER AILMAN
Chief Investment Officer



CASSANDRA LICHNOCK
Chief Operating Officer

Financial Services



ROBIN MADSEN
Chief Financial Officer

General Counsel



BRIAN J. BARTOW
General Counsel

Technology Services



ASHISH JAIN
Chief Technology Officer

Plan Design and Communication



ED DERMAN
Deputy Chief Executive Officer

Administrative Services



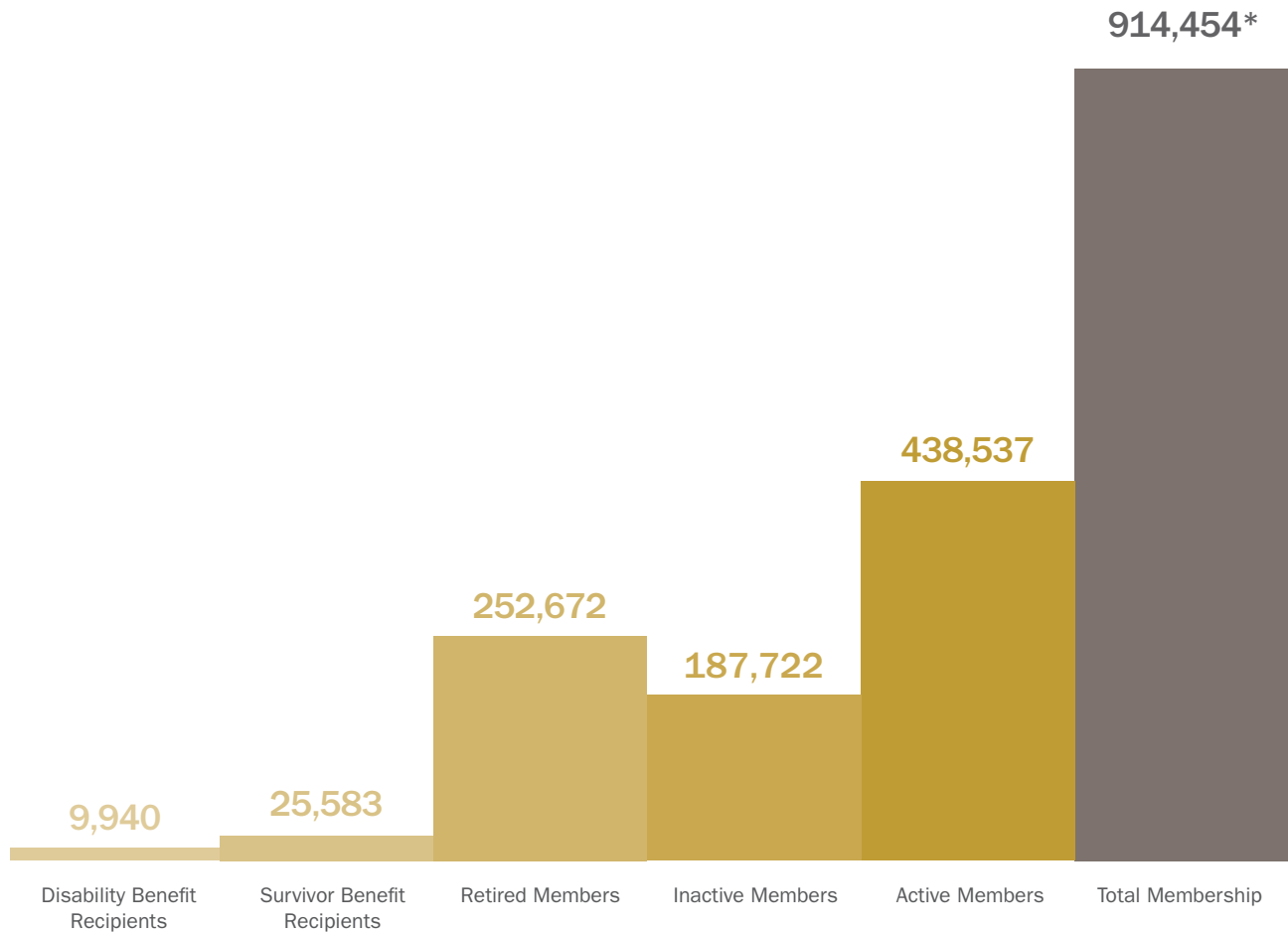
LISA BLATNICK
Chief of Administrative Services

Benefits and Services



ANDREW ROTH
Benefits and Services
Executive Officer

MEMBERS BY THE NUMBERS



*Due to the timing of when membership numbers were pulled, there will be a difference between the numbers reported in this section and the Financial Section.

Membership

Membership in the CalSTRS Defined Benefit Program includes California public school employees, prekindergarten through community college, who teach or who are involved in selecting and preparing instructional materials, provide vocational or guidance counseling or are supervising people engaged in those activities. Membership is in effect as long as contributions remain on deposit with CalSTRS. Members are employed in approximately 1,740 public

school districts, community college districts, county offices of education, regional occupational centers and programs, and select state agencies. The CalSTRS Defined Benefit Program includes retirement, disability and survivor benefits. Beneficiaries of a retired member who elected an option receive a continuing lifetime benefit upon the member's death.

YEAR IN REVIEW

Benefits to Members and Benefit Recipients

Service Retirement

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

11,374 Members who retired in fiscal year 2015–16

0.85 percent Increase from fiscal year 2014–15

Disability Benefits

96 percent Applications processed within 150 days

750 Applications received in 2015–16

562 Applications approved in 2015–16

4 percent Decrease in number of disability applications received from fiscal year 2014–15

Survivor Benefits

90 percent Payments processed within 30 days of receiving all necessary information

8,605 Notifications of death received in 2015–16

3.5 percent Increase in number of notifications from fiscal year 2014–15

Communicating With Our Members and Beneficiaries

Customer Service

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

286,317 Member inquiries answered

57 percent Member calls answered within 30 seconds

166 seconds Average wait time to talk with a Contact Center agent

71 percent Members who received a response to their secure online message within one business day

CalSTRS places great emphasis on customer satisfaction and regularly surveys members to ensure they receive accurate, timely and thorough answers to their questions.

➤ **73 percent** of members were “highly satisfied” with their Contact Center experience.

Member Communications

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

Newsletters

CalSTRS reaches out to members and beneficiaries through the *CalSTRS Connections: Reaching Your Retirement*, *CalSTRS Connections: Your Money Matters* and *Retired Educator* newsletters.

CalSTRS Connections: Reaching Your Retirement is sent in the spring and fall to active and inactive members age 50 and older. It provides information about retirement planning and decisions, workshops and benefits counseling, legislative news and more.

CalSTRS Connections: Your Money Matters is sent in the spring and fall to active and inactive members age 49 and younger. It provides updates on CalSTRS programs and services, articles on retirement benefits, supplemental savings options, financial planning, legislative news and more.

Retired Educator is sent to retired members and beneficiaries in the summer and winter. It provides information on benefits and services, legislation, investments and board updates.

Retirement Progress Report

Every year Defined Benefit members and Cash Balance Benefit participants receive a personalized *Retirement Progress Report* that contains retirement planning information and detailed account information as of June 30 for the fiscal year. For Defined Benefit members age 45 and older, the report includes retirement benefit estimates. The reports are available online in September in the member’s *myCalSTRS* account and are mailed in October if requested. Retired members and other benefit recipients do not receive this report.

Member Informational Publications

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

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

The *Your Retirement Guide* booklet provides information members need to plan, research and make retirement decisions regarding their defined benefit pension and Defined Benefit Supplement funds. It includes step-by-step instructions for applying for service retirement and what to expect after submitting the retirement application.

CalSTRS Member Kits contain targeted retirement information and are sent annually to three groups of CalSTRS members when they reach a career milestone. The three career milestones—newly vested, mid-career and near retirement—are based on the member's age and years of service credit.

In addition, CalSTRS produces publications that cover specific topics, including:

- *Cash Balance Benefit Program: A Retirement Plan for Part-Time and Adjunct Educators*
- *Community Property Guide*
- *Concurrent Retirement*
- *Introduction to Disability Benefits*
- *Your Disability Benefits Guide*
- *Join CalSTRS? Join CalPERS?*
- *Purchase Additional Service Credit*
- *Refund: Consider the Consequences*
- *Social Security, CalSTRS and You*
- *Survivor Benefits: Remember Your Loved Ones*
- *Tax Considerations for Rollovers*
- *Understanding the Formula*
- *Welcome to CalSTRS*
- *Working After Retirement*

CalSTRS Online

CalSTRS has four websites: CalSTRS.com, myCalSTRS, Pension2.com and 403bCompare.com.

CalSTRS.com is the main site for members, board members, employers and other business partners. Features include online calculators to estimate retirement benefits and the cost to purchase service credit or redeposit funds; CalSTRS publications and forms; recent CalSTRS news, investment overview, and self-scheduling for workshops and benefits planning sessions.

myCalSTRS, CalSTRS' self-service site for members, provides secure and convenient access to members' personal accounts. After registering for myCalSTRS, members can view their account balances, complete and submit forms online, keep their contact information current, view their *Retirement Progress Reports*, manage their beneficiary selections, and ask questions and receive prompt answers.

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

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

Members can also stay connected to CalSTRS through its social media presence on Facebook, Twitter, Google+, Instagram, LinkedIn, YouTube and Pinterest.

Benefits Planning Services

CalSTRS has six member service centers: West Sacramento (headquarters), Glendale, Santa Clara, Irvine, Riverside and San Diego, which opened in November 2016.

Member service centers offer educational and benefits planning services, including individual and group benefits planning sessions and financial savings workshops. Existing member service centers serve the greater Sacramento, Los Angeles, Bay Area, Orange County, the Inland Empire and San Diego regions. Offices are open Monday through Friday, 8 a.m. to 5 p.m. and some Saturdays by appointment.

YEAR IN REVIEW

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

In addition to the member service centers, CalSTRS has one leased office space staffed by CalSTRS staff and seven benefits planning offices located in county offices of education across the state. These offices typically provide workshops, group and individual benefits planning sessions and walk-in assistance, in addition to reviewing and receiving completed forms.

This year, 29,520 members attended group or individual benefits planning sessions or workshops, while 12,064 members took advantage of the opportunity to walk in and receive immediate assistance. An additional 4,029 members received services at outreach events, including job fairs and on-campus presentations.

Another convenient service for members is the estimate-only service, which last year provided 1,625 members with updated retirement benefit estimates without requiring second appointments.

CalSTRS continues to focus on providing services that increase accessibility for members, reflect individual member needs and increase member self-education.

Services to Employers, Member and Client Organizations

CalSTRS staff supports the employer reporting process through education, collaboration and continuous improvement. CalSTRS has enhanced the delivery of information by making it available electronically and on demand for the employer. The Secure Employer Website, SEW, a secure solution for employers to submit their monthly reporting data, includes checks and balances to ensure the data is accurate and verified. In addition, CalSTRS is committed to ensuring our employers have all the information and training necessary to provide the most accurate data reporting.

CalSTRS is committed to preventing pension abuse by automating the review of compensation credited to retirement benefits. The CalSTRS Compensation Review Unit has increased reviews of potential abuse cases through the Pension Abuse Reporting Hotline and online reporting form.

Professional Services

CalSTRS contracts for the services of various independent consultants essential to the effective and professional operation of the system. Milliman, Inc. provides actuarial services and Crowe Horwath LLP is the independent auditor. Lists of investment professionals for investment services and other consultants are provided on Schedules VII and VIII in the Financial Section of this report. Table 8 in the Investments Section also lists entities to whom CalSTRS paid global equity broker commissions during the fiscal year.

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CalSTRS is **the largest educator-only pension fund in the world**, with a \$189.8 billion in net position as of June 30, 2016.

FINANCIAL

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INDEPENDENT AUDITOR'S REPORT



Crowe Horwath LLP
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INDEPENDENT AUDITOR'S REPORT

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

Report on the Financial Statements

We have audited the accompanying financial statements of California State Teachers' Retirement System (the System), a component unit of the State of California, as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the System's preparation and fair presentation of the financial statements 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, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

INDEPENDENT AUDITOR'S REPORT

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of California State Teachers' Retirement System as of June 30, 2016, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

Net Pension Liability of Employers and Nonemployer Contributing Entity

As described in Note 3, based on the most recent actuarial valuation as of June 30, 2015, the System's independent actuaries determined that, at June 30, 2016, the value of the State Teachers Retirement Plan (STRP) total pension liability exceeded the STRP fiduciary net position by \$80.9 billion. The actuarial valuation is sensitive to the underlying actuarial assumptions, including investment rate of return of 7.6%, consumer price inflation of 3%, wage growth of 3.75% 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 described in Notes 5 and 6, the financial statements include investments valued at approximately \$50.1 billion as of June 30, 2016, 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 estimate of 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.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis on pages 28-41 and the Schedule of Changes in Net Pension Liability of Employers and Nonemployer Contributing Entity, Schedule of Net Pension Liability of Employers and Nonemployer Contributing Entity, Schedule of Contributions from Employers and Nonemployer Contributing Entity, Schedule of Money-Weighted Investment Returns and Schedule of Funding Progress (Medicare Premium Payment Program only) on pages 80-85 be presented to supplement the basic financial statements. Such information, 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.

INDEPENDENT AUDITOR'S REPORT

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 Introduction section, Schedule of Administrative Expenses, Schedule of Investment Expenses, Schedule of Consultant and Professional Services Expenses, Investments section, Actuarial section, and Statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedule of Administrative Expenses, Schedule of Investment Expenses and Schedule of Consultant and Professional Services Expenses are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such 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.

The Introduction section, Investments section, Actuarial section, and Statistical section have not been subjected to the auditing procedures applied in the audit of the basic financial statements and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated September 30, 2016 on our consideration of 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 other matters. The purpose of that report is 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 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 Horwath LLP

September 30, 2016
Sacramento, California

INTRODUCTION

Management's Discussion and Analysis of the California State Teachers' Retirement System's (CalSTRS) financial performance is intended to provide an overview of activities for the fiscal year ended June 30, 2016. The discussion and analysis focuses on the year's business events and resulting changes. This discussion is more meaningful when read in conjunction with CalSTRS financial statements and the accompanying notes to the financial statements.

In addition to historical information, the discussion and analysis includes some forward-looking statements that involve uncertainties and risks. CalSTRS actual results, performance and achievements expressed or implied in these statements are subject to changes in interest rates, securities markets, general economic conditions, legislation, regulations, and other factors.

MISSION

Since CalSTRS was founded in 1913, it has grown from no assets and 15,000 members to a portfolio valued at just under \$190 billion serving 914,000 members and beneficiaries as of June 30, 2016. In 1913, the annual benefit was \$500; today, the average annual member-only benefit exceeds \$50,000. Over the past 103 years, CalSTRS mission has remained the same: to secure the financial future and sustain the trust of California's educators now and for generations to come.

In fiscal year 2015-16, CalSTRS continued to build upon the momentum of Assembly Bill 1469 (Bonta), which was signed into law on June 24, 2014, and established required member, employer, and state contribution rate increases. The June 30, 2015 actuarial valuation (the most recent) assessed the funded ratio at 68.5 percent, and CalSTRS remains on track to have a fully funded defined benefit plan by approximately 2046.

UC BERKELEY STUDY

A study released in February 2016 determined that a defined benefit pension like what CalSTRS provides offers more secure retirement income than a 401(k)-type plan. The study, *Are California Teachers Better off with a Pension or a 401(k)*, was conducted by Nari Rhee, PhD, of the UC Berkeley Center for Labor Research and Education, and William Forna, FSA, of Pension Trustee Advisors. The authors concluded that switching to an account-based

retirement system such as a 401(k) or cash balance plan would sharply reduce the retirement income security of teachers who account for a significant majority of the educational workforce in California.

Overall, the CalSTRS pension benefit structure is better matched to the needs of the active teaching workforce than 401(k) or cash balance plans. Under benefit models used in the study:

- For six out of seven teachers in California, the CalSTRS Defined Benefit pension provides a greater, more secure retirement income compared to a 401(k) style plan.
- The CalSTRS Defined Benefit pension becomes greater than an idealized 401(k) defined contribution account at age 51, and 86 percent of active educators stay in California schools until at least age 51.
- The CalSTRS Defined Benefit pension becomes greater than a generously structured cash balance plan at age 56, and 79 percent of active educators will stay on the job until age 56.

The study reaffirmed that, for those who commit to teaching as a profession, the CalSTRS defined benefit plan is a powerful retention tool that serves member retirement needs well.

SUSTAINABILITY

Sustainability is the framework that guides CalSTRS' long-term strategy and governs our organizational business culture. Our sustainable strategy focuses on not only delivering profitable, risk-adjusted returns, but is integrated into our everyday efforts, such as stewardship of natural resources, ethical and transparent business practices and engaging and developing our diverse workforce. To ensure the strength and increased engagement of our workforce, we have developed supporting programs designed to identify and improve environmental standards such as recycling and waste diversion, energy use reduction, and other conservation efforts.

Last year, CalSTRS' achieved an overall 22 percent reduction in water use within our headquarters facility during a year of extreme drought. Through better monitoring and use of our facility heating and cooling systems, CalSTRS also decreased our building-generated greenhouse gas emissions, energy and natural gas use.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

In 2015, CalSTRS became the first U.S. public pension fund to release an annual sustainability report consistent with the Global Reporting Initiative's G4 rigorous and detailed reporting framework. The report demonstrates our commitment to progressive environmental, social and governance (ESG) principles. This year, we released our second annual sustainability report which discusses creditable compensation guidelines and monitoring, information security efforts and compliance functions, and highlights our vigilant risk-aware culture.

CalSTRS has a well-established investment policy for mitigating ESG risk and, during the fiscal year, utilized this policy to conduct a ten-month research and engagement process with U.S. thermal coal companies. In February 2016, CalSTRS board voted to divest from some U.S. thermal coal companies and to initiate engagement with non-U.S. companies. The board found that divestment was consistent with both CalSTRS' fiduciary duty and the provisions enacted in Senate Bill 185 (De León) calling for divestment from thermal coal companies.

In November 2015, CalSTRS released the ninth annual Green Initiative Task Force report. The report outlines activities undertaken by CalSTRS to work to integrate ESG factors into and across the investment portfolio. One key activity developed last year and utilized extensively this year was an external manager survey with which staff annually affirm manager awareness of ESG risk management in an efficient, homogeneous manner across all asset classes. Also, this fiscal year saw CalSTRS total portfolio investments in green bonds rise to \$303 million, an increase of over \$40 million since the end of fiscal year 2014-15.

CalSTRS became one of the first public pension funds to sign the December 2015 Paris Pledge for Action at the Conference of Parties COP21 Paris event. CalSTRS continues to be a proactive leader and role model making a measurable difference in reducing the footprint of greenhouse gas emissions on the planet.

To gain better insight into the various investment implications presented by climate change, CalSTRS collaborated with Mercer and 17 other participants in a research study, *Investing in a Time of Climate Change: California State Teachers' Retirement System Portfolio Climate Change Risk Assessment*. The study highlights estimated portfolio return implications under four climate change

scenarios and recommends appropriate actions to mitigate investment risk and maximize value within the portfolio. Climate change risk is viewed as a material risk assessed across the entire portfolio that could impact current and future investment value. CalSTRS believes that the underlying risk of climate change should be addressed now to capture economic growth opportunities and mitigate long-term risks for the benefit of California's educators. CalSTRS has implemented many of the recommendations made in the Mercer report and continues to monitor the potential risks raised in the study.

In March 2016, CalSTRS along with State Street Global Advisors held a networking workshop: "Beyond Talk: Taking Action to Achieve Gender Balance in the Financial World." The workshop was inspired both by CalSTRS' efforts to advance diversity in the investments industry, as well as the 72-percent female composition of its membership of California educators. Additionally, CalSTRS announced its initial investment of \$250 million in the SSGA Gender Diversity Index, a large cap U.S. stock index primarily tilted toward companies with women in greater than 30 percent of senior leadership positions.

During the fiscal year, staff prepared new investment cost reports for the board's review with the goal of setting forth the CalSTRS investment cost standard and reporting disclosure report format. The purpose of these new informational reports was to provide the board more visibility into internal/external investment costs across asset classes and investment strategies. Staff will enhance these annual investment cost reports to provide additional details across the entire portfolio. CalSTRS will also continue to partner with other institutional investors and organizations to develop standardized reporting templates for general partners to use to provide more transparent cost information.

CalSTRS Defined Benefit Program actuarial valuations examine the impact of various long term investment return rates on future employer and State contributions. This provides ongoing visibility into the impact of investment returns on program funding sustainability.

CORPORATE GOVERNANCE

CalSTRS has one of the longest-standing corporate governance policies in the public pension community, with a detailed written policy that dates back to 1978. During fiscal year 2015-16, the CalSTRS corporate governance unit assumed responsibility for the investment department's public equity sustainable manager portfolio and incorporated these managers into the corporate governance performance hierarchy. This change aligns CalSTRS sustainability engagement efforts in the Public Equity markets with our sustainability focused investments in those same markets.

CalSTRS staff engaged more than 100 companies on implementing a majority vote standard. In addition, staff developed a select list of companies in the energy industry to engage on board diversity, with commitments made by three large companies. Other efforts included implementing engagement plans with 16 portfolio companies on energy efficiency and 30 portfolio companies on methane emissions capture. CalSTRS filed six shareholder proposals calling for companies to improve their disclosure on how they were managing risks associated with methane emissions.

BUSINESS TRANSFORMATION

CalSTRS continues to make progress with its long-term BusinessRenew Program created to lead the transformation of business processes, systems, and tools to enable CalSTRS to meet the objectives outlined in its strategic plans.

CalSTRS is currently focusing its efforts on the Pension Solution Project, a major BusinessRenew Program effort that includes the replacement of CalSTRS legacy pension administration system. The project team and the selected vendor, CGI Group, Inc. continued working through requirements, design, and hardware installation, addressing member privacy, data security, business continuity, and technology risks. The activities and deliverables of the early phases of the project will form the blueprint and foundation for the overall solution and implementation strategy.

In addition, the companion Data Prep Project effort is charged with data analysis and cleansing activities related to CalSTRS pension data in preparation for conversion to the new pension system.

Based on the absorption of the additional staff necessary to complete the Pension Solution project as well as CalSTRS growth rate, CalSTRS concluded it could be faced with a space shortage. A new facilities management strategy was adopted that included opportunities to maximize the utilization of space at our current headquarters.

GOVERNMENTAL ACCOUNTING STANDARDS BOARD

In February 2015, Governmental Accounting Standards Board (GASB) released Statement No. 72, *Fair Value Measurement and Application*, to address how fair value should be measured and applied by governmental entities. It provides guidance for determining a fair value measurement for financial reporting purposes. It also provides guidance for applying fair value to certain types of investments and disclosures related to all fair value measurements. CalSTRS implemented GASB 72 in the current year financial statements. Disclosures related to GASB 72 are incorporated in Note 6.

In March 2016, GASB released Statement No. 82, *Pension Issues—an amendment of GASB Statements No. 67, No. 68, and No. 73*. Prior to the issuance of this statement, Statements 67 and 68 required presentation of covered-employee payroll, which is the payroll of employees that are provided with pensions through the pension plan, and ratios that use that measure in schedules of required supplementary information. Statement No. 82 amends Statements 67 and 68 to instead require the presentation of covered payroll, defined as the payroll on which contributions to a pension plan are based, and ratios that use that measure. In addition, Statement No. 82 clarifies guidance regarding the selection of assumptions used in determining the total pension liability and related measures, and clarifies guidance regarding plan member contributions where payments are made by an employer. CalSTRS has implemented Statement No. 82 in the current year Financial Statements. Additional information regarding new GASB statements can be found in Note 9.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

FINANCIAL HIGHLIGHTS

The tables that follow present comparative information and changes to plan net position for the State Teachers' Retirement Plan for fiscal years 2015-16 and 2014-15.

Net Position (Dollars in Thousands)			
Assets and Deferred Outflows of Resources	2016	2015¹	Percent Change
Investment Assets ²	\$207,541,517	\$210,698,551	(1.5%)
Cash	164,597	359,992	(54.3%)
Investment Receivables	1,280,564	3,376,504	(62.1%)
Member, Employer and Other Receivables	2,693,178	1,961,486	37.3%
Capital and Other Assets	231,216	226,167	2.2%
Deferred Outflows of Resources	22,756	16,398	38.8%
Total Assets and Deferred Outflows of Resources	211,933,828	216,639,098	(2.2%)
Liabilities and Deferred Inflows of Resources			
Benefits in Process of Payment	1,188,518	1,178,524	0.8%
Investment Liabilities	169,246	107,373	57.6%
Investment Payables	1,403,511	3,725,966	(62.3%)
Loans Payable	2,129,694	1,447,405	47.1%
Net Pension and OPEB Obligation	256,069	213,427	20.0%
Other	127,494	73,800	72.8%
Securities Lending Obligation	17,530,264	18,043,187	(2.8%)
Deferred Inflows of Resources	15,545	27,080	(42.6%)
Total Liabilities and Deferred Inflows of Resources	22,820,341	24,816,762	(8.0%)
Net Position	\$189,113,487	\$191,822,336	(1.4%)
¹ Some reclassifications have been made to the comparative totals as of and for the year ended June 30, 2015, to conform to the presentation as of and for the year ended June 30, 2016. The reclassifications had no impact on net position or changes in net position. ² Includes securities lending collateral of \$17.5 billion and \$18.0 billion for 2016 and 2015, respectively.			
Changes in Net Position (Dollars in Thousands)			
Additions	2016	2015¹	Percent Change
Member Contributions	\$2,957,473	\$2,509,712	17.8%
Employer Contributions	3,391,144	2,677,815	26.6%
State of California	1,939,902	1,425,796	36.1%
Net Investment Income	2,304,958	7,575,999	(69.6%)
Other	41,519	39,580	4.9%
Total Additions	10,634,996	14,228,902	(25.3%)
Deductions			
Benefit Payments	13,064,557	12,476,902	4.7%
Refunds of Contributions	84,001	87,694	(4.2%)
Administrative Expenses	180,056	145,239	24.0%
Other	15,231	8,840	72.3%
Total Deductions	13,343,845	12,718,675	4.9%
Net Position Increase (Decrease)	(2,708,849)	1,510,227	(279.4%)
Beginning Net Position	191,822,336	190,312,109	0.8%
Ending Net Position	\$189,113,487	\$191,822,336	(1.4%)

¹Some reclassifications have been made to the comparative totals as of and for the year ended June 30, 2015, to conform to the presentation as of and for the year ended June 30, 2016. The reclassifications had no impact on net position or changes in net position.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

- Total net position for the STRP decreased by \$2.7 billion or 1.4 percent from results at June 30, 2015, to \$189.1 billion.
- STRP net investments, excluding securities lending collateral, totaled \$189.8 billion at June 30, 2016, a decrease of 1.4 percent from \$192.6 billion as of prior fiscal year-end. The decrease is mainly attributable to investment liquidations to fund benefit payments along with flat returns for the current fiscal year.
- Other liabilities for the STRP increased by \$53.7 million or 72.8 percent to \$127.5 million primarily due to a higher estimate of return of excess contributions as a result of AB1469 (Bonta), enacted in 2014.
- Net pension and OPEB obligation increased by \$42.6 million or 20.0 percent. Most of the increase is due to an increase in CalSTRS estimated proportionate share of the Net Pension Liability (NPL) for the State of California as a result of an increase in CalSTRS payroll costs. Additionally, the State's NPL increased due to lower investment returns for the current fiscal year. The increase in proportionate share and increase in the State's NPL also increased Deferred Outflows and decreased Deferred Inflows, respectively.
- The June 30, 2015 funding valuation shows an increase of \$3.5 billion to \$76.2 billion in unfunded actuarial obligation (UAO) of the DB program due to lower investment returns as of June 30, 2015. The funded ratio remained consistent with last year at 68.5 percent. Although the NPL and the UAO are both determined using the June 30, 2015 valuation, the NPL is adjusted to update the results to the plan's current fiscal year end, June 30, 2016.

As of June 30, 2016, the STRP fiduciary net position as a percentage of the total pension liability was approximately 70 percent compared to 74 percent as of June 30, 2015. See Note 3 and Schedule II for additional information. As discussed above, the primary reason for the increase in the net pension liability is the underperformance of investments returns as compared to the actuarial assumption.

- Total contributions for the current fiscal year increased by \$1.7 billion (25.3 percent) as a result of increases in member contributions by \$447.8 million (17.8 percent),

employer contributions by \$713.3 million (26.6 percent), and state contributions by \$514.1 million (36.1 percent). The increases are due to increases in both creditable compensation and contribution rates implemented through AB 1469 (Bonta).

- Net investment income for the STRP decreased by \$5.3 billion or 69.6 percent to \$2.3 billion due to investment liquidations to fund benefit payments along with flat returns for the fiscal year.
- Administrative expenses for STRP increased by \$34.8 million or 24.0 percent to \$180 million. Some of the factors contributing to this increase are payroll costs and CalSTRS share of the State's pension expense. Additionally, as discussed in the Business Transformation section, the increase is also due to efforts on the Pension Solution Project.

Throughout fiscal year 2015-16, CalSTRS maintained its Moody's Investors Service issuer rating at Aa2 & short term rating at P-1 and Standard and Poor's long-term issuer credit rating of AA- & short-term rating of A-1+. However, in July 2016, Standard and Poor's revised its long term outlook for CalSTRS to stable from positive due to its view that the actuarial funded levels were likely to stay near the current levels over its two-year outlook.

INVESTMENTS

CalSTRS investment philosophy is "long-term patient capital" — investing for long-term net cash flows and capital gain potential at a reasonable price. The fiscal year 2015-16 goals and targets for the STRP investments were to:

1. Achieve an absolute return of 7.5 percent and/or outperform the Total Fund Policy benchmark
2. Outperform the benchmark and add additional 40 basis points of extra return without excess risk
3. Aspire to be cost effective with tight operational internal controls
4. Maximize risk-adjusted returns to meet CalSTRS obligation to pay benefits
5. Expand internal management of public assets
6. Provide stable cash flows
7. Reinforce CalSTRS reputation as a global leader in corporate governance

CalSTRS uses a time-weighted return methodology to calculate returns for portfolio performance purposes. For fiscal year 2015-16, CalSTRS earned an approximate 1.4 percent one-year return calculated on a net of fees time-weighted basis. The resulting one-year performance is below the actuarially assumed 7.5 percent rate of return. CalSTRS returns reflect the following longer-term performance:

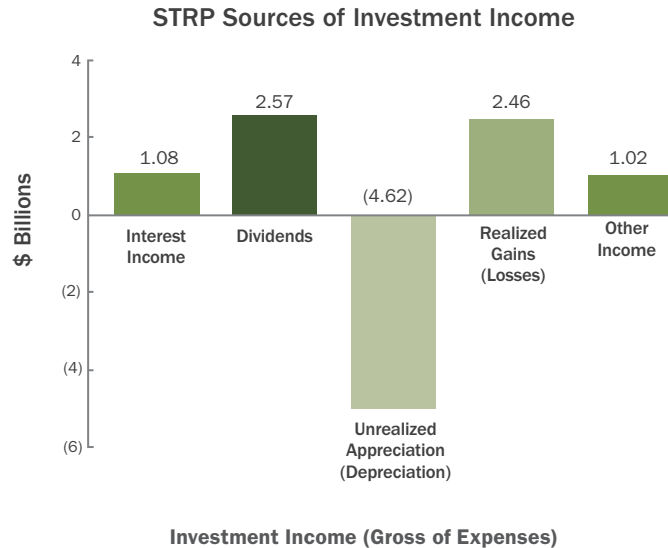
- 7.8 percent over three years
- 7.7 percent over five years
- 5.6 percent over 10 years
- 7.1 percent over 20 years

CalSTRS continues to underscore and emphasize the long-term nature of pension funding as it pertains to investment performance and the need to look beyond the immediate impacts of any single year's returns. Although meeting investment assumptions is very important to the overall funding picture, it is just one factor in keeping the plan on track. Factors such as member compensation and longevity also play important roles. CalSTRS remains on target for full funding by the year 2046.

The money-weighted return net of all investment expenses based on financial statement values reflects an approximate 1.2 percent one-year return as of June 30, 2016. The money-weighted return measures the overall performance of the pension plan factoring in the impact of cash flows. Differences in the money-weighted and time-weighted returns are caused by the inherent variations in the methodology and inputs of the two calculations as well as the quarter lag in the annual performance data for private assets in the time-weighted performance calculation.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

The graph below shows a detailed view of the sources of investment income, excluding securities lending income, based on the Statement of Changes in Fiduciary Net Position.



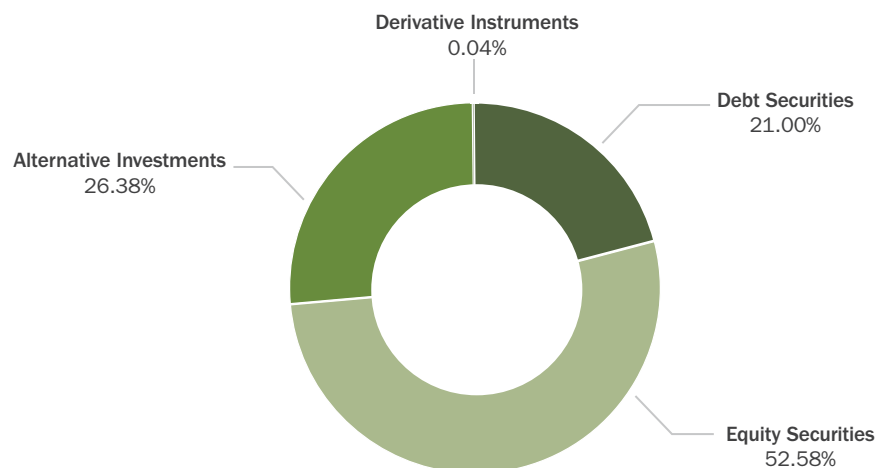
CalSTRS investments earn income in the form of interest and dividends from holding fixed income securities and various types of equity interests in public companies, limited partnerships, and co-investments. Unrealized appreciation and depreciation is generated by period over period

valuation fluctuation in all types of investments. Realized gains and losses are generally a result of investment sales, write-offs and re-organizations. Other income consists primarily of distributed income from alternative investments (such as rent), term loans and securities litigation.

Asset Allocation and Performance

The graph below presents STRP investments, excluding securities lending collateral and obligations, based on investment classifications within the Statement of Fiduciary Net Position as of June 30, 2016.

STRP Statement of Fiduciary Net Position Investment Distribution



MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

The following table displays the distribution of investment assets based on the portfolio asset allocation as compared to the classification within the Statement of Fiduciary Net Position as of June 30, 2016:

Portfolio Allocation versus Financial Statement Classification			
Portfolio Allocation		Financial Statement Classification	
Asset Class	Asset Allocation	Investments	% of Asset Class
Global Equity	54.8%	Equity Securities	95.6%
		Alternative Investments	2.9%
		Debt Securities	1.2%
		Other ¹	0.3%
Fixed Income	16.9%	Debt Securities	100.4%
		Other ¹	-0.4%
Real Estate	13.9%	Alternative Investments	99.2%
		Debt Securities	0.6%
		Equity Securities	0.1%
		Other ¹	0.1%
Private Equity	8.7%	Alternative Investments	99.3%
		Debt Securities	0.6%
		Other ¹	0.1%
Liquidity	2.9%	Debt Securities	100.7%
		Other ¹	-0.7%
Absolute Return	1.8%	Alternative Investments	68.7%
		Equity Securities	24.6%
		Debt Securities	6.4%
		Derivative Instruments	-0.1%
		Other ¹	0.4%
Inflation Sensitive	1.0%	Alternative Investments	70.2%
		Debt Securities	29.5%
		Other ¹	0.3%
Total Fund	100.0%		

¹Other consists of cash, payables and receivables that are reflected as such on the Statement of Fiduciary Net Position and any investment categories less than 0.1%.

Global Equities – Equity Securities

Representing 54.8 percent of total investments as of June 30, 2016, the Global Equity Portfolio is comprised of equity securities within the U.S., non-U.S. developed countries and emerging markets. Corporate governance funds are included within the Global Equity Portfolio but are classified as Alternative Investments on the financial statements, as reflected in the table above. Approximately 57 percent of the Global Equity assets are managed internally by CalSTRS investment staff, while the remaining 43 percent are managed externally.

As of June 30, 2016, the STRP held \$99.8 billion in equity securities across all portfolios, a decrease of 4.6 percent compared to the prior year. The global equities market fluctuated significantly throughout the fiscal year – equity prices fell sharply in the first quarter as concerns about global deflation and the economic slowdown in China caused global market volatility. Stocks, however, rebounded in the second quarter as the Federal Reserve raised its key interest rate for the first time in over a decade following positive domestic macroeconomic news. At the end of the fiscal year, global equities regressed (then quickly recovered) amid the news of “Brexit,” the June 23 referendum vote for the United Kingdom to leave the European Union.

Emerging markets generally performed negatively for the fiscal year primarily due to political tensions, currency weaknesses and declining commodity prices. While the economic slowdown in China hindered emerging markets, Brazil was also a significant factor – the country's debt was downgraded to non-investment grade, and the president was impeached on concerns of corruption. Russian stocks were dragged down by the fall in the price of crude oil, the country's main export. Currency weakness in the Latin America region also contributed to the negative performance for emerging markets.

Fixed Income – Debt Securities

The Fixed Income Portfolio is comprised of U.S. and non-U.S. dollar based investment grade and non-investment grade securities. Approximately 83 percent of the portfolio uses enhanced core and high yield strategies. The remaining 17 percent uses broader core plus, high yield and other opportunistic strategies.

Debt securities within fixed income and other portfolios increased 10.0 percent from \$36.3 billion as of June 30, 2015, to \$39.9 billion at June 30, 2016. In contrast to the equities market, the global bond market was primarily positive for the fiscal year as investors became more risk averse and sought out “safe havens” from the volatility of the global financial markets. Government bond yields among developed countries decreased to record lows as a result of the UK Brexit vote. By June 30, 2016, the 10-year U.S. Treasury yield decreased to 1.49 percent, its lowest level since 2012. Other factors that contributed to the increase in performance for the fixed income markets include fluctuating oil prices, positive economic data and continued easing measures from global central banks.

Alternative Investments

Alternative investments include investments in private equity, real estate, infrastructure, innovation, and corporate governance. For the year ended June 30, 2016, alternative investments decreased 5.7 percent from \$53.1 billion to \$50.1 billion. The decrease was primarily due to the decrease of 12.6 percent from \$26.7 billion to \$23.3 billion in privately held equities and debt. As a result, CalSTRS allocation in the Private Equity asset class declined from 10.1 percent to 8.7 percent over the fiscal year.

The decrease in market value was primarily due to distributions far exceeding contributions; returns were positive at the end of the fiscal year.

For the market as a whole, the number of private equity funds has increased over the fiscal year, while the amount of capital called by the funds has lagged. Market cash reserves are also at an all-time high.

The Private Equity Portfolio is comprised of limited partnerships and co-investments focusing on commitments to domestic and non-U.S. partnerships as identified in the Private Equity Policy. Types of investment strategies include leveraged buyouts, venture capital, expansion capital, distressed debt, and mezzanine investments.

Substantial fees and costs are associated with investments in the Private Equity Portfolio. Consequently, emphasis is placed on negotiating and monitoring the direct and indirect costs of each limited partnership investment.

The Real Estate Portfolio is comprised of investments in directly held real estate, such as wholly owned properties and joint venture investments and non-directly held real estate, which consist of commingled funds and co-investments. Approximately 7 percent of the Real Estate Portfolio represents non-U.S. assets. Leverage has been reduced to levels set by the board in policy. Core portfolio leverage is 33 percent as of June 30, 2016. To more closely align the interests of CalSTRS and the real estate managers, emphasis is placed on negotiating, monitoring, and managing the direct costs associated with each real estate investment.

Real estate investments increased from \$26.4 billion at June 30, 2015, to \$26.7 billion at June 30, 2016, or 1.1 percent. The Real Estate asset class generated double-digit returns for the fiscal year and as a result, the asset allocation increased from 12.7 percent to 13.9 percent. Overall, the real estate industry remained positive amid the volatility of the global markets during the fiscal year due to positive U.S. economic growth data, which included strong labor markets, increasing home values and robust consumer spending. In addition, despite the Federal Reserve's interest rate hike in December, rates remained at historical lows. In the commercial property space, healthy demand drove valuations higher and low vacancy rates led to increased rents.

Derivative Instruments

Derivative instruments include swaps, options, rights and warrants, forward contracts, and futures contracts. Please note that forward and futures contracts are not included in the table on page 35. Net derivative instruments increased from \$55.7 million to \$70.4 million, or 26.4 percent for the fiscal year due to valuation fluctuations and expiration of contracts. For more information on derivative instruments, please refer to Note 5.

Asset/Liability Study

CalSTRS conducts a full asset/liability (A/L) study once every four years or more frequently if there is a significant change in the assets or liabilities, with the key goal of developing an asset allocation policy that maximizes the likelihood that the investment portfolio's assets will, over the planning horizon, fund plan benefits. The most recent study, which began in February 2015, occurred over several Investment Committee meetings and concluded at the November 2015 meeting with the adoption of capital markets assumptions and strategic asset allocation targets and ranges into the Investment Policy and Management Plan (IPMP). The revised IPMP reflects the new long-term asset targets and sets the overall risk limit or acceptable risk parameters for the investment portfolio.

In conjunction with the strategic allocation target, a range for each asset category has been established to provide flexibility designed to reduce rebalancing costs and to provide for changing market conditions. The new asset allocation targets and ranges are effective July 1, 2016, and will be implemented strategically over time as market opportunities arise.

Detailed information regarding the A/L study can be found in the board meeting agendas. For additional information on CalSTRS investments, please refer to the Notes to the Basic Financial Statements.

PENSION ACTUARIAL VALUATION

As a result of GASB 67 and 68, CalSTRS has separate actuarial valuations performed for funding and financial reporting purposes.

Pension System Funding Actuarial Valuations

The purpose of the actuarial valuations for funding the programs within the STRP is to guide decision making to sustain the long-term viability of the programs. Specifically, the primary purpose is to analyze the sufficiency of future contributions from members, employers and the state to meet current and future obligations. Historically, CalSTRS investment income has contributed approximately 61 percent of the total inflows to the STRP with employer contributions making up 16 percent, member contributions making up 15 percent, and State of California contributions making up 8 percent. These percentages will change over time due to fluctuating net investment income as well as the adjustments to required member, employer, and state contribution rates due to AB 1469 (Bonta).

Separate funding actuarial valuations are performed for the DB, DBS, and Cash Balance Benefit (CBB) programs. Currently the investment rate of return and discount rate assumption for funding actuarial valuations is 7.5 percent (7.0 percent for CBB). The investment return assumption, according to actuarial principles, should be based on an estimated long-term investment yield for the STRP, with consideration given to the nature and mix of current and expected plan investments, and is the basis for determining the actuarial value of assets.

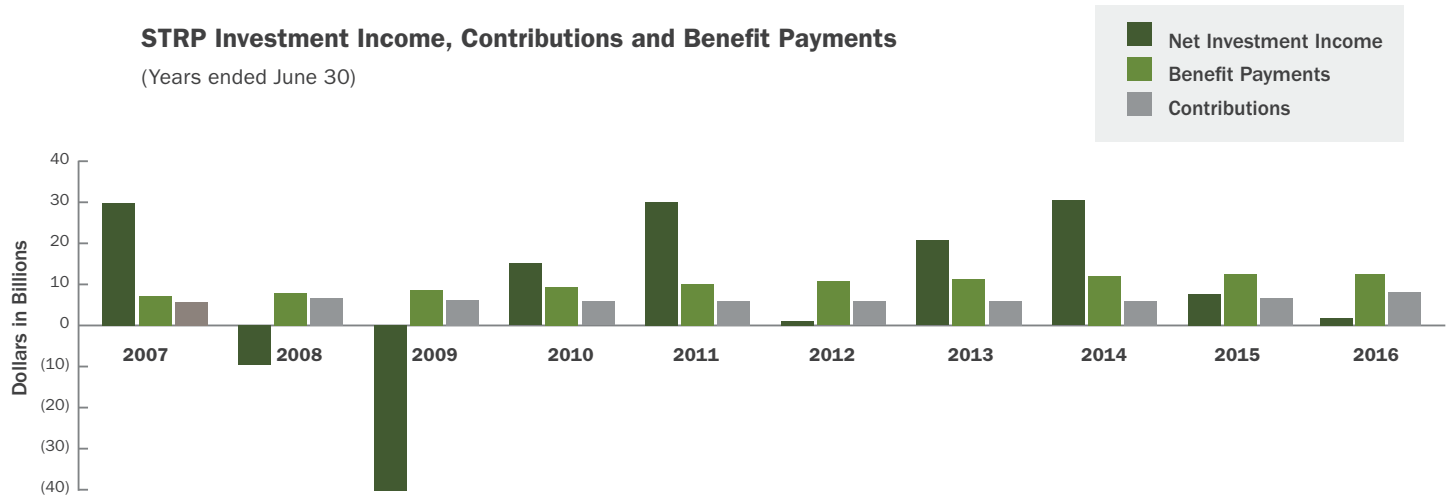
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

The investment return assumptions are developed by CalSTRS investment and actuarial consultants and are adopted by the board. The following chart is a 10-year

comparison of investment income (including unrealized gains and losses), contributions, and benefit payments.

STRP Investment Income, Contributions and Benefit Payments

(Years ended June 30)

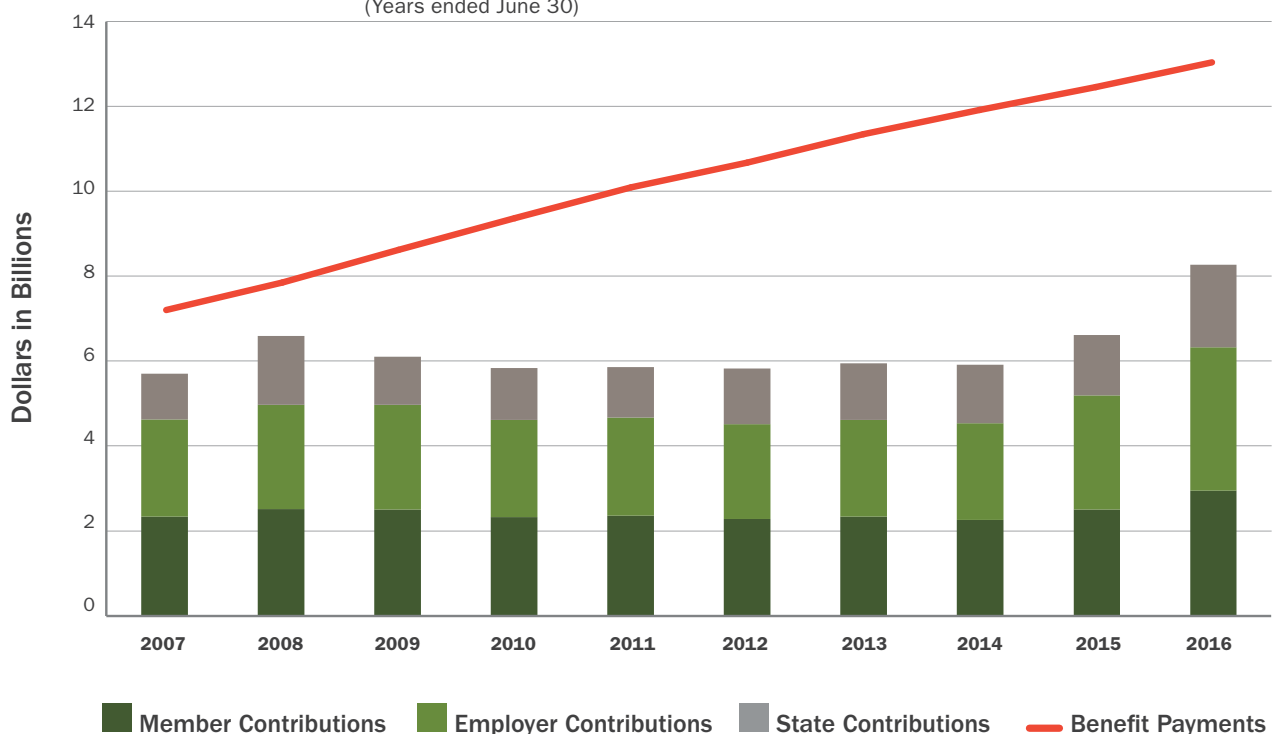


The chart below shows that prior to the enactment of Assembly Bill 1469 (Bonta) in June 2014, there had been a growing gap between contributions and benefit payments.

During fiscal year 2015-16, the gap narrowed by 18.5 percent. Contributions will continue to increase according to AB 1469 (Bonta) and the DB Program is scheduled to be fully funded by the year 2046.

STRP Contributions and Benefits Payments

(Years ended June 30)



The actuarial assumptions and methods used in the June 30, 2015 actuarial valuation were based on the 2010 Actuarial Experience Analysis adopted by the board in February 2012.

The most recent actuarial valuation indicates that the DB Program has 68.5 percent of the funds needed to pay the actuarial cost of the benefits accrued as of June 30, 2015, which is unchanged from the June 30, 2014 valuation. The actuarial valuation also indicates that as of June 30, 2015, the CBB Program had a funded ratio of 116.14 percent compared to the June 30, 2014 funded ratio of 117.09 percent. Additionally, the valuation indicates that as of June 30, 2015, the DBS Program had a funded ratio of 118.55 percent, compared to the June 30, 2014 funded ratio of 116.32 percent. The funded ratios for both the DBS and CBB programs were prior to the adoption of additional earnings credit by the Board.

Interest is credited to the nominal DBS and CBB program accounts at the minimum guaranteed annual rate established by the board prior to each plan year, which was 3.15 percent for the fiscal year ended June 30, 2016. 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 by the board. The board granted additional earnings credit for the DBS and CBB programs totaling \$324.2 million and \$5.6 million, respectively. Awarding the credits reduced the funded ratios cited above from 118.55 percent to 114.52 percent for the DBS Program and from 116.14 percent to 113.20 percent for the CBB Program. Refer to Note 1 for additional information.

Financial Reporting Valuation

The actuarial valuation for financial reporting focuses on the obligation an employer incurs to employees through the employment-exchange process. The primary purpose of the valuation for financial reporting is to provide a consistent, standardized methodology that allows comparability of data and increased transparency of the pension liability across plans. To achieve this, GASB requires a different approach for determining the reported NPL, as compared to unfunded actuarial accrued liability (UAAL).

There are considerable differences between the UAAL and NPL. Conceptually, the UAAL is the actuary's measure of the additional amount of assets needed to pay all benefits earned to date by current plan members, while the NPL is

an accrual calculation that reflects future benefits earned by plan members through the employment-exchange process in excess of the plan's fiduciary net position.

With the provision of additional member, employer, and General Fund contributions effective July 1, 2014, CalSTRS does not project a depletion of assets. CalSTRS discounted all future obligations for the STRP using the long-term rate of return on plan assets gross of administrative costs (currently 7.6 percent). Based on that assumption, the STRP has an NPL of \$80.9 billion as of June 30, 2016.

CalSTRS Pension2 Program

CalSTRS Pension2 (Pension2) offers Internal Revenue Code (IRC) section 403(b) and 457(b) tax-deferred defined contribution plans.

Net position for Pension2 increased by \$71.1 million or 11.8 percent as total additions of \$111.8 million exceeded total deductions of \$40.7 million. Contributions increased by 33.1 percent or \$25.3 million from fiscal year 2014-15 due to an increase in plan participants. Net investment income decreased \$9.9 million or 49.9 percent as a result of lower investment returns.

TEACHERS' DEFERRED COMPENSATION FUND

The Teachers' Deferred Compensation Fund (TDCF) is a trust fund established to account for ancillary activities associated with various deferred compensation plans and programs offered by CalSTRS. The TDCF received fee revenues and interest of \$1.3 million, an increase of \$0.3 million or 25.4 percent from the prior year. The increase is primarily due to increased sponsor and maintenance fees from vendors based on the increased value of assets.

As of June 30, 2016, TDCF is in a net deficit position amounting to \$166,000 as a result of an increase in TDCF's proportionate share of the State's pension expense.

TEACHERS' HEALTH BENEFIT FUND

The Teachers' Health Benefits Fund (THBF) is a trust fund created to administer health benefit programs established by statute. The Medicare Premium Payment Program (MPP Program), the only program within the fund, pays Medicare Part A premiums and surcharges and Part B surcharges for retired members of the DB Program who meet certain eligibility criteria.

Contributions decreased by \$0.5 million to \$30.0 million during fiscal year 2015-16. The THBF paid benefits of \$29.7 million which is a 3.1 percent decrease from the \$30.6 million in benefits paid in the prior year. Since the evaluated amount needed to fund the MPP Program in its entirety has not been transferred to the THBF, the funded ratio from a financial reporting perspective is 0.2 percent as of June 30, 2014, the most recent actuarial valuation date. See Note 4 for additional information.

LEGISLATIVE UPDATE

Consistent with CalSTRS mission, the board authorizes staff to engage in the legislative process to prevent and remove obstacles that impair the ability of CalSTRS members to achieve financial security.

Legislative topics related to CalSTRS during the period ended June 30, 2016, included the following:

Board-sponsored AB 736 (Cooley) adds CalSTRS Chief Operating Officer and Chief Financial Officer to those positions for which the Teachers' Retirement Board has the authority to establish desired competencies, set terms and conditions of employment, and set the compensation levels. This bill also imposes limits on annual salary increases paid to a person who served in either position on January 1, 2016, and who does not separate from service prior to the increase.

AB 2833 (Cooley) requires every California public investment fund to require its alternative investment vehicle fund managers and related parties to make specified disclosures regarding fees and expenses for each alternative investment vehicle. The bill also requires this information to be disclosed at least once annually in a report presented at a meeting open to the public. The bill applies to new contracts entered into, and to existing contracts pursuant to which the fund makes a new capital commitment, on or after January 1, 2017.

H.R. 4822 (Nunes) requires the state or local government employee pension plan sponsor to report to the U.S. Treasury Secretary each plan year beginning on or after January 1, 2017, specified information using the U.S. Treasury Obligation Yield Curve—so as to derive and apply a “risk free” rate of return—to calculate the information, where applicable. Failure to comply with the reporting

requirements results in the forfeiture of federal tax benefits to bonds issued by the relevant state or political subdivision until noncompliance is remedied.

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:

1. The Statement of Fiduciary Net Position
2. The Statement of Changes in Fiduciary Net Position
3. Notes to the Basic Financial Statements
4. Required Supplementary Information - Unaudited
5. Other Supplemental Information

The 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 its ability to fund future benefit payments.

The Statement of Changes in Fiduciary Net Position

The Statement of Changes in Fiduciary Net Position shows how CalSTRS net position changed during the fiscal year, reflecting contributions earned, benefit payments made, net investment returns 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 fiduciary fund financial statements. The type of information provided in each of the notes is as follows:

- Note 1 provides a general description of CalSTRS, as well as a concise description of each of the plans and funds administered by CalSTRS.
- Note 2 provides a summary of significant accounting policies, including the basis of accounting for CalSTRS, management's use of estimates, cash and investment accounting policies, and other significant accounting policies.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

- Note 3 provides a summary of the net pension liability of employers and the nonemployer contributing entity in accordance with GASB 67, *Financial Reporting for Pension Plans*.
- Note 4 provides a summary of CalSTRS funded status for the MPP Program in accordance with GASB 43, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*.
- Note 5 provides information related to deposits and investments, including disclosures required by GASB 28, *Accounting and Financial Reporting for Securities Lending Transactions*; GASB 38, *Certain Financial Statement Note Disclosures*; GASB 40, *Deposit and Investment Risk Disclosures*; GASB 53, *Accounting and Financial Reporting for Derivative Instruments*; GASB 67, *Financial Reporting for Pension Plans*; and GASB 72, *Fair Value Measurement and Application*. This note discloses information about CalSTRS investment performance and risks related to credit (including custodial credit and concentrations of credit risk), interest rates and foreign currency. In an effort to provide increased visibility to investment holdings, Note 5 also includes a Schedule of Investments that discloses the types of investments within each broad investment category.
- Note 6 provides information related to investment disclosures required by GASB 72 regarding the fair value of CalSTRS investments.
- Note 7 generally describes potential contingencies of CalSTRS.
- Note 8 provides a summary of CalSTRS significant commitments.
- Note 9 provides a summary of new accounting and financial reporting pronouncements.

Required Supplementary Information

The Required Supplementary Information consists of five schedules and related notes on the State Teachers' Retirement Plan's net pension liability and the other postemployment benefit plan's funding progress. It also provides a history of contributions from employers and the nonemployer contributing entity, the state of California. These schedules are intended to assist the reader in understanding the net pension liability of the STRP and the

funded status of the MPP Program. The information available in the Required Supplementary Information 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 Contributions from Employers and Nonemployer Contributing Entity
- Schedule IV – Schedule of Money-Weighted Investment Returns
- Schedule V – Schedule of Funding Progress (MPP Program only)

Other Supplemental Information

Other Supplemental Information includes details on administrative expenses, investment expenses, and consultant and professional services expenses. The schedules include:

- Schedule VI – Schedule of Administrative Expenses
- Schedule VII – Schedule of Investment Expenses
- Schedule VIII – Schedule of Consultant and Professional Services Expenses

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,



Robin Madsen
Chief Financial Officer



Basic Financial Statements

STATEMENT OF FIDUCIARY NET POSITION

As of June 30, 2016
(Dollars in Thousands)

	State Teachers' Retirement Plan	Pension2 403(b) Plan	Pension2 457(b) Plan	Teachers' Health Benefits	Teachers' Deferred Compensation	Total
Assets						
Investments:						
Debt Securities	\$39,877,359	\$276,692	\$9,896	\$590	\$1,443	\$40,165,980
Equity Securities	99,824,467	363,551	14,755	-	-	100,202,773
Alternative Investments	50,075,718	-	-	-	-	50,075,718
Derivative Instruments	239,683	-	-	-	-	239,683
Securities Lending Collateral	17,524,290	-	-	-	-	17,524,290
Total Investment Assets	207,541,517	640,243	24,651	590	1,443	208,208,444
Cash	164,597	-	-	-	1	164,598
Receivables:						
Investments Sold	897,941	-	-	-	-	897,941
Interest and Dividends	382,623	-	-	3	2	382,628
Member, Employer and State	545,890	7,345	473	-	-	553,708
Loans Receivable	2,131,694	2,222	99	-	-	2,134,015
Other	15,594	-	-	-	119	15,713
Total Receivables	3,973,742	9,567	572	3	121	3,984,005
Other Assets:						
Capital Assets, Net of Accumulated Depreciation	230,890	-	-	-	-	230,890
Other	326	-	-	-	-	326
Total Other Assets	231,216	-	-	-	-	231,216
Total Assets	211,911,072	649,810	25,223	593	1,565	212,588,263
Deferred Outflows of Resources	22,756	-	-	42	81	22,879
Total Assets and Deferred Outflows of Resources	211,933,828	649,810	25,223	635	1,646	212,611,142
Liabilities						
Investments:						
Derivative Instruments	169,246	-	-	-	-	169,246
Total Investment Liabilities	169,246	-	-	-	-	169,246
Investments Purchased Payable	1,403,511	-	-	-	-	1,403,511
Loans Payable	2,129,694	-	-	-	-	2,129,694
Benefits in Process of Payment	1,188,518	-	-	-	-	1,188,518
Net Pension and OPEB Obligation	256,069	-	-	571	1,067	257,707
Other	127,494	1,483	41	32	589	129,639
Securities Lending Obligation	17,530,264	-	-	-	-	17,530,264
Total Liabilities	22,804,796	1,483	41	603	1,656	22,808,579
Deferred Inflows of Resources	15,545	-	-	22	156	15,723
Total Liabilities and Deferred Inflows of Resources	22,820,341	1,483	41	625	1,812	22,824,302
Net Position Restricted for Pension/ Other Postemployment Benefits	\$189,113,487	\$648,327	\$25,182	\$10	\$(166)	\$189,786,840

The accompanying notes are an integral part of these statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For the Fiscal Year Ended June 30, 2016
(Dollars in Thousands)

	State Teachers' Retirement Plan	Pension2 403(b) Plan	Pension2 457(b) Plan	Teachers' Health Benefits	Teachers' Deferred Compensation	Total
Additions						
Contributions:						
Member Contributions	\$2,957,473	\$96,347	\$4,898	\$-	\$-	\$3,058,718
Employer Contributions	3,391,144	377	77	29,982	-	3,421,580
State of California	1,939,902	-	-	-	-	1,939,902
Total Contributions	8,288,519	96,724	4,975	29,982	-	8,420,200
Investment Income (Loss):						
Net Appreciation/(Depreciation) in Fair Value of Investments	(2,138,824)	(1,689)	13	-	-	(2,140,500)
Interest, Dividends and Other	4,649,039	11,237	413	9	6	4,660,704
Securities Lending Income	111,637	-	-	-	-	111,637
Less Investment Expenses:						
Cost of Lending Securities	(22,796)	-	-	-	-	(22,796)
Borrowing Costs	(32,406)	-	-	-	-	(32,406)
Other Investment Expenses	(261,692)	-	-	-	-	(261,692)
Net Investment Income	2,304,958	9,548	426	9	6	2,314,947
Other Income	41,519	120	4	-	1,339	42,982
Total Additions	10,634,996	106,392	5,405	29,991	1,345	10,778,129
Deductions						
Retirement, Disability, Death and Survivor Benefits	12,892,265	-	-	-	-	12,892,265
Premiums Paid	-	-	-	29,661	-	29,661
Distributions and Withdrawals	-	32,936	905	-	-	33,841
Purchasing Power Benefits	172,292	-	-	-	-	172,292
Refunds of Member Contributions	84,001	4,965	266	-	-	89,232
Administrative Expenses	180,056	1,583	56	380	1,433	183,508
Other Expenses	15,231	-	-	-	14	15,245
Total Deductions	13,343,845	39,484	1,227	30,041	1,447	13,416,044
Net Increase (Decrease) in Net Position	(2,708,849)	66,908	4,178	(50)	(102)	(2,637,915)
Net Position Restricted for Pension/ Other Postemployment Benefits						
Beginning of the Year	191,822,336	581,419	21,004	60	(64)	192,424,755
End of the Year	\$189,113,487	\$648,327	\$25,182	\$10	\$(166)	\$189,786,840

The accompanying notes are an integral part of these statements.

NOTES TO THE BASIC FINANCIAL STATEMENTS

1. DESCRIPTION OF CALSTRS AND CONTRIBUTION INFORMATION

The California State Teachers' Retirement System (CalSTRS) 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 various deferred compensation plans and programs:

- State Teachers' Retirement Plan (STRP)
- CalSTRS Pension2® Program (Internal Revenue Code 403(b) and 457(b) plans)
- Teachers' Health Benefits Fund (THBF)
- Teachers' Deferred Compensation Fund (TDCF)

CalSTRS provides pension benefits, including disability and survivor benefits, to California full-time and part-time public school teachers from pre-kindergarten through community college and certain other employees of the public school system. The Teachers' Retirement Law (California Education Code Section 22000 et seq.), as enacted and amended by the California Legislature, 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. These financial statements include only the accounts of CalSTRS. The state includes CalSTRS' various plans and funds as fiduciary funds in its financial statements.

The Teachers' Retirement Board (board) has exclusive control over the administration of the retirement system plans and the investment of funds, and makes rules, sets policies, and has the authority to hear and determine all facts pertaining to application for benefits under the retirement system. It is comprised of 12 members:

- Five members appointed by the Governor and confirmed by the Senate: one school board representative, one retired CalSTRS member, and three public representatives;
- Four ex-officio members: the Superintendent of Public Instruction, the State Treasurer, the State Controller and the Director of Finance; and
- Three member-elected positions representing current educators.

State Teachers' Retirement Plan

The State Teachers' Retirement Plan (STRP) is a multiple-employer, cost-sharing defined benefit plan comprised of four programs: Defined Benefit (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 and beneficiaries of these programs. 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 of the STRP and obligor of the trust. In addition, the state is both an employer and nonemployer contributing entity to the STRP.

STRP Defined Benefit Program

At June 30, 2016, there were 1,740 contributing employers (charter schools, school districts, community college districts, county offices of education and regional occupational programs). 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 retirement program provides benefits to members upon disability and to their survivors or beneficiaries upon the death of eligible members.

At June 30, 2016, membership consisted of:

Active Members	
Vested	317,654
Nonvested	120,734
Inactive Members	
Vested	38,066
Nonvested	149,738
Retirees and Benefit Recipients	288,079
Total Members, Retirees and Beneficiaries	914,271

NOTES TO THE BASIC FINANCIAL STATEMENTS

The STRP DB Program has two benefit formulas:

- 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 formulas, 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 2.0 percent 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 percent at age 63 or older. Members who have 30 years or more of credited service receive an additional increase of up to 0.2 percent to the age factor, up to the 2.4 percent 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 means 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 of credited service a member could earn in a school year.
- For fiscal year 2015–16, the limit on compensation that can be counted towards a member's benefit is \$265,000, if hired on or after July 1, 1996. The limit is

increased based on cost-of-living increases calculated per Internal Revenue Code 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. Limited-period compensation 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.

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 percent 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 percent 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 of credited service a member could earn in a school year.
- The limit on creditable compensation that can be counted towards a member's benefit is based on 120 percent of the Social Security wage base in effect on January 1, 2013. The limit is adjusted each fiscal year based on changes in the Consumer Price Index. In fiscal year 2015–16, the limit was \$137,941.
- 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

NOTES TO THE BASIC FINANCIAL STATEMENTS

allowances, cash in lieu of fringe benefits, limited-period compensation and compensation determined to have been paid to enhance a benefit, is not creditable to any CalSTRS benefit program.

The following provisions apply to both CalSTRS 2% at 60 and 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 Coverage A, no age limit if under Coverage B) is eligible for disability benefits of 50 percent of final compensation plus 10 percent of final compensation for each eligible child, up to a maximum addition of 40 percent. 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 in a school year due to overtime or working additional assignments are credited to the DBS Program at the lowest annual 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 each fiscal year. For the year ended June 30, 2016, the rate of interest credited to members' accounts was 0.49 percent.
- There is a postretirement annual benefit adjustment increase of 2 percent per year on a simple (rather than compound) basis. This benefit is vested for members who pay the higher contribution rates enacted in AB 1469 or retired in 2014.
- The member's benefit is reduced dollar for dollar, regardless of age, for the first 180 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 specified actions with respect to a member who is above normal retirement age.

- There is a 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 the fiscal year limitation, which is \$40,321 in 2015-16.
- Any enhancements to the CalSTRS Defined Benefit 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 his or her official duties, including specifically a felony involving a child with whom the member had contact as part of the member's official duties, forfeits a right to any benefits accrued beginning with the commission of the felony.

Purchasing Power Protection

Purchasing power protection is provided to members of the Defined Benefit Program through annual distributions (in quarterly payments) to retired and disabled members and beneficiaries to restore purchasing power up to 85 percent of the initial monthly allowance. Funding for purchasing power protection is from School Lands Revenue generated from the use of school lands (land granted to California by the federal government to support schools) and lieu lands (properties purchased with the proceeds from the sale of school lands) and from the Supplemental Benefit Maintenance Account (SBMA).

Public Resources Code Section 6217.5 allocates School Lands Revenue to the Teachers' Retirement Fund for purchasing power protection. In addition, Education Code Section 22954 provides a continuous appropriation from the state's General Fund to the SBMA in an amount equal to 2.5 percent of the total of the creditable compensation of the fiscal year ending in the immediately preceding calendar year, reduced by \$72 million. Through June 30, 2016, school lands revenue was \$4.6 million and the amount contributed to the SBMA was \$607.0 million.

Contributions

The parameters for member, employer and state contribution rates are set by the California Legislature and Governor and detailed in the Teachers' Retirement Law.

NOTES TO THE BASIC FINANCIAL STATEMENTS

A summary of statutory contribution rates and other sources of contributions to the DB Program are as follows:

Members — Pursuant to Chapter 47, Statutes of 2014 (AB 1469–Bonta), the CalSTRS member contribution rates effective for fiscal year 2015–16 and beyond are summarized in the table below:

Effective Date	2% at 60 Members	2% at 62 Members
July 01, 2015	9.20%	8.56%
July 01, 2016	10.25%	9.205%*

*The rate imposed on CalSTRS 2% at 62 members assuming no change in the normal cost of benefits.

Employers — Pursuant to Chapter 47, Statutes of 2014 (AB 1469–Bonta), CalSTRS employer contribution rate increases effective for fiscal year 2015–16 through fiscal year 2045–46 are summarized in the table below:

Effective Date	Pre AB 1469 Rate	Increase	Total
July 01, 2015	8.25%	2.48%	10.73%
July 01, 2016	8.25%	4.33%	12.58%
July 01, 2017	8.25%	6.18%	14.43%
July 01, 2018	8.25%	8.03%	16.28%
July 01, 2019	8.25%	9.88%	18.13%
July 01, 2020	8.25%	10.85%	19.10%
July 01, 2021 to June 30, 2046	8.25%	*	*
July 01, 2046	8.25%	Increase from prior rate ceases in 2046-47	

*The board cannot adjust the employer rate by more than 1 percent in a fiscal year, and the increase to the contribution rate above the 8.25 percent base contribution rate cannot exceed 12 percent for a maximum of 20.25 percent.

State — Also as a result of AB 1469, the additional state appropriation required to fully fund the benefits in effect as of 1990 by 2046 is specified in Education Code Section 22955.1(b). The increased contributions end as of fiscal year 2046–47. The CalSTRS state contribution rates effective for fiscal year 2015–16 and beyond are summarized in the table below:

Effective Date	Base Rate	AB 1469 Increase For 1990 Benefit Structure		Total
		Structure	SBMA Funding ¹	
July 01, 2015	2.017%	2.874%	2.50%	7.391%
July 01, 2016	2.017%	4.311%	2.50%	8.828%
July 01, 2017 to June 30, 2046	2.017%	4.311% ²	2.50%	8.828% ²
July 01, 2046 and thereafter	2.017%	²	2.50%	4.517% ²

¹This rate does not include the \$72 million reduction in accordance with Education Code Section 22954. Refer to Note 1, Purchasing Power Protection section for further discussion.

²The board has limited authority to adjust state contribution rates from July 1, 2017, through June 2046 in order to eliminate the remaining unfunded actuarial obligation associated with the 1990 benefit structure. The board cannot increase the rate by more than 0.50 percent in a fiscal year, and if there is no unfunded actuarial obligation, the contribution rate imposed to pay for the 1990 benefit structure would be reduced to 0 percent. Rates in effect prior to July 1, 2014, are reinstated if necessary to address any remaining 1990 unfunded actuarial obligation from July 1, 2046, and thereafter.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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. These 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 7.5 percent). As of June 30, 2016, the outstanding balance of receivables for benefit enhancements was \$15.0 million.

STRP Defined Benefit Supplement Program

The DBS Program, established pursuant to Chapter 74, Statutes of 2000 (AB 1509), is a cash balance defined benefit pension program that operates within the STRP. All members of the DB Program who make contributions to CalSTRS on creditable compensation earned on and after January 1, 2001, have an account under the DBS Program and are eligible to receive a DBS benefit based on the amount of funds contributed to the DBS account. Membership in the DBS Program is mandatory.

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 3.15 percent for the fiscal year ending June 30, 2016. 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 board policy. In April 2016, the board granted an additional earnings credit (AEC) of 3.95 percent of active and inactive members' June 30, 2015 nominal accounts, for a total value of approximately \$324.2 million.

Contributions

Beginning July 1, 2002, for creditable service in excess of one year of service credit within one fiscal year, member contributions of 8 percent and employer contributions of 8 percent are credited to the members' nominal DBS Program account (up to the compensation cap). Also, member contributions of 8 percent and employer contributions of 8 percent for compensation as a result of retirement incentives or limited-term enhancements are credited to the members' DBS Program accounts for CalSTRS 2% at 60 members.

STRP Cash Balance Benefit Program

The CBB Program, established under Chapter 592, Statutes of 1995 (AB 1298), and subsequently merged into the STRP by Chapter 1048, Statutes of 1998 (SB 2085), 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 percent 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 for not more than 67 percent of a full-time position in a community college district. Participation in the CBB Program is optional; a school district, community college district, county office of education 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. At June 30, 2016, there were 30 contributing school districts and 37,972 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 3.15 percent for the year ending June 30, 2016. 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 board policy. In April 2016, the board granted an AEC of 2.64 percent of active and inactive participants' June 30, 2015, nominal accounts, for a total value of approximately \$5.6 million.

Contributions

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

Participants — 4.0 percent of applicable participant's earnings

Employers — 4.0 percent of applicable participant's earnings

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

NOTES TO THE BASIC FINANCIAL STATEMENTS

STRP Replacement Benefits Program

The STRP Replacement Benefits 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 is established in accordance with Internal Revenue Code (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. In 2016, the federal dollar limit applicable to a 65-year-old CalSTRS member is \$179,558. CalSTRS 2% at 62 members will not receive any benefits in excess of the IRC Section 415(b) limit.

The program is funded as needed. Contributions that would otherwise be credited to the DB Program each month are instead credited to the Replacement Benefits 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. At June 30, 2016, there were 323 retirees, beneficiaries and non-member spouses receiving benefits from the Replacement Benefits Program.

CalSTRS Pension2 Program

Pursuant to Chapter 291, Statutes of 1994 (AB 3064), CalSTRS Pension2 (Pension2) was established to include two tax-deferred defined contribution plans under the IRC sections 403(b) and 457(b). Voya Financial and TIAA are responsible for administrative services, including custody and record-keeping services, while CalSTRS performs the investment management functions of determining, monitoring and maintaining the plan's investments.

As of June 30, 2016, the IRC 403(b) plan had 10,627 plan participants and 823 participating employers (school districts) with account balances. On the same date, the IRC 457(b) plan had 587 plan participants and 44 participating employers (school districts) with account balances. Pension2 is available to all full-time California pre-kindergarten 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 2% at 62 member compensation in excess of the compensation cap.

The Pension2 investments are comprised of a selection of mutual funds with underlying investments that include stocks, bonds and 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 member's account.

Teachers' Health Benefits Fund

The Teachers' Health Benefits Fund (THBF) was established pursuant to Chapter 1032, Statutes of 2000 (SB 1435), which also established the Medicare Premium Payment (MPP) Program, a cost-sharing multiple-employer other postemployment benefit plan, paid from the THBF to eligible retired members of the DB Program. At June 30, 2016, there were 7,109 retirees participating in the MPP Program. The number of members who will participate in the program after they retire is unknown because eligibility cannot be pre-determined.

The MPP Program pays Medicare Part A premiums and surcharges and Part B surcharges for retired members of the DB Program who meet certain eligibility criteria. The MPP Program has been extended several times. On April 5, 2007, the board extended the MPP Program to members who retired on or before June 30, 2012. Members who retire after June 30, 2012, are not eligible for coverage under the MPP Program.

The MPP Program is funded on a pay-as-you go basis from a portion of monthly employer contributions. 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.

NOTES TO THE BASIC FINANCIAL STATEMENTS

Teachers' Deferred Compensation Fund

The Teachers' Deferred Compensation Fund (TDCF) was established pursuant to Chapter 655, Statutes of 2006 (SB 1466), and is used to account for ancillary activities associated with various 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, a vendor registration program and an employer compliance assistance program.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

CalSTRS maintains its accounting records using the accrual basis of accounting. It recognizes member contributions in the period in which the contributions are required by statute. Furthermore, CalSTRS recognizes employer and state contributions when required by statute and the employer or state has made a formal commitment to provide the contributions. Also, CalSTRS recognizes benefits when due and payable in accordance with its retirement and benefits programs. Purchases and sales of investments are recorded on the trade date. Interest income is recorded on an accrual basis. Dividends are recorded on the ex-dividend date.

Use of Estimates in The Preparation of Financial Statements

The preparation of CalSTRS financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect certain financial statement amounts and disclosures. Actual results could differ from those estimates.

Cash

Cash held by CalSTRS includes foreign currency, deposits with the State Treasury and master custodian, and cash held at commercial banks for operational purposes.

Investments

Under the California Constitution, Article 16, Section 17, the board has the sole and exclusive fiduciary responsibility over the assets of the retirement system and to administer

the system in a manner that will assure prompt delivery of benefits and related services to the members and their beneficiaries. As a public pension fund, CalSTRS is not subject to ERISA, which governs corporate pension plans. However, the CalSTRS investment decision-making criteria are based on the "prudent investor" standard, for which the ERISA standards serve as a basis.

Additionally, the California Constitution, Article 16, Section 17, and the California Education Code, Part 13, Chapter 4, Section 22250 require the diversification of investments so as to minimize the risk of loss and maximize the rate of return, unless, under the circumstances, it is clearly not prudent to do so. CalSTRS Investment Policy and Management Plan is established, 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 regarding the Schedule of Investments.

In the Statement of Changes in Fiduciary Net Position, CalSTRS presents the net appreciation (depreciation) in the fair value of its 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 impacting certain industries, sectors or geographies. See Note 5 for disclosures related to these risks.

Certain 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.

Investment Risk Management

CalSTRS enters into currency forwards and option contracts to protect the value of non-U.S. investments against foreign currency fluctuation. 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 hedge risks in the equity and fixed income markets. CalSTRS seeks to minimize risk from counterparties by establishing

NOTES TO THE BASIC FINANCIAL STATEMENTS

minimum credit quality standards and the use of master trading agreements which require a daily exchange of collateral to offset mark-to-market 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 for capital assets is \$1 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. Estimated useful lives range from one to five years for equipment, 40 years for buildings and a minimum of five years for amortizable intangible assets. As of June 30, 2016 accumulated depreciation/amortization was \$66.4 million and depreciation/amortization expense was \$11.7 million. CalSTRS reviews its 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, 2016, there has been no impairment of capital assets.

Administrative Expenses

The cost of administering the CalSTRS system is financed through contributions and investment earnings. Schedule VI (Schedule of Administrative Expenses) provides a listing of administrative expense by type.

Income Taxes

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

Investment Expenses

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. Schedule VII (Schedule of Investment Expenses) provides a listing

of investment expenses by type. Broker commissions for securities trades and private asset fees are capitalized, with the exception of certain equity and derivative securities for which they are expensed.

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.

Reserves

CalSTRS maintains accounts within the net position restricted for pension/other postemployment benefits as reserve accounts for various operating purposes. These include four reserve accounts for the DBS Program, four reserve accounts for the CBB Program, one reserve account for the Supplemental Benefit Maintenance Account (SBMA), and other reserves not legally required for disclosure.

Defined Benefit Supplement Annuitant Reserve

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 pension plan 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 established the DBS Gain and Loss Reserve, which represents a segregated account that may be used to either: 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 Annuitant Reserve

Section 26204 of the Education Code established 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 certified educators available to CalSTRS employers as an alternative to the CalSTRS DB Program, Social Security, and other retirement plans. During a participant's career, credits and interest accumulate in the Cash Balance Active Contribution and Accumulated Interest reserves, respectively, as described in the table below. When a participant retires, the reserve funds are either paid out as a lump sum or transferred to the Cash Balance Annuitant Reserve if the participant elects to receive their benefit as an annuity.

Cash Balance Gain and Loss Reserve

Section 26202 of the Education Code established the Cash Balance Benefit Gain and Loss Reserve, which may be used to either: 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, and 3) where necessary, to provide additions to the CBB Annuitant Reserve for monthly annuity payments.

Supplemental Benefit Maintenance Account

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

Other Reserves Not Legally Required For Disclosure

These reserves represent accumulated changes in operations reflecting contributions earned, benefit payments made, investment returns and the costs of plan administration for the STRP, Pension2, THBF and TDCF.

The reserve balances as of June 30, 2016, are summarized in the table below:

Reserve Type	Reserve Balance (Dollars in Thousands)
Defined Benefit Supplement Contribution Reserve	\$6,461,743
Defined Benefit Supplement Accumulated Interest Reserve	2,267,698
Defined Benefit Supplement Annuitant Reserve	525,406
Defined Benefit Supplement Gain and (Loss) Reserve	1,955,991
Cash Balance Active Contribution Reserve	176,245
Cash Balance Accumulated Interest Reserve	57,499
Cash Balance Annuitant Reserve	4,362
Cash Balance Gain and (Loss) Reserve	25,595
Supplemental Benefit Maintenance Account Reserve	12,796,444
Other Reserves Not Legally Required for Disclosure	165,515,857
Total	\$189,786,840

NOTES TO THE BASIC FINANCIAL STATEMENTS

3. NET PENSION LIABILITY OF EMPLOYERS AND NONEMPLOYER CONTRIBUTING ENTITY

The components of the net pension liability of the STRP for participating employers and the State of California (nonemployer contributing entity) as of June 30, 2016, are as follows (dollars in millions):

Total pension liability	\$269,994
Less: STRP fiduciary net position	(189,113)
Net pension liability of employers and the state	\$80,881
STRP fiduciary net position as a percentage of the total pension liability	70%

Actuarial Methods and Assumptions

The total pension liability for the STRP was determined by applying update procedures to a financial reporting actuarial valuation as of June 30, 2015, and rolling forward the total pension liability to June 30, 2016. The financial reporting actuarial valuation as of June 30, 2015, used the following actuarial methods and assumptions, applied to all prior periods included in the measurement:

Valuation Date	June 30, 2015
Experience Study	July 1, 2006, through June 30, 2010
Actuarial Cost Method	Entry age normal
Investment Rate of Return ¹	7.60%
Consumer Price Inflation	3.00%
Wage Growth	3.75%
Post-retirement Benefit Increases	2% simple for DB (Annually) Maintain 85% purchasing power level for DB Not applicable for DBS/CBB

CalSTRS uses custom mortality tables to best fit the patterns of mortality among its members. These custom tables are based on RP2000 series tables² adjusted to fit CalSTRS specific experience through June 30, 2015. See CalSTRS July 1, 2006 – June 30, 2010 Experience Analysis and June 30, 2015 Actuarial Program Valuations for more information.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. The best-estimate ranges were developed using capital market assumptions from CalSTRS general investment consultant (Pension Consulting Alliance - PCA) as an input to the process. The actuarial investment rate of return assumption was adopted by the board in 2012 in conjunction with the most recent experience study. For each future valuation, CalSTRS consulting actuary (Milliman) reviews the return assumption for reasonableness based on the most current capital market assumptions. Best estimates of 20-year geometric real rates of return and the assumed asset allocation for each major asset class for the year ended June 30, 2016, are summarized in the following table:

Discount Rate

Asset Class	Assumed Asset Allocation	Long-Term Expected Real Rate of Return ³
Global Equity	47%	6.30%
Fixed Income	12	0.30
Real Estate	13	5.20
Private Equity	13	9.30
Absolute Return/Risk Mitigating Strategies	9	2.90
Inflation Sensitive	4	3.80
Cash/Liquidity	2	-1.00

¹Net of investment expenses, but gross of administrative expenses. CalSTRS uses a 7.5 percent assumed investment rate of return for funding purposes which is net of administrative expenses.

²RP2000 series tables are an industry standard set of mortality rates published in 2000 by the Society of Actuaries.

³20-years geometric average

NOTES TO THE BASIC FINANCIAL STATEMENTS

The discount rate used to measure the total pension liability was 7.60 percent. 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 (7.60 percent) and assuming that contributions, benefit payments, and administrative expense 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.

Presented below is the net pension liability of employers and the state using the current discount rate of 7.60 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 to 3 percent lower or 1 to 3 percent higher than the current rate:

Discount Rate	Net Pension Liability of Employers and Nonemployer Contributing Entity (Dollars in Millions)
3% Decrease (4.60%)	\$212,020
2% Decrease (5.60%)	159,488
1% Decrease (6.60%)	116,406
Current Discount Rate (7.60%)	80,881
1% Increase (8.60%)	51,376
2% Increase (9.60%)	26,564
3% Increase (10.60%)	5,603

NOTES TO THE BASIC FINANCIAL STATEMENTS

4. FUNDED STATUS

Teachers' Health Benefits Fund

The funded status of the Medicare Premium Payment (MPP) Program, as of June 30, 2014, the most recent actuarial valuation date, is as follows (dollars in millions):

	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll * (a/b)	UAAL as a % of Covered Payroll ((b-a)/c)
MPP Program	\$0.9	\$482.0	\$481.1	0.2%	\$ -	N/A

*As of June 30, 2012, current active members are no longer eligible for future enrollment in the MPP Program. Therefore, the covered payroll is \$0 for years 2012 and thereafter.

The above table shows the funded ratio of 0.2 percent from a financial reporting perspective. This ratio is determined using methodology based upon financial reporting requirements, which is different from the methodology used to develop the estimated cost to fund the program.

The estimated amount needed to fully fund the program, \$336 million based on the June 30, 2015 actuarial valuation of the DB Program, has not been transferred to the THBF. The estimated amount of future employer contributions required to fully fund the MPP Program is noted as a commitment and is explained further in Note 8.

Methods and Assumptions

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of

events far into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. The required schedule of funding progress immediately following the notes to the financial statements presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits. Calculations are based on the benefits provided under the terms of the plan in effect at the time of each valuation.

Actuarial calculations reflect a long-term perspective and the actuarial methods and assumptions used for valuing the MPP Program include techniques that are consistent with the long-term perspective of the calculations.

Additional information as of the latest actuarial valuation follows:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level dollar basis
Amortization Period	Closed
Remaining Amortization Period	22 years
Asset Valuation Method	Fair value of net assets
Actuarial Assumptions:	
Investment Rate of Return	3.50%
Interest on Accounts	Not applicable
Wage Growth	Not applicable
Consumer Price Inflation	3.00%
Healthcare Cost Trend Rate Part A Premiums	3.70%
Healthcare Cost Trend Rate Part B Premiums	5.70%

NOTES TO THE BASIC FINANCIAL STATEMENTS

5. DEPOSITS AND INVESTMENTS

Money-Weighted Rate of Return

For the period ended June 30, 2016, the money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 1.2 percent. The money-weighted rate of return expresses investment performance,

taking into account the impact of cash infusion into and disbursements from the pension system.

Schedule of Investments

CalSTRS is authorized to invest and reinvest the monies to meet the objectives of the Investment Policy and Management Plan as established by the board.

The following table represents the detailed investments by type within equities, debt securities, alternative investments and derivatives presented in the Statement of Fiduciary Net Position.

Schedule of Investments

At June 30, 2016, CalSTRS investments are as follows:
(Dollars in Thousands)

Investments	State Teachers' Retirement Plan	Pension2 403(b) Plan	Pension2 457(b) Plan	Teachers' Health Benefits	Teachers' Deferred Compensation	Total
Assets:						
Debt Securities						
Asset-Backed Securities	\$753,987	\$-	\$-	\$-	\$-	\$753,987
Corporate Bonds	11,929,414	-	-	-	-	11,929,414
Foreign Government Issues	1,115,753	-	-	-	-	1,115,753
Mortgage-Backed Securities	8,900,347	-	-	-	-	8,900,347
Municipal Securities	207,670	-	-	-	-	207,670
U.S. Government and Agency Obligations	11,127,262	-	-	-	-	11,127,262
Short-Term Securities	5,842,926	3,011	87	590	1,443	5,848,057
Mutual Funds-Bond Funds	-	49,243	1,735	-	-	50,978
Guaranteed Annuity Contracts	-	224,438	8,074	-	-	232,512
Total Debt Securities	39,877,359	276,692	9,896	590	1,443	40,165,980
Equity Securities						
Common Stocks	93,833,562	-	-	-	-	93,833,562
Depository Receipts	2,224,017	-	-	-	-	2,224,017
Mutual Funds-Stock Funds	290,481	363,551	14,755	-	-	668,787
Preferred Stocks	289,813	-	-	-	-	289,813
Real Estate Investment Trusts	3,186,594	-	-	-	-	3,186,594
Total Equity Securities	99,824,467	363,551	14,755	-	-	100,202,773
Alternative Investments						
Debt-Privately Held	2,210,907	-	-	-	-	2,210,907
Equity-Privately Held	21,131,883	-	-	-	-	21,131,883
Real Estate-Directly-Held	16,049,293	-	-	-	-	16,049,293
Real Estate-Non-Directly-Held	10,683,635	-	-	-	-	10,683,635
Total Alternative Investments	50,075,718	-	-	-	-	50,075,718
Derivative Instruments						
Forwards	134,292	-	-	-	-	134,292
Futures	86,879	-	-	-	-	86,879
Options	1,119	-	-	-	-	1,119
Rights and Warrants	10,258	-	-	-	-	10,258
Swaps	7,135	-	-	-	-	7,135
Total Derivative Instruments	239,683	-	-	-	-	239,683
Securities Lending Collateral	17,524,290	-	-	-	-	17,524,290
Total Investment Assets	207,541,517	640,243	24,651	590	1,443	208,208,444
Liabilities:						
Derivative Instruments						
Forwards	104,176	-	-	-	-	104,176
Futures	52,230	-	-	-	-	52,230
Options	3,299	-	-	-	-	3,299
Swaps	9,541	-	-	-	-	9,541
Total Derivative Instruments	169,246	-	-	-	-	169,246
Total Investment Liabilities	169,246	-	-	-	-	169,246
Total Net Investments	\$207,372,271	\$640,243	\$24,651	\$590	\$1,443	\$208,039,198

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. Investments in Pension2 include debt securities such as bond mutual funds and guaranteed annuity contracts.

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 Pooled Money Investment Account (classified under short-term securities), administered by the State Treasurer, represent various investments with approximately 167 average days to maturity. The State Treasury 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 Short-Term Investment Fund, administered by State Street Bank, represent various investments with approximately 24 average days to maturity.

Pension2 offers bond mutual funds and annuity contracts to the individual participants. The annuity contracts offered guarantee a specified minimum interest rate which is subject to change at any time.

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, including distressed and mezzanine debt, or privately held equity, including venture capital, buyouts, co-investments and equity expansion, as well as investments in real estate and infrastructure. They include investments held within the private equity, real estate, corporate governance, innovation, and infrastructure asset classes and investment strategies.

Investments in real estate directly-held assets are in separate accounts and joint ventures which are primarily comprised of retail, office, industrial, and multi-family properties. Real estate non-directly-held investments primarily include commingled limited partnership investments, in which CalSTRS does not have a controlling interest.

Real estate investments in non-directly-held assets are 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.

Corporate governance funds employ specific investment strategies and co-investments including, but not limited to, publicly traded equity securities of companies on U.S., Canadian, and European exchanges.

Derivative Instruments

CalSTRS holds investments in futures, foreign currency forward contracts, options, swaps, rights and warrants.

Foreign currency forward contracts are traded over-the-counter (OTC) and are an obligation to buy or sell currency at a specified exchange rate and quantity on a specific future date.

CalSTRS invests in exchange-traded options and OTC 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, contracts or notional amount, expiration date and strike price are known in advance for exchange-traded 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 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

Securities Lending

State of California statutes and board policies permit CalSTRS to make short-term, collateralized loans of its securities to broker-dealers and other entities in order to earn incremental income. CalSTRS has contracted with third-party securities lending agents and their respective custodians to lend global 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 percent and 105 percent of the fair value of domestic and international equity securities loaned, respectively. For non-U.S. debt securities loaned, CalSTRS follows market practice which requires collateral of 102 percent 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. At June 30, 2016, the weighted duration difference between the investments and these loans was 26 days.

At June 30, 2016, the fair value of the securities on loan was \$20.1 billion. The securities lending cash collateral obligations were \$17.5 billion. The fair value of the re-invested cash collateral was \$17.5 billion, the non-cash collateral was \$3.2 billion and the calculated mark (additional collateral requested for the next business day) was \$110.7 million. The invested collateral and corresponding obligation are reflected in the Statement of Fiduciary Net Position as assets and liabilities, respectively. Due to the decline in the fair value in the re-invested cash collateral, the liability represented by the securities lending cash collateral obligation was greater than the re-invested cash collateral. The re-invested cash collateral securities in this program are typically held to maturity and expected to mature at par.

In accordance with GASB Statement No. 28, *Accounting and Financial Reporting on Securities Lending Transactions*, the non-cash collateral of \$3.2 billion is not reported in the Statement of Fiduciary Net Position because 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.

Real Estate Debt Service

Real estate investments are classified as investments in accordance with GASB Statement No. 72, *Fair Value Measurement and Application*. Certain real estate investments are leveraged through partnerships using a combination of equity contributions from CalSTRS and other investors and through the utilization 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. At June 30, 2016 the estimated fair value of real estate investments (net of all outstanding debt) totaled approximately \$26.7 billion. The CalSTRS share of outstanding debt is \$10.3 billion, excluding obligations of limited partnership interests in commingled funds. The CalSTRS portion of real estate debt service requirements includes both recourse and nonrecourse loans.

NOTES TO THE BASIC FINANCIAL STATEMENTS

The chart below details the repayment of real estate debt, excluding obligations of limited partnership interests in commingled funds, as of June 30, 2016:

Real Estate Debt Service Requirements (Dollars in Thousands)			
	Principal	Interest	Total
Period Ended June 30, 2017	\$3,834,400	\$327,788	\$4,162,188
2018	1,651,447	196,185	1,847,632
2019	1,012,508	146,369	1,158,877
2020	812,932	118,832	931,764
2021	773,398	95,693	869,091
2022 - 2026	1,934,887	178,547	2,113,434
2027 - 2031	81,023	42,487	123,510
2032 - 2036	22,683	36,548	59,231
2037 - 2041	71,027	12,742	83,769
2042 - Thereafter	57,983	5,205	63,188
Total	\$10,252,288	\$1,160,396	\$11,412,684

This table includes \$1.9 billion of loans for CalSTRS interest in real estate investments from the Master Credit Facility Portfolio discussed further below.

Real estate debt currently bears interest at fixed and variable rates ranging from 0.00¹ to 10.55 percent and 0.58 to 10.70 percent, respectively.

CalSTRS has three separate unsecured credit facilities (Master Credit Facility Portfolio). The proceeds from the Master Credit Facility Portfolio provide the source of funds for managing capital flows of investment strategies. As of June 30, 2016, the total available lines of credit in the Master Credit Facility Portfolio were \$2.85 billion. The total principal amount borrowed was \$2.13 billion and the remaining amount available was \$720 million. These lines of credit will mature between October 2016 and December 2018.

The CalSTRS Real Estate Investment Policy states that leverage shall be used to enhance investment returns. Careful consideration is given to the impact of leverage on investment and portfolio risks. Leverage within each segment of the portfolio is regularly monitored and reported to the board for compliance. At June 30, 2016, the loan to value on the real estate portfolio, excluding obligations of limited partnership interests in commingled funds was 40 percent. CalSTRS does not have any debt obligations under the real estate limited partnership interests held in commingled funds.

¹Zero percent interest rate through June 30, 2016.

Investment Risk Schedules

In accordance with GASB Statement No. 40, 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 risk and foreign currency risk. The policies addressing each risk, discussed in more detail below, are contained within the Investment Policy and Management Plan reviewed and approved annually by the board.

CalSTRS has no investment (other than those issued or explicitly guaranteed by the U.S. government) in any one organization that represents 5 percent or more of the STRP's fiduciary net position at June 30, 2016.

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 percent of the market value of the corporate securities comprising the credit portion of the core fixed income portfolio be rated investment grade as defined by the Barclays U.S. Aggregate Bond Index. The ratings used to determine the quality of the individual securities in the table below are the ratings provided by S&P McGraw

NOTES TO THE BASIC FINANCIAL STATEMENTS

Hill Financial. Obligations issued or guaranteed by the U.S. federal 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 percent of the market 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 percent per issuer, at the time of purchase, of the market value of any individual portfolio. The Investment Guidelines also include an allocation to opportunistic strategies which allows for the purchase of

bonds rated below investment grade. Limitations on the amount of debt of any one issuer each investment manager may hold are 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 NR represents those securities that are not rated and NA 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.

At June 30, 2016, the credit ratings of all debt securities and securities lending collateral 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 Fund	Annuity Contracts	Total
Long-term Ratings										
AAA	\$470,677	\$333,373	\$194,798	\$217,670	\$38,518	\$25,008	\$-	\$32,247	\$-	\$1,312,291
AA	23,650	987,942	76,351	94,439	122,432	1,956,175	-	18,731	-	3,279,720
A	25,957	3,032,901	139,816	46,700	21,737	15,002	-	-	-	3,282,113
BBB	25,622	4,698,216	213,551	258,713	10,961	-	-	-	-	5,207,063
BB	8,194	1,259,085	103,807	220,233	-	1,518	-	-	-	1,592,837
B	6,058	1,068,065	25,239	206,747	14,022	1,226	-	-	-	1,321,357
CCC	2,562	244,292	1,284	65,944	-	1,993	-	-	-	316,075
CC	5,014	7,158	-	4,972	-	-	-	-	-	17,144
C	-	1,085	-	-	-	-	-	-	-	1,085
D	1,161	14,074	1,879	24,578	-	-	-	-	-	41,692
NR	185,092	283,223	359,028	5,874,758	-	35,445	-	-	232,512	6,970,058
NA	-	-	-	1,885,593	-	9,090,895	-	-	-	10,976,488
Short-term Ratings										
A-1	-	-	-	-	-	-	886,560	-	-	886,560
NR	-	-	-	-	-	-	4,446,939	-	-	4,446,939
NA	-	-	-	-	-	-	514,558	-	-	514,558
Total	\$753,987	\$11,929,414	\$1,115,753	\$8,900,347	\$207,670	\$11,127,262	\$5,848,057	\$50,978	\$232,512	\$40,165,980

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	\$2,514,115	\$89,995	\$48,152	\$-	\$-	\$2,652,262
AA	72,946	1,163,435	215,062	-	-	1,451,443
A	176,858	653,139	55,205	-	-	885,202
BBB	545	-	-	-	-	545
BB	168	-	-	-	-	168
CC	443	-	-	-	-	443
D	-	-	6,881	-	-	6,881
NR	311,808	115,153	3,594	-	-	430,555
NA	-	-	-	50,013	-	50,013
Short-term Ratings						
A-1	-	-	-	-	1,942,235	1,942,235
NR	-	-	-	-	10,056,084	10,056,084
Total	\$3,076,883	\$2,021,722	\$328,894	\$50,013	\$11,998,319	\$17,475,831

Cash and accruals totaling \$48,459 (in thousands) are not included in the total above but are included in the Securities Lending Collateral line item in the Statement of Fiduciary Net Position.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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.

The Investment Guidelines allow the core long-term investment grade portfolios the discretion to deviate the average duration of the portfolio within a range of +/- 20 percent (80 to 120 percent) of the weighted average effective duration of the performance benchmark.

The table below represents the net asset values and duration of the long-term fixed income portfolios at June 30, 2016.

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	\$735,084	5.40	5.30	0.10
Credit Obligations	8,301,786	7.05	7.00	0.05
Mortgage-Backed Securities	7,157,531	2.57	2.47	0.10
U.S. Government and Agency Obligations	9,653,388	6.09	5.92	0.17
Debt Opportunistic				
Corporate High Yield	1,830,668	4.00	4.14	(0.14)
Debt Core Plus	3,410,509	5.33	5.17	0.16
Leveraged Loans	707,927	0.47	0.25	0.22
Special Situations	49,396	0.09	5.20	(5.11)
Total	\$31,846,289	5.19	5.20	(0.01)

Global inflation-linked securities and the home loan program are not included in the table above. The global inflation-linked securities had a net asset value of \$568.1 million with an effective duration of 12.42 compared to the benchmark duration of 12.38. The home loan program had a net asset value of \$117.1 million with a weighted average

maturity of 23.06 years. Cash and accruals totaling \$306.1 million and swaps and other collateral totaling -\$6.9 million are included in the total net asset value within the fixed income portfolio but are not included in debt securities on the Statement of Fiduciary Net Position.

At June 30, 2016, the segmented time distribution for the short-term securities based upon the expected maturity and/or first reset dates are 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	\$366,086	\$64,570	\$45,871	\$-	\$-	\$-	\$476,527
Corporate Bonds	298,528	235,603	-	-	-	-	534,131
Money Market Securities	2,009,901	1,506,000	369,372	69,831	39,798	-	3,994,902
Mortgage-Backed Securities	768	169	-	-	-	-	937
Pooled Money Investment Account	127,175	-	-	-	-	-	127,175
Short-Term Investment Fund	521,474	-	-	-	-	-	521,474
U.S. Government and Agency Obligations	615,457	470,971	470,328	139,809	280,326	15,019	1,991,910
Total	\$3,939,389	\$2,277,313	\$885,571	\$209,640	\$320,124	\$15,019	\$7,647,056
Weightings	51.51%	29.78%	11.58%	2.74%	4.19%	0.20%	100.00%

NOTES TO THE BASIC FINANCIAL STATEMENTS

The primary investment objective for the 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 above table includes \$1.8 billion debt securities that are managed

within the short-term fixed income portfolio but may have original maturities of over a year. The Investment Guidelines of the short-term portfolio state that the average maturity of the investments shall be managed such that it will not exceed 180 days.

At June 30, 2016, the segmented time distribution based upon the expected maturity and/or first reset date for the invested Securities Lending Cash Collateral are as follows:

Securities Lending Collateral Segmented Time Distribution (Dollars in Thousands)							
Investment Type	0–1 days	2–6 days	7–29 days	30–59 days	60–89 days	90+ days	TOTAL
Asset-Backed Securities	\$-	\$-	\$2,694,328	\$290,616	\$34,952	\$56,987	\$3,076,883
Corporate Bonds	-	80,092	596,408	738,255	606,967	-	2,021,722
Mortgage-Backed Securities	-	80,039	50,129	34,322	149,392	15,012	328,894
U.S. Government and Agency Obligations	50,013	-	-	-	-	-	50,013
Short-Term Securities	4,081,981	1,394,351	3,378,127	1,214,270	1,170,003	759,587	11,998,319
Total	\$4,131,994	\$1,554,482	\$6,718,992	\$2,277,463	\$1,961,314	\$831,586	\$17,475,831
Weightings	23.64%	8.90%	38.45%	13.03%	11.22%	4.76%	100.00%

Cash and accruals totaling \$48,459 (in thousands) are not included in the total above but are included in the Securities Lending Collateral line item in the Statement of Fiduciary Net Position.

The invested Securities Lending Cash Collateral is diversified among different asset classes 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

The primary objectives of Voya Fixed Plus III and TIAA Traditional Annuity/Annuities are the guarantee of principal and an interest rate floor of 1.0 percent for the life of the contract. The interest rate guarantees under the contracts are subject to Voya Retirement Insurance and Annuity Company (VRIAC) and TIAA's claim paying abilities.

At June 30, 2016, the weighted average maturity of investments for the Pension2 IRC 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
Federated U.S. Treasury Cash	52 days	\$2,897
Money Market Securities	51 days	201
Vanguard Inflation Protected Securities Fund Institutional	8.7 years	24,085
Vanguard Short-Term Bond Index Fund Institutional	2.8 years	18,731
Vanguard Total Bond Market Index Fund	8.0 years	8,162
Total		\$54,076

NOTES TO THE BASIC FINANCIAL STATEMENTS

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of CalSTRS investment in a single issuer. As of June 30, 2016, CalSTRS has no single issuer that exceeds 5 percent of total investments. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments are excluded. CalSTRS Investment Policy and Management Plan states that no more than 3 percent of the total fund shall be invested or exposed to any one security or corporation, with the exception of United States Treasury or Agency Obligations. At June 30, 2016, CalSTRS was in compliance with this policy. The Pension2's 403(b) and 457(b) plans, which are comprised primarily of mutual funds, have no single issuer that exceeds 5 percent 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 its deposits, investments, or collateral securities. As of June 30, 2016, all of CalSTRS non-cash investments are not exposed to custodial credit risk. Cash held with the master custodian is insured up to \$250,000 under the Federal Deposit Insurance Corporation (FDIC) general deposit insurance rules. 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. At June 30, 2016, CalSTRS investments in foreign currencies are as follows:

Foreign Currency Risk (Dollars in Thousands) (In U.S. Dollar Equivalents)						
Currency Name	Cash	Equity	Fixed Income	Spot Contracts	Forward Contracts	Total Exposure
Australian Dollar	\$12,272	\$1,743,037	\$36,910	\$5	\$234	\$1,792,458
Brazilian Real	1,621	521,926	4,248	(4)	13,674	541,465
Canadian Dollar	28,954	2,218,201	66,506	4	468	2,314,133
Chilean Peso	340	35,187	-	-	(43)	35,484
Colombian Peso	-	6,951	-	-	2,964	9,915
Czech Koruna	1	1,881	-	-	1,282	3,164
Danish Krone	1,094	540,309	-	-	-	541,403
Egyptian Pound	135	2,790	-	-	-	2,925
Euro Currency	8,682	9,771,819	222,935	(196)	13,068	10,016,308
Hong Kong Dollar	8,398	2,029,786	(44,892)	(1)	22	1,993,313
Hungarian Forint	48	42,145	-	(2)	(261)	41,930
Indian Rupee	523	593,048	-	-	(308)	593,263
Indonesian Rupiah	716	225,708	26,777	(5)	999	254,195
Japanese Yen	9,452	6,029,954	12,937	(12)	(17,320)	6,035,011
Malaysian Ringgit	1,404	133,343	-	-	1,337	136,084
Mexican Peso	3,389	218,270	50,971	-	346	272,976
Moroccan Dirham	-	-	-	-	67	67
New Israeli Sheqel	1,575	116,443	(17,343)	-	373	101,048
New Taiwan Dollar	10,915	839,711	7,036	7	(959)	856,710
New Zealand Dollar	943	70,104	48,208	-	(5,240)	114,015
Norwegian Krone	1,064	212,968	-	10	945	214,987
Pakistan Rupee	168	29,449	-	-	-	29,617
Peruvian Nouveau Sol	4	-	-	-	172	176
Philippine Peso	44	73,280	-	-	(125)	73,199
Polish Zloty	745	38,084	(203)	305	(1,295)	37,636
Pound Sterling	31,565	5,322,690	209,706	(88)	12,539	5,576,412
Russian Ruble	-	-	6,026	-	2,028	8,054
Qatari Rial	120	36,734	-	-	-	36,854
Singapore Dollar	1,958	380,429	-	-	(3,152)	379,235
South African Rand	2,064	503,964	2,788	(5)	7,535	516,346
South Korean Won	3,956	1,131,499	(38,082)	(2)	(2,539)	1,094,832
Swedish Krona	1,107	671,197	5,498	5	(1,413)	676,394
Swiss Franc	4,147	2,119,042	-	(8)	(1,492)	2,121,689
Thailand Baht	559	181,749	-	(6)	443	182,745
Turkish Lira	210	187,056	(264)	(1)	5,546	192,547
UAE Dirham	4	44,423	-	-	-	44,427
Yuan Renminbi	94	-	4,335	-	221	4,650
Total	\$138,271	\$36,073,177	\$604,097	\$6	\$30,116	\$36,845,667

NOTES TO THE BASIC FINANCIAL STATEMENTS

CalSTRS investments denominated in foreign currencies are reported within derivative instruments and investment receivables or payables on the Statement of Fiduciary Net Position.

Foreign currency is comprised 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 Investment Policy and Management Plan, CalSTRS has established a strategic allocation to non-dollar public and private equity assets (i.e. private equity investments and real estate). Considering this commitment to non-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 its Currency Management Program should emphasize the protection of the value of its non-dollar public and private equity assets against a strengthening U.S. dollar first, yet recognizes that there also exists opportunities 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/or 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 in order 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 a result, the position range is -25 percent to 50 percent of the total notional value (in U.S. Dollars) of the non-U.S. public and non-U.S. private equity portfolios (i.e. Private Equity, Real Estate and Corporate Governance).

As of June 30, 2016, the Pension2's 403(b) and 457(b) plans are not exposed to foreign currency risk.

Derivative Instruments

As of June 30, 2016, 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 derivatives discussed below are included within the Investment Risk Schedules, which precede this section. Investments in derivative instruments are disclosed separately to provide a comprehensive view of this activity and its impact on the overall investment portfolio.

NOTES TO THE BASIC FINANCIAL STATEMENTS

The table below presents the related net appreciation (depreciation) in fair value, the fair value amounts and the notional amounts of derivative instruments outstanding at June 30, 2016:

Investment Derivative Disclosure (Dollars in Thousands)				
Classification	Net Appreciation (Depreciation) in Fair Value of Investments through June 30, 2016		Fair Value at June 30, 2016	
	Amount	Amount	Amount	Notional (Amount/Shares)
Investment Derivatives Instruments				
Credit Default Swaps	Investment Income / (Loss)	\$(14,770)	\$1,452	\$50,608
Interest Rate Swaps	Investment Income / (Loss)	(7,317)	(7,562)	170,800
Total Return Swaps	Investment Income / (Loss)	5,755	3,704	(85,990)
Foreign Currency Forwards	Investment Income / (Loss)	81,773	30,116	10,107,763
Futures (Domestic and Foreign)	Investment Income / (Loss)	(103,460)	34,649	739,213
Options	Investment Income / (Loss)	(54,337)	(2,180)	166,075
Rights	Investment Income / (Loss)	(13,806)	9,936	136,099 Shares
Warrants	Investment Income / (Loss)	55	322	16,609 Shares
Total Derivative Instruments		\$(106,107)	\$70,437	

The total options amount of \$(2,180) is comprised of options bought and options written of \$1,119 and \$(3,299), respectively (Dollars in Thousands).

Counterparty Credit Risk

The table below depicts the counterparty credit ratings of CalSTRS non-exchange traded investment derivative instruments outstanding and subject to loss at June 30, 2016.

Counterparty Credit Rating (Dollars in Thousands)					
S&P Rating	Credit Default Swaps	Interest Rate Swaps	Total Return Swaps	Foreign Currency Forwards	Total
AA	\$-	\$-	\$-	\$18,870	\$18,870
A	60	-	-	34,839	34,899
BBB	1,778	6	3,704	2,247	7,735
Subtotal Investments in Asset Position	1,838	6	3,704	55,956	61,504
Investments in Liability Position	(386)	(7,568)	-	(25,840)	(33,794)
Total Investments in Asset / (Liability) Position	\$1,452	\$(7,562)	\$3,704	\$30,116	\$27,710

The counterparty credit exposure for similar instruments with the same counterparty is netted for presentation purposes.

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 at June 30, 2016 was \$61.5 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. At June 30, 2016, there were assets of \$19.3 million, including cash collateral held by CalSTRS, and liabilities of \$14.5 million from non-exchange traded derivatives subject to master netting agreements. At June 30, 2016, CalSTRS did not have any significant exposure to counterparty credit risk with any single party.

NOTES TO THE BASIC FINANCIAL STATEMENTS

Custodial Credit Risk

The custodial credit risk disclosure for exchange traded derivative instruments is made in accordance with the custodial credit risk disclosure requirements of GASB Statement 40. At June 30, 2016, all of CalSTRS investments in derivative instruments are held in CalSTRS

name or CalSTRS nominee's name and/or are not exposed to custodial credit risk as of June 30, 2016.

Interest Rate Risk

At June 30, 2016, 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
Credit Default Swaps Bought	\$(294)	\$-	\$(294)	\$-	\$-
Credit Default Swaps Written	1,746	-	1,804	(58)	-
Interest Rate Swaps	(7,562)	-	167	(5,393)	(2,336)
Total Return Swaps	3,704	3,704	-	-	-
Total	\$(2,406)	\$3,704	\$1,677	\$(5,451)	\$(2,336)

Interest rate swaps are highly sensitive to changes in interest rates. The table below details the reference rate, fair value and notional amount of these derivative instruments:

Derivative Instruments Highly Sensitive to Interest Rate Changes (Dollars in Thousands)				
Investment Type	Reference Rate	Fair Value	Notional	
Interest Rate Swap	Pay Fixed 2.72%, Receive Variable 3-month LIBOR	\$(2,340)	\$12,672	
Interest Rate Swap	Pay Fixed 1.897%, Receive Variable 3-month LIBOR	(1,980)	41,600	
Interest Rate Swap	Pay Fixed 1.9%, Receive Variable 3-month LIBOR	(3,107)	64,728	
Interest Rate Swap	Pay Fixed 1.58%, Receive Variable 3-month LIBOR	(308)	18,380	
Interest Rate Swap	Receive Fixed 1.185%, Pay Variable 3-month LIBOR	166	18,420	
Interest Rate Swap	Receive Fixed 1.3868%, Pay Variable 3-month LIBOR	5	7,000	
Interest Rate Swap	Receive Fixed 0.993%, Pay Variable 3-month LIBOR	2	8,000	
Interest Rate Swaps Total		\$(7,562)	\$170,800	
Total Return Swap	Receive MSCI Taiwan, PAY Taiwan Secondary Mkt CP Bank Rate (CPTW90DY)	\$(147)	\$7,036	
Total Return Swap	Receive MSCI Daily TR NET EM South Africa USD, PAY ZAR 3-month JIBAR	(71)	2,788	
Total Return Swap	Receive MSCI Daily Net EM Mexico, PAY 28D Mexican Interbank Rate (TIIE)	(3)	151	
Total Return Swap	Receive IHN16 index, Pay 3-month LIBOR	(189)	8,980	
Total Return Swap	Receive KOPSI 200 Index, Pay KRW 3-month CD	(655)	(38,082)	
Total Return Swap	Receive MSCI Daily TR Net Brazil USD, Pay 1D CETIP	87	(4,161)	
Total Return Swap	Receive MSCI Daily TR NET EM Poland USD, PAY 6-month WIBOR	-	(203)	
Total Return Swap	Receive MSCI Daily TR NET EM Turkey USD, PAY 3-month TRLIBOR	1	(117)	
Total Return Swap	Receive TA-25 index, Pay 3-month TELBOR	(246)	(17,343)	
Total Return Swap	Receive MSCI Daily TR Net Hong Kong Local, Pay 3-month HIBOR	4,927	(44,892)	
Total Return Swap	Receive MSCI Daily TR Net Turkey USD, Pay Variable 3-month TRLIBOR	-	(147)	
Total Return Swaps Total		\$3,704	\$(85,990)	

NOTES TO THE BASIC FINANCIAL STATEMENTS

Foreign Currency Risk

At June 30, 2016, CalSTRS is exposed to foreign currency risk on its investments in options, rights, warrants, and forward contracts in foreign currencies.

Foreign Currency Risk

(Dollars in Thousands)
(In U.S. Dollar Equivalents)

Currency Name	Options	Rights	Swaps	Warrants	Currency Forward Contracts		Total Exposure
					Investment Asset	Investment Liability	
Australian Dollar	\$-	\$238	\$-	\$-	\$2,412	\$(2,178)	\$472
Brazilian Real	-	-	87	-	17,613	(3,939)	13,761
Canadian Dollar	-	-	-	-	1,730	(1,262)	468
Chilean Peso	-	10	-	-	590	(633)	(33)
Colombian Peso	-	-	-	-	3,934	(970)	2,964
Czech Koruna	-	-	-	-	1,783	(501)	1,282
Euro Currency	140	882	56	-	32,657	(19,589)	14,146
Hong Kong Dollar	-	-	4,926	-	31	(9)	4,948
Hungarian Forint	-	-	-	-	545	(806)	(261)
Indian Rupee	-	-	-	-	395	(703)	(308)
Indonesian Rupiah	-	-	-	-	999	-	999
Japanese Yen	-	-	-	-	5,563	(22,883)	(17,320)
Malaysian Ringgit	-	-	-	-	1,931	(594)	1,337
Mexican Peso	-	-	(3)	-	1,864	(1,518)	343
Moroccan Dirham	-	-	-	-	67	-	67
New Israeli Sheqel	-	-	(246)	-	490	(117)	127
New Taiwan Dollar	-	-	(147)	-	99	(1,058)	(1,106)
New Zealand Dollar	-	-	-	-	2,255	(7,495)	(5,240)
Norwegian Krone	-	15	-	-	1,221	(276)	960
Peruvian Nouveau Sol	-	-	-	-	442	(270)	172
Philippine Peso	-	-	-	-	387	(512)	(125)
Polish Zloty	-	-	-	-	866	(2,161)	(1,295)
Pound Sterling	-	-	-	-	33,773	(21,234)	12,539
Russian Ruble	-	-	-	-	2,074	(46)	2,028
Singapore Dollar	-	8,778	-	13	1,978	(5,130)	5,639
South African Rand	-	-	(71)	-	7,875	(340)	7,464
South Korean Won	-	8	(655)	-	941	(3,480)	(3,186)
Swedish Krona	-	-	-	-	1,057	(2,470)	(1,413)
Swiss Franc	-	-	-	-	1,398	(2,890)	(1,492)
Thailand Baht	-	-	-	240	756	(313)	683
Turkish Lira	-	-	2	-	6,320	(774)	5,548
Yuan Renminbi	-	-	-	-	246	(25)	221
Total	\$140	\$9,931	\$3,949	\$253	\$134,292	\$(104,176)	\$44,389

NOTES TO THE BASIC FINANCIAL STATEMENTS

At June 30, 2016, the net unrealized gain on the foreign currency forward contracts was \$30.1 million.

Investment Allocation Policy

In accordance with GASB Statement No. 67, 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 policy manual. The key goal of the asset allocation process is to develop an asset allocation policy that maximizes the likelihood that an investment portfolio's assets will, over the planning horizon, fund plan

benefits. CalSTRS conducts an asset allocation study every three 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. In conjunction with the long-term strategic target, a range for each asset class has been established to provide flexibility designed to reduce rebalancing costs and adapt to changing market conditions. Effective July 1, 2013, the board approved the Investment Policy and Management Plan changing the asset allocation ranges.

The following table displays the previous and current board-approved target allocation, the policy range, and the actual allocation for the Defined Benefit and Defined Benefit Supplement Programs per the portfolio allocation and management structure as of June 30, 2016:

Asset Class	Previous Target Allocation as of July 2009	Current Target Allocation as of June 30, 2016	Policy Range	Actual Allocation as of June 30, 2016
Global Equity	53.0%	55.0%	+/- 6%	54.8%
Fixed Income	20.0%	17.0%	+/- 3%	16.9%
Real Estate	12.0%	13.0%	+/- 3%	13.9%
Private Equity	12.0%	13.0%	+/- 3%	8.7%
Cash / Liquidity	1.0%	1.0%	+/- 3%	2.9%
Inflation Sensitive	2.0%	1.0%	+/- 3%	1.0%
Absolute Return	-	-	+/- 3%	1.8%
Total Asset Allocation	100.0%	100.0%		100.0%

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. GAAP establishes 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, the investment-specific characteristics, the state of the marketplace, and the 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 Level Hierarchy table that follows 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, 2016	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	\$753,987	\$-	\$651,046	\$102,941
Corporate Bonds	11,929,414	-	11,905,828	23,586
Foreign Government Issues	1,115,753	-	1,115,753	-
Mortgage-Backed Securities	8,900,347	-	8,894,966	5,381
Municipal Securities	207,670	-	207,670	-
U.S. Government and Agency Obligations	11,127,262	-	11,127,262	-
Short-Term Securities	5,117,293	524,572	4,592,721	-
Mutual Funds-Bond Funds	50,978	50,978	-	-
Guaranteed Annuity Contracts	232,512	-	-	232,512
Total Debt Securities	39,435,216	575,550	38,495,246	364,420
Equity Securities				
Common Stocks	93,833,562	93,824,257	2,432	6,873
Depository Receipts	2,224,017	2,213,893	10,066	58
Mutual Funds-Stock Funds	668,787	405,112	263,675	-
Preferred Stocks	289,813	289,813	-	-
Real Estate Investment Trusts	3,186,594	3,186,586	-	8
Total Equity Securities	100,202,773	99,919,661	276,173	6,939
Alternative Investments				
Debt-Privately Held	6,940	-	-	6,940
Equity-Privately Held	162,942	-	-	162,942
Real Estate-Directly-Held	16,049,293	-	-	16,049,293
Total Alternative Investments	16,219,175	-	-	16,219,175
Derivative Instruments				
Forwards	134,292	-	134,292	-
Futures	86,879	86,879	-	-
Options	1,119	-	1,119	-
Rights and Warrants	10,258	10,258	-	-
Swaps	7,135	-	7,135	-
Total Derivative Instruments	239,683	97,137	142,546	-
Securities Lending Collateral	14,051,104	1,242,775	12,808,329	-
Total Investment Assets Recorded at Fair Value	170,147,951	101,835,123	51,722,294	16,590,534
Investments Measured at Cost				
Short Term Securities	730,764	-	-	-
Securities Lending Collateral	3,473,186	-	-	-
Total Investments Measured at Cost	4,203,950	-	-	-
Investments Measured at Net Asset Value (NAV)				
Debt-Privately Held	2,203,967	-	-	-
Equity-Privately Held	20,968,941	-	-	-
Real Estate-Non-Directly-Held	10,683,635	-	-	-
Total Investments Measured at NAV	33,856,543	-	-	-
Total Investment Assets	\$208,208,444	\$-	\$-	\$-
Liabilities:				
Investments by Fair Value Level				
Derivative Instruments				
Forwards	104,176	-	104,176	-
Futures	52,230	52,230	-	-
Options	3,299	-	3,299	-
Swaps	9,541	-	9,541	-
Total Derivative Instruments	169,246	52,230	117,016	-
Total Investment Liabilities Recorded at Fair Value	\$169,246	\$52,230	\$117,016	\$-
Total Net Investments	\$208,039,198			

NOTES TO THE BASIC FINANCIAL STATEMENTS

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 stock, preferred stock, real estate investment trusts (REITs), exchange-traded derivatives, and exchange-traded funds.

Level 2 measurements are generally valued using indicative prices from vendors, brokers, or ask prices. These indicative measurements often utilize 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 derivatives. 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.

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 which 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 pre-established means are used to determine a price. Stock mutual funds, held in the STRP and the Pension2 program, 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 fair valuation policy as of the measurement date, and are audited annually. The most significant input into the NAVs of such an entity is the fair value of its investment holdings which are typically valued on a quarterly or semi-annual 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.

Corporate Governance 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 CalSTRS global equity holdings.

Investments in real estate directly-held 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 management. Leverage may be used to enhance investment returns as set forth in the CalSTRS Real Estate Investment Policy. See Note 5 regarding the disclosure relating to Real Estate leverage.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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' fair 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 variation margins are 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 at June 30, 2016.

Investment in Certain Entities that Calculate Net Asset Value Per Share

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 as of the reporting date. CalSTRS does not currently have any 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, 2016	Total Unfunded Commitments	Redemption Frequency if Currently Eligible	Redemption Notice Period
Debt-Privately Held¹	\$2,203,967	\$1,143,678	N/A	N/A
Equity-Privately Held				
Private Equity Funds ²	15,340,467	8,059,217	N/A	N/A
Corporate Governance Funds ³	2,980,769	438,681	Monthly, Quarterly, Annually	60-120 days
Other ⁴	2,647,705	-	Monthly, Quarterly	2-90 days
Real Estate-Non-Directly-Held				
Real Estate Funds ⁵	7,088,816	3,274,921	N/A	N/A
Other ⁶	3,594,819	161,306	Quarterly, Annually	30-90 days
Total Investments Measured at NAV	\$33,856,543	\$13,077,803		

¹This category includes private equity funds that invest in privately held debt, such as distressed debt and mezzanine 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 ten years at June 30, 2016.

²This 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. CalSTRS investment in each fund in this category 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 eight years at June 30, 2016.

³This category includes funds that invest strategically in publicly traded equities of companies on U.S. exchanges to achieve long-term capital appreciation. The funds in this category are generally subject to a lockup period before redemption is permissible. Investments representing 8.8 percent, 17.8 percent, and 45.6 percent of the value of the investments in this category can be redeemed monthly, quarterly, and annually, respectively, following the lockup period. The remaining 27.8 percent of the value of the investments in this category can be redeemed at the end of a three-year period.

⁴This category includes funds that invest primarily in equities, fixed income securities, opportunistic, and other funds. Investments representing 87.5 percent and 12.5 percent in this category can be redeemed monthly and quarterly, respectively, upon written notice.

⁵This category includes funds that invest directly in real estate and real estate related assets, including primarily retail, industrial, office, residential and hotels. CalSTRS investment in each fund in this category 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 five years at June 30, 2016.

⁶This category includes open-ended funds that invest directly in real estate and real estate related assets, including primarily retail, industrial, office, residential and hotels. Investments representing 92.7 percent and 7.3 percent in this category can be redeemed quarterly and annually, respectively, upon written notice.

NOTES TO THE BASIC FINANCIAL STATEMENTS

7. 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 financial statements.

8. COMMITMENTS

In connection with the purchase of partnership interests under various investment portfolios, CalSTRS has remaining unfunded commitments of approximately \$19.8 billion at June 30, 2016.

The following table depicts the unfunded commitments by asset strategy:

Asset Class	Unfunded Commitments (Dollars in Thousands)
Corporate Governance	\$438,681
Infrastructure	778,815
Innovation	130,772
Private Equity	9,941,308
Real Estate	8,558,882
Total	\$19,848,458

These unfunded commitments include agreements for acquisition not yet initiated, which are not included in the NAV Practical Expedient table. Real Estate unfunded commitments include joint ventures, which are directly-held investments. Real Estate's total unfunded commitment amount of \$8.6 billion is comprised of discretionary and non-discretionary amounts of \$4.1 billion and \$4.5 billion, respectively. Discretionary contractual arrangements provide CalSTRS the ability to cancel or redirect its investment commitment.

CalSTRS has entered into agreements through its Credit Enhancement Program to provide credit support and/or liquidity support on certain debt securities. At June 30, 2016, CalSTRS had commitments of approximately \$81.3 million expiring through March 2017. CalSTRS is paid a fee over the term of such agreements and earned approximately \$2.2 million for the period ended June 30, 2016.

Medicare Premium Payment Program (MPP Program)

Under current board policy, the assets set aside from the future employer contributions to fund the MPP Program are equal to its actuarial obligation less the value of any assets already in the THBF. As of the June 30, 2015,

actuarial valuation of the DB Program, the future employer contributions committed to funding the MPP Program obligations total \$336 million.

9. NEW ACCOUNTING PRONOUNCEMENTS

GASB Statement No. 72, *Fair Value Measurement and Application*, addresses accounting and financial reporting issues related to fair value measurements. This statement provides guidance for determining fair value measurement for financial reporting purposes and applying fair value to certain investments and disclosures related to all fair value measurements. GASB Statement No. 72 requires disclosures on fair value measurements, the level of fair value hierarchy, and valuation techniques. It also requires additional disclosures relating to investments in certain entities that calculate net asset value (NAV) per share (or its equivalent). The provisions of this statement are effective for financial statements for periods beginning after June 15, 2015. Management has implemented GASB 72 in the financial statements dated June 30, 2016.

GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68*, and Amendments to Certain Provisions of GASB Statements 67 and 68, establishes requirements for pensions and pension plans that are not administered through a trust meeting specified criteria. The provisions in this statement are effective for fiscal years beginning after June 15, 2015, except those provisions that address employers and governmental nonemployer contributing entities for pensions that are not within the scope of GASB Statement No. 68, which are effective for financial statements for fiscal years beginning after June 15, 2016. Management has evaluated GASB Statement No. 73 and determined it does not have an effect on CalSTRS financial reporting.

GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, addresses reporting by OPEB plans that administer benefits on behalf of governments. This statement replaces GASB Statement No. 43, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. GASB Statement No. 74 addresses the financial reports of defined benefit OPEB plans that are administered through trusts that meet specified criteria. For defined benefit OPEB plans that are administered through trusts that meet the specified criteria, this statement requires an OPEB liability to be included in

NOTES TO THE BASIC FINANCIAL STATEMENTS

the statement of fiduciary net position and the statement of changes in fiduciary net position, as well as extensive note disclosures and required supplementary information related to the measurement of the OPEB liabilities for which assets have been accumulated, including information about the annual money-weighted rates of return on plan investments. The provisions in this statement are effective for financial statements for fiscal years beginning after June 15, 2016. Management is evaluating the impact of the adoption of this standard on our Financial Statements.

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, addresses reporting by governments that provide OPEB to their employees and for governments that finance OPEB for employees of other governments. GASB Statement No. 75 replaces the requirements of GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. This statement requires governments to report a liability on the face of the financial statements for the OPEB that they provide by reporting, according to specified criteria, either a net OPEB liability, their proportionate share of the collective OPEB liability, or the total OPEB liability related to their employees. GASB Statement No. 75 requires governments in all types of OPEB plans to present more extensive note disclosures and required supplementary information about their OPEB liabilities. The provisions in this statement are effective for fiscal years beginning after June 15, 2017. Management is evaluating the impact of the adoption of this standard on our Financial Statements.

GASB Statement No. 77, *Tax Abatement Disclosures*, improves financial reporting disclosure of tax abatement information about (1) a reporting government's own tax abatement agreements and (2) those that are entered into by other governments and that reduce the reporting government's tax revenues. The requirements of this Statement are effective for reporting periods beginning after December 15, 2015. Management is evaluating GASB Statement No. 77 and its impact to CalSTRS financial reporting and, if applicable, will implement it in the financial statements for the fiscal year ending June 30, 2017.

GASB Statement No. 78, *Pensions Provided Through Certain Multiple-Employer Defined Benefit Pension Plans*, addresses a practice issue regarding the scope and applicability of Statement No. 68, *Accounting and Financial Reporting for Pensions*. The requirements of this Statement are effective for reporting periods beginning after December 15, 2015. Management is evaluating GASB Statement No. 78 and its impact to CalSTRS financial reporting and, if applicable, will implement it in the financial statements for the fiscal year ending June 30, 2017.

GASB Statement No. 79, *Certain External Investment Pools and Pool Participants*, addresses accounting and financial reporting for certain external investment pools and pool participants. The provisions in this statement are effective for fiscal years beginning after June 15, 2015, except for certain provisions on portfolio quality, custodial credit risk, and shadow pricing, which are effective for reporting periods beginning after December 15, 2015. Management has evaluated and determined this statement does not have an impact on CalSTRS financial reporting.

GASB Statement No. 80, *Blending Requirements for Certain Component Units—an amendment of GASB Statement No. 14*, improves financial reporting by clarifying the financial statement presentation requirements for certain component units. The requirements of this Statement are effective for reporting periods beginning after June 15, 2016. Management is evaluating GASB Statement No. 80 and its impact to CalSTRS financial reporting and, if applicable, will implement it in the financial statements for the fiscal year ending June 30, 2017.

GASB Statement No. 81, *Irrevocable Split-Interest Agreements*, improves accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement. The requirements of this Statement are effective for reporting periods beginning after December 15, 2016. Management is evaluating GASB Statement No. 81 and its impact to CalSTRS financial reporting and, if applicable, will implement it in the financial statements for the fiscal year ending June 30, 2018.

NOTES TO THE BASIC FINANCIAL STATEMENTS

GASB Statement No. 82, *Pension Issues – An Amendment of GASB Statements No. 67, No. 68, and No. 73*, address certain issues that have been raised with respect to Statements No. 67, *Financial Reporting for Pension Plans*, No. 68, *Accounting and Financial Reporting for Pensions*, and No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. Prior to the issuance of this Statement, Statements 67 and 68 required presentation of covered-employee payroll, which is the payroll of employees that are provided with pensions through the pension plan, and ratios that use the measure in schedules of required supplementary information. Statement No. 82 amends Statements 67 and 68 to instead require the presentation of covered payroll, defined as the payroll on which contributions to a pension plan are based, and ratios that use that measure. This statement clarifies selection of assumptions used by the actuary in determining the total pension liability and related measures. In addition, this statement clarifies that payments made by an employer to satisfy member contribution requirements should be classified as plan member contributions for purposes of GASB statement No. 67 and as employee contribution for purposes of Statement No. 68, and will not be included in the calculation of proportionate share. The provisions of this statement, specifically presentation of covered payroll, have been implemented in the financial statements for the fiscal year ended June 30, 2016.

Required Supplementary Information (Unaudited)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY OF EMPLOYERS AND NONEMPLOYER CONTRIBUTING ENTITY

(Dollars in Millions)

Schedule I

State Teachers' Retirement Plan			
Year ended June 30 ¹	2016	2015	2014
Total Pension Liability			
Service Cost	\$5,874	\$5,556	\$5,338
Interest	19,332	18,556	17,822
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	(1,209)	(1,312)	-
Changes of Assumptions	-	-	-
Benefit Payments, Including Refunds of Member Contributions	(13,149)	(12,565)	(12,035)
Net Change in Total Pension Liability	10,848	10,235	11,125
Beginning Total Pension Liability	259,146	248,911	237,786
Ending Total Pension Liability (a)	269,994	259,146	248,911
Plan Fiduciary Net Position			
Member Contributions	2,957	2,510	2,264
Employer Contributions	3,391	2,678	2,272
State Contributions	1,940	1,426	1,383
Net Investment Income	2,305	7,612	30,402
Other Income	42	4	2
Benefit Payments, Including Refunds of Member Contributions	(13,149)	(12,565)	(12,035)
Administrative Expense	(180)	(145)	(154)
Other Expenses	(15)	(10)	(9)
Net Change in Plan Fiduciary Net Position	(2,709)	1,510	24,125
Beginning Plan Fiduciary Net Position (as previously stated)	191,822	190,474	166,349
Adjustment For Application of GASB 68²	-	(162)	-
Beginning Plan Fiduciary Net Position (as adjusted)	191,822	190,312	166,349
Ending Plan Fiduciary Net Position (b)	189,113	191,822	190,474
Ending Net Pension Liability of Employers and The State (a) - (b)³	\$80,881	\$67,324	\$58,437

¹This is a 10-year schedule. However, the information in this schedule is not required to be presented retroactively. Years will added to this schedule in future fiscal years until 10 years of information is available.

²Adjustment was made to the STRP due to implementation of GASB 68 which resulted in a decrease in beginning net position for fiscal year 2014-15.

³The Net Pension Liability for fiscal year 2013-14 does not include a \$161.9 million reduction to the net position as a result of CalSTRS implementation of GASB 68.

SCHEDULE OF NET PENSION LIABILITY OF EMPLOYERS AND NONEMPLOYER CONTRIBUTING ENTITY

(Dollars in Millions)

Schedule II

State Teachers' Retirement Plan						
Year Ended June 30 ⁽¹⁾	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability of Employers and the State (a - b) ⁽³⁾	Plan Fiduciary Net Position as a Percentage of Total Pension Liability (b/a)	Covered Payroll (c)	Net Pension Liability of Employers and the State as a Percentage of Covered Payroll (a-b)/c
2016	\$269,994	\$189,113	\$80,881	70%	\$31,910	253%
2015	259,146	191,822	67,324	74%	32,026 ⁽²⁾	210%
2014	248,911	190,474	58,437	77%	27,486	213%

¹This is a 10-year schedule. However, the information in this schedule is not required to be presented retroactively. Years will be added to this schedule in future fiscal years until 10 years of information is available.

²In fiscal year 2013-14, CalSTRS reported pensionable compensation as part of GASB Statement 67 implementation. In fiscal year 2014-15, GASB clarified the requirement to be covered-employee payroll, which includes both pensionable and non-pensionable compensation. In fiscal year 2015-16, GASB Statement 82 was issued, which amended GASB Statements 67 and 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.

³The Net Pension Liability for fiscal year 2013-14 does not include a \$161.9 million reduction to the net position as a result of CalSTRS implementation of GASB 68.

SCHEDULE OF CONTRIBUTIONS FROM EMPLOYERS AND NONEMPLOYER CONTRIBUTING ENTITY

(Dollars in Millions)

Schedule III

The information presented in this schedule for the State Teachers' Retirement Plan is required for defined benefit pension plans.

State Teachers' Retirement Plan								
Year Ended June 30 ⁽¹⁾	Actuarially Determined Contributions (a)	Legally Required Contributions for Employers and State	Employer Contributions ⁽²⁾⁽³⁾ (b)	State Contributions ⁽⁴⁾ (c)	Total Contributions (b + c)	Contribution Deficiency (excess) a - (b + c)	Covered Payroll (d)	Contributions as % of Covered Payroll (b + c)/d
2016	\$7,748	\$5,318	\$3,378	\$1,940	\$5,318	\$2,430	\$31,910	17%
2015	7,707	4,093	2,667	1,426	4,093	3,614	32,026 ⁽⁵⁾	13%
2014	7,158	3,641	2,258	1,383	3,641	3,517	27,486	13%

¹This is a 10-year schedule. However, per GASB 67, the information in this schedule is not required to be presented retroactively. Years will be added to this schedule in future fiscal years until 10 years of information is available.

²Excludes \$13.5 million, \$12.5 million, and \$14.5 million for fiscal years 2015-16, 2014-15, and 2013-14, respectively, in contributions to separately finance specific liabilities, such as benefit enhancements, of an individual employer.

³Includes employer contributions under Education Code sections 22711, 22713, 22905, 22950, 22951, 24260, and 26503, as well as Government Code section 7522.

⁴Includes state contributions under Education Code sections 22954 and 22955, as well as Public Resources Code section 6217.

⁵In fiscal year 2013-14, CalSTRS reported pensionable compensation as part of GASB Statement 67 implementation. In fiscal year 2014-15, GASB clarified the requirement to be covered-employee payroll, which includes both pensionable and non-pensionable compensation. In fiscal year 2015-16, GASB Statement 82 was issued, which amended GASB Statements 67 and 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.

The information presented in this schedule for the Teachers' Health Benefit Fund is required for other postemployment benefit plans.

Teachers' Health Benefit Fund Medicare Premium Payment Program					
Year Ended June 30	Annual Required Contribution (a)	Employer Contributions (b)	State Contributions (c)	Total Contributions (b + c)	Percentage Contributed (b + c)/a
2016	\$32 ⁽¹⁾	\$30	\$-	\$30	94%
2015	32	31	-	31	97%
2014	38 ⁽¹⁾	33	-	33	87%
2013	38	35	-	35	92%
2012	57 ⁽¹⁾	35	-	35	61%
2011	57	36	-	36	63%
2010	64 ⁽¹⁾	32	-	32	50%

¹The ARCs for 2010, 2012, 2014, and 2016 were based on a roll-forward of figures from the June 30, 2008, June 30, 2010, June 30, 2012, and June 30, 2014 valuations, respectively.

SCHEDULE OF CONTRIBUTIONS FROM EMPLOYERS AND NONEMPLOYER CONTRIBUTING ENTITY

Schedule III (Continued)

Changes of Assumptions

There were changes in economic assumptions used in the June 30, 2014 valuation of the MPP Program. The interest rate for GASB reporting, inflation rate for Part A Premiums, and inflation rate for Part B Premiums for the June 30, 2014 valuation were 3.50 percent, 3.70 percent, and 5.70 percent, respectively. Comparatively, the interest rate for GASB reporting, inflation rate for Part A Premiums, and inflation rate for Part B Premiums for the June 30, 2012 valuation were 4.00 percent, 3.50 percent, and 4.50 percent, respectively.

Method and Assumptions Used in Calculations of Actuarially Determined Contributions

The following actuarial methods and assumptions were used to determine the actuarially determined contribution for the STRP and the annual required contribution for the MPP Program presented in this Schedule of Contributions from Employers and Nonemployer Contributing Entity:

	State Teachers' Retirement Plan ¹	MPP Program
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percent of Payroll Basis	Level Dollar Basis
Amortization Period	Closed/Open ³	Closed
Remaining Amortization Period	31 years	22 years
Asset Valuation Method	Adjustment to market value	Fair market value of net assets
Actuarial Assumptions:		
Investment Rate of Return	7.50% ²	3.50%
Interest on Accounts	4.50%	Not Applicable
Wage Growth	3.75%	Not Applicable
Consumer Price Inflation	3.00%	3.00%
Post-retirement Benefit Increases	2.00% simple	Not Applicable
Healthcare Cost Trend Rate		
Part A Premiums	Not applicable	3.70%
Healthcare Cost Trend Rate		
Part B Premiums	Not applicable	5.70%

¹The assumptions shown above are for the actuarially determined contributions (ADC) of the DB Program. For the portion of the STRP ADC attributable to the DBS, CBB and SBMA Programs, contributions recognized on an accrual basis for the current year have been used.

²The actuarially determined contribution is a funding amount, which is calculated using a 7.50 percent assumed investment rate of return, net of investment and administrative expenses. The 7.60 percent disclosed in Note 3 (Net Pension Liability) is net of investment expenses, but gross of administrative expenses and used to calculate the net pension liability for financial reporting.

³The actuarial gains/losses and the unfunded actuarial obligation are amortized over a closed period for the DB Program, in contrast to the use of an open amortization period for the DBS and CBB Programs.

SCHEDULE OF MONEY-WEIGHTED INVESTMENT RETURNS

Schedule IV

Year Ended June 30 ¹	Annual Money-Weighted Rate of Return, Net of Investment Expenses
2016	1.2%
2015	4.1%
2014	18.6%

¹This is a 10-year schedule. However, per GASB 67, the information in this schedule is not required to be presented retroactively. Years will be added to this schedule in future fiscal years until 10 years of information is available.

SCHEDULE OF FUNDING PROGRESS (MEDICARE PREMIUM PAYMENT PROGRAM ONLY)

(Dollars in Millions)

Schedule V

Teachers' Health Benefit Fund Medicare Premium Payment Program						
Actuarial Valuation Date as of June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (Funding Excess) (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll (b-a)/c
2016	(1)	(1)	(1)	(1)	(3)	(1)
2015	(2)	(2)	(2)	(2)	(2)	(2)
2014	\$0.9	\$482.0	\$481.1	0.2%	(3)	N/A
2013	(2)	(2)	(2)	(2)	(2)	(2)
2012	0.4	582.0	581.6	0.1%	(3)	N/A
2011	(2)	(2)	(2)	(2)	(2)	(2)
2010	0.6	905.0	904.4	0.1%	5,011	18%

¹An actuarial valuation for the MPP Program Fund as of June 30, 2016 is expected to be available by April 2017.

²An actuarial valuation for the MPP Program Fund is performed on a biennial basis and not available as of 2011, 2013, and 2015.

³As of June 30, 2012, active members are no longer eligible for future enrollment in the MPP Program. Therefore, the covered payroll is \$0 for years 2012 and later.

Other Supplemental Information

SCHEDULE OF ADMINISTRATIVE EXPENSES

(Dollars in Thousands)

Schedule VI

	State Teachers' Retirement Plan	Pension2 IRC 403(b) Plan	Pension2 IRC 457(b) Plan	Teachers' Health Benefits	Teachers' Deferred Compensation	Totals
Personnel Services:						
Salaries and Wages	\$59,692	\$-	\$-	\$159	\$261	\$60,112
Staff Benefits	14,769	-	-	43	108	14,920
Accrued Pension and OPEB Expense	35,571	-	-	72	401	36,044
Total Personnel Services	110,032	-	-	274	770	111,076
Operating Expenses and Equipment:						
General	1,077	-	-	87	138	1,302
Depreciation/Amortization	11,655	-	-	-	-	11,655
Printing	842	-	-	-	-	842
Communications	975	-	-	-	-	975
Postage	944	-	-	-	-	944
Insurance	28	-	-	-	-	28
Travel	657	-	-	-	15	672
Training	746	-	-	-	-	746
Facilities Operations	11,437	-	-	-	-	11,437
Consultants and Professional Services	23,379	1,583	56	-	475	25,493
Information Technology	9,304	-	-	-	-	9,304
Indirect State Central Services	7,509	-	-	19	35	7,563
Equipment	1,352	-	-	-	-	1,352
Other	119	-	-	-	-	119
Total Operating Expenses and Equipment	70,024	1,583	56	106	663	72,432
Total	\$180,056	\$1,583	\$56	\$380	\$1,433	\$183,508

SCHEDULE OF INVESTMENT EXPENSES

(Dollars in Thousands)

Schedule VII

	Contract Start Date	Amount
Investment Management Fees		
Aberdeen Asset Management Inc.	12/15/06	\$2,466
AGF Investments America, Inc.	3/19/07	843
Analytic Investors, LLC	9/1/14	416
AQR Capital Management Holdings, LLC	12/1/14	6,983
Arrowstreet Capital, Ltd.	8/1/15	2,291
Baillie Gifford Overseas, Ltd.	1/15/06	5,319
Bivium Capital Partners, LLC	2/15/08	2,417
BlackRock Financial Management, Inc.	3/12/07	3,281
BlackRock Institutional Trust, N.A.	10/27/98	1,775
Blackrock International, Ltd.	5/12/99	1,738
Capital Prospects, LLC	2/15/08	1,205
Chicago Equity Partners	11/1/98	832
Columbia Management Investment Advisers, LLC	10/1/11	1,140
Credit Suisse Asset Management, LLC	9/1/11	1,381
Delaware Investment Advisors	11/1/98	4,701
Delphi Management, Inc.	1/1/99	314
Denver Investments Advisors, LLC	1/1/99	81
FDO Partners, LLC	1/1/10	3,188
First Quadrant, LP	11/1/98	968
FIS Group, Inc.	2/27/04	2,348
Gateway Investment Advisers, LLC	12/1/14	235
Generation Investment Management	3/19/07	11,522
Geneva Capital Management, LLC	5/1/16	184
JP Morgan Investment Management, Inc	1/1/14	2,446
Lazard Asset Management, LLC	5/18/99	10,786
Leading Edge Investment Advisors, LLC	2/15/08	2,074
Lee Overlay Partners, Ltd.	10/15/09	2,475
LM Capital Group, LLC	12/1/06	871
Millennium Global Investments, Ltd.	7/1/10	3,750
Mondrian Investment Partners, Ltd.	5/13/99	9,239
Northern Trust Global Advisors, Inc.	1/23/04	1,161
Oechsle International Advisors, LLC	5/19/99	2,299
Parametric Portfolio Associates, LLC	12/1/14	292
Post Advisory Group, LLC	1/31/02	1,735
Progress Investment Management	2/15/08	2,758
Pyramis Global Advisors Trust Co.	2/1/00	2,252
Pzena Investment Management, LLC	7/1/15	1,973
QS Investors, LLC	5/11/99	2,230
Sasco Capital, Inc.	10/30/98	794
Schroder Investment Management	9/1/14	4,025
Silvercrest Asset Management	7/1/11	1,202
State Street Bank & Trust Co	12/1/00	4,028
Sterling Capital Management, LLC	3/11/04	1,700
T. Rowe Price Associates, Inc.	1/15/06	3,340

SCHEDULE OF INVESTMENT EXPENSES

(Dollars in Thousands)

Schedule VII (Continued)

	Contract Start Date	Amount
Templeton Asset Management, Ltd.	5/18/99	\$3,153
UBS Global Asset Management (Americas)	11/1/98	416
Western Asset Management Co.	10/30/06	1,702
Miscellaneous	N/A	4
Total Investment Management Fees		\$122,333
Advisors and Consultants		
Altius Associates, Ltd.	6/1/08	500
Altus Group U.S., Inc.	7/1/15	1,015
Bard Consulting, LLC	9/20/07	749
Bickmore Risk Services and Consulting	12/1/09	117
Callan Associates	9/20/07	27
Cambridge Associates, LLC	6/1/08	2,800
Courtland Partners, Ltd.	9/20/07	180
David L. Bonuccelli & Associates, Inc.	9/20/07	1,050
LP Capital Advisors, LLC	1/1/12	193
Lyxor Asset Management, Inc.	8/1/11	2,500
Meketa Investment Group, Inc.	1/1/12	903
Pension Consulting Alliance, LLC	7/1/12	1,205
The Townsend Group, Inc.	3/1/13	236
Valuation Research Corporation	8/1/01	75
Total Advisors and Consultants		\$11,550
External Services-Legal and Attorney Fees		
Berman DeValerio	4/19/11	73
BLA Schwartz, PC	11/1/13	393
Cox, Castle & Nicholson, LLP	11/30/09	2,743
Grant & Eisenhofer	9/1/10	15
Morgan, Lewis & Bockius, LLP	12/9/10	519
Pepper Hamilton, LLP	4/1/11	26
Proskauer, LLP	3/9/11	727
Reed Smith, LLP	4/13/10	504
Sheppard Mullin Richter & Hampton LLP	4/5/10	146
Miscellaneous	N/A	12
Total External Services-Legal and Attorney Fees		\$5,158
Master Custodian		
State Street Bank & Trust Co	7/1/01	5,183
Total Master Custodian		\$5,183

SCHEDULE OF INVESTMENT EXPENSES

(Dollars in Thousands)

Schedule VII (Continued)

	Contract Start Date	Amount
Research and Rating Services		
Accounting Research & Analytics, LLC	1/1/16	\$25
Activist Insight, Ltd.	9/1/15	15
CEM Benchmarking Inc.	1/1/15	70
Cornerstone Macro, LP	1/1/16	63
CoStar Portfolio Strategy, Inc.	5/3/11	203
Covenant Review, LLC	1/1/16	50
Creditsights, Inc.	12/30/15	24
EIRIS Conflict Risk Network Ltd	10/1/15	19
Equilar, Inc.	7/1/14	40
eVestment Alliance Holdings, Inc.	8/1/15	26
FactSet Research System, Inc.	7/1/12	591
Fitch Ratings, Inc.	1/1/10	84
Glass Lewis & Co., LLC	6/1/10	236
GNA Services, LLC	1/1/16	25
ICE Benchmark Administration	7/1/14	32
IdealsWork, Inc.	7/1/14	12
Informa Investment Solutions	1/12/16	24
Institutional Shareholder Services	1/1/14	138
KDP Investment Advisors, Inc.	10/1/14	37
KPA Advisory Services	1/1/16	10
Moody's Investors Service	1/1/16	342
Morningstar, Inc.	7/1/14	50
MSCI ESG Research, Inc.	10/1/15	239
MSCI, Inc.	1/19/16	138
PEI Media, Ltd.	2/27/16	14
Real Estate Research Corporation	9/20/07	174
Russell Investment Group	7/1/15	40
Standard & Poor's	7/1/15	430
Strategas Securities, LLC	1/1/13	56
Style Research, Inc.	5/15/15	181
Sustainable Investments Institute	7/1/14	28
Technical Analysis Group, LLC	2/3/16	28
Thomson Reuters Markets, LLC	7/1/15	166
Trepp, LLC	1/1/10	86
Trucost PLC	7/1/14	59
Miscellaneous	N/A	15
Total Research and Rating Services		\$3,770

SCHEDULE OF INVESTMENT EXPENSES

(Dollars in Thousands)

Schedule VII (Continued)

	Contract Start Date	Amount
Risk Management Systems		
Barclays Risk Analytics & Index Solutions Limited	7/1/15	\$225
BlackRock Financial Management, Inc.	7/1/06	5,749
MSCI, Inc. d/b/a Barra, LLC	4/1/16	104
Total Risk Management Systems		\$6,078
Trading Systems		
Bloomberg, LP	9/6/12	635
Fixed Income Clearing Corp	7/1/12	12
Intex Solutions, Inc.	9/1/11	152
IPC Systems, Inc	7/1/15	166
Market Axess Corporation	10/1/12	29
Markit N.America Inc. / Markit Group	7/15/12	111
Omgeo, LLC	11/1/09	13
Miscellaneous	N/A	7
Total Trading Systems		\$1,125
Operating Expenses		
Administrative Costs		32,397
Aon Risk Insurance		964
Council of Institutional Investors		30
Miscellaneous		7
Total Operating Expenses		\$33,398
Subtotal		\$188,595
Other Investment Expenses		
Foreign Tax Withheld		41,602
Real Estate		160
Global Equity Broker Commissions		23,252
Miscellaneous		8,083
Total Other Investment Expenses		\$73,097
Total		\$261,692

SCHEDULE OF CONSULTANT AND PROFESSIONAL SERVICES EXPENSES

(Dollars in Thousands)

Schedule VIII

Individual or Firm	Commission/Fee	Nature of Services
State Teachers' Retirement Plan		
Milliman, Inc.	\$560	
	\$560	Actuarial Services
Crowe Horwath LLP	2,032	
KPMG LLP	198	
	\$2,230	Auditing Services
22nd Century Technologies, Inc.	117	
Adtech Global Solutions, Inc.	18	
Allegiance, Inc.	43	
Aon Hewitt Invest Consulting, Inc.	134	
Background Profiles, Inc.	(15)	
Business Advantage Consulting, Inc.	145	
CEM Benchmarking Inc.	45	
CGI Technologies and Solutions Inc.	12,644	
Ciber, Inc.	4,957	
Cloud Services Integrators, Inc.	72	
CommVault Systems, Inc.	64	
Daniel J. Edelman, Inc.	203	
Deloitte & Touche, LLP	351	
Deloitte Consulting, LLP	163	
Department of General Services	262	
Department Of Human Resources	44	
Digital Deployment, Inc.	96	
Dr. Robert Yetman	43	
Employment Development Department	48	
Enterprising Service Providers, LLC	221	
Eventus Solutions Group, LLC	104	
ExamWorks, Inc.	66	
Forrester Research, Inc.	567	
Gartner, Inc.	183	
Global Governance Advisors, LLC	10	
GoldLink Pacific, Inc.	398	
Government Operations Agency	63	
Grant Thornton, LLP	915	
Group One Consultants, Inc.	20	
Guardian Protection Force, Inc.	217	
Infojini, Inc.	49	
Informatix, Inc.	41	
International Network Consulting	178	
Jama Software, Inc.	40	
Jaykumar Maistry	162	
Jones Lang LaSalle Americas, Inc.	359	

SCHEDULE OF CONSULTANT AND PROFESSIONAL SERVICES EXPENSES

(Dollars in Thousands)

Schedule VIII (Continued)

Individual or Firm	Commission/Fee	Nature of Services
LexisNexis	\$18	
Mailing Systems, Inc.	47	
MaritzCX Research LLC	43	
Matthew Bender & Company, Inc.	17	
Maximus Human Services, Inc.	1,178	
McLagan Partners, Inc.	41	
Meridian Wealth Management	14	
MG Systems and Software, LLC	151	
Montridge Consulting	153	
Natl Disability Evaluations, Inc.	82	
Nexus IS, Inc.	16	
O.C. Tanner Recognition Company	75	
Oak Technical Services, LLC	110	
OnCore Consulting, LLC	890	
Pension Benefit Information, Inc.	26	
Pinnacle Consulting	257	
Providence Technology Group	230	
R Systems Inc.	134	
Regents of the University of California	70	
S&P Capital IQ	28	
Sierra Metrics, Inc.	120	
State Controller's Office	1,858	
State Personnel Board	11	
State Street Bank and Trust Co	11	
SupportFocus, Inc.	119	
Thomas V. Ennis Consulting	168	
Thomas/Ferrous, Inc.	138	
Unisys Corporation	200	
University Enterprises, Inc.	121	
UST Global, Inc.	80	
Vasquez & Company, LLP	39	
Visionary Integration Professionals	562	
xFusion Technologies, Inc.	70	
	\$30,104	Consulting Services
California Department Of Justice	174	
Hogan Lovells US, LLP	247	
Kaplan & Walker LLP	48	
Murphy Austin Adams Schoenfeld, LLP	57	
Olson, Hagel & Fishburn, LLP	51	
Reed Smith, LLP	568	
Shaw Valenza, LLP	27	
Sheppard Mullin Richter & Hampton	190	
	\$1,362	Legal Services

SCHEDULE OF CONSULTANT AND PROFESSIONAL SERVICES EXPENSES

(Dollars in Thousands)

Schedule VIII (Continued)

Individual or Firm	Commission/Fee	Nature of Services
Fresno County Office Of Education	\$298	
Humboldt County Office Of Education	78	
Kern County Office of Education	125	
Placer County Office Of Education	94	
San Diego County Office Of Education	288	
Santa Barbara County Office of Education	97	
Santa Cruz County Office of Education	142	
Stanislaus County Office of Education	35	
	\$1,157	Regional Counseling Services
Others	112	
	\$112	Various Services Under \$10K
Gross Consulting and Professional Services	\$35,525	
Less: Amounts Capitalized	12,146	
Consulting and Professional Services Net of Amounts Capitalized:	\$23,379	
IRC 403(b) Plan		
TIAA	60	
Voya Institutional Plan	1,523	
Consulting and Professional Services:	\$1,583	Administrative Services
IRC 457(b) Plan		
TIAA	2	
Voya Institutional Plan	54	
Consulting and Professional Services:	\$56	Administrative Services
Teachers' Deferred Compensation Fund		
JEM Resource Partners, LP	420	
Meridian Fiduciary Consulting	52	
Morningstar, Inc.	3	
Consulting and Professional Services:	\$475	Consulting Services

The CalSTRS Investment Portfolio generated **1.4 percent return** net of fees on its investments for the fiscal year ending June 30, 2016.

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100	Time-Weighted Performance Returns Net of Fees for Major Asset Categories
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106	Investment Summary
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While its assets produced a low positive return for the fiscal year, the CalSTRS Investment Portfolio decreased by (\$2.7) billion over the past 12 months, ending with a value of \$188.7 billion on June 30, 2016. As highlighted below, the CalSTRS portfolio is broadly diversified, holding investments ranging from publicly traded short-term bonds to privately held partnerships. Clearly, the scale and breadth of investments make the management and oversight of these assets highly complex. In light of these factors, CalSTRS has been effective in utilizing its resources in a cost-efficient manner to ensure that benefits continue to flow to CalSTRS participants.

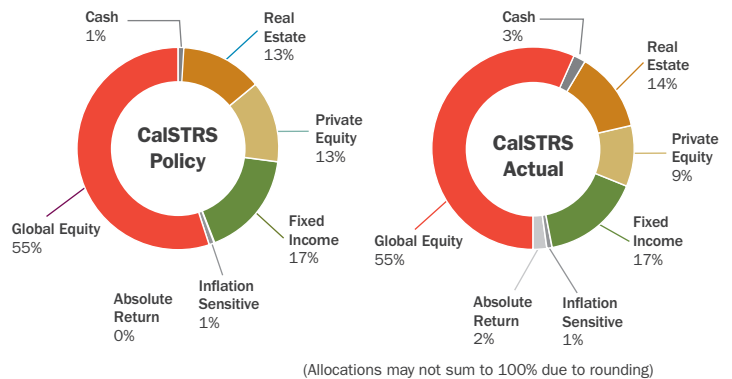
Investment Allocation

The Teachers' Retirement Board adopts long-term strategic allocation targets to be implemented over several years. The fiscal year-end report reflects strategic allocation guidelines for the 2015–16 fiscal year as adopted by the board (see left pie chart). The portfolio's actual allocation was slightly different from policy (see right pie chart). As of June 30, 2016, the Real Estate, Absolute Return and Cash classes were modestly overweighted, while the Private Equity class was meaningfully underweighted. The Global Equity, Fixed Income and Inflation Sensitive classes were in line with policy.

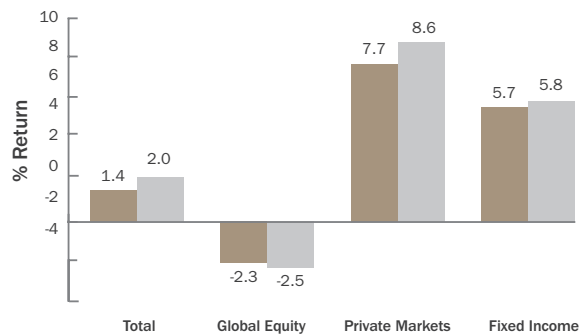
Investment Results (Net of Fees)

Over the last year, the CalSTRS Investment Portfolio produced an absolute return of 1.4 percent, ranking in the second quartile among its large public pension fund peers¹. During this period, CalSTRS portfolio results trailed the policy benchmark² return by (60) basis points (top bar chart). Relative outperformance by the Global Equity class aided relative performance, whereas relative underperformance by the Private Markets and Fixed Income classes detracted from relative performance.

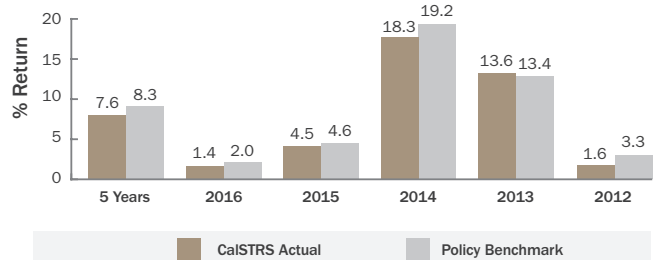
During the last three years, CalSTRS portfolio generated a 7.8 percent average annual return, ranking in the first quartile among peer funds. Over the last five years, the CalSTRS portfolio produced an average annual return



Last 12 Months Ending June 30 (Net of Fees)



Periods Ending June 30 (Net of Fees)



of 7.6 percent³, trailing its policy benchmark by (70) basis points per year (bottom bar chart). Due in large part to the benchmark not fully reflecting the opportunity set, the Private Equity strategic class was the primary contributor to the relative underperformance over this period. Overall, these total portfolio results were in-line with CalSTRS' actuarial rate of return. Previous fiscal year periods are presented here as well. The CalSTRS Investment Portfolio last outperformed its policy benchmark (net of fees) in fiscal year 2013⁴.

Pension Consulting Alliance, Inc.

¹Per Wilshire TUCS Universe of Master Trust Public Funds with assets in excess of \$10 billion.

²The policy benchmark consists of passively managed strategic class portfolios weighted by CalSTRS' policy allocations. The difference between actual results and the benchmark are due to two factors: i) deviations from policy and ii) active decisions on the part of CalSTRS and its investment managers.

³Reported elsewhere as 7.7 percent due to different rounding methodologies.

⁴CalSTRS' investment performance is calculated using a daily time-weighted return geometrically linked to calculate a monthly return. Periods longer than one month are geometrically linked to calculate annualized "time-weighted" rates of return.



BOSTON MA
CHICAGO IL

MIAMI FL

PORTLAND OR

SAN DIEGO CA

LONDON UK

2016 CALSTRS INVESTMENT REVIEW

The value of CalSTRS' investments decreased by \$2.7 billion in the most recent fiscal year, and stood at \$188.7 billion as of June 30, 2016. During the year, a positive investment return of 1.35 percent (net of fees) was more than offset by cash outflows to pay for benefits in excess of contributions. We highlight below the portfolio allocation, performance, and investment attribution. The investment portfolio remains well diversified by asset type and geography, in a mix of private and public investments in the United States and abroad.

Asset Allocation

During fiscal year 2015–16, the Teachers' Retirement Board undertook a comprehensive review of asset allocation. After significant analysis, the board adopted a new asset allocation, to be implemented over the next several years. That shift toward the new allocations began subsequent to fiscal year-end.

Most asset class allocations were very close to targets at fiscal year-end, with 54.8 percent of assets in Global Equity, 16.9 percent in Fixed Income, 8.7 percent in Private Equity, 13.9 percent in Real Estate, 2.9 percent in Cash, 1.8 percent in Absolute Return, and 1.0 percent in Inflation Sensitive.

Investment Performance

Underscoring a challenging period for equity market returns, especially outside of the U.S., CalSTRS returned 1.35 percent, net of fees, for the most recent fiscal year ending June 30, 2016, trailing the policy benchmark by 69 basis points. Global Equity outperformed its benchmark during the period by 18 basis points, while most other asset classes trailed their benchmarks slightly. Over the past three years, the CalSTRS Investment Portfolio returned 7.81 percent annualized, and over the past five years it returned 7.65 percent. Both of these trailing returns were above the actuarial assumed rate of 7.50 percent. The portfolio has outperformed its assumed rate of return in five of the past ten fiscal years.

In the challenging investment environment of the past fiscal year, CalSTRS' 1.35 percent return exceeded that of the average large public pension plan by approximately 1.4 percent, largely due to its somewhat higher allocation to U.S.-based assets.

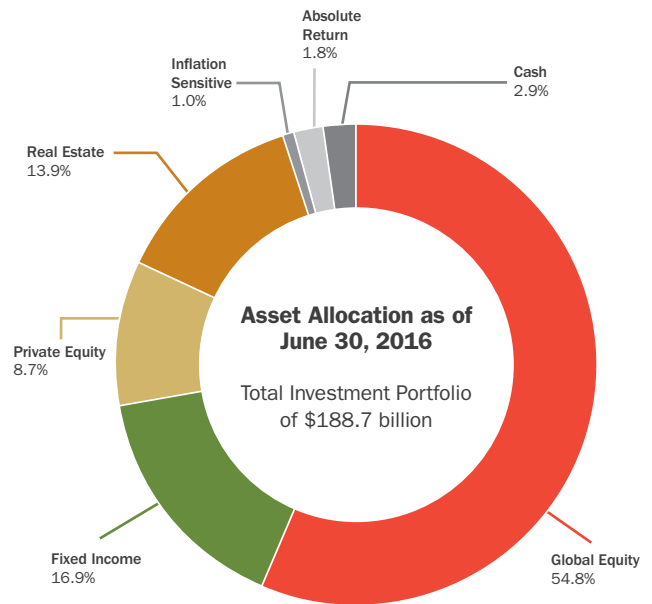
Sincerely,

Stephen P. McCourt, CFA
Managing Principal

INVESTMENTS

Investment values and the related returns for the CalSTRS Investment Portfolio are presented differently within the Investments and Financial sections of the CAFR for various reasons; therefore, the reader needs to understand the methodology presented in each section. In the preceding pages and news releases and on the internet, the investment values and related returns are presented using common industry practices that reflect the way in which CalSTRS manages its investment portfolio. The presentation based on industry practices provides timely information that is easily compared to benchmarks and peer results. Within the Financial Section, the same information is reported in accordance with Generally Accepted Accounting Principles. The primary difference between the presentations is the categorization of the investments. Additional differences result from the timing of recognition of performance for long-term investments in the portfolio. In accordance with investment industry practices, private asset performance is reported with a quarter lag; for financial reporting purposes, adjustments were made to bring results current. Both sets of numbers are relevant but reflect different methodologies and serve different purposes.

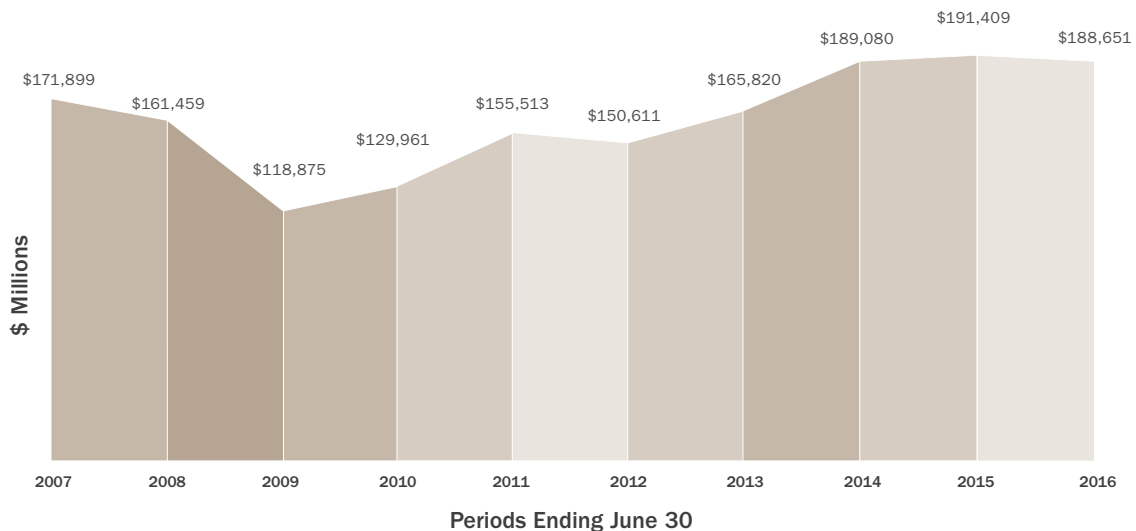
Performance information in this section is reported as returns net of fees and is calculated using a time-weighted return methodology. The investment information on the CalSTRS website is reported consistent with investment industry standards and is comparable to the global financial markets and other pension plans and institutional investors. For more information, see CalSTRS.com.



After a strong five-year rebound from the global financial crisis of 2008, for the second year in a row, the U.S. equity market barely turned a profit. Likewise, non-U.S. stocks were mixed, as lack of global economic growth and global risks plagued the markets. As a result, it was a difficult year to produce positive returns. In the 2015–16 fiscal year, CalSTRS generated 1.4 percent return net of fees on its investments. However, the portfolio values decreased due

Table 1 Market Value of Investments

Portfolio values and performance results may vary from information presented in the Basic Financial Statements due to rounding, portfolio management requirements and Generally Accepted Accounting Principles.



INVESTMENTS

to benefits payments being in excess of contributions. One year is a very short time period. CalSTRS is a long-term investor with a thirty-year investment horizon, so it is much more meaningful to review the investment performance over longer time periods. At June 30, 2016, the investment portfolio generated 7.8 percent return net of fees over the past three years, 7.7 percent over the last five years and 7.1 percent over the past 20 years. Compared to other

U.S. public pensions plans, CalSTRS investment returns ranked in the top half for the year and top quartile over three and five years ending June 30, 2016.

While this annual report provides a significant amount of information regarding the CalSTRS Investment Portfolio, it only represents one point in time, June 30, 2016. It is difficult to compare this time measurement to the

Table 2 Time-Weighted Annual Returns

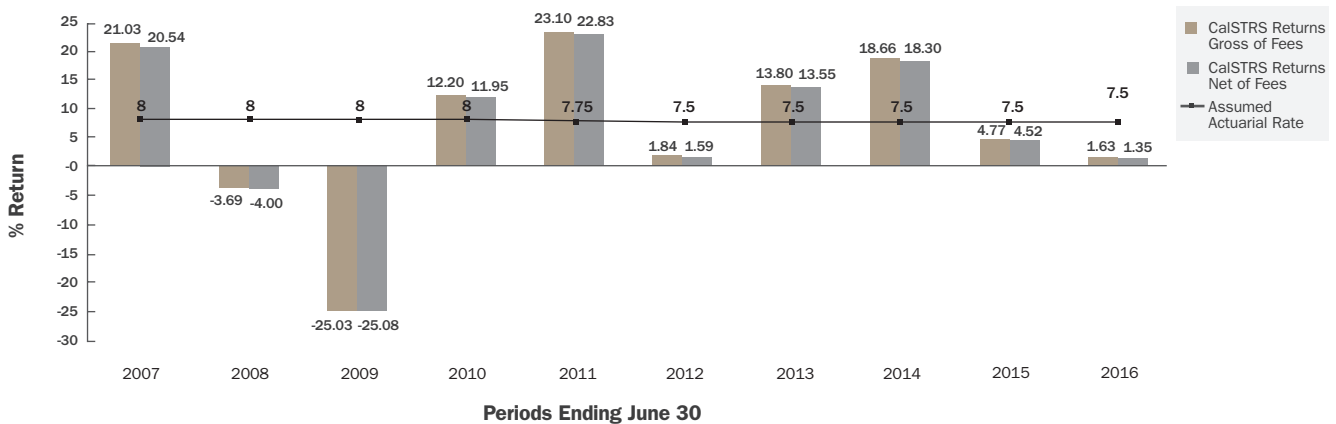


Table 3 Time-Weighted Returns Net of Fees for Major Asset Categories for Period Ending June 30, 2016

Portfolio Type/Associated Indices	1 Yr	3 Yr	5 Yr	10 Yr
Total Fund	1.35%	7.81%	7.65%	5.59%
Total Fund Custom ⁽¹⁾	2.04	8.36	8.31	6.31
Global Equity	(2.33)	7.82	7.64	5.58
Global Equity Custom ⁽²⁾	(2.51)	7.65	7.59	5.49
U.S. Equity	1.76	11.10	11.40	7.21
Russell 3000	1.71	11.00	11.48	7.25
Non-U.S. Equity	(9.47)	1.64	0.50	2.32
MSCI All Country World Index ex-U.S.	(10.57)	1.06	(0.03)	1.79
MSCI Europe, Australia, Far East & Canada	(10.26)	1.72	1.06	1.48
MSCI Emerging Market	(12.09)	(1.51)	(3.80)	3.52
Fixed Income	5.70	4.49	4.31	5.59
U.S. Debt Custom ⁽³⁾	5.77	4.07	3.87	5.25
Barclays Capital U.S. Aggregate	6.00	4.06	3.76	5.13
Barclays Capital High Yield Cash Pay	1.63	4.19	5.86	7.62
Real Estate	11.11	11.76	11.16	2.98
Real Estate Custom (lagged 1 quarter) ⁽⁴⁾	12.62	12.59	12.34	7.81
Private Equity	2.85	10.30	10.13	9.54
Private Equity Custom (lagged 1 quarter) ⁽⁵⁾	4.59	12.48	13.06	9.68
Inflation Sensitive	4.20	3.15	3.30	-
Inflation Sensitive Custom ⁽⁶⁾	4.45	4.43	4.41	-
Barclays Global Inflation Linked	2.55	2.74	2.36	4.36
Infrastructure Custom Index ⁽⁷⁾	6.05	6.11	6.38	6.79
Absolute Return ⁽⁸⁾	0.24	0.44	0.36	-
Absolute Return Custom ⁽⁹⁾	1.22	1.11	-	-
Cash/Liquidity ⁽¹⁰⁾	1.23	0.71	1.75	1.26
Barclays Capital 3-Month Treasury Bill ⁽¹¹⁾	0.21	0.11	0.10	1.08

CalSTRS' investment performance is calculated using a daily time-weighted return geometrically linked to calculate a monthly return. Periods longer than one month are geometrically linked to calculate annualized "time-weighted" rates of return. Custom public indices are updated quarterly in accordance with CalSTRS restricted securities list. Russell and Barclays indices exclude tobacco, illegal California firearms, geopolitical and U.S. thermal coal companies. MSCI indices exclude tobacco, illegal California firearms and geopolitical companies.

(1) Policy weighted blend of asset class benchmarks.
 (2) Weighted blend of Russell 3000 combined with the MSCI All Country World Index (ex-U.S.) custom indices.
 (3) 95% Barclays Capital U.S. Aggregate + 5% U.S. High Yield Cash Pay 2% Issuer Constrained custom indices.
 (4) NCREIF ODCE Value Weighted Index net of fees qtr lag. Previously NCREIF Property Index qtr lag through 06/30/2013.
 (5) State Street Private Equity Index qtr lag. Previously Russell 3000 Custom Index qtr lag + 3% from 07/01/2008 through 6/30/2014 and Russell 3000 Custom Index qtr lag + 5% + Barclays Capital 3-Month Treasury Bill from 04/01/1999 through 06/30/2008.
 (6) Weighted blend of Barclay's Global Inflation Protected Linked Securities Index and Infrastructure Custom Index.
 (7) Weighted blend of Alerian MLP Daily Index and Consumer Price Index (CPI) + 4% qtr lag. Previously CPI + 4% qtr lag from 07/01/2014 through 04/30/2016 and CPI + 5% through 6/30/2014.
 (8) Asset class formally adopted by the board April 2012. Benchmark returns are not applicable for 5 and 10 periods.
 (9) Barclays Capital 3-Month Treasury Bill + 1%.
 (10) Includes the Securities Lending Program loss incurred in FY 2008-2009 and subsequent income earned through December 2013.
 (11) Previously Citigroup 3-Month Treasury Bill prior to 07/01/2006.

movement and complexity of the investment portfolio in this highly dynamic global financial market. For more current investment information, as well as videos detailing key aspects of the investment portfolio, see CalSTRS.com.

Absolute Return

The Absolute Return asset class consists of Innovation, Strategic Overlay and Stable Return.

Innovation and Risk (Innovation)

The Innovation Portfolio, managed by the Innovation and Risk Unit, has a long-term allocation goal not to exceed 2.5 percent of the total plan assets. The Innovation Portfolio's objective is to help mitigate the plan's dependency on economic growth and low inflation to meet long-term expectations. This is achieved by incubating and graduating new strategies expected to diversify the risk of the total plan while providing attractive real returns over a market cycle. The unit is also building a fund-wide risk management process, which will help CalSTRS monitor risk factors driving the performance of the investment portfolio. The framework will help improve CalSTRS' investment process and provide tools to mitigate the impact of a severe macroeconomic or market event.

For the fiscal year ending June 30, 2016, the \$3.1 billion Innovation Portfolio generated 2.00 percent, return net of fees outperforming its policy benchmark by 42 basis points. For more information about the Innovation and Risk Portfolio, refer to the Investments section on the CalSTRS website.

Currency Management Program (Overlay)

The Currency Management Program, managed by the Fixed Income Unit, is designed to address the global nature of all the Total Fund's assets and attempts to add value on a fund-wide basis. The currency markets are some of the most liquid and volatile markets that CalSTRS operates within. The internally managed Core strategy performance was positive by 11 basis points for the year ending June 30, 2016, while the externally managed Opportunistic strategy underperformed by 80 basis points for the same period. Some of the underperformance can be attributed to a stagnation of fundamentals driving currency prices along with the managers generally shorting a strong appreciating yen for most of the year. Since inception in 1995, the Currency Management Program has added nearly 50 basis points on an annualized basis to the value of the Total Fund.

Home Loan Program (Stable Return)

The CalSTRS Home Loan Program was established by legislation in 1984 and provided home ownership to qualified participants, which attributed to CalSTRS' investment mortgage asset objectives. New home loan origination activity was suspended by the board on October 1, 2011; however, staff continues to manage the existing assets of \$117.1 million, as of June 30, 2016.

Credit Enhancement (Stable Return)

CalSTRS enters into agreements with a number of domestic issuers of debt to provide credit support and/or liquidity support on specific debt obligations. In return, CalSTRS earns fee income for these commitments. In July 2013, the Credit Enhancement Program suspended underwriting new commitments and has been managing the wind-down of the program, which is expected to be completed by 2017. As of June 30, 2016, the Credit Enhancement Program had commitments on approximately \$81.3 million, and fee income earned during the fiscal year was approximately \$2.2 million.

Inflation Sensitive

For the fiscal year ending June 30, 2016, the \$1.9 billion Inflation Sensitive Portfolio represented one percent of the Total Fund. Global Inflation Securities (Linkers) represent 30 percent of this asset class with the balance consisting of Infrastructure investments. The long-term allocation target, as set by the board in April 2016, for the Inflation Sensitive Portfolio, is four percent allocated between Linkers and Infrastructure investments.

The Inflation Sensitive Portfolio generated 4.20 percent return net of fees for the fiscal year ending June 30, 2016, versus the benchmark return of 4.45 percent, underperforming the weighted policy benchmark by 25 basis points. The Linkers Portfolio had 2.56 percent return net of fees while the Infrastructure Portfolio generated 4.93 percent return net of fees. Over the previous three years, the Inflation Sensitive Portfolio underperformed its benchmark by 128 basis points.

Short-term results for the Infrastructure portion of this portfolio are not particularly significant; performance expectations will be better measured over the long-term

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as investments mature and achieve their full cash flow potential. Infrastructure has begun to enter a more mature phase and is beginning to achieve greater cash flow potential. For more information about the Inflation Sensitive Portfolio, refer to the Investments section on the CalSTRS website.

Fixed Income

For the fiscal year ending June 30, 2016, the Fixed Income Portfolio had total assets of \$31.9 billion representing 16.9 percent of the Total Fund. The Fixed Income Unit operates a hybrid model portfolio, which takes advantage of the benefits and efficiencies of both internal and external asset management. Eighty-three percent of the portfolio's assets are managed by internal staff using enhanced core and high-yield strategies with a moderate level of risk. The remaining 17 percent is managed by external managers using broader opportunistic strategies, which assume a higher level of risk and, therefore, a higher level of expected return. As shown on Table 3, the Fixed Income Portfolio underperformed its benchmark by seven basis points (5.70 percent vs. 5.77 percent). The three-, five- and 10-year returns net of fees were positive and have outperformed the benchmark by 42, 44, and 34 basis points, respectively.

The Fixed Income Unit manages two additional programs: Currency Management, which is discussed in the Overlay

section, and Securities Lending discussed in the next section. For more information about the Fixed Income Portfolio, refer to the Investments section on the CalSTRS website.

Securities Lending Program

The Securities Lending Program is a low-risk strategy that allows the Total Fund to use its existing asset base and lending expertise to generate additional income. For the fiscal year ended June 30, 2016, the Securities Lending Program earned approximately \$88.8 million in additional income for the Total Fund. Over the past year, income decreased by more than \$4 million from the previous year. The drop in earnings is attributed to several factors: lower demand to borrow individual securities with large return spreads (super specials), an overall reduction of general collateral (non-special) trades and more restrictive dealer balance sheets given new and pending regulations. These headwinds were somewhat mitigated by a decrease in the overall supply of lendable assets. This provided more opportunities for increased spread as well as cash collateral yields rising as a result of the Federal Reserve forecasting a normalization in rates. For additional information on the Securities Lending Program, please refer to the *CalSTRS Securities Lending Program 2015 Annual Report* available on the CalSTRS website.

Table 4 Largest Fixed Income Holdings as of June 30, 2016
(CalSTRS maintains a complete list of portfolio holdings)

Issue	Maturity Date	Interest Rate	Par	Market Value	Cost	Unrealized Gain (Loss)
US TREASURY N/B	1/31/18	0.875%	365,000,000	\$366,744,689	\$361,613,480	\$5,131,209
US TREASURY N/B	1/31/20	1.375	320,000,000	326,179,200	320,743,841	5,435,359
US TREASURY N/B	10/31/17	1.875	300,000,000	305,193,009	305,039,063	153,946
US TREASURY N/B	5/15/44	3.375	245,000,000	301,396,526	254,409,573	46,986,953
US TREASURY N/B	2/29/20	1.375	295,000,000	300,584,344	292,561,039	8,023,305
US TREASURY N/B	9/30/19	1.750	290,000,000	299,105,997	291,812,500	7,293,497
US TREASURY N/B	6/30/20	1.625	273,550,000	281,327,032	274,432,065	6,894,967
US TREASURY N/B	5/15/43	2.875	244,070,000	273,890,477	244,109,542	29,780,935
US TREASURY N/B	5/15/46	2.500	240,690,000	250,449,980	237,354,325	13,095,655
US TREASURY N/B	11/15/40	4.250	175,000,000	244,653,504	172,986,907	71,666,597

Private Equity

The Private Equity Portfolio ended the June 30, 2016, fiscal year with a market value of \$16.3 billion or 8.7 percent of the Total Fund. The portfolio consists primarily of investments in limited partnerships, which account for 93.6 percent with the remaining assets consisting of co-investments.

As shown on Table 3, Private Equity Portfolio generated single-digit returns net of fees for the one-year and 10-year periods and double-digit returns net of fees for the three- and five-year periods ending June 30, 2016. The portfolio has underperformed its benchmark over these periods, primarily due to the reason described below.

Private Equity is difficult to benchmark; the CalSTRS Private Equity Portfolio benchmark has changed twice over the past decade. Regarding the long-term performance metrics, the benchmark for these periods includes a large component linked to public equity market performance plus a spread. Given the abnormally strong performance of public equity markets in the wake of the global financial crisis of 2008, it is neither surprising nor atypical that the CalSTRS Private Equity Portfolio is underperforming such a benchmark. Regarding the short-term performance metrics, the Private Equity Portfolio has substantially increased its investment pace over the past two years, and therefore, J-curve effects are influencing performance.

For current information on the CalSTRS Private Equity Portfolio, please refer to the Investments section on the CalSTRS website.

Real Estate

The Real Estate Portfolio ended the fiscal year 2015–16 with a market value of \$26.2 billion or 13.9 percent of the Total Fund. The portfolio holds real estate investments in limited partnership funds, joint ventures, separate accounts and other investments, which account for 37.4 percent, 34.8 percent, 24.7 percent and 3.1 percent, respectively. Over the last several years, staff has emphasized an increase in joint ventures and separate accounts in order to increase internal management control and lower fees. In addition, staff has emphasized an increase in investments in core assets over higher risk strategies.

Real Estate is a long-term asset with performance results influenced by various factors. As shown on Table 3, performance for the period ending June 30, 2016, has been positive but lags the benchmark over all periods. The suboptimal performance relative to the portfolio benchmark is attributable to two factors: 1) an over-concentration of higher risk limited partnership investments during 2005–08, and 2) a benchmark that is based on low-levered core real estate that has outperformed higher risk investments. Staff continues to focus on making allocations to strong, top tier partners, strategic investment opportunities and managing the remaining assets impacted by the global financial crisis of 2008. These investments entered into since the financial crisis have outperformed the benchmark on all time periods.

For current information on the CalSTRS Real Estate Portfolio, please refer to the Investments section on the CalSTRS website.

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Global Equity

For the fiscal year ending June 30, 2016, the \$103.5 billion Global Equity Portfolio represented 54.8 percent of the Total Fund. U.S. equity accounted for 64 percent of the Global Equity Portfolio, while non-U.S. equity accounted for the remaining 36 percent.

As shown on Table 3, the Global Equity Portfolio generated a negative 2.33 percent return net of fees, outperforming its policy benchmark by 18 basis points (-2.33 percent vs. -2.51 percent) for the fiscal year. The relative outperformance was driven by the non-U.S. Equity Portfolio, which outperformed the Custom MSCI ACWI ex-U.S. Index by 110 basis points (-9.47 percent vs. -10.57 percent). The U.S. Equity Portfolio outperformed the Custom Russell 3000 Index by 5 basis points (1.76 percent vs. 1.71 percent).

For more information about the Global Equity Portfolio, please refer to the Investments section on the CalSTRS website.

Corporate Governance

The Corporate Governance Unit manages 10 governance funds and two sustainability funds within the Global Equity Portfolio. As of June 30, 2016, the assets under management accounted for \$3.8 billion with one year returns net of fees of negative 3.84 percent. The governance funds invest in companies with poor governance structures and engage management to improve governance and enhance long-term shareholder value. The sustainability funds integrate sustainability factors into their long-term investment strategy to deliver market outperformance.

The Corporate Governance Unit is responsible for proxy voting. During fiscal year 2015–16, CalSTRS staff voted on 76,995 proxy proposals submitted by 7,072 corporations that were held in the investment portfolio. The 76,995 proposals represented a 0.6 percent decrease from the 77,461 proposals voted in 2014–15.

1. Election of Directors:

CalSTRS generally votes in favor of directors at public companies unless the proxy statement shows circumstances contrary to policy. Examples of such circumstances include potential conflict of interest due to other directorships or employment, legal or investment banking advice and poor board meeting attendance (less than 75 percent).

- Number Voted: 17,347
- Voted For: 11,698 (67 percent)
- Voted Against: 5,649 (33 percent)

Table 5 Largest Public Equity Holdings as of June 30, 2016
(CalSTRS maintains a complete list of portfolio holdings)

Issue	Shares	Market Value	Cost	Unrealized Gain (Loss)
APPLE INC	15,298,337	\$1,462,521,017	\$1,272,458,168	\$190,062,849
ALPHABET INC	1,727,058	1,205,433,926	814,968,435	390,465,491
MICROSOFT CORP	21,878,048	1,119,499,716	798,518,422	320,981,294
EXXON MOBIL CORP	11,466,358	1,074,856,399	971,496,049	103,360,350
JOHNSON + JOHNSON	8,300,271	1,006,822,872	640,623,608	366,199,264
AMAZON.COM INC	1,153,506	825,471,964	387,721,752	437,750,212
GENERAL ELECTRIC CO	25,207,319	793,526,402	553,319,901	240,206,501
AT+T INC	18,355,111	793,124,346	615,406,587	177,717,759
BERKSHIRE HATHAWAY INC	5,261,894	761,869,632	521,242,385	240,627,247
FACEBOOK INC	6,648,225	759,759,153	383,363,172	376,395,981

2. Auditor Ratifications:

CalSTRS will vote to approve or ratify the independent auditors of public companies recommended by management unless the auditor provides services that run contrary to what CalSTRS policy allows. Examples of such services are: consulting, information system design and implementation, investment banking support and excessive non-audit fees (greater than 30 percent of the total fees billed).

- Number Voted: 2,749
- Voted For: 2,522 (92 percent)
- Voted Against: 227 (8 percent)

3. Compensation Plans (Stock Option Plans, Employee Stock Purchase Plans, etc.):

Companies provide a variety of compensation plans for executives, employees and non-employee directors. Many of these plans provide for the issuance of long-term incentives to attract, reward and retain key employees. Compensation plans are evaluated based on the CalSTRS Corporate Governance Principles.

- Number Voted: 1,291
- Voted For: 1,045 (81 percent)
- Voted Against: 246 (19 percent)

4. Advisory Vote on Compensation:

More commonly known as say-on-pay, these votes provide shareholders the opportunity to ratify the compensation of the executives named in the proxy. These votes are evaluated based on the CalSTRS Corporate Governance Principles.

- Number Voted: 2,102
- Voted For: 1,695 (81 percent)
- Voted Against: 407 (19 percent)

5. Approve Merger/Acquisition—Management:

CalSTRS evaluates mergers and acquisitions on a case-by-case basis utilizing a total portfolio view.

- Number Voted: 176
- Voted For: 166 (94 percent)
- Voted Against: 10 (6 percent)

6. Corporate Actions/Corporate Governance Issues:

These are issues related to spin-offs, incorporation, stock issuance, stock splits and bylaw amendments. CalSTRS votes on these proposals on a case-by-case basis.

- Number Voted: 541
- Voted For: 392 (72 percent)
- Voted Against: 149 (28 percent)

7. Miscellaneous Issues—Management:

The most common miscellaneous votes considered are requests to transact other business or adjourn a meeting. CalSTRS votes these issues on a case-by-case basis.

- Number Voted: 217
- Voted For: 4 (2 percent)
- Voted Against: 213 (98 percent)

8. Frequency of Advisory Vote on Compensation:

More commonly known as say-when-on-pay, this vote is a requirement of the Dodd-Frank Act to allow shareholders to vote on the frequency of future advisory votes on compensation, also known as say-on-pay votes. Under the rule, shareholder can choose to vote every one, two or three years. CalSTRS routinely supports an annual say-on-pay vote.

- Number Voted: 113
- 1-year: 113 (100 percent)
- 2-year: 0 (0 percent)
- 3-year: 0 (0 percent)

9. Shareholder Proposals:

CalSTRS votes on a variety of shareholder proposals. Examples of the issues voted on include: promoting social and environmental issues, removing classified boards of directors, requiring an independent board chairman, giving shareholder access to the nomination process, tying compensation plans to company performance, and requiring majority vote for director elections.

- Number Voted: 556
- Voted For: 387 (70 percent)
- Voted Against: 169 (30 percent)

INVESTMENTS

Cash Balance Benefit Program

The CBB Program contributions were invested into pooled funds from inception in February 1997 through June 2001 within the State Teacher's Retirement Plan. During that period, 60 percent of the contributions were allocated to the S&P 500 Portfolio and 40 percent to the Government Index Portfolio. In July 2001, the contributions were invested throughout the State Teacher's Retirement Plan, excluding Private Equity and Real Estate investments. As of June 30, 2016, the market value was approximately \$282.4 million and the rate of return gross of fees for the fiscal year was negative 0.35 percent.

Defined Benefit Supplement Program

The DBS Program contributions were invested in the State Teacher's Retirement Plan, excluding Private Equity and Real Estate investments from January 2001 through June 2011. In July 2011, the contributions were invested throughout the State Teacher's Retirement Plan. As of June 30, 2016, the market value was approximately \$11.0 billion and the rate of return gross of fees for the fiscal year was 1.63 percent.

For further information on the CBB Program or the DBS Program, please see the supplemental program information on the CalSTRS website.

Table 6 Investment Summary for the Current and Previous Fiscal Year
(Dollars in Millions)

Portfolio Type	June 30, 2015		June 30, 2016			
	Book Value	Net Asset Value	Book Value	Net Asset Value	% of Net Asset Value	Net Value Change
Global Equity	\$85,359	\$109,900	\$88,787	\$103,477	54.8%	\$(6,423)
Fixed Income	30,240	30,076	30,994	31,851	16.9	1,775
Private Equity	20,116	19,306	19,319	16,337	8.7	(2,969)
Real Estate	26,637	24,326	27,285	26,172	13.9	1,846
Inflation Sensitive	1,546	1,539	1,880	1,916	1.0	377
Absolute Return	2,624	2,858	3,165	3,409	1.8	551
Cash	3,403	3,404	5,492	5,489	2.9	2,085
PORTFOLIO TOTAL	\$169,925	\$191,409	\$176,922	\$188,651	100%	\$(2,758)
Adjustments:						
Securities Lending Collateral		18,029		17,524		
Accruals ¹		1,513		1,362		
Cash & Cash Equivalent		(360)		(165)		
STRP-INVESTMENTS TOTAL		\$210,591		\$207,372		

¹Includes reclassifications made for the fiscal year ended 2015 to conform to the presentation for the fiscal year ended 2016 in the Financial Section.

INVESTMENTS

Table 7 Schedule of Investment Expenses
July 1, 2015 through, June 30, 2016 (Dollars in Thousands)

Investment Categories	Net Asset Value	Investment Expenses*	Basis Points
Global Equity	\$103,477,094	\$126,234	12.2
Fixed Income	31,850,547	20,811	6.5
Private Equity	16,337,466	7,772	4.8
Real Estate	26,171,707	14,167	5.4
Inflation Sensitive	1,915,575	524	2.7
Absolute Return	3,409,045	17,584	**
Cash	5,489,522	1,503	2.7
Total Assets And Expenses	\$188,650,956	\$188,595	10.0

* Investment Expenses reflected in this table generally represent direct costs associated with investing. Certain expenses, including carried interest and management fees related to private assets are not included; however, may be reflected within the net asset value.

** Absolute Return includes the Currency Management Program, which calculates basis points using notional values instead of net asset values.

Table 8 Global Equity Broker Commissions
July 1, 2015 through, June 30, 2016

Broker Name	Commission	Shares	Commission Per Share (Avg)
State Street Bank and Trust Company	\$2,740,589	697,922,552	\$0.004
Credit Suisse First Boston	1,843,717	440,147,634	0.004
Merrill Lynch	1,621,714	552,294,961	0.003
Citigroup	1,516,786	239,607,815	0.006
JP MORGAN	1,456,567	373,765,630	0.004
Instinet	1,433,005	593,638,593	0.002
Goldman Sachs	1,407,638	415,204,781	0.003
UBS	1,112,967	230,250,339	0.005
Morgan Stanley	1,057,177	393,687,816	0.003
Investment Technology Group Inc.	649,312	69,177,719	0.009
All Other Brokers	8,412,882	1,556,216,947	0.005
Total Commissions	\$23,252,354	5,561,914,787	\$0.004

CalSTRS administers retirement, disability and survivor **benefits for California's 914,454 public school educators** (from pre-kindergarten through community college) and their beneficiaries.

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VALUATION OF THE DEFINED BENEFIT PROGRAM



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November 8, 2016

Teachers' Retirement Board
California State Teachers' Retirement System

Re: Valuation of the Defined Benefit Program

Dear Members of the Board:

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

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

Valuation Date	Funded Ratio
June 30, 2013	67%
June 30, 2014	69%
June 30, 2015	69%

Based on the June 30, 2015 actuarial valuation, the scheduled income from member, employer, and State contributions is projected to finance the DB Program on an actuarially sound basis. CalSTRS is projected to reach a 100% Funded Ratio in 2046.

The June 30, 2015 valuation results are based on the membership data and the asset information provided by CalSTRS. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

Milliman did not prepare the summaries or schedules shown in the Financial and Actuarial Sections. However, the actuarial information contained in the Financial Section and in this Actuarial Section was derived from our June 30, 2015 actuarial valuation report for funding and our September 22, 2016 GASB 67/68 report which communicated the actuarial results for financial reporting for June 30, 2016.

The actuarial computations presented in the valuation report are for purposes of determining the recommended funding amounts for CalSTRS consistent with our understanding of their funding requirements and goals. The liabilities are determined by using the entry age normal funding method. The actuarial assets are determined by using a one-third smoothed recognition method of the difference between the actual market value to the expected actuarial value.

VALUATION OF THE DEFINED BENEFIT PROGRAM



Teachers' Retirement Board
November 8, 2016
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The valuation is based on our understanding of the current benefit provisions of the DB Program and the actuarial assumptions adopted by the Board. The assumptions are reviewed annually for reasonableness, with a detailed experience analysis completed every four or five years. The last detailed experience analysis was completed in February of 2012 when the Board adopted the current assumptions. The assumptions will be reviewed in detail again for use in the June 30, 2016 funding valuation and the GASB 67/68 valuation for reporting date June 30, 2017. The assumptions and methods used for financial reporting under GASB 67/68 are the same as the funding valuation assumptions with the following exceptions:

1. The discount rate of 7.60% is gross of administrative expenses; and
2. The market value of assets is used for the Fiduciary Net Position.

For financial reporting purposes, all programs within the State Teachers' Retirement Plan are reported in aggregate.

We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement Numbers 67, 68 and 82 for fulfilling financial reporting requirements and meet the parameters set forth in the relevant Actuarial Standards of Practice (ASOPs). Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements as presented in the valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

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

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

We certify that the June 30, 2015 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Respectfully submitted,

A handwritten signature in black ink that reads "Mark C. Olleman".

Mark C. Olleman, FSA, EA, MAAA
Principal and Consulting Actuary

A handwritten signature in black ink that reads "Nick Collier".

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

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DEFINED BENEFIT PROGRAM

Summary of Actuarial Assumptions and Methods

CalSTRS, through its consulting actuary, performs an experience study every four years to determine appropriate demographic and economic assumptions. These assumptions are then applied when the consulting actuary performs an actuarial valuation to monitor the funding status of the Defined Benefit (DB) Program.

The most recent experience study for 2006–2010 was completed as of June 30, 2010. The most recent actuarial valuation was completed as of June 30, 2015, and adopted by the Teachers' Retirement Board on April 7, 2016.

The following summary and tables were prepared by CalSTRS staff. All of the assumptions used in the June 30, 2015 actuarial valuation were based on the 2010 Actuarial Experience Analysis adopted by the board in February 2012.*

The following is a summary of the assumptions and methods adopted by the board for funding this program:

- Investment return rate and discount rate is 7.50 percent, net of investment and administrative expenses.
- Method used to value program assets for actuarial valuation purposes: expected actuarial value adjusted for one-third of the difference between actual market value and expected actuarial value.
- Assumption for general wage increase is 3.75 percent, of which 3.00 percent is due to inflation, and 0.75 percent is due to expected gains in productivity.
- The actuarial cost method used by the program is the entry age normal actuarial cost method, with the actuarial gains/losses and the unfunded actuarial obligation amortized over a closed period ending June 30, 2046.
- The extent to which benefits are expected to increase as a result of cost-of-living type adjustments is an annual 2 percent increase to the initial benefit beginning on September 1 following the first anniversary of the effective date of the benefit. Since 1972, this increase is applied to all eligible continuing benefits.

Actuarial Cost Method

For funding purposes, the entry age normal cost method was selected for the DB Program since it is the most common cost method among public sector pension plans. The advantage to using this method is that the cost over time tends to remain fairly level as a percentage of overall payroll. This is well-suited to most public systems, which tend to contribute as a percentage of pay and which benefit from a stable contribution rate for budgeting and planning purposes.

Financial Reporting

Under GASB 67, financial reporting for the State Teachers' Retirement Plan (STRP) includes the DB, Defined Benefit Supplement (DBS), Cash Balance Benefit (CBB), Supplemental Benefit Maintenance Account (SBMA) and Teachers' Replacement Benefits programs.

Actuarial method and assumptions for GASB 67 financial reporting

- The discount rate is 7.60 percent, net of investment expenses but gross of administrative expenses.
- The actuarial cost method is the entry age normal cost method.
- General wage increase is 3.75 percent, of which 3.00 percent is due to inflation.
- Postretirement benefit increases of 2.00 percent simple for DB Program and 85 percent purchasing power level for SBMA program. Not applicable for CBB and DBS programs.

As required by GASB 67, the discount rate used for financial reporting of 7.60 percent is net of investment expenses but gross of administrative expenses. The 7.50 percent investment return rate used for funding and administrative purposes is net of investment and administrative expenses. The 2011 CalSTRS mortality tables were used in both financial funding and administrative calculations. Table 7 provides more details of the mortality assumptions. For the valuation used for funding and administrative purposes, the DB Program actuarial value of assets ("smoothed value")

***Note:** These assumptions are currently being reviewed. The results of this review will be presented to the CalSTRS board in February 2017. If changes are adopted, they would be reflected in the June 30, 2017 Financial Report.

DEFINED BENEFIT PROGRAM

is used in the determination of the Unfunded Actuarial Obligation. For financial reporting, the aggregate assets for all programs in the State Teachers' Retirement Plan on a market basis are used in the determination of the Net Pension Liability.

Discussion of recent changes:

The nature of the program—Since the last experience study as of June 30, 2010, program amendments have been made that have affected the June 30, 2015, actuarial valuation.

Changes to the plan: Effective January 1, 2013, Chapter 296, Statutes of 2012 (AB 340-Furutani) was enacted in 2012. The law known as the California Public Employees' Pension Reform Act (PEPRA) of 2013, reduces retirement benefits for educators who became members after 2012. Specifically, for new members some of the key provisions of the law are: 1) the benefit factors at all ages less than age 65 are reduced;

- 2) final compensation is based on a 36-month period;
- 3) the definition of creditable compensation is restricted;
- and 4) compensation for benefit purposes is limited to no more than 120 percent of the Social Security taxable wage base adjusted annually based on the Consumer Price Index for all Urban Consumers: U.S. City Average. Additional changes that do not directly affect the calculated retirement benefits apply to all members.

Funding: The board had no authority to set contribution rates and had to rely upon remedy from the Legislature and the Governor, who enacted a responsible funding plan in 2014. AB 1469, enacted in Chapter 47, Statutes of 2014, is projected to significantly fund the DB Program by June 30, 2046, through shared contribution increases among CalSTRS members, employers and the State of California. Member contributions of eight percent (pre-AB 1469 rate) will increase by an additional 2.25 percent of payroll for CalSTRS 2% at 60 members and an additional 1.205 percent for CalSTRS 2% at 62 members by fiscal year 2016–17. Employer contributions will increase to a total of 19.1 percent by fiscal year 2020–21. State contributions will increase to a total of 6.328 percent by fiscal year 2016–17. AB 1469 grants the board limited rate setting authority to adjust up or down the state and employer contribution rates

Actuarial Assumptions

The actuarial valuation utilizes various methods and two different types of assumptions: economic and demographic. Economic assumptions are related to the general economy and its impact on CalSTRS or to the operation of the membership. Demographic assumptions predict the future experience of the membership with respect to eligibility and benefits and are directly related to the specific experience of CalSTRS members.

Economic assumptions: The two major economic assumptions are investment return and wage growth, and each is affected by the underlying assumed rate of inflation. Table 6 provides economic actuarial assumptions for this program as reflected in the most recent actuarial valuation as of June 30, 2015.

Demographic assumptions: Tables 1–5 and 7–9 provide demographic assumption information for this program as reflected in the most recent actuarial valuation as of June 30, 2015.

Actuarial Methods

The asset smoothing method projects an Expected Value of Assets using the assumed rate of investment return, then one-third of the difference between the Expected Value and the Market Value is recognized in the Actuarial Value of Assets. There were no revisions to either the Actuarial Cost Method or the Asset Valuation Method for this actuarial valuation.

Valuation Results

CalSTRS contracts for many actuarial services. The current contractor, Milliman, has been the program's actuary since January 15, 2000.

Tables 10–14 provide summaries of the valuation results. The data displayed in Table 10 is as of June 30 of the specified year. Other information, specifically annual payroll amounts, reported in the Financial Section of this report will generally not be consistent with this data. The reason for this is that the financial data reflects payroll for all individuals who were active during the year, while Table 10

DEFINED BENEFIT PROGRAM

only includes those individuals who are active as of June 30. It does not include those individuals who were active at some point during the year but not as of June 30.

Amounts provided in Table 11 represent the status of the population as of June 30 of the indicated year. The information provided in “The Removed From Rolls” and “Rolls End of Year” columns include the application of the annual postretirement 2 percent not-compounded cost-of-living adjustment.

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

The following significant plan changes have taken place during the time depicted in Table 12. These program amendments include:

Effective January 1, 2008

Allowed members applying for disability benefits, who were eligible to retire for service, to submit a new Service Retirement During Evaluation of Disability Application and receive a service retirement allowance pending determination of their disability claim.

Effective September 30, 2008

Increased the SBMA purchasing power benefit from 80 percent to 85 percent of the benefit's original value, subject to regulations promulgated by the board.

Effective January 1, 2009

Funding:

- Effective with fiscal year 2009–10 through fiscal year 2012–13, payment of previously withheld contributions and interest of \$56,979,949 will be made each fiscal year to the SBMA Program.

Effective July 1, 2010

Reduced members' retirement benefit by the amount earned in CalSTRS-covered employment for six calendar months immediately following their retirement effective date or until their 60th birthday, whichever is sooner.

Effective July 17, 2012

Changed the postretirement earnings limit to be one half of the median final compensation of all members who retired for service during the fiscal year ending in the previous calendar year.

Effective January 1, 2013

For CalSTRS members first hired on or after January 1, 2013

- Placed a cap equal to 120 percent of the 2013 Social Security wage base on compensation earnable adjusted each fiscal year based on the changes in the Consumer Price Index for All Urban Consumers: U.S. City Average.
- Changed the normal retirement age from 60 to 62 with a 2 percent age factor.
- Changed the maximum age factor from 2.4 percent at age 63 to 2.4 percent at age 65.
- Changed the age factor for early retirement at age 55 from 1.4 percent to 1.16 percent.
- Eliminated the ability of newly hired members to retire as early as age 50 with 30 years of service.
- Eliminated the career factor.
- Final compensation to be based on 36-month period.

Effective July 1, 2014

Increased contribution rates for members, employer, and the state to fully fund the DB Program by June 30, 2046.

The most recent actuarial valuation of the system as of June 30, 2015, determined there is an unfunded actuarial obligation for this program. The prior actuarial valuation as of June 30, 2014, also indicated there was an unfunded actuarial obligation.

With one exception, actuarial valuations have been performed every year since June 30, 1997, to analyze the sufficiency of the statutory contributions to meet the current and future obligations of the program. By using the actuarial methods and assumptions adopted by the board, the actuarial valuation provides the best estimate of the program's long-term financing.

Comparing the unfunded actuarial obligation as of two valuation dates does not provide enough information to determine if there were actuarial gains or losses. The correct comparison is between the unfunded actuarial

DEFINED BENEFIT PROGRAM

obligation on the valuation date and the expected unfunded actuarial obligation projected from the prior valuation date using the actuarial assumptions in effect for the period of comparison.

Actuarial gains reduce the unfunded actuarial obligation as of the valuation date, and actuarial losses increase the unfunded actuarial obligation. Most actuarial gains and losses are a result of short-term fluctuations in experience or changes in actuarial assumptions. Because of the long-term nature of actuarial assumptions, future patterns of emerging experience may offset these short-term fluctuations.

Independent Actuarial Review

Actuarial services for CalSTRS are provided under contract by a qualified independent actuarial firm, with additional review provided by the actuarial staff.

Through the competitive bid process, the work of a prior actuary will be verified in a subsequent actuarial valuation performed by a new contract actuary. Should the same actuarial firm continue for a period of 10 years, provision is made for an independent review of that firm's work through an actuarial audit completed by another firm. These audit services are acquired using the competitive bid process.

An audit of the 2007 Actuarial Experience Analysis of the DB Program was performed by the firm, The Segal Company. The result of the audit was reported to the board on September 8, 2011.

An audit of the 2008 Actuarial Valuation of the DB Program was performed by the firm Cheiron. The result of the audit was reported to the board on February 11, 2011.

The current actuarial consultant was retained on January 15, 2000—and in 2006, 2012 and 2016—as a result of the competitive bid process.

Summary of Defined Benefit Program Provisions

The following summary and tables were prepared by CalSTRS staff. All information was considered in the June 30, 2015, actuarial valuation.

Normal Retirement

Eligibility Requirement

CalSTRS 2% at 60 Members: Age 60 with five years of credited service.

CalSTRS 2% at 62 Members: Age 62 with five years of credited service.

Benefit

2 percent of final compensation for each year of credited service.

Benefit Factors

Credited Service—For each year of membership, credited service is granted based on the ratio of salary earned to compensation earnable. No more than one full year of service credit is allowed during any school year; however, the contributions for any service in excess of one year are deposited to the member and employer contribution accounts within the DBS Program.

Contributions received for DBS compensation that are attributable to increases under AB 1469 will be returned to school district employers. School district employers should return excess member contributions to their employees, and the returned pre-tax contributions will be considered taxable income in the year they are received by the employee.

Final Compensation—CalSTRS 2% at 60 Members: Highest average annual compensation earnable for 36 consecutive months of credited service. For members with 25 years of service, the calculation is based on the highest average annual compensation earnable for 12 consecutive months.

CalSTRS 2% at 62 Members: Final compensation is based on the highest average annual compensation earnable for

DEFINED BENEFIT PROGRAM

36 consecutive months. Compensation is limited to 120 percent of the Social Security wage base in effect January 1, 2013, adjusted each fiscal year based on the changes in the Consumer Price Index for All Urban Consumers: U.S. City Average.

Sick Leave Service Credit—Credited service is granted for unused sick leave at the time of retirement. Up to 0.2 years of credited service for sick leave may be used for eligibility for one-year final compensation or to attain the career factor or the longevity bonus for eligible members.

Career Factor—If a CalSTRS 2% at 60 member has 30 years of credited service, the age factor is increased by 0.2 percent. However, the maximum age factor is 2.4 percent. The career factor does not apply to CalSTRS 2% at 62 members.

Longevity Bonus—For CalSTRS 2% at 60 members attaining 30 years of service by January 1, 2011, a longevity bonus of \$200 per month is added to the Member-Only Benefit. The bonus is increased to \$300 per month with 31 years of service and \$400 per month with 32 or more years of service. The longevity bonus does not apply to CalSTRS 2% at 62 members.

Postretirement Benefit Adjustment

Benefit Improvement Factor—Two percent simple increase on September 1 following the first anniversary of the effective date of the benefit, applied to all continuing benefits.

IRC Section 401(a)(17)

Compensation is limited under IRC section 401(a)(17) and assumed to increase at the rate of inflation.

IRC Section 415(b)

For CalSTRS 2% at 60 members, benefits are subject to limits imposed under section 415(b). However, no limits are imposed in the valuation of the DB Program in order to address the potential pay-as-you-go funding needs of the Teachers' Replacement Benefits Program Fund. CalSTRS 2% at 62 members will not receive any benefits in excess of the federal limit.

Early Retirement

Eligibility Requirement—CalSTRS 2% at 60 Members: Age 55 with five years of credited service, or age 50 with 30 years of credited service.

CalSTRS 2% at 62 Members: Age 55 with five years of credited service.

Benefit Reduction—CalSTRS 2% at 60 Members: A 0.50 percent reduction in the normal retirement allowance for each full month or partial month the member is younger than age 60, plus a reduction of 0.25 percent for each full month or partial month the member is younger than age 55.

CalSTRS 2% at 62 Members: A 0.50 percent reduction in the normal retirement allowance for each full month or partial month the member is younger than age 62.

Late Retirement

Benefit—CalSTRS 2% at 60 Members: Members continue to earn additional service credit after age 60. The 2 percent age factor increases by 0.033 percent for each quarter year of age that the member is over age 60, up to a maximum of 2.4 percent.

CalSTRS 2% at 62 Members: Members continue to earn additional service credit after age 62. The 2 percent age factor increases by 0.033 percent for each quarter year of age that the member is over age 62, up to a maximum of 2.4 percent.

Deferred Retirement

Benefit—Any time after satisfying the minimum service requirement, a member may cease active service, leave the accumulated contributions on deposit, and later retire upon attaining the minimum age requirement.

Disability Allowance—Coverage A

Eligibility Requirement—Member has five years of credited California service and has not attained age 60, or if a member has earned one year of creditable service and is disabled due to an unlawful act of bodily harm committed by another person while performing creditable service.

DEFINED BENEFIT PROGRAM

Benefit—Fifty percent of final compensation.

- or -

Five percent of final compensation for each year of service credit if over age 45 with fewer than 10 years of service credit.

Children's Benefit—Ten percent for each eligible dependent child, up to a maximum of 40 percent of final compensation. The increment for each eligible child continues until the child marries or attains age 22.

Offsets—Benefit, including children's increment, is reduced by disability benefits payable under Social Security, workers' compensation and employer-paid income protection plan.

Disability Allowance—Coverage B

Eligibility Requirement—Member has five years of credited California service, or if a member has earned one year of creditable service and is disabled due to an unlawful act of bodily harm committed by another person while performing creditable service.

Benefit—Fifty percent of final compensation, regardless of age and service credit.

Children's Benefit—Ten percent for each eligible child up to four children, for a maximum of 40 percent of final compensation. The increment for each child continues until the child attains age 21, regardless of student, marital or employment status.

Offsets—The member's benefit is reduced by disability benefits payable under workers' compensation.

Death Before Retirement—Coverage A

Eligibility Requirement—One or more years of service credit for active members or members receiving a disability benefit.

Lump-Sum Payment—The one-time death benefit recipient receives a \$6,163 lump-sum payment.

Benefit—The surviving spouse or registered domestic partner with eligible children will receive a family benefit of 40 percent of final compensation for as long as there is at least one eligible child. An additional 10 percent of final compensation is payable for each eligible child up to a maximum benefit of 90 percent.

If there is no surviving spouse or registered domestic partner, a benefit of 10 percent of final compensation is payable to eligible children up to a maximum benefit of 50 percent.

When there are no eligible children, the spouse or registered domestic partner may elect to receive one-half of a 50 percent joint and survivor benefit projected to age 60 or take a lump-sum payment of the remaining contributions and interest.

Death Before Retirement—Coverage B

Eligibility—One or more years of service credit for active members.

Lump-Sum Payment—The one-time death benefit recipient receives a \$24,652 lump-sum payment.

Benefit—A lump-sum payment of the contributions and interest.

- or -

One-half of a 50 percent joint and survivor benefit, beginning on the member's 60th birthday or immediately with a reduction based on the member's age and that of the spouse or registered domestic partner at the time the benefit begins.

If the surviving spouse or registered domestic partner elects a monthly benefit, or there is no surviving spouse, each eligible child would receive 10 percent of the member's final compensation, with a maximum benefit of 50 percent.

Death After Retirement

Lump-Sum Payment—The one-time death benefit recipient receives a \$6,163 lump-sum payment.

Members of retirement age may make a preretirement election of an option to designate a beneficiary.

Annuity Form—If the retired member had elected one of the joint and survivor options, the retirement benefit would be reduced in accordance with the option elected.

If no option had been elected, payment of the unpaid contributions and interest, if any, remaining in the member's account will be made to the beneficiary, if one is named, or to the deceased member's estate.

DEFINED BENEFIT PROGRAM

Termination From CalSTRS

Refund—Refund of the member's contributions with interest as credited to the member's account to date of withdrawal. A refund terminates membership and all rights to future benefits from the program.

Re-entry After Refund—Former members who re-enter the program may redeposit all amounts previously refunded plus regular interest. The member must earn one year of credited service after re-entry before becoming eligible for program benefits.

Funding

Member Contribution—CalSTRS 2% at 60 Members: For fiscal year ended June 30, 2016, 9.20 percent of creditable compensation.

CalSTRS 2% at 62 Members: Equal to one-half of the Normal Cost rate determined in the valuation rounded to the nearest quarter percent, plus a supplemental amount. Member rates only change when the Normal Cost rate changes by 1 percent of pay as compared to the initial Normal Cost rate (or at the time of the last adjustment). For fiscal year ended June 30, 2016, the member contribution rate is equal to 8.56 percent of creditable compensation.

Employer Contribution—For fiscal year ended June 30, 2016, 10.48 percent of the total creditable compensation on which member contributions are based. In addition, funding for the Teachers' Health Benefits Fund and Teachers' Replacement Benefits Fund is directed as needed from the employer contributions on a pay-as-you-go basis.

- plus -

0.25 percent of the total creditable compensation on which members' contributions are based to pay costs for unused sick leave service credit.

State Contribution—For fiscal year ended June 30, 2016, the state pays 4.891 percent of the total creditable compensation of the fiscal year ending in the immediately preceding calendar year upon which members' contributions are based, calculated annually on October 1 and updated on or before the subsequent April 15 and paid in four equal quarterly payments.

Changes in Defined Benefit Program Provisions

See Discussion of recent changes on page 114.

DEFINED BENEFIT PROGRAM

Table 1 Post Retirement Mortality for Sample Ages

Age	Male	Female
	2011	2011
50	0.114%	0.073%
55	0.164	0.118
60	0.300	0.254
65	0.596	0.468
70	1.095	0.864
75	1.886	1.451
80	3.772	2.759
85	7.619	5.596
90	14.212	11.702
95	22.860	17.780

All demographic assumptions used in the actuarial valuation were adopted by the board when the experience study was adopted on February 2, 2012.

Table 2 Service Retirement for Sample Ages¹

DB Program Benefits				
	Age	1990 Benefits	Under 30 years	30 or More Years
Male	55	5.8%	2.7%	8.0%
	60	25.0	6.3	27.0
	65	20.0	13.5	32.5
	70	100.0	10.8	30.0
	75	100.0	100.0	100.0
Female	55	7.0%	4.5%	9.0%
	60	22.0	9.0	31.0
	65	18.0	14.4	37.5
	70	100.0	13.5	35.0
	75	100.0	100.0	100.0

¹Probabilities of retirement are adjusted for members with service between 25 and 30 years.

Table 3 Probabilities of Withdrawal from Active Service Before Age and Service Retirement for Sample Duration in Years

Male	
Duration	
1	13.0%
2	9.0
3	6.4
4	4.6
5	3.9
10	1.8
15	0.9
20	0.5
25	0.3
Female	
1	12.0%
2	8.5
3	6.4
4	4.6
5	3.9
10	1.8
15	0.9
20	0.5
25	0.3

Table 4 Probabilities of Refund by Sample Duration in Years of Members and Sample Entry Ages

Duration	Entry Ages				
	Under 25	25-29	30-34	35-39	40+
Male					
Under 5	100%	100%	100%	100%	100%
10	46	46	38	36	36
15	38	38	31	21	—
20	28	31	15	—	—
25	15	15	—	—	—
Female					
Under 5	100%	100%	100%	100%	100%
10	34	32	32	29	29
15	27	24	24	24	—
20	19	14	14	—	—
25	10	10	—	—	—

DEFINED BENEFIT PROGRAM

Table 5 Assumption for Pay Increases Due to Promotions and Longevity for Sample Ages in Years
(Exclusive of the assumed general wage increase, which includes inflation)

Duration	Entry Ages					
	Under 25	25–29	30–34	35–39	40–44	45+
1	5.6%	5.3%	5.1%	4.8%	4.8%	3.5%
5	5.5	4.8	4.5	3.8	3.8	2.6
10	3.2	3.0	2.7	2.3	2.2	1.6
20	1.3	1.1	1.1	0.8	0.8	0.6
30	0.9	0.7	0.6	0.5	—	—
40	0.8	0.6	—	—	—	—

Table 6 Economic Assumptions

Consumer Price Inflation	3.00%
Investment Yield (Net of Expenses)	7.50
Wage Inflation	3.75
Interest on Member Accounts	4.50

Table 7 Mortality Assumptions

Retired Members ¹	
Male	2011 CalSTRS Retired-M
Female	2011 CalSTRS Retired-F
Active Members	
Male	2011 CalSTRS Retired-M (-2 years)
Female	2011 CalSTRS Retired-F (-2 years)
Beneficiaries ¹	
Male	2011 CalSTRS Beneficiary-M
Female	2011 CalSTRS Beneficiary-F

¹Future retirees and beneficiaries are valued with a two-year age setback.

Table 8 Termination from Disability Due to Death¹

Male	
Age	
<70	2% at age 40 and under, graded to 3.2% at age 70
≥70	RP 2000 male white collar +7 projected to 2025 at age 70 smoothed to +1 age 85 (select rates in first three years, regardless of age)
Female	
Age	
<70	1.5% at age 40 and less graded to 2.25% at age 70
≥70	RP 2000 female white collar +6 projected to 2025 at age 70 smoothed to +2 at age 80 (select rates in first three years, regardless of age)

¹Future disabled members are valued with a two-year age setback.

DEFINED BENEFIT PROGRAM

Table 9 Disability Rates for Sample Ages

Coverage A			Coverage B		
Male	25	0.018%	Male	25	0.010%
	30	0.027		30	0.020
	40	0.072		35	0.030
	50	0.144		40	0.060
	55	0.189		45	0.100
Female	25	0.018%	Female	50	0.140
	30	0.027		55	0.245
	40	0.081		25	0.020%
	50	0.198		30	0.020
	55	0.252		35	0.040
			40	0.070	
			45	0.110	
			50	0.185	
			55	0.300	

Table 10 Schedule of Active Member Valuation Data

Date (as of June 30)	Number of Participating Employers*	Active Members			
		Number	Annual Payroll	Annual Average Pay	% Increase In Average Pay
2006	1,322	453,365	\$24,239,606,097	\$53,466	3.5%
2007	1,356	455,693	25,905,691,360	56,849	6.3
2008	1,428	461,378	27,118,230,762	58,777	3.4
2009	1,472	459,009	27,327,386,616	59,536	1.3
2010	1,514	441,544	26,274,889,981	59,507	—
2011	1,587	429,600	25,576,008,636	59,534	—
2012	1,660	421,499	25,388,209,920	60,233	1.2
2013	1,670	416,643	25,479,056,693	61,153	1.5
2014	1,690	420,887	26,469,883,008	62,891	2.8
2015	1,724	429,460	28,013,191,853	65,229	3.7

*Account employers who submit the last contribution line for the active member in the target fiscal year.

DEFINED BENEFIT PROGRAM

Table 11 Schedule of Retired Members and Beneficiaries Added to and Removed From Rolls

Date (as of June 30)	Added to Rolls		Removed from Rolls		Rolls – End of Year			
	Number	Annual Allowances ¹	Number	Annual Allowances ¹	Number	Annual Allowances ¹	% Increase in Annual Allowances	Average Annual Allowances
2007	12,457	562,542	6,162	137,474	215,641	7,078,199	8.8%	32,824
2008	13,246	626,567	6,419	147,966	223,968	7,711,132	8.9%	34,430
2009	13,420	657,984	6,163	149,998	228,969	8,340,671	8.2%	36,427
2010	16,201	777,293	6,499	165,404	243,796	9,171,309	10.0%	37,619
2011	14,559	671,868	6,938	181,927	253,041	9,802,995	6.9%	38,741
2012	14,316	635,935	6,860	187,271	262,039	10,458,555	6.7%	39,912
2013	12,377	555,751	7,119	205,779	269,429	11,091,944	6.1%	41,168
2014	11,383	507,801	7,299	221,733	275,627	11,624,220	4.8%	42,173
2015	11,952	558,655	7,759	247,766	282,100	12,197,828	4.9%	43,239
2016	12,014	591,902	7,871	262,170	288,195	12,792,104	4.9%	44,387

¹Dollars in thousands.

Table 12 Solvency Test

Valuation Date (as of June 30)	Aggregate Accrued Liabilities for (in Millions)				Funding of Liabilities		
	(1) Active Member Contributions on Deposit	(2) Future Benefits to Benefit Recipients	(3) Service Already Rendered by Active Members (Financed by Employer)	Actuarial Value of Assets	(1)	(2)	(3)
2006	\$25,124	\$68,774	\$56,974	\$131,237	100.0%	100.0%	65.5%
2007	25,895	75,612	65,622	148,427	100.0	100.0	71.5
2008	26,881	81,984	68,869	155,215	100.0	100.0	67.3
2009	27,477	88,927	69,279	145,142	100.0	100.0	41.5
2010	27,105	99,135	70,075	140,291	100.0	100.0	20.1
2011	27,038	109,984	71,383	143,930	100.0	100.0	9.7
2012	27,245	116,475	71,469	144,232	100.0	100.0	0.7
2013	27,683	121,714	72,884	148,614	100.0	99.4	—
2014	28,290	126,235	76,688	158,495	100.0	100.0	5.2
2015	28,935	131,451	81,367	165,553	100.0	100.0	6.4

DEFINED BENEFIT PROGRAM

Table 13 Analysis of Financial Experience
(Gains and losses in unfunded actuarial obligation resulting from differences between assumed and actual experience) (Dollars in Millions)

Actuarial Valuation as of June 30		
	2015	2014
Actuarial Obligation at June 30	\$231,213	\$222,281
Normal Cost	5,155	4,897
Benefit Payments	(12,039)	(11,496)
Expected Interest	17,088	16,428
Expected Actuarial Obligation at June 30	241,417	232,110
Expected Actuarial Value of Assets at June 30	163,721	153,183
Expected UAO at June 30	77,696	78,927
Actuarial (Gains) or Losses		
Change in Assumptions	—	—
Investment Return Assumptions	(1,659)	(5,320)
Demographic Assumptions	336	(897)
Net Change Other Sources	(173)	8
Total Actuarial (Gains) & Losses	(1,496)	(6,209)
Unfunded Actuarial Obligation at June 30	76,200	72,718
Funded Ratio	69%	69%

Table 14 Schedule of Funding Progress
(Dollars in Millions)

Actuarial Valuation Date as of June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (Funding Excess) (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2007	\$148,427	\$167,129	\$18,702	89%	\$25,906	72%
2008	155,215	177,734	22,519	87%	27,118	83%
2009	145,142	185,683	40,541	78%	27,327	148%
2010	140,291	196,315	56,024	71%	26,275	213%
2011	143,930	208,405	64,475	69%	26,592	242%
2012	144,232	215,189	70,957	67%	26,404	269%
2013	148,614	222,281	73,667	67%	26,483	278%
2014	158,495	231,213	72,718	69%	26,398	275%
2015	165,553	241,753	76,200	69%	28,640	266%
2016	(1)	(1)	(1)	(1)	(1)	(1)

*Actuarial valuation as of June 30, 2016, are expected to be available by April 2017.

Note: Information of actuarially determined and actual contributions for the State Teachers' Retirement Plan is provided in the Financial Section, Schedule III, Contributions of Employer and Nonemployer Contributing Entity table.

VALUATION OF THE DEFINED BENEFIT SUPPLEMENT PROGRAM



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November 8, 2016

Teachers' Retirement Board
California State Teachers' Retirement System

Re: Valuation of the Defined Benefit Supplement Program

Dear Members of the Board:

The basic financial goal of the Defined Benefit Supplement (DBS) Program of the California State Teachers' Retirement System (CalSTRS) is to maintain sufficient resources to fully fund the obligations. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

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

Valuation Date	Funded Ratio
June 30, 2013	106%
June 30, 2014	116%
June 30, 2015	115%

The actual return was less than the assumed return for the fiscal year ended in 2015 which, combined with other factors, caused a small decrease in the Funded Ratio. As of June 30, 2015, the Market Value of Assets for the DBS Program exceeds the Actuarial Obligation. Additional interest credits were granted based on the Program's funded level and are reflected in the Funded Ratio shown above. Prior to the additional credits, the Funded Ratio was 119%.

The June 30, 2015 valuation results are based on the membership data and the asset information provided by CalSTRS. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

Milliman did not prepare the summaries or schedules shown in the Financial and Actuarial Sections. However, the actuarial information contained in the Financial Section and in this Actuarial Section was derived from our June 30, 2015 actuarial valuation report for funding and our September 22, 2016 GASB 67/68 report which communicated the actuarial results for financial reporting for June 30, 2016.

The actuarial computations presented in the valuation report are for purposes of determining the recommended funding amounts for CalSTRS consistent with our understanding of their funding requirements and goals. The liabilities are determined by using the traditional unit credit funding method. The actuarial assets are equal to fair market value.

VALUATION OF THE DEFINED BENEFIT SUPPLEMENT PROGRAM



Teachers' Retirement Board
November 8, 2016
Page 2

The funding valuation is based on our understanding of the current benefit provisions of the DBS Program and the actuarial assumptions adopted by the Board. The assumptions are reviewed annually for reasonableness, with a detailed experience analysis completed every four or five years. The last detailed experience analysis was completed in February of 2012 when the Board adopted the current assumptions. The assumptions will be reviewed in detail again for use in the June 30, 2016 funding valuation and the GASB 67/68 valuation for reporting date June 30, 2017. The assumptions and methods used for financial reporting under GASB 67/68 are the same as the funding valuation assumptions with the following exceptions:

1. The discount rate of 7.60% is gross of administrative expenses; and
2. The individual entry age normal cost method is used.

For financial reporting purposes, all programs within the State Teachers' Retirement Plan are reported in aggregate.

We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement Numbers 67, 68 and 82 for fulfilling financial accounting requirements and meet the parameters set forth in the relevant Actuarial Standards of Practice (ASOPs). Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements as presented in the valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

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

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

We certify that the June 30, 2015 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Respectfully submitted,

A handwritten signature in black ink that reads "Mark C. Olleman".

Mark C. Olleman, FSA, EA, MAAA
Principal and Consulting Actuary

A handwritten signature in black ink that reads "Nick Collier".

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

DEFINED BENEFIT SUPPLEMENT PROGRAM

Summary of Actuarial Assumptions and Methods

CalSTRS, through its consulting actuary, performs an experience study at least every four years to determine appropriate demographic and economic assumptions. These assumptions are then applied every year when the consulting actuary performs an actuarial valuation to monitor the funding status of the Defined Benefit Supplement (DBS) Program. The most recent actuarial valuation was completed as of June 30, 2015, and adopted by the Teachers' Retirement Board April 7, 2016. The following summary and tables were prepared by CalSTRS staff. All information is considered in the June 30, 2015, actuarial valuation.

The DBS Program was established January 1, 2001. The DB Program and DBS Program share the same population, so it is reasonable to use most of the same assumptions for both programs. All of the assumptions used in the June 30, 2015 actuarial valuation were based on the 2010 Actuarial Experience Analysis adopted by the board in February 2012.* Following are the assumptions adopted by the board for this program:

- Investment return rate and discount rate is 7.50 percent, net of investment and administrative expenses.
- Method used to value plan assets for actuarial valuation purposes: Fair market value.
- Assumption for general wage increase is 3.75 percent, of which 3.00 percent is due to inflation, and 0.75 percent is due to expected gains in productivity.
- The actuarial cost method used by the program is the traditional unit credit cost method.
- The DBS Program does not provide cost-of-living adjustments for benefit recipients.

Actuarial Cost Method

For funding purposes, the traditional unit credit cost method was selected for the Defined Benefit Supplement Program since the projected benefits of each individual member are allocated by a consistent formula to valuation years. As a result, the actuarial obligation is equal to the accumulated account balances, and the normal cost is equal to the total annual contribution.

Financial Reporting

Under GASB 67 financial reporting, the State Teachers' Retirement Plan (STRP) includes the DB, DBS, CBB, SBMA and Teachers' Replacement Benefits Programs.

Actuarial method and assumptions for GASB 67 financial reporting

- The discount rate is 7.60 percent, net of investment expenses but gross of administrative expenses.
- The actuarial cost method is the entry age normal cost method.
- General wage increase is 3.75 percent, of which 3.00 percent is due to inflation.
- Postretirement benefit increases of 2.00 percent simple for DB Program and 85 percent purchasing power level for SBMA program. Not applicable for CBB and DBS.

As required by GASB 67, the discount rate used for financial reporting of 7.60 percent is net of investment expenses but gross of administrative expenses. The 7.50 percent investment return rate used for funding and administrative purposes is net of investment and administrative expenses. GASB 67 also specifies using the entry age normal cost method to calculate pension liability for financial reporting. The traditional unit credit method is used for funding. In addition, the 2011 CalSTRS mortality tables were used in both financial reporting and funding calculations. Table 6 provides more details of the mortality assumptions.

Discussion of recent changes in:

The nature of the program—The DBS Program was established January 1, 2001.

All provisions of the program were considered when completing the most recent actuarial valuation.

Actuarial Assumptions

The following assumptions were used to complete the valuation for this program.

Under the traditional unit credit actuarial cost method, neither the economic nor the demographic assumptions

***Note:** These assumptions are currently being reviewed. The results of this review will be presented to the CalSTRS board in February 2017. If changes are adopted, they would be reflected in the June 30, 2017 Financial Report.

DEFINED BENEFIT SUPPLEMENT PROGRAM

affect the actuarial obligation for the DBS Program. Those assumptions for this program will have minimal impact under the traditional unit credit cost method or only have significance when participants elect to annuitize the account balance. Under the program, a member must have at least \$3,500 in his or her account to elect to annuitize the account balance.

The actuarial methods used for the program's actuarial valuation as of June 30, 2015, result in an actuarial surplus of \$1,387,609,000 after additional credits.

CalSTRS contracts for many actuarial services. The current contractor, Milliman, has been CalSTRS actuary from the program's inception.

Independent Actuarial Review

Actuarial services for CalSTRS are provided under contract by a qualified independent actuarial firm, with additional review provided by the actuarial staff.

Through the competitive bid process, the work of a prior actuary will be verified in a subsequent actuarial valuation performed by a new contract actuary. Should the same actuarial firm continue for a period of 10 years, provision is made for an independent review of that firm's work through an actuarial audit completed by another firm. These audit services are acquired using the competitive bid process.

An audit of the 2007 Actuarial Experience Analysis of the DBS Program was performed by the firm, The Segal Company. The result of the audit was reported to the board on September 8, 2011.

The current actuarial consultant was retained on January 15, 2000—and in 2006, 2012 and 2016—as a result of the competitive bid process.

Summary of Defined Benefit Supplement Program Provisions

The following tables and summary were prepared by CalSTRS staff. All information is considered in the June 30, 2015, actuarial valuation.

Membership

Eligibility Requirement—All members of the DB Program who perform creditable service and earn creditable compensation after December 31, 2000, have a DBS account.

Member—An eligible employee with creditable service subject to coverage who has contributions credited in the program or is receiving an annuity from the program.

Account Balance

Account Balance—Nominal accounts are established for the purpose of determining DBS benefits payable to the member. Accounts are credited with contributions, interest at the minimum interest rate and, if applicable, additional earnings credits.

Contributions—Member and employer contributions are credited to the member's DBS account for service greater than one year during a single school year, and for CalSTRS 2% at 60 members, compensation for limited-term payments and retirement incentives are credited.

Minimum Interest Rate—Annual rate determined for the plan year by the board in accordance with federal laws and regulations. The minimum interest rate is equal to the average of the yields on 30-year Treasury Notes for the twelve months ending in February preceding the beginning of the plan year, rounded to the next highest basis point. The minimum interest rate is not less than the rate at which interest is credited under the DB Program.

Additional Earnings Credit—Annual rate determined for the plan year by the board based on the actual earnings during the plan year but only to the extent the earnings are sufficient to credit the minimum interest rate and provide any additions to the gain and loss reserve deemed warranted by the board. The board adopted an additional earnings credit of 3.95 percent for the fiscal year ending June 30, 2015.

Additional Annuity Credit—No longer applies per board additional annuity credit policy adopted at April 2015 meeting.

Normal Retirement

Eligibility Requirement—Receipt of a corresponding benefit under the DB Program.

DEFINED BENEFIT SUPPLEMENT PROGRAM

Benefit—The account balance at the benefit effective date subject to limits imposed under IRC section 415.

Form of Payment—The normal form of payment is a lump-sum distribution. Annuity options are available if the account balance is at least \$3,500.

Early Retirement

Eligibility Requirement—Same as Normal Retirement.

Benefit and Form of Payment—Same as Normal Retirement.

Late Retirement

Benefit and Form of Payment—Same as Normal Retirement.

Contributions and earnings may continue to be credited to the account balance.

Deferred Retirement

Benefit—A member must receive a DBS Program benefit when the corresponding benefit is received under the DB Program.

Disability Benefit

Eligibility Requirement—Receipt of a corresponding benefit under the DB Program.

Benefit—The account balance at the date the disability benefit becomes payable.

Form of Payment—Same as Normal Retirement. An annuity benefit is discontinued upon termination of the corresponding DB Program benefit.

Death Before Retirement

Eligibility Requirement—Deceased member has an account balance.

Benefit—The account balance at the date of death payable to the designated beneficiary.

Form of Payment—Similar to Normal Retirement.

Death After Retirement

Eligibility Requirement—The deceased member was receiving an annuity.

Benefit—According to the terms of the annuity elected by the member.

Termination from the Program

Eligibility Requirement—Termination of all CalSTRS-covered employment.

More than five years has elapsed since the most recent termination benefit, if any, has been paid.

Benefit and Form of Payment—Lump-sum distribution of the account balance as of the date of distribution.

Changes in Defined Benefit Supplement Program Provisions

There have been no program amendments that would affect an actuarial valuation of the DBS Program since the last CalSTRS annual financial report was issued. All program provisions were considered in the completion of the June 30, 2015, actuarial valuation.

DEFINED BENEFIT SUPPLEMENT PROGRAM

All of the assumptions used in the actuarial valuation were adopted by the board when the experience study was adopted on February 2, 2012. Following are the assumptions adopted by the board for this program.

Table 1 Post retirement Mortality Table for Sample Ages

Age	Male	Female
	2011 CalSTRS Retired M	2011 CalSTRS Retired F
50	0.114%	0.073%
55	0.164	0.118
60	0.300	0.254
65	0.596	0.468
70	1.095	0.864
75	1.886	1.451
80	3.772	2.759
85	7.619	5.596
90	14.212	11.702
95	22.860	17.780

Table 2 Probabilities of Retirement for Sample Ages¹

Age	Under 30 years		30 or more years	
	Male	Female	Male	Female
55	2.7%	4.5%	8.0%	9.0%
60	6.3	9.0	27.0	31.0
65	13.5	14.4	32.5	37.5
70	10.8	13.5	30.0	35.0
75	100.0	100.0	100.0	100.0

¹Probabilities of retirement are adjusted for members with service between 25 and 30 years.

Table 3 Probabilities of Withdrawal From Active Service Before Age and Service Retirement for Sample Ages in Years

Duration	Male	Female	
1	13.0%	1	12.0%
2	9.0	2	8.5
3	6.4	3	6.4
4	4.6	4	4.6
5	3.9	5	3.9
10	1.8	10	1.8
15	0.9	15	0.9
20	0.5	20	0.5
25	0.3	25	0.3
30	0.2	30	0.2

DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 4 Assumption for Pay Increases Due to Promotions and Longevity for Sample Ages
(exclusive of the assumed general wage increase, which includes inflation)

Duration	Entry Ages					
	Under 25	25–29	30–34	35–39	40–44	45+
1	5.6%	5.3%	5.1%	4.8%	4.8%	3.5%
5	5.5	4.8	4.5	3.8	3.8	2.6
10	3.2	3.0	2.7	2.3	2.2	1.6
20	1.3	1.1	1.1	0.8	0.8	0.6
30	0.9	0.7	0.6	0.5	—	—
40	0.8	0.6	—	—	—	—

Table 5 Economic Assumptions

Consumer Price Inflation	3.00%
Investment Yield	7.50
Wage Inflation	3.75
Interest on Member Accounts	7.50

Table 6 Mortality Assumptions

Retired Members ¹	
Male	2011 CalSTRS Retired-M
Female	2011 CalSTRS Retired-F
Active Members	
Male	2011 CalSTRS Retired-M (-2 years)
Female	2011 CalSTRS Retired-F (-2 years)
Beneficiaries ¹	
Male	2011 CalSTRS Beneficiary-M
Female	2011 CalSTRS Beneficiary-F

¹Future retirees and beneficiaries are valued with a 2-year age setback.

Table 7 Termination from Disability Due to Death¹

Male	
Age	
<70	2% at age 40 and under, graded to 3.2% at age 70
≥70	RP 2000 male white collar +7 projected to 2025 at age 70 smoothed to +1 age 85 (select rates in first three years, regardless of age)
Female	
Age	
<70	1.5% at age 40 and less graded to 2.25% at age 70
≥70	RP 2000 female white collar +6 projected to 2025 at age 70 smoothed to +2 at age 80 (select rates in first three years, regardless of age)

¹Future disabled members are valued with a two-year age setback.

DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 8 Disability Rates—Coverage B for Sample Ages

Coverage A			Coverage B		
Male	25	0.018%	Male	25	0.010%
	30	0.027		30	0.020
	40	0.072		35	0.030
	50	0.144		40	0.060
	55	0.189		45	0.100
Female	25	0.018%	50	0.140	
	30	0.027	55	0.245	
	40	0.081	Female	25	0.020%
	50	0.198	30	0.020	
	55	0.252	35	0.040	
			40	0.070	
			45	0.110	
			50	0.185	
			55	0.300	

Table 9 Schedule of Active Member Valuation Data

Date (as of June 30)	Number of Participating Employers*	Active Members			
		Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
2006	1,322	453,131	\$25,524,878,188	\$56,330	3.5%
2007	1,356	455,453	27,076,457,044	59,450	5.5
2008	1,428	460,961	28,574,701,507	61,989	4.3
2009	1,472	458,736	28,763,266,744	62,701	1.1
2010	1,514	441,326	27,340,840,174	61,952	(1.2)
2011	1,587	423,366	26,758,301,370	63,204	2.0
2012	1,660	403,117	26,556,820,635	65,879	4.2
2013	1,670	390,465	26,444,290,250	67,725	2.8
2014	1,690	386,766	27,582,572,209	71,316	5.3
2015	1,724	388,314	29,306,186,224	75,470	5.8

*Account employers who submit the last contribution line for the active member in the target fiscal year.

DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 10 Schedule of Retired Members and Beneficiaries Added to and Removed from Annuity Rolls

Date (as of June 30)	Added to Rolls*		Removed from Rolls		Rolls - End of Year			
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	% Increase in Annual Allowances	Average Annual Allowances
2007	4,841	\$11,483,366	651	\$1,405,165	13,561	\$25,387,837	67.2%	\$1,872
2008	5,404	14,810,571	1,113	3,006,699	17,900	37,308,946	47.0%	2,084
2009	6,668	22,090,439	1,582	4,948,230	23,010	55,237,098	48.1%	2,401
2010	8,796	31,707,577	1,816	6,612,662	30,048	80,571,112	45.9%	2,681
2011	8,811	31,693,536	343	1,329,718	36,110	103,087,388	27.9%	2,855
2012	8,257	32,650,936	2,386	11,666,909	42,055	124,148,784	20.4%	2,952
2013	7,425	30,392,875	2,657	13,354,982	47,014	141,044,393	13.6%	3,000
2014	6,753	27,678,797	3,115	16,285,428	50,963	153,375,082	8.7%	3,010
2015	7,097	31,304,181	3,423	18,040,255	54,901	167,972,370	9.5%	3,060
2016	7,324	35,828,397	3,335	17,497,131	59,075	187,434,597	11.6%	3,173

*The DBS Program was established January 1, 2001. As of June 30, 2003, all members who had retired or became disabled had elected a lump-sum distribution.

*Revised in 2007.

Table 11 Solvency Test

Valuation Date (as of June 30)	Aggregate Accrued Liabilities for				Funding of Liabilities		
	(1) Active Member Contributions on Deposit	(2) Future Benefits to Benefit Recipients	(3) Service Already Rendered by Active Members (Financed by Employer)	Actuarial Value of Assets	(1)	(2)	(3)
2006	\$3,546,575,000	\$69,684,000	0	\$3,951,327,000	100.0%	100.0%	—
2007	4,498,170,000	123,876,000	0	5,381,585,000	100.0	100.0	—
2008	5,434,171,000	193,173,000	0	5,636,113,000	100.0	100.0	—
2009	6,316,154,000	283,161,000	0	5,145,981,000	81.5	—	—
2010	7,012,291,000	444,151,000	0	6,412,180,000	91.4	—	—
2011	7,196,652,000	577,115,000	0	8,054,962,000	100.0	100.0	—
2012	7,280,977,000	710,586,000	0	8,042,090,000	100.0	100.0	—
2013	7,641,488,000	850,275,000	0	8,983,919,000	100.0	100.0	—
2014	8,077,762,000	942,945,000	0	10,493,062,000	100.0	100.0	—
2015	8,532,216,000	1,021,092,000	0	10,940,917,000	100.0	100.0	—

DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 12 Analysis of Financial Experience
(Gains and losses in unfunded actuarial obligation resulting from differences between assumed and actual experience)
(Dollars in Thousands)

Actuarial Valuation as of June 30		
	2015	2014
Actuarial Obligation at June 30	\$9,020,707	\$8,491,763
Expected Changes:		
Contributions	216,128	159,663
Benefits Paid	(319,531)	(323,991)
Expected Earnings/Credits	672,675	630,720
Expected Actuarial Obligation at June 30	9,589,979	8,958,155
Expected Actuarial Value of Assets at June 30	11,172,761	9,487,223
Expected UAO at June 30	(1,582,782)	(529,068)
Actuarial (Gains) or Losses		
(Gain) on Actuarial Obligation	(360,887)	(285,294)
(Gain) on Assets	231,844	(1,005,839)
Total Actuarial (Gains) & Losses	(129,043)	(1,291,133)
Additional Earnings Credit	324,216	347,846
Unfunded Actuarial Obligation (Surplus) at June 30	(1,387,609)	(1,472,355)
Funded Ratio	115%	116%

Table 13 Schedule of Funding Progress
(Dollars in Millions)

Actuarial Valuation Date as of June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (Funding Excess) (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll ⁽¹⁾ (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2007	\$5,382	\$4,622	(\$760)	116%	\$25,906	(3%)
2008	5,636	5,627	(9)	100%	27,118	0%
2009	5,146	6,599	1,453	78%	28,763	5%
2010	6,412	7,456	1,044	86%	27,340	4%
2011	8,055	7,774	(281)	104%	27,666	(1%)
2012	8,042	7,992	(50)	101%	27,407	—
2013	8,984	8,492	(492)	106%	27,461	(2%)
2014	10,493	9,021	(1,472)	116%	27,396	(5%)
2015	10,941	9,553	(1,388)	115%	29,991	(5%)
2016	(2)	(2)	(2)	(2)	(2)	(2)

¹From the June 30, 2006, to the June 30, 2008, valuation, covered payroll excludes limited-term incentive pay and extra service credit pay in order to present the payroll based most relevant to the funding of any unfunded actuarial accrued liabilities of the DBS Program.

²Actuarial Valuation as of June 30, 2016, are expected to be available by April 2017.

Note: Information of actuarially determined and actual contributions for the State Teachers' Retirement Plan is provided in the Financial Section, Schedule III, Contributions of Employer and Nonemployer Contributing Entity table.

VALUATION OF THE CASH BALANCE BENEFIT PROGRAM



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November 8, 2016

Teachers' Retirement Board
California State Teachers' Retirement System

Re: Valuation of the Cash Balance Benefit Program

Dear Members of the Board:

The basic financial goal of the Cash Balance Benefit (CBB) Program of the California State Teachers' Retirement System (CalSTRS) is to maintain sufficient resources to fully fund the obligations. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

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

Valuation Date	Funded Ratio
June 30, 2013	107%
June 30, 2014	117%
June 30, 2015	113%

The actual return was less than the assumed return for the fiscal year ended in 2015 which, combined with other factors, caused a small decrease in the Funded Ratio. As of June 30, 2015, the Market Value of Assets for the CBB Program exceeds the Actuarial Obligation. Additional interest credits were granted based on the Program's funded level and are reflected in the Funded Ratio shown above. Prior to the additional credits, the Funded Ratio was 116%.

The June 30, 2015 valuation results are based on the membership data and the asset information provided by CalSTRS. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

Milliman did not prepare the summaries or schedules shown in the Financial and Actuarial Sections. However, the actuarial information contained in the Financial Section and in this Actuarial Section was derived from our June 30, 2015 actuarial valuation report for funding and our September 22, 2016 GASB 67/68 report which communicated the actuarial results for financial reporting for June 30, 2016.

The actuarial computations presented in the valuation report are for purposes of determining the recommended funding amounts for CalSTRS consistent with our understanding of their funding requirements and goals. The liabilities are determined by using the traditional unit credit funding method. The actuarial assets are equal to fair market value.

VALUATION OF THE CASH BALANCE BENEFIT PROGRAM



Teachers' Retirement Board
November 8, 2016
Page 2

The funding valuation is based on our understanding of the current benefit provisions of the CBB Program and the actuarial assumptions adopted by the Board. The assumptions are reviewed annually for reasonableness, with a detailed experience analysis completed every four or five years. The last detailed experience analysis was completed in February of 2012 when the Board adopted the current assumptions. The assumptions will be reviewed in detail again for use in the June 30, 2016 funding valuation and the GASB 67/68 valuation for reporting date June 30, 2017. The assumptions and methods used for financial reporting under GASB 67/68 are the same as the funding valuation assumptions with the following exceptions:

1. The discount rate of 7.60% is gross of administrative expenses; and
2. The individual entry age normal cost method is used.

For financial reporting purposes, all programs within the State Teachers' Retirement Plan are reported in aggregate.

We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement Numbers 67, 68 and 82 for fulfilling financial accounting requirements and meet the parameters set forth in the relevant Actuarial Standards of Practice (ASOPs). Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements as presented in the valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

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

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

We certify that the June 30, 2015 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Respectfully submitted,

A handwritten signature in black ink that reads "Mark C. Olleman".

Mark C. Olleman, FSA, EA, MAAA
Principal and Consulting Actuary

A handwritten signature in black ink that reads "Nick Collier".

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

CASH BALANCE BENEFIT PROGRAM

Summary of Actuarial Assumptions and Methods

CalSTRS, through its consulting actuary, will perform an experience study at least every four years to determine appropriate demographic and economic assumptions. These assumptions are then applied every year when the consulting actuary performs an actuarial valuation to monitor the funding status of the Cash Balance Benefit (CBB) Program. The most recent actuarial valuation was completed as of June 30, 2015, and adopted by the board on April 7, 2016. The following summary and tables were prepared by CalSTRS staff. All information is considered in the June 30, 2015, actuarial valuation.

The CBB Program was established July 1, 1996. All of the assumptions used in the June 30, 2015 actuarial valuation were based on the 2010 Actuarial Experience Analysis adopted by the board in February 2012.* Following are the assumptions adopted by the board for this program:

- Investment return rate and discount rate is 7.00 percent, net of investment and administrative expenses.
- Method used to value plan assets for actuarial valuation purposes: Fair market value.
- Assumption for general wage increase is 3.75 percent, of which 3.00 percent is due to inflation, and 0.75 percent is due to expected gains in productivity.
- The actuarial cost method used by the program is the traditional unit credit cost method.
- The CBB Program does not provide cost-of-living adjustments for benefit recipients.

Actuarial Cost Method

For funding purposes, the traditional unit credit cost method was selected for the CBB Program since the projected benefits of each individual member are allocated by a consistent formula to valuation years. As a result, the actuarial obligation is equal to the accumulated account balances, and the normal cost is equal to the total annual contribution.

Financial Reporting

Under GASB 67 financial reporting, the State Teachers' Retirement Plan (STRP) includes the DB, DBS, CBB, SBMA and Teachers' Replacement Benefits Programs.

Actuarial method and assumptions for GASB 67 financial reporting

- The discount rate is 7.60 percent, net of investment expenses but gross of administrative expenses.
- The actuarial cost method is the entry age normal cost method.
- General wage increase is 3.75 percent, of which 3.00 percent is due to inflation.
- Postretirement benefit increases of 2.00 percent simple for DB Program and 85 percent purchasing power level for SBMA program. Not applicable for CBB and DBS programs.

As required by GASB 67, the discount rate used for financial reporting of 7.60 percent is the expected return for all programs in the State Teachers' Retirement Plan and is net of investment expenses but gross of administrative expenses. The 7.00 percent investment return rate used for funding purposes is for CBB Program assets only and is net of investment and administrative expenses. GASB 67 also specifies using the entry age normal cost method to calculate pension liability for financial reporting. The traditional unit credit method is used for funding. In addition, the 2011 CalSTRS mortality tables were used in both financial reporting and funding calculations. Table 6 provides more details of the mortality assumptions.

Discussion of recent changes in:

The nature of the program—The CBB Program was established July 1, 1996.

Program amendments include:

Effective January 1, 2006

- Reduced the one-year waiting period for the receipt of termination benefits to six months.
- Extended eligibility to members hired by a community college district to perform creditable service on a part-time or temporary basis (semester to semester) or for not more than 60 percent of the hours per week considered a regular full-time assignment.

***Note:** These assumptions are currently being reviewed. The results of this review will be presented to the CalSTRS board in February 2017. If changes are adopted, they would be reflected in the June 30, 2017 Financial Report.

CASH BALANCE BENEFIT PROGRAM

Actuarial Assumptions

The following assumptions were used to complete the valuation for this program.

Neither the economic nor the demographic assumptions for the actuarial valuation as of June 30, 2015, affected the actuarial surplus. Those assumptions for this program will have minimal impact under the traditional unit credit cost method or only have significance when participants elect to annuitize the account balance. Under the program, a participant must have at least \$3,500 in his or her account to elect to annuitize the account balance.

The actuarial methods used for the program's actuarial valuation as of June 30, 2015, result in an actuarial surplus of \$29,005,000 after additional credits.

CalSTRS contracts for many actuarial services. The current contractor, Milliman, has been the CalSTRS actuary since January 15, 2000.

There are no other specific assumptions that have a material impact on valuation results for this program.

Independent Actuarial Review

Actuarial services for CalSTRS are provided under contract by a qualified independent actuarial firm, with additional review provided by the actuarial staff. The current actuarial consultant was retained on January 15, 2000—and in 2006, 2012 and 2016—as a result of the competitive bid process.

Through the competitive bid process, the work of a prior actuary will be verified in a subsequent actuarial valuation performed by a new contract actuary. Should the same actuarial firm continue for a period of 10 years, provision is made for an independent review of that firm's work through an actuarial audit completed by another firm. These audit services are acquired using the competitive bid process.

An audit of the 2007 Actuarial Experience Analysis of the Cash Balance Benefit Program was performed by the firm, The Segal Company. The result of the audit was reported to the board on September 8, 2011.

Summary of Cash Balance Benefit Program Provisions

The following tables and summary were prepared by CalSTRS staff. All information is considered in the June 30, 2015, actuarial valuation.

Membership

Eligibility Requirement—Membership if employed at less than 50 percent of a full-time position for a California school district, community college district or county office of education that has elected to offer the Cash Balance Benefit Program.

Participant—An eligible employee with creditable service subject to coverage who has contributions credited in the program or is receiving an annuity from the program.

Account Balance

Account Balance—Nominal accounts established for the purpose of determining benefits payable to the participant. Accounts are credited with contributions, minimum interest rate and additional earnings credits.

Contributions—Generally, participant contributions are 4 percent of salary, and employer contributions are 4 percent of salary.

Rules for contribution rates may differ for participants covered by a collective bargaining agreement, but the sum of the participant and employer contributions must equal or exceed 8 percent of salary. The employer contribution rate cannot be less than 4 percent of salary and the participant rate cannot be less than the employers rate.

Board may adjust employer contributions for a fixed number of years, but the adjustment shall not exceed 0.25 percent of salaries in any plan year.

Minimum Interest Rate—Annual rate determined for the plan year by the board in accordance with federal laws and regulations. The minimum interest rate is equal to the average of the yields on 30-year Treasury Notes for the 12 months ending in February preceding the beginning of the plan year, rounded to the next highest basis point.

CASH BALANCE BENEFIT PROGRAM

Additional Earnings Credit—Annual rate determined for the plan year by the board based on the actual earnings during the plan year, but only to the extent the earnings are sufficient to credit the minimum interest rate and provide any additions to the gain and loss reserve deemed warranted by the board. The board adopted an additional earnings credit of 2.64 percent for the fiscal year ending June 30, 2015.

Additional Annuity Credit—No longer applies per board additional annuity credit policy adopted at April 2015 meeting.

Normal Retirement

Eligibility Requirement—Age 60.

Benefit—The account balance at the retirement date subject to limits imposed under IRC section 415.*

Form of Payment—The normal form of payment is a lump-sum distribution. Annuity options are available if the sum of the employer and employee accounts equals or exceeds \$3,500.

Early Retirement

Eligibility Requirement—Age 55.

Benefit and Form of Payment—Same as Normal Retirement.

Late Retirement

Benefit and Form of Payment—Same as Normal Retirement. Contributions and interest continue to be credited to the account balances until distributed.

Deferred Retirement

Benefit—A participant may cease active service, leave the accumulated account balance on deposit and later retire upon attaining the minimum age requirement.

Disability Benefit

Eligibility Requirement—Determination by the board that the participant has a total and permanent disability.

Benefit—The account balance at the date of disability. An annuity benefit is discontinued if the participant is re-employed before age 60 and performs service creditable under the program.

Form of Payment—Same as Normal Retirement.

Death Before Retirement

Eligibility Requirement—Deceased participant has an account balance.

Benefit—The account balance at the date of death payable to the designated beneficiary.

Form of Payment—Normal distribution is a lump-sum benefit. A participant's beneficiary may elect to receive the benefit in the form of a period-certain annuity if the sum of the balance of credits to the participant's employee and employer accounts is \$3,500 or more.

Death After Retirement

Eligibility Requirement—The deceased participant was receiving an annuity.

Benefit—According to the terms of the annuity elected by the participant.

Termination from the Program

Eligibility Requirement—More than five years has elapsed since the most recent termination benefit, if any, has been paid.

Benefit and Form of Payment—Lump-sum distribution of the account balance as of the date of distribution. The benefit is payable six months from the termination of creditable service.

Changes in Cash Balance Benefit Program Provisions

There have been no program amendments that would affect an actuarial valuation of the CBB Program since the last CalSTRS annual financial report was issued. All program provisions were considered in the completion of the June 30, 2015, actuarial valuation.

*For participants hired on or after January 1, 2013, salary credited to CalSTRS from all employers is capped at \$137,941 for 2015–16 fiscal year. The limit is adjusted each fiscal year based on the changes in the Consumer Price Index for all Urban Consumers: U.S. City Average.

CASH BALANCE BENEFIT PROGRAM

All demographic assumptions used in the actuarial valuation were adopted by the board when the experience study was adopted on February 2, 2012. The following are the assumptions adopted by the board for this program.

Table 1 Post retirement Mortality Table for Sample Ages

Age	Male	Female
	2011 CalSTRS Retired	2011 CalSTRS Retired
50	0.114%	0.073%
55	0.164	0.118
60	0.300	0.254
65	0.596	0.468
70	1.095	0.864
75	1.886	1.451
80	3.772	2.759
85	7.619	5.596
90	14.212	11.702
95	22.860	17.780

Table 2 Probabilities of Retirement for Sample Ages¹

Age	Under 30 years		30 or more years	
	Male	Female	Male	Female
55	2.7%	4.5%	8.0%	9.0%
60	6.3	9.0	27.0	31.0
65	13.5	14.4	32.5	37.5
70	10.8	13.5	30.0	35.0
75	100.0	100.0	100.0	100.0

¹Probabilities of retirement are adjusted for members with service between 25 and 30 years.

Table 3 Probabilities of Withdrawal From Active Service Before Age and Service Retirement for Sample Ages in Years

Duration	Male	Female	
1	13.0%	1	12.0%
2	9.0	2	8.5
3	6.4	3	6.4
4	4.6	4	4.6
5	3.9	5	3.9
10	1.8	10	1.8
15	0.9	15	0.9
20	0.5	20	0.5
25	0.3	25	0.3
30	0.2	30	0.2
35	—	35	—
40	—	40	—

CASH BALANCE BENEFIT PROGRAM

Table 4 Assumption for Pay Increases Due to Promotions and Longevity for Sample Ages in Years
(Exclusive of the assumed general wage increase, which includes inflation)

Duration	Entry Ages					
	Under 25	25–29	30–34	35–39	40–44	45+
1	5.6%	5.3%	5.1%	4.8%	4.8%	3.5%
5	5.5	4.8	4.5	3.8	3.8	2.6
10	3.2	3.0	2.7	2.3	2.2	1.6
20	1.3	1.1	1.1	0.8	0.8	0.6
30	0.9	0.7	0.6	0.5	—	—
40	0.8	0.6	—	—	—	—

Table 5 Economic Assumptions

Consumer Price Inflation	3.00%
Investment Yield	7.00
Wage Inflation	3.75
Interest on Member Accounts	7.00

Table 6 Mortality Assumptions

Retired Members ¹	
Male	2011 CalSTRS Retired-M
Female	2011 CalSTRS Retired-F
Active Members	
Male	2011 CalSTRS Retired-M (-2 years)
Female	2011 CalSTRS Retired-F (-2 years)
Beneficiaries ¹	
Male	2011 CalSTRS Beneficiary-M
Female	2011 CalSTRS Beneficiary-F

¹Future retirees and beneficiaries are valued with a two-year age setback.

Table 7 Termination From Disability Due to Death¹

Male	
Age	
<70	2% at age 40 and under, graded to 3.2% at age 70
≥70	RP 2000 male white collar +7 projected to 2025 at age 70 smoothed to +1 age 85 (select rates in first three years, regardless of age)
Female	
Age	
<70	1.5% at age 40 and less graded to 2.25% at age 70
≥70	RP 2000 female white collar +6 projected to 2025 at age 70 smoothed to +2 at age 80 (select rates in first three years, regardless of age)

¹Future disabled members are valued with a two-year age setback.

CASH BALANCE BENEFIT PROGRAM

Table 8 Disability Rates—Coverage B for Sample Ages

Coverage A			Coverage B		
Male	25	0.018%	Male	25	0.010
	30	0.027		30	0.020
	40	0.072		35	0.030
	50	0.144		40	0.060
	55	0.189		45	0.100
Female	25	0.018%	50	0.140	
	30	0.027	55	0.245	
	40	0.081	Female	25	0.020
	50	0.198	30	0.020	
	55	0.252	35	0.040	
			40	0.070	
			45	0.110	
			50	0.185	
			55	0.300	

Table 9 Schedule of Active Participant Valuation Data

Date (as of June 30)	Number of Participating Employers	Number	Active Members		
			Annual Payroll	Annual Average Pay	% Increase In Average Pay
2006	30	9,869	\$122,316,000	\$12,394	8.8%
2007	30	10,579	144,516,000	13,661	10.2
2008	33	11,627	181,104,000	15,576	14.0
2009	33	11,332	182,871,332	16,138	3.6
2010	33	10,378	163,248,119	15,730	(2.5)
2011	33	9,923	158,501,388	15,973	1.5
2012	33	9,273	151,284,621	16,315	2.1
2013	31	9,129	151,281,260	16,572	1.6
2014	32	9,955	175,058,251	17,585	6.1
2015	33	10,416	193,075,185	18,536	5.4

CASH BALANCE BENEFIT PROGRAM

Table 10 Schedule of Retired Participants and Beneficiaries Added to and Removed from Annuity Rolls

Date (as of June 30)	Added to Rolls		Removed from Rolls		Rolls-End of Year			
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	% Increase in Annual Allowances	Average Annual Allowances
2007	5	\$10,715	—	—	16	\$35,139	43.9%	\$2,196
2008	7	21,650	—	—	23	56,788	61.6%	2,469
2009	12	29,184	2	4,104	33	81,935	44.3%	2,483
2010 ¹	18	55,193	5	23,079	46	114,047	39.2%	2,479
2011	24	66,664	2	6,899	68	173,813	52.4%	2,556
2012	42	139,297	5	18,110	105	294,000	69.1%	2,800
2013	30	132,912	8	26,578	127	401,112	36.4%	3,158
2014	42	212,087	10	43,746	159	568,682	41.8%	3,577
2015	52	164,451	11	74,583	200	658,550	15.8%	3,293
2016	60	260,307	10	43,035	252	841,230	27.7%	3,338

*The Cash Balance Benefit Program was established July 1, 1996.

¹Revised add count for 2010 as a result subsequent years' end counts changed in 2015.

Table 11 Solvency Test

Valuation Date (as of June 30)	Aggregate Accrued Liabilities for				Funding of Liabilities		
	(1) Active Member Contributions on Deposit	(2) Future Benefit to Benefit Recipients	(3) Service Already Rendered by Active Members (Financed by Employer)	Actuarial Value of Assets	(1)	(2)	(3)
2006	\$62,749,487	\$140,000	—	\$68,797,000	100.0	100.0	—
2007	79,691,000	191,000	—	93,182,000	100.0	100.0	—
2008	97,802,000	229,000	—	98,892,000	100.0	100.0	—
2009	114,338,000	354,000	—	91,793,000	80.2	—	—
2010	129,065,000	509,000	—	114,418,000	88.7	—	—
2011	143,695,000	767,000	—	151,248,000	100.0	100.0	—
2012	156,600,000	1,386,000	—	158,020,000	100.0	100.0	—
2013	174,171,000	1,952,000	—	188,551,000	100.0	100.0	—
2014	194,792,000	3,061,000	—	231,671,000	100.0	100.0	—
2015	215,851,000	3,843,000	—	248,699,000	100.0	100.0	—

CASH BALANCE BENEFIT PROGRAM

Table 12 Analysis of Financial Experience
(Gains and losses in unfunded actuarial obligation resulting from differences between assumed and actual experience)
(Dollars in Thousands)

Actuarial Valuation as of June 30		
	2015	2014
Actuarial Obligation at June 30	\$197,853	\$176,123
Expected Changes:		
Contributions	15,861	13,831
Benefits Paid	(6,333)	(6,187)
Expected Earnings/Credits	14,183	12,596
Expected Actuarial Obligation at June 30	221,564	196,363
Expected Actuarial Value of Assets at June 30	257,749	209,661
Expected UAO at June 30	(36,185)	(13,298)
Actuarial (Gains) or Losses		
(Gain) on Actuarial Obligation	(7,422)	(6,002)
(Gain) on Assets	9,050	(22,010)
Total Actuarial (Gains) & Losses	1,628	(28,012)
Additional Earnings Credit	5,552	7,492
Unfunded Actuarial Obligation (Surplus) at June 30	(29,005)	(33,818)
Funded Ratio	113%	117%

Table 13 Schedule of Funding Progress
(Dollars in Millions)

Actuarial Valuation Date as of June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (Funding Excess) (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2006	\$69	\$63	(6)	109%	\$122	(5%)
2007	93	80	(13)	117%	145	(9%)
2008	99	98	(1)	101%	181	(1%)
2009	92	115	23	80%	182	13%
2010	114	130	16	88%	163	10%
2011	151	144	(7)	105%	158	(4%)
2012	158	158	0	100%	151	—
2013	189	176	(13)	107%	151	(9%)
2014	232	198	(34)	117%	174	(20%)
2015	249	220	(29)	113%	192	(15%)
2016	(1)	(1)	(1)	(1)	(1)	(1)

⁴Actuarial Valuation as of June 30, 2016, are expected to be available by April 2017.

Note: Information of actuarially determined and actual contributions for the State Teachers' Retirement Plan is provided in the Financial Section, Schedule III, Contributions of Employer and Nonemployer Contributing Entity table.

GASB 43 REPORTING FOR THE MEDICARE PREMIUM PAYMENT PROGRAM



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November 8, 2016

Teachers' Retirement Board
California State Teachers' Retirement System

Re: **GASB 43 Reporting for the Medicare Premium Payment Program**

Dear Members of the Board:

The basic financial goal of the Medicare Premium Payment (MPP) Program of the California State Teachers' Retirement System (CalSTRS) is to maintain sufficient resources to fully fund the obligations. Actuarial valuations used for GASB 43 reporting are performed every two years and measure the progress toward this goal, as well as test the adequacy of the contribution rates. The most recent valuation was as of June 30, 2014.

The MPP Program is essentially funded on a pay-as-you-go basis with a portion of contributions to the DB Program diverted to the Teachers' Health Benefit Fund to make MPP Program payments. As of June 30, 2014, \$341 million of future employer contributions to the DB Program have been allocated to pay the MPPP benefits; however, this amount is not included as an asset for GASB 43 reporting. This gives the appearance that the MPP Program is significantly underfunded in the GASB 43 results. However, based on the commitment to transfer a portion of future contributions from the DB Program to fund the MPP Program, it is our opinion that the MPP Program continues in sound financial condition as of June 30, 2014.

The June 30, 2014 valuation results are based on the membership data and the asset information provided by CalSTRS. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

Milliman did not prepare the summaries or schedules shown in the Financial and Actuarial Sections. However, the actuarial information contained in the Financial Section and in this Actuarial Section was derived from our June 30, 2014 actuarial valuation report.

The valuation is based on our understanding of the current benefit provisions of the MPP Program and the actuarial assumptions which were last reviewed and adopted by the Board at the February 2015 meeting.

We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement No. 43 for fulfilling financial accounting requirements and meet the parameters set forth in the relevant Actuarial Standards of Practice (ASOPs). It should be noted that we relied on advice from Milliman's health actuaries on our recommendations of assumptions specific to health costs. Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements as presented in the

GASB 43 REPORTING FOR THE MEDICARE PREMIUM PAYMENT PROGRAM



Teachers' Retirement Board
November 8, 2016
Page 2

valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

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

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

In conclusion, the results presented in this report satisfy GASB 43 reporting purposes. Based on the current actuarial assumptions used for financial reporting purposes, the current assets of the MPP Program fund 0.2% of the accrued liabilities. It should be noted that these calculations do not include \$341 million of future employer contributions to the DB Program that has been allocated to pay the MPPP benefits.

We certify that the June 30, 2014 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Respectfully submitted,

A handwritten signature in black ink that reads "Mark C. Olleman".

Mark C. Olleman, FSA, EA, MAAA
Principal and Consulting Actuary

A handwritten signature in black ink that reads "Nick Collier".

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

MEDICARE PREMIUM PAYMENT PROGRAM

Summary of Actuarial Assumptions and Methods

CalSTRS, through its consulting actuary, will perform an experience study at least every four years to determine appropriate demographic and economic assumptions. These assumptions are then applied every two years when the consulting actuary produces GASB 43 reporting information for the CalSTRS Medicare Premium Payment (MPPP) Program. The GASB 43 reporting information was completed as of June 30, 2014, and adopted by the board on April 2, 2015. The following tables and summary were prepared by CalSTRS staff.

The MPP Program was established January 1, 2001. Assumptions specific to the MPP Program were adopted by the board on June 5, 2009. The economic and demographic assumptions were based on those adopted for the Defined Benefit Program by the board on February 2, 2012. The economic and demographic assumptions were used for GASB 43 reporting information. The DB Program and the MPP Program share the same population, so it is reasonable to use most of the same assumptions for both programs. *Following are the assumptions adopted by the board for GASB 43 reporting:

- GASB 43 discount rate is 3.5 percent.
- Method used to value plan assets for GASB 43 reporting purposes: market value of assets held in the Health Benefit Trust Fund.
- Assumption for the price increase is 3.00 percent.
- The actuarial cost method used for GASB 43 reporting purposes is entry age normal.

Discussion of recent changes in:

The nature of the program—The MPP Program was established January 1, 2001. All provisions of the program as of June 2014 were considered when producing GASB 43 reporting information.

Actuarial Assumptions—There have been several changes to the assumptions since the June 30, 2012, valuation. The most significant changes were the reductions in the probabilities of enrollment in the MPP Program and the reduced investment return assumption. The following assumptions were used to complete the valuation for this program.

***Note:** These assumptions are currently being reviewed. The results of this review will be presented to the CalSTRS board in February 2017. If changes are adopted, they would be reflected in the June 30, 2017 Financial Report.

Actuarial Methods

Actuarial Cost Method

Level Dollar Entry Age Normal

Asset Valuation Method

Fair Market Value in the Health Benefit Trust Fund

The actuarial methods used for GASB 43 reporting purposes as of June 30, 2014, result in an unfunded actuarial accrued liability of \$481.1 million.

CalSTRS contracts for many actuarial services. The current contractor, Milliman, has been the CalSTRS actuary since the program's inception.

There are no other specific assumptions that have a material impact on GASB 43 reporting information.

Independent Actuarial Review

Actuarial services for CalSTRS are provided under contract by a qualified independent actuarial firm, with additional review provided by the actuarial staff.

Through the competitive bid process, the work of a prior actuary will be verified in a subsequent actuarial valuation performed by a new contract actuary. Should the same actuarial firm continue for a period of 10 years, provision is made for an independent review of that firm's work through an actuarial audit completed by another firm. These audit services are acquired using the competitive bid process.

An audit of the 2007 Actuarial Experience Analysis of the Medicare Premium Payment Program was performed by the firm, The Segal Company. The result of the audit was reported to the board on September 8, 2011.

Summary of Medicare Premium Payment Program Provisions

The following tables and summary were prepared by CalSTRS staff. All information is considered for GASB 43 reporting purposes as of June 30, 2014.

MEDICARE PREMIUM PAYMENT PROGRAM

Membership

Eligibility requirement—Part A

Member—satisfies either:

- 1) Retired or disabled prior to January 1, 2001; hired prior to April 1, 1986; age 65 or above; enrolled in Medicare Part A and Part B; and not eligible for Part A without premium payment.
- or -
- 2) Meet all above requirements, except retired or disabled before July 1, 2012; district completed a Medicare Division election prior to retirement; and active member was less than 58 years of age at the time of the election.

Spouse eligibility—Spouses of members are not eligible to participate in the program.

Eligibility requirement—Part B

Only those currently enrolled are eligible.

Benefits Paid

Part A – Part A premium (\$426 per month in 2014).

If applicable, Part A penalty is also paid.

Part B – Part B penalty. Based on Part B premium (\$104.90 per month in 2014). Small group of high earners will have higher premiums, up to \$335.70 in 2014.

Changes in the Medicare Premium Payment Program Provisions

The following amendments were considered for June 30, 2014 GASB 43 reporting:

- MPP Program was extended for a five-year period to include members retiring or becoming disabled prior to July 1, 2012.

MEDICARE PREMIUM PAYMENT PROGRAM

Demographic assumptions used for GASB 43 reporting were adopted by the board when the experience study was adopted on February 2, 2012. Following are assumptions adopted by the board for this program.

Table 1 Post retirement Mortality Table for Sample Ages

Age	Male	Female
	2011 CalSTRS Retired	2011 CalSTRS Retired
50	0.114%	0.073%
55	0.164	0.118
60	0.300	0.254
65	0.596	0.468
70	1.095	0.864
75	1.886	1.451
80	3.772	2.759
85	7.619	5.596
90	14.212	11.702
95	22.860	17.780

Table 2 Probabilities of Retirement for Sample Ages

NOT APPLICABLE

Table 3 Probabilities of Withdrawal from Active Service Before Age and Service Retirement for Sample Age

NOT APPLICABLE

MEDICARE PREMIUM PAYMENT PROGRAM

Table 4 Probability of Refund

NOT APPLICABLE

Table 5 Economic Assumptions

Investment Yield	
GASB Reporting	3.50%
Medical Inflation	
Part A Premiums	3.70%
Part B Premiums	5.70%
Price Inflation	
	3.00%

Table 6 Mortality Assumptions

Retired Members ¹	
Male	2011 CalSTRS Retired-M
Female	2011 CalSTRS Retired-F
Active Members	
Male	N/A
Female	N/A
Beneficiaries ¹	
Male	2011 CalSTRS Beneficiary-M
Female	2011 CalSTRS Beneficiary-F

¹Future retirees and beneficiaries are valued with a two-year age setback.

MEDICARE PREMIUM PAYMENT PROGRAM

Table 7 Termination From Disability Due to Death¹

Male	
Age	
<70	2% at age 40 and under, graded to 3.2% at age 70
≥70	RP 2000 male white collar +7 projected to 2025 at age 70 smoothed to +1 age 85 (select rates in first three years, regardless of age)
Female	
Age	
<70	1.5% at age 40 and less graded to 2.25% at age 70
≥70	RP 2000 female white collar +6 projected to 2025 at age 70 smoothed to +2 at age 80 (select rates in first three years, regardless of age)

¹Future disabled members are valued with a two-year age setback.

Table 8 Service Retirement for Sample Ages

NOT APPLICABLE

Table 9 Disability Rates for Sample Ages

NOT APPLICABLE

MEDICARE PREMIUM PAYMENT PROGRAM

Table 10 Schedule of Medicare Part A Enrollment Rates

Assumption	Best Estimate	
	Male	Female
% of Under 65 Retirees Enrolling (Retired On or After 2001)	2.80%	2.80%
% of Under 65 Retirees Enrolling (Retired Before 2001)	4.50	4.50
% of Over 65 Retirees Enrolling (For Those Not Currently Enrolled) at Age:		
65	1.20	1.20
66	0.12	0.12
67	0.10	0.10
68	0.08	0.08
69	0.06	0.06
70-84	0.02	0.02
85 & above	—	—

Table 11 Schedule of Retired Members Added to and Removed From Medicare Part A Premium Rolls

Date (as of June 30)	Added to Rolls ¹		Removed From Rolls		Rolls-End of Year			
	Number	Annual Allowances ²	Number	Annual Allowances ²	Number	Annual Allowances ²	% Increase in Annual Allowances	Average Annual Allowances
2007	391	\$1,274	215	\$630	6,268	\$29,618	8.4%	\$4,725
2008	389	1,296	213	608	6,300	31,328	5.8%	4,973
2009	399	1,489	208	604	6,431	35,814 ³	14.3%	5,569
2010	347	1,215	220	660	6,475	34,015	(5.0%)	5,253
2011	537	2,202	231	695	6,709	34,677	1.9%	5,169
2012	359	1,177	218	634	6,742	33,708	(2.8%)	5,000
2013*	305	1,009	212	641	6,770	33,663	(0.1%)	4,972
2014	235	751	259	703	6,684	32,047	(4.8%)	4,795
2015	178	443	254	772	6,474	29,729	(7.2%)	4,592
2016	166	404	264	768	6,324	28,345	(4.7%)	4,482

¹The MPP Program was established July 1, 2001.

²Dollars in thousands.

³This does not include the \$8.04 million credit adjustments and deletions. If including the credit adjustments and deletions, the Total Annual Allowance would be \$28.3 million; the percentage decrease in annual allowance would be 9.6% and the average annual allowance would be \$4,402.

*Numbers revised in 2014.

MEDICARE PREMIUM PAYMENT PROGRAM

Table 12 Solvency Test¹

Aggregate Accrued Liabilities for (in millions)					Funding of Liabilities		
Valuation Date (as of June 30)	(1) Active Member Contributions on Deposit	(2) Future Benefit to Benefit Recipients	(3) Service Already Rendered by Active Members	Actuarial Value of Assets	(1)	(2)	(3)
2006	\$ —	\$796.5	—	\$2.7	100%	0.3%	— %
2008	—	976.3	—	4.2	100	0.4	—
2010	—	905.0	—	0.6	100	0.1	—
2012	—	582.1	—	0.4	100	0.1	—
2014	—	482.0	—	0.9	100	0.2	—

¹GASB 43 reporting information was determined for the first time as of June 30, 2006.

Table 13 Analysis of Financial Experience

(Gains and losses in unfunded actuarial obligation resulting from differences between assumed and actual experience)
(Dollars in Thousands)

	GASB 43 reporting as of June 30	
	2014	2012
Actuarial Obligation at June 30		
Expected Changes:		
Eligibility Extended	not calculated	not calculated
Benefits Paid	(\$33.0)	(\$35.0)
Interest	not calculated	not calculated
Expected Actuarial Obligation at June 30	not calculated	not calculated
Expected Actuarial Value of Assets at June 30	not calculated	not calculated
Expected UAO at June 30	not calculated	not calculated
Actuarial (Gains) or Losses		
(Gain) on Medical Trend Assumption	not calculated	not calculated
(Gain) on Premium/Penalty	not calculated	not calculated
(Gain) on Part B Premium for higher earners	not calculated	not calculated
(Gain) other sources	not calculated	not calculated
Total Actuarial Gains & Losses	not calculated	not calculated
Unfunded Actuarial Obligation (Surplus) at June 30	\$481.1	\$581.7
Funded Ratio	0.2%	0.1%

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In fiscal year 2015–16, CalSTRS members, on average, retired at age 63 after about 25 years of service with a **pension replacing less than 60 percent of their highest salary.**

STATISTICAL

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- 169** Defined Benefit and Defined Benefit Supplement Program Participating Employers
- 173** Defined Benefit Supplement Program Schedules
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The Statistical Section presents additional detailed information to assist users of basic financial statements, notes to basic financial statements and required supplementary information in assessing the economic condition of CalSTRS. The section provides financial trend information for the State Teachers' Retirement Plan (STRP), which includes Defined Benefit (DB), Defined Benefit Supplement (DBS), Cash Balance Benefit (CBB) and Replacement Benefits Program, as well as operating information for the Pension², Medicare Premium Payment (MPPP) programs and Teachers' Deferred Compensation Fund. Previously, financial trend information for the STRP was presented by program—DB, DBS and CBB. Financial trend information for those programs has been consolidated and presented as the STRP to be consistent with the basic financial statements. Operating information for STRP programs continues to be presented separately because consolidation would not provide meaningful information due to the unique characteristics of those programs.

The financial trend schedules assist users in understanding and assessing how the system's financial position has changed over time and include:

- Changes in Fiduciary Net Position
- Benefit and Refund Deductions From Net Position by Type

The operating information schedules provide data about the system's operations and resources to assist users in understanding CalSTRS benefits and services and include:

- Members and Benefit Recipient Statistics
- Participating Employers Statistics

The information in this section was derived from the Financial Section and the CalSTRS pension administration system, START, except where noted.

Notes:

Supplemental statistical tables are available on request by calling CalSTRS at **800-228-5453**.

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STATE TEACHERS' RETIREMENT PLAN

Table 1 Changes in Fiduciary Net Position¹
(Dollars in Millions)

Fiscal Year Ending June 30	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions										
Member Contributions	\$2,957.5	\$2,509.7	\$2,263.6	\$2,336.8	\$2,279.9	\$2,355.9	\$2,331.5	\$2,500.6	\$2,511.8	\$2,334.9
Employer Contributions	3,391.1	2,677.8	2,272.2	2,283.3	2,238.0	2,310.2	2,286.3	2,464.2	2,453.3	2,285.7
State of California/ Federal Government ²	1,939.9	1,425.8	1,383.5	1,328.3	1,302.5	1,193.3	1,221.6	1,140.4	1,629.6	1,084.4
Net Investment Income	2,305.0	7,611.6	30,401.9	20,682.4	1,071.3	30,030.3	15,089.3	(40,357.7)	(9,655.1)	29,839.9
Other Income	41.5	3.9	2.1	1.2	4.1	6.5	7.7	7.5	213.1	0.5
Total Additions	\$10,635.0	\$14,228.8	\$36,323.3	\$26,632.0	\$6,895.8	\$35,896.2	\$20,936.4	\$(34,245.0)	\$(2,847.3)	\$35,545.4
Deductions										
Benefit Payments to Members ³	\$12,892.3	\$12,284.1	\$11,725.3	\$11,133.3	\$10,442.5	\$9,854.5	\$9,085.3	\$8,256.2	\$7,591.7	\$6,937.6
Refunds of Member Contributions	84.0	87.7	107.6	105.0	108.1	116.1	100.2	105.8	101.8	106.2
Purchasing Power Benefits	172.3	192.8	202.2	221.5	234.6	237.6	272.6	348.1	229.8	230.3
Administrative Expenses	180.1	145.2	154.2	136.9	138.4	110.4	140.2	113.2	109.4	105.9
Other Expenses	15.2	8.8	8.8	4.4	0.0	0.0	0.0	0.0	(0.2)	0.0
Total Deductions	\$13,343.9	\$12,718.6	\$12,198.1	\$11,601.1	\$10,923.6	\$10,318.6	\$9,598.3	\$8,823.3	\$8,032.5	\$7,380.0
Change in Fiduciary Net Position	\$(2,708.9)	\$1,510.2	\$24,125.2	\$15,030.9	\$(4,027.8)	\$25,577.6	\$11,338.1	\$(43,068.3)	\$(10,879.8)	\$28,165.4

There may be immaterial rounding differences between the figures presented in this table and in the Statement of Changes in Fiduciary Net Position.

¹Includes the Replacement Benefits Program beginning in 2009, the year the Replacement Benefits Program began being reported as part of the STRP.

²Includes Elder Full Funding, SBMA contributions and School Lands revenue.

³Includes member elected administrative transfers to purchase service credit in the DB Program.

STATE TEACHERS' RETIREMENT PLAN

Table 2 Benefit and Refund Deductions from Fiduciary Net Position by Type¹
(Dollars in Millions)

Fiscal Year Ending June 30	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Type of Benefit										
Age & Service Benefits										
Retired Members ²	\$11,869.3	\$11,305.8	\$10,821.1	\$10,280.6	\$9,703.8	\$9,167.4	\$8,356.8	\$7,609.0	\$6,965.1	\$6,382.8
Survivors	634.0	591.0	547.3	527.9	502.8	464.8	503.9	443.6	426.6	376.9
Death	62.7	75.9	57.0	73.6	31.0	35.3	42.8	37.0	39.3	29.2
Purchasing Power Benefits	172.3	192.8	202.2	221.5	234.6	237.6	272.6	348.1	229.8	230.3
Disability Benefits										
Retired Members	326.3	311.4	299.9	251.2	204.9	187.1	181.8	166.5	160.8	148.7
Survivors	—	—	—	—	—	—	—	—	—	—
Total Benefits	\$13,064.6	\$12,476.9	\$11,927.5	\$11,354.8	\$10,677.1	\$10,092.2	\$9,357.9	\$8,604.2	\$7,821.6	\$7,167.9
Type of Refund										
Separation	\$84.0	\$87.7	\$107.6	\$105.0	\$108.1	\$116.1	\$100.2	\$105.8	\$101.8	\$106.2
Total Refunds	\$84.0	\$87.7	\$107.6	\$105.0	\$108.1	\$116.1	\$100.2	\$105.8	\$101.8	\$106.2

There may be immaterial rounding differences between the figures presented in this table and in the Statement of Changes in Fiduciary Net Position.

¹Includes the Replacement Benefit Program beginning in 2009, the year the Replacement Benefit Program began being reported as part of the State Teachers' Retirement Plan.

²Includes member elected administrative transfers to purchase service credit and DB Program.

DEFINED BENEFIT PROGRAM

Table 1 Active Member Characteristics

Fiscal Year Ending June 30	Count ²	Average Earnable Compensation ¹	Average Age	Average Service Credit	Average Service Projected to Age 60
2007	455,693	\$61,097	44.7	10.8	26.1
2008	461,378	63,281	44.7	10.8	26.2
2009	459,009	64,044	44.8	11.0	26.2
2010	441,544	64,156	45.1	11.3	26.3
2011	429,600	64,069	45.3	11.7	26.3
2012	421,499	64,743	45.5	11.9	26.5
2013	416,643	65,571	45.6	12.2	26.6
2014	420,887	67,276	45.6	12.3	26.6
2015	429,460	69,597	45.5	12.2	26.7
2016	438,537	72,550	45.4	12.1	26.7

¹Average salary that would be paid if members worked full-time basis.

²Due to the timing of when membership numbers were pulled, there will be a difference between the members reported in this section and the Financial Section.

Table 2 Members Retired for Service During Fiscal Year 2015–16, Classified by Unmodified Allowance¹

Monthly Unmodified Allowance ²	Count	Average Age at Retirement ³	Average Service Credit ³	Average Final Compensation ^{3*}	Average Allowance Payable ⁴
Less than \$500	396	63.3	5.189	\$3,855	315
500–1000	619	63.1	8.917	4,372	723
1000–1500	542	62.4	12.412	5,247	1,215
1500–2000	612	61.9	15.155	6,004	1,688
2000–2500	704	62.6	17.237	6,397	2,169
2500–3000	864	63.3	19.240	6,734	2,657
3000–3500	895	63.4	21.427	7,048	3,124
3500–4000	845	63.2	23.639	7,274	3,577
4000–4500	756	63.3	25.774	7,532	4,083
4500–5000	803	63.4	27.958	7,576	4,557
5000–5500	820	63.4	29.392	7,889	5,033
5500–6000	733	63.4	30.863	8,059	5,514
6000 & Greater	2,785	63.4	35.391	9,220	7,442
Total	11,374	63.2	24.504	7,329	4,180

¹Does not include formerly disabled members.

²As of the June 30, 2004, population report the longevity bonus is included in the unmodified allowance.

³Overall averages.

⁴Includes cumulative application of annual 2 percent benefit improvement factor.

*Excludes new retirees with no final comp data.

DEFINED BENEFIT PROGRAM

Table 3 Members Retired for Service During Fiscal Year 2015–16¹,
Classified by Age and Joint & Survivor Option Elected²

Age	Total	Unmodified	Option types							
			2	3	4	5	6	7	8	9
Under 55	17	13					1	3		
55	371	262					63	28	3	15
56	253	147					54	26	4	22
57	292	177					59	32	3	21
58	385	218					83	40	1	43
59	534	284					96	82	6	66
60	897	467					180	130	20	100
61	1,244	617					279	165	14	169
62	1,529	775					311	223	29	191
63	1,415	720					296	205	24	170
64	979	546	1				187	134	20	91
65	892	521	5				147	113	20	86
66	693	413	2	1			129	71	16	61
67	491	275	4				98	59	9	46
68	361	193	11		1		76	43	4	33
69	305	192	4	1			50	33	6	19
70	241	151	3	3			40	24	6	14
71	152	90	2	1			34	14	3	8
72	65	39	2				13	7	3	1
73	67	47	2				12	2	2	2
74	50	32					6	8		4
75 and over	141	101	2	1			18	8	5	6
Total	11,374	6,280	38	7	1		2,232	1,450	198	1,168
% of Total	100%	55%	—	—	—	—	20%	13%	2%	10%

¹Does not include formerly disabled members.

²Option Elected:

Option 2 - Beneficiary receives 100% of member's modified allowance.

Option 3 - Beneficiary receives 50% of member's modified allowance.

Option 4 - Beneficiary receives 2/3 of member's modified allowance.

Option 5 - Survivors receive 50% of member's modified allowance, upon death of either member of beneficiary.

Option 6 - Beneficiary receives 100% of member's modified allowance. If beneficiary pre-deceases the member, the allowance pops up to the unmodified amount.

Option 7 - Beneficiary receives 50% of member's modified allowance. If beneficiary pre-deceases the member, the allowance pops up to the unmodified amount.

Option 8 - Compound option that allows the member to provide for more than one beneficiary.

Option 9 - Beneficiary receives 75% of member's modified allowance. If beneficiary pre-deceases the member, the allowance pops up to the unmodified amount.

DEFINED BENEFIT PROGRAM

Table 4 Characteristics of Members Going on Disability

Fiscal Year Ending June 30	Count	Average Disability Allowance Payable	Average Service Credit	Average Final Compensation	Average Age at Disability
2007	501	\$2,579	13.959	\$5,281	54.7
2008	510	2,660	14.074	5,478	54.5
2009	511	2,728	13.934	5,567	53.8
2010	498	2,825	14.524	5,827	55.3
2011	504	2,784	14.297	5,781	55.0
2012	488	2,825	14.321	5,823	55.4
2013	571	2,788	14.800	5,742	54.9
2014	494	2,875	14.993	5,967	55.1
2015	503	2,899	15.158	6,002	54.3
2016	455	2,936	14.905	6,081	54.1

Table 5 Total Number of Benefit Recipients by Type of Benefit

Fiscal Year Ending June 30	Service Retirement	Disability Benefits	Benefits for Survivors	Total Benefit Recipients
2007	188,659	7,915	19,067	215,641
2008	195,960	8,170	19,838	223,968
2009	203,649	8,380	20,588	232,617
2010	213,952	8,581	21,263	243,796
2011	222,222	8,813	22,006	253,041
2012	230,278	9,036	22,724	262,038
2013	236,487	9,374	23,413	269,274
2014	241,920	9,604	24,103	275,627
2015	247,353	9,848	24,899	282,100
2016	252,672	9,940	25,583	288,195

DEFINED BENEFIT PROGRAM

Table 6 Members Retired for Service Characteristics¹ by Year of Retirement

Effective Date of Retirement by Service Credit	Number of Retirements	Average Service Credit	Average Unmodified Allowance	Average Final Compensation	Average Age at Retirement
7/1/2006 thru 6/30/2007²					
0-5	105	2.5	\$253	\$5,127	61.0
5-10	1,080	7.3	620	4,075	62.0
10-15	1,019	12.4	1,239	4,874	61.4
15-20	1,311	17.5	2,039	5,625	61.5
20-25	1,248	22.2	2,802	5,987	61.8
25-30	1,249	27.1	3,847	6,678	62.0
30-35	3,078	32.5	5,312	7,087	60.6
35-40	2,259	37.3	6,680	7,434	61.4
40 & over	413	42.2	8,151	7,830	65.0
Total	11,762	26.1	\$4,059	\$6,371	61.5
7/1/2007 thru 6/30/2008²					
0-5	129	2.6	\$286	\$5,393	61.5
5-10	1,038	7.3	643	4,213	62.2
10-15	1,093	12.4	1,307	5,090	61.6
15-20	1,324	17.7	2,148	5,822	61.6
20-25	1,463	22.2	2,902	6,203	61.7
25-30	1,408	27.0	4,000	6,921	62.1
30-35	3,203	32.5	5,526	7,315	60.9
35-40	2,443	37.3	6,908	7,685	61.4
40 & over	467	42.0	8,242	7,990	64.6
Total	12,568	26.3	\$4,239	\$6,612	61.6
7/1/2008 thru 6/30/2009²					
0-5	126	2.4	\$291	\$5,814	62.4
5-10	1,022	7.4	668	4,236	62.8
10-15	1,145	12.4	1,336	5,140	62.1
15-20	1,323	17.7	2,235	5,995	61.8
20-25	1,535	22.3	3,116	6,537	62.1
25-30	1,406	27.1	4,125	7,076	62.2
30-35	3,161	32.4	5,687	7,506	61.1
35-40	2,574	37.2	7,122	7,866	61.7
40 & over	461	42.2	8,594	8,316	64.9
Total	12,753	26.3	\$4,396	\$6,796	61.6

¹Does not include formerly disabled members.

²The average unmodified allowance for this fiscal year includes the longevity bonus.

DEFINED BENEFIT PROGRAM

Table 6 Members Retired for Service Characteristics¹ by Year of Retirement (continued)

Effective Date of Retirement by Service Credit	Number of Retirements	Average Service Credit	Average Unmodified Allowance	Average Final Compensation	Average Age at Retirement
7/1/2009 thru 6/30/2010²					
0-5	148	2.3	\$289	\$5,535	61.4
5-10	1,356	7.4	686	4,287	63.0
10-15	1,436	12.6	1,446	5,385	62.4
15-20	1,663	17.6	2,326	6,138	62.3
20-25	2,323	22.4	3,236	6,658	62.4
25-30	1,885	27.1	4,231	7,165	62.5
30-35	3,620	32.4	5,665	7,478	61.2
35-40	2,481	37.2	7,228	7,999	61.6
40 & over	581	42.3	8,759	8,409	65.4
Total	15,493	25.5	\$4,256	\$6,800	62.2
7/1/2010 thru 6/30/2011²					
0-5	194	2.401	\$305	\$6,182	62.0
5-10	1,388	7.301	663	4,187	62.9
10-15	1,506	12.508	1,487	5,491	62.7
15-20	1,571	17.475	2,320	6,191	62.2
20-25	2,005	22.433	3,278	6,729	62.5
25-30	1,834	27.053	4,237	7,186	62.4
30-35	2,874	32.412	5,693	7,508	61.3
35-40	2,068	37.241	7,313	8,091	61.8
40 & over	456	42.267	9,037	8,738	65.6
Total	13,896	24.534	\$4,088	\$6,763	62.3
7/1/2011 thru 6/30/2012²					
0-5	167	2.441	\$310	\$6,013	63.0
5-10	1,497	7.306	676	4,224	63.2
10-15	1,659	12.521	1,437	5,315	62.7
15-20	1,743	17.425	2,316	6,122	62.7
20-25	1,962	22.535	3,350	6,788	62.6
25-30	1,878	27.097	4,318	7,212	62.8
30-35	2,547	32.504	5,750	7,550	61.4
35-40	1,770	37.203	7,364	8,093	61.9
40 & over	396	42.138	9,487	9,113	65.2
Total	13,619	23.710	\$3,936	\$6,670	62.5

¹Does not include formerly disabled members.

²The average unmodified allowance for this fiscal year includes the longevity bonus.

DEFINED BENEFIT PROGRAM

Table 6 Members Retired for Service Characteristics¹ by Year of Retirement (continued)

Effective Date of Retirement by Service Credit	Number of Retirements	Average Service Credit	Average Unmodified Allowance	Average Final Compensation	Average Age at Retirement
7/1/2012 thru 6/30/2013²					
0-5	132	2.527	\$311	\$6,092	62.8
5-10	1,017	7.246	710	4,540	63.1
10-15	1,298	12.573	1,521	5,528	63.1
15-20	1,678	17.421	2,392	6,272	63.0
20-25	1,760	22.589	3,367	6,802	62.8
25-30	1,817	27.222	4,319	7,169	62.7
30-35	2,150	32.509	5,700	7,528	61.6
35-40	1,522	37.206	7,329	8,038	61.8
40 & over	271	42.344	8,924	8,439	65.6
Total	11,645	24.085	\$3,980	\$6,769	62.6
Effective Date of Retirement by Service Credit	Number of Retirements	Average Service Credit	Average Unmodified Allowance	Average Final Compensation	Average Age at Retirement
7/1/2013 thru 6/30/2014²					
0-5	144	2.230	\$268	\$5,994	62.9
5-10	950	7.416	721	4,463	63.2
10-15	1,176	12.645	1,533	5,553	63.1
15-20	1,604	17.432	2,425	6,286	63.2
20-25	1,593	22.411	3,334	6,743	62.9
25-30	1,845	27.167	4,443	7,367	63.0
30-35	1,814	32.332	5,607	7,532	61.6
35-40	1,374	37.179	7,295	7,973	61.9
40 & over	236	42.214	9,197	8,741	65.5
Total	10,736	23.819	\$3,939	\$6,774	62.7
Effective Date of Retirement by Service Credit	Number of Retirements	Average Service Credit	Average Unmodified Allowance	Average Final Compensation*	Average Age at Retirement
7/1/2014 thru 6/30/2015^{1,2,3}					
0-5	168	2.188	\$275	\$6,195	62.6
5-10	855	7.357	736	4,517	63.7
10-15	1,125	12.629	1,554	5,597	63.4
15-20	1,764	17.589	2,520	6,467	63.4
20-25	1,585	22.406	3,415	6,883	63.0
25-30	2,069	27.185	4,603	7,576	63.3
30-35	1,948	32.128	5,709	7,787	62.0
35-40	1,482	37.096	7,490	8,207	62.2
40 & over	282	42.378	9,539	9,166	65.8
Total	11,278	24.221	\$4,142	\$7,013	63.0

¹Does not include formerly disabled members.

²The average unmodified allowance for this fiscal year includes the longevity bonus.

³Excludes retirees with no final comp data.

DEFINED BENEFIT PROGRAM

Table 6 Members Retired for Service Characteristics¹ by Year of Retirement (continued)

Effective Date of Retirement by Service Credit	Number of Retirements	Average Service Credit	Average Unmodified Allowance	Average Final Compensation ³	Average Age at Retirement
7/1/2015 thru 6/30/2016 ^{2,3}					
0-5	170	2.387	\$314	\$6,438	62.7
5-10	793	7.351	754	4,637	63.9
10-15	1,046	12.638	1,608	5,792	63.5
15-20	1,751	17.637	2,612	6,664	63.6
20-25	1,652	22.194	3,534	7,149	63.4
25-30	2,152	27.297	4,861	7,928	63.4
30-35	2,034	32.065	5,899	8,108	62.0
35-40	1,467	37.236	7,836	8,624	62.4
40 & over	309	42.470	9,666	9,215	66.4
Total	11,374	24.504	\$4,369	\$7,329	63.2

¹Does not include formerly disabled members.

²The average unmodified allowance for this fiscal year includes the longevity bonus.

³Excludes retirees with no final comp data.

Table 7 Members Retired for Service Characteristics¹

Fiscal Year Ending June 30	Average Age at Retirement	Average Years of Service Credit	Average Final Compensation	Average Current Allowance Payable
2007	60.8	26.3	\$4,437	\$2,878
2008	60.8	26.3	4,620	3,021
2009	60.8	26.4	4,798	3,164
2010	60.9	26.3	4,983	3,302
2011	61.0	26.3	5,138	3,417
2012	61.1	26.2	5,271	3,517
2013	61.1	26.1	5,385	3,609
2014	61.2	26.0	5,487	3,694
2015	61.3	25.9	5,597	3,786
2016	61.3	25.8	5,716	3,884

¹Does not include formerly disabled members.

DEFINED BENEFIT PROGRAM

Table 8 Retired Members by Type of Benefit and Option Selected

Monthly Unmodified Allowance ⁴	Total	Type of Benefit ¹			Option Selected ²								
		1 ³	2	3	Unmodified	2	3	4	5	6	7	8	9
Less than \$500	36,851	14,970	86	2,284	12,700	1,324	422	63	76	1,796	637	97	225
500–1000	43,685	21,881	575	2,911	17,152	1,878	961	110	102	3,001	1,502	118	543
1000–1500	45,008	21,804	939	3,397	15,504	2,357	1,300	193	147	3,466	2,329	113	731
1500–2000	46,529	23,204	1,578	3,398	15,739	2,324	1,041	437	175	3,899	3,449	150	966
2000–2500	44,303	23,325	2,240	3,375	15,148	2,222	938	380	197	4,559	4,159	210	1,127
2500–3000	39,186	20,978	2,070	2,716	13,042	1,764	608	279	125	4,603	3,972	204	1,167
3000–3500	33,564	18,208	1,631	2,065	10,910	1,276	392	240	67	4,157	3,451	233	1,178
3500–4000	29,977	15,356	547	1,306	8,305	914	280	169	58	3,368	2,931	175	1,009
4000–4500	28,890	14,621	163	984	7,418	774	232	99	38	3,094	2,924	222	967
4500–5000	28,562	14,269	60	846	6,869	717	212	68	29	3,274	2,773	231	1,002
5000–5500	26,946	14,293	28	643	6,623	671	176	65	20	3,300	2,792	229	1,088
5500–6000	49,763	12,653	11	494	5,752	591	153	59	17	2,956	2,366	221	1,043
6000 & Greater	289,782	37,110	12	1,164	14,609	2,085	338	141	44	10,021	6,491	1,009	3,548
Total	288,195	252,672	9,940	25,583	149,771	18,897	7,053	2,303	1,095	51,494	39,776	3,212	14,594

¹Type of Benefit: 1) Service Retirement 2) Disability Benefits 3) Survivor Benefits

²Option Selected: Option 2 - Beneficiary receives 100% of member's modified allowance.
 Option 3 - Beneficiary receives 50% of member's modified allowance.
 Option 4 - Beneficiary receives 2/3 of member's modified allowance.
 Option 5 - Survivors receive 50% of member's modified allowance, upon death of either member or beneficiary.
 Option 6 - Beneficiary receives 100% of member's modified allowance. If beneficiary pre-deceases the member, the allowance pops up to the unmodified amount.
 Option 7 - Beneficiary receives 50% of member's modified allowance. If beneficiary pre-deceases the member, the allowance pops up to the unmodified amount.
 Option 8 - Compound option that allows the member to provide for more than one beneficiary.
 Option 9 - Beneficiary receives 75% of member's modified allowance. If beneficiary pre-deceases the member, the allowance pops up to the unmodified amount.

³Does not include formerly disabled members.

⁴As of the June 30, 2004, population report the longevity bonus is included in the unmodified allowance.

DEFINED BENEFIT PROGRAM

Table 9 Principal Participating Defined Benefit and Defined Benefit Supplement Employers for Current Year and Nine Years Ago

2015–2016			
Rank	Participating Employers	*Covered Employees	Percentage of Total System
1	Los Angeles Unified School District	37,808	7.52%
2	San Diego Unified School District	8,624	1.72%
3	Long Beach Unified School District	5,732	1.14%
4	San Francisco Unified School District	5,536	1.10%
5	Fresno Unified School District	5,213	1.04%
6	Elk Grove Unified School District	4,161	0.83%
7	San Bernardino City Unified School District	3,647	0.73%
8	Corona-Norco Unified School District	3,446	0.69%
9	Oakland Unified School District	3,237	0.64%
10	Los Angeles Community College District	3,228	0.64%
11	Santa Ana Unified School District	3,222	0.64%
12	Capistrano Unified School District	3,039	0.60%
	Top 12 Total	86,893	17.29%
	All Other	415,656	82.71%
	Total Covered Employees	502,549	100.00%

*Covered employees are calculated as all employees for whom an employer reports service credit during the fiscal year. Covered employees in this table are counted more than once if they are reported by multiple employers. They are also counted if their employer reports service credit for a retired employee from prior fiscal years. Therefore, the total number of covered employees in this table is higher than the number of active members shown in Table 10 on page 122 of the Actuarial Section under the DB Program.

2006–2007			
Rank	Participating Employers	Covered Employees	Percentage of Total System
1	Los Angeles Unified School District	49,335	9.33%
2	San Diego Unified School District	10,956	2.07%
3	Long Beach Unified School District	6,663	1.26%
4	Fresno Unified School District	5,848	1.11%
5	Elk Grove Unified School District	4,435	0.84%
6	San Bernardino City Unified School District	4,263	0.81%
7	San Francisco Unified School District	4,254	0.80%
8	Sacramento City Unified School District	3,779	0.71%
9	Santa Ana Unified School District	3,630	0.69%
10	San Juan Unified School District	3,617	0.68%
	Top 10 Total	96,780	18.29%
	All Other	432,252	81.71%
	Total Covered Employees	529,032	100.00%

DEFINED BENEFIT PROGRAM

Table 10 Average Allowance Purchasing Power for Fiscal Year 2015–16

Calendar Year of Benefit Effective Date	CCPI Increases Since Benefit Effective Date	Average Allowance Increases Since Benefit Effective Date	Average Purchasing Power of Current Allowance	Average Increase Needed to Restore Full Purchasing Power	Average Annual Supplemental Increase
(1)	(2)	(3)	(4)	(5)	(6)
Prior to 1956	874.3%	317.0%	42.8%	133.6%	\$3,404
1956	855.7%	294.3%	41.3%	142.4%	\$4,347
1957	824.0%	202.3%	32.7%	205.7%	\$4,635
1958	no retiree with benefit effective date in calendar year 1958				
1959	778.6%	158.5%	29.4%	239.9%	\$11,923
1960	760.5%	130.4%	26.8%	273.5%	\$6,101
1961	748.8%	129.0%	27.0%	270.7%	\$5,010
1962	734.7%	122.2%	26.6%	275.7%	\$8,805
1963	729.2%	139.1%	28.8%	246.8%	\$4,876
1964	713.0%	99.4%	24.5%	307.7%	\$5,877
1965	692.4%	106.4%	26.1%	283.9%	\$6,137
1966	680.1%	116.1%	27.7%	261.0%	\$5,606
1967	661.1%	114.7%	28.2%	254.5%	\$7,477
1968	630.0%	108.3%	28.5%	250.5%	\$8,312
1969	595.6%	107.6%	29.8%	235.1%	\$8,664
1970	560.7%	98.0%	30.0%	233.7%	\$8,290
1971	535.5%	104.5%	32.2%	210.8%	\$7,150
1972	518.3%	98.9%	32.2%	210.9%	\$11,626
1973	486.4%	97.6%	33.7%	196.8%	\$13,832
1974	431.6%	89.4%	35.6%	180.7%	\$11,949
1975	381.5%	87.0%	38.8%	157.5%	\$11,249
1976	353.6%	82.9%	40.3%	148.0%	\$11,031
1977	320.8%	79.5%	42.7%	134.4%	\$10,656
1978	287.6%	77.9%	45.9%	117.9%	\$9,961
1979	252.7%	74.2%	49.4%	102.5%	\$9,216
1980	200.6%	71.5%	57.0%	75.3%	\$6,796
1981	177.9%	69.2%	60.9%	64.2%	\$5,927
1982	154.2%	66.7%	65.6%	52.5%	\$4,965
1983	152.7%	64.8%	65.2%	53.3%	\$5,519
1984	141.7%	62.7%	67.3%	48.6%	\$5,104
1985	131.0%	59.7%	69.1%	44.6%	\$4,841
1986	123.2%	57.4%	70.5%	41.8%	\$4,683

Explanation of source and/or calculation of data in columns 3, 4 and 5:

Column 3—Increases from all sources as a percentage of initial allowance. Obtained by dividing total current allowance by total initial allowance and adjusting to a percentage.

Column 4—Purchasing power as of June 2015. Obtained by dividing total current allowance payable by full CCPI adjusted allowance. Based on totals for all benefit types by calendar year of effective date.

Column 5—Percentage increase in current allowance payable required to restore full 100 percent purchasing power as of June 2015. Obtained by dividing the fully adjusted CCPI allowance factor (column 2) by the percentage increase to date (column 3) and adjusting to a percentage.

Example: $(874.3 + 100) / (317.0 + 100) = 2.336 \times 100 = 233.6 - 100 = 133.6$ percent.

DEFINED BENEFIT PROGRAM

Table 10 Average Allowance Purchasing Power for Fiscal Year 2015–16 (continued)

Calendar Year of Benefit Effective Date	CCPI Increases Since Benefit Effective Date	Average Allowance Increases Since Benefit Effective Date	Average Purchasing Power of Current Allowance	Average Increase Needed to Restore Full Purchasing Power	Average Annual Supplemental Increase
(1)	(2)	(3)	(4)	(5)	(6)
1987	115.3%	55.7%	72.3%	38.3%	\$4,431
1988	105.8%	53.2%	74.4%	34.3%	\$3,767
1989	95.3%	51.9%	77.8%	28.6%	\$2,585
1990	86.5%	50.0%	80.4%	24.3%	\$1,682
1991	78.7%	49.3%	83.5%	19.7%	\$567
1992	72.5%	47.0%	85.2%	17.3%	—
1993	68.2%	45.0%	86.2%	16.0%	—
1994	66.2%	43.2%	86.2%	16.1%	—
1995	62.4%	41.2%	86.9%	15.0%	—
1996	59.9%	39.0%	86.9%	15.0%	—
1997	56.5%	37.1%	87.6%	14.2%	—
1998	53.1%	35.4%	88.4%	13.1%	—
1999	49.2%	32.7%	89.0%	12.4%	—
2000	43.9%	30.8%	90.9%	10.0%	—
2001	36.7%	30.3%	95.3%	4.9%	—
2002	34.7%	28.0%	95.0%	5.2%	—
2003	31.9%	25.9%	95.4%	4.8%	—
2004	27.9%	23.5%	96.5%	3.6%	—
2005	24.4%	21.4%	97.6%	2.5%	—
2006	18.7%	19.2%	100.4%	-0.4%	—
2007	15.2%	16.9%	101.5%	-1.5%	—
2008	9.7%	14.8%	104.6%	-4.4%	—
2009	11.3%	12.6%	101.2%	-1.2%	—
2010	10.3%	10.3%	100.0%	0.0%	—
2011	7.3%	8.2%	100.9%	-0.8%	—
2012	5.3%	6.0%	100.7%	-0.7%	—
2013	3.5%	4.0%	100.5%	-0.5%	—
2014	1.3%	1.9%	100.6%	-0.6%	—
2015	0.0%	0.0%	100.0%	0.0%	—

Explanation of source and/or calculation of data in columns 3, 4 and 5:

Column 3—Increases from all sources as a percentage of initial allowance. Obtained by dividing total current allowance by total initial allowance and adjusting to a percentage.

Column 4—Purchasing power as of June 2015. Obtained by dividing total current allowance payable by full CCPI adjusted allowance. Based on totals for all benefit types by calendar year of effective date.

Column 5—Percentage increase in current allowance payable required to restore full 100 percent purchasing power as of June 2015. Obtained by dividing the fully adjusted CCPI allowance factor (column 2) by the percentage increase to date (column 3) and adjusting to a percentage.

Example: $(874.3 + 100) / (317.0 + 100) = 2.336 \times 100 = 233.6 - 100 = 133.6$ percent.

DEFINED BENEFIT PROGRAM

Table 11 Restoration of Allowance Purchasing Power Through Supplemental Benefit Payments

Retirees' Purchasing Power Protection Account Payments						
Year	Purchasing Power	Count	Total \$ Paid	Income Source		
				School Lands	Investment Earnings	General Fund
83-84	58.40%	35,654	\$21,394,183	\$n/a	\$894,183	\$20,500,000
84-85	62.40%	57,189	54,306,976	10,119,124	2,426,456	41,761,396
85-86	65.50%	56,811	85,675,243	7,770,757	3,994,458	73,910,028
86-87	68.20%	57,343	122,275,289	4,167,970	5,511,448	112,595,871
87-88	68.20%	59,092	128,231,357	6,083,374	5,317,456	116,830,527
88-89	68.20%	58,037	143,061,285	4,479,266	5,956,019	132,626,000
89-90	68.20%	55,971	158,274,048	2,751,075	n/a	155,522,973 ¹

Supplemental Benefit Payments						
Year	Purchasing Power	Count	Total \$ Paid	Income Source		
				School Lands	Teachers' Retirement Fund	SBMA
90-91	68.20%	52,199	\$168,922,827	\$2,964,211	\$111,103,596	\$54,855,020
91-92	68.20%	48,650	178,057,887	2,913,338	56,985,521	118,159,028
92-93	68.20%	54,029	184,551,442	6,658,800	—	177,892,642
93-94	68.20%	49,113	178,886,980	4,225,808	—	174,661,172
94-95	68.20%	46,459	168,359,918	4,973,687	—	163,386,231
95-96	68.20%	41,703	168,517,183	1,171,779	—	167,345,404
96-97	68.20%	38,939	159,786,521	1,870,825	—	157,915,696
97-98	68.2%/75.0%	44,887	179,308,000	2,586,920	—	176,721,080
98-99	75.00%	42,624	197,860,324	4,168,363	—	193,691,961
99-00	75.00%	41,048	190,478,334	2,704,171	—	187,774,163
00-01	75.00%	44,699	189,388,495	4,023,007	—	185,365,488
01-02 ³	80.00%	60,428	256,976,205	7,967,992	—	249,008,212
02-03	80.00%	58,591	233,814,578	3,543,362	—	230,271,216
03-04	80.00%	55,779	223,501,415	2,922,844	—	220,578,571
04-05	80.00%	57,079	221,271,471	3,318,095	—	217,953,375
05-06	80.00%	54,360	215,257,813	4,301,959	—	210,955,854
06-07	80.00%	56,002	230,336,755	6,205,860	—	224,130,894
07-08	80.00%	53,122	229,860,350	6,522,856	—	223,337,493
08-09	85.00% ⁴	89,142	348,105,380	7,036,201	—	341,069,179
09-10	85.00%	63,949	272,579,523	6,334,670	—	266,244,852
10-11	85.00%	53,870	237,572,962	1,929,606	—	235,643,356
11-12	85.00%	57,337	234,612,294	5,227,046	—	229,385,248
12-13	85.00%	54,847	221,451,056	10,277,064	—	211,173,992
13-14	85.00%	50,331	202,231,779	10,297,864	—	191,933,914
14-15	85.00%	52,474	192,831,168	4,386,099	—	188,445,068
15-16	85.00%	47,764	172,292,149	5,256,886	—	167,035,262

¹The 89-90 appropriation was from the Teachers' Retirement Fund. This amount plus regular interest was repaid from General Fund contributions to the SBMA.

²Percentage changed to 75% effective January 1, 1998 and payable April 1, 1998 (Chapter 939, Statutes of 1997).

³Percentage changed to 80% effective January 1, 2002 and payable October 1, 2001 (Chapter 840, Statutes of 2001).

⁴Percentage changed to 85% effective September 30, 2008 and payable October 1, 2008 (Chapter 751, Statutes of 2008).

DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 1 Members Retired for Service During Fiscal Year 2015–16¹, Classified by Age and Option Elected

Age	Total	Regular Annuity				Period Certain							
		Single Life with Cash	100% Joint and Survivor	75% Joint and Survivor	50% Joint and Survivor	10 Years	9 Years	8 Years	7 Years	6 Years	5 Years	4 Years	3 Years
Under 55	14	6	1	—	1	2	—	—	—	—	2	—	2
55	289	90	33	6	10	50	4	2	12	5	35	9	33
56	155	44	21	4	7	26	9	4	4	3	15	6	12
57	174	44	18	2	10	36	2	7	6	4	20	4	21
58	267	58	37	10	9	45	9	8	11	6	37	13	24
59	346	73	47	10	19	69	6	2	8	18	53	5	36
60	585	121	76	12	40	126	15	7	13	22	83	17	53
61	923	189	141	23	58	200	28	29	17	22	112	43	61
62	836	191	128	23	48	156	13	13	23	23	107	27	84
63	747	201	97	21	46	140	9	8	33	19	74	21	78
64	548	143	70	17	43	105	7	6	11	30	73	10	33
65	498	170	51	17	37	92	6	—	8	4	62	15	36
66	385	112	56	16	19	68	3	2	5	10	48	16	30
67	269	90	39	5	10	53	1	2	5	3	24	9	28
68	205	54	29	7	10	42	6	1	3	4	24	4	21
69	175	54	20	6	7	36	4	—	3	4	20	5	16
70	128	36	11	2	11	31	—	—	1	2	15	5	14
71	68	22	14	1	3	10	—	—	—	1	9	2	6
72	43	12	5	—	3	6	2	2	2	1	4	—	6
73	38	13	2	—	4	6	1	—	—	4	3	2	3
74	23	6	3	1	—	6	—	—	1	—	2	—	4
75 and over	78	22	7	2	5	13	1	1	—	2	11	4	10
Age Unknown	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6,794	1,751	906	185	400	1,318	126	94	166	187	833	217	611

¹Does not include formerly disabled members.

DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 2 Characteristics of All Members Retired for Service and Receiving an Annuity

Fiscal Year Ending June 30	Count	Average Monthly Retirement Annuity	Average Accumulated Credits ¹	Average Age at Retirement
2007	13,299	\$158	\$6,379	61.4
2008	17,517	176	7,636	61.4
2009	22,474	203	9,019	61.6
2010	29,261	227	10,651	61.7
2011	34,917	241	12,004	61.9
2012	40,493	250	13,133	62.0
2013	45,110	254	14,088	62.1
2014	48,745	255	14,848	62.2
2015	52,335	259	15,659	62.3
2016	56,238	269	16,590	62.4

¹Neither service credit nor final compensation are factors in determining a benefit from the Defined Benefit Supplement Program and, therefore, are not included in this table.

Table 3 Characteristics of All Members Retired for Disability and Receiving an Annuity

Fiscal Year Ending June 30	Count	Average Monthly Disability Annuity	Average Accumulated Credits ¹	Average Age at Retirement
2007	125	\$121	\$4,367	55.6
2008	175	129	5,332	55.2
2009	236	163	6,308	54.8
2010	336	201	7,673	55.6
2011	575	239	9,436	55.4
2012	747	239	10,404	55.5
2013	977	244	11,495	55.6
2014	1,123	239	12,407	55.8
2015	1,263	245	13,237	55.6
2016	1,340	239	13,953	55.5

¹Neither service credit nor final compensation are factors in determining a benefit from the Defined Benefit Supplement Program and, therefore, are not included in this table.

DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 4 Retired Members by Type of Benefit and Option Selected
(as of June 30, 2016)

Type of Benefit	Monthly Unmodified Allowance					Total
	Less than \$250	\$250 - 500	\$500 - 750	\$750 - 1,000	\$1,000 & Greater	
Retirement	34,592	14,768	4,552	1,425	901	56,238
Disability	930	294	83	18	15	1,340
Survivors	873	279	94	32	24	1,302
Total	36,395	15,341	4,729	1,475	940	58,880
Type of Payment						
Regular Annuity						
Single Life Without Cash	1,077	1	—	—	—	1,078
Single Life With Cash	16,483	2,160	218	46	18	18,925
100% J&S	8,998	1,549	194	38	26	10,805
75% J&S	1,276	257	38	5	4	1,580
50% J&S	2,931	536	76	18	7	3,568
Period Certain Annuity						
10 Year	4,522	6,229	912	237	134	12,034
9 Year	221	531	89	18	17	876
8 Year	92	396	72	20	14	594
7 Year	97	618	201	42	28	986
6 Year	84	524	275	45	24	952
5 Year	389	2,003	1,737	377	222	4,728
4 Year	61	209	390	121	62	843
3 Year	164	328	527	508	384	1,911
Total	36,395	15,341	4,729	1,475	940	58,880

CASH BALANCE BENEFIT PROGRAM

Table 1 Participants Retired for Service During the 2015–16 Fiscal Year¹ Classified by Age and Type of Annuity Selected

Age	Total	Regular Annuity			Period Certain Annuity								
		Participant Only ²	100% Beneficiary ³	75% Beneficiary ⁴	50% Beneficiary ⁵	10 Years	9 Years	8 Years	7 Years	6 Years	5 Years	4 Years	3 Years
Under 55	0	—											
55	0	—											
56	0	—											
57	0	—											
58	0	—											
59	2	1	1										
60	1	—											1
61	2	1				1							
62	5	2	1					1					1
63	5	2										1	2
64	4	1	1			2							
65	2	2											
66	4	—			1	1							2
67	3	1				1		1					
68	4	2	1						1				
69	4	3											1
70	5	2	1										2
71	2	—				1				1			
72	2	1											1
73	0	—											
74	3	1				2							
75 & Over	11	3	3							2			3
Total	59	22	8	—	1	8	—	—	2	1	3	1	13

¹Does not include formerly disabled members.

²Formerly known as the Single Life Annuity with Cash Refund.

³Formerly known as the 100% Joint and Survivor Annuity.

⁴New option available for selection effective January 1, 2007.

⁵Formerly known as the 50% Joint and Survivor Annuity.

CASH BALANCE BENEFIT PROGRAM

Table 2 Characteristics of All Members Retired for Service and Receiving an Annuity

Fiscal Year Ending June 30	Average Age At Retirement	Average Annuitant Reserve	Average Monthly Annuity
2007	66.9	\$10,892	183
2008	67.2	12,400	206
2009	67.3	13,054	201
2010	68.1	12,701	204
2011	67.8	13,388	215
2012	67.7	15,945	233
2013	67.1	18,442	263
2014	67.5	20,365	281
2015	67.6	20,815	251
2016	67.9	21,700	270

Table 3 All Participants Receiving an Annuity by Type of Benefit and Type of Annuity Selected

Type of Benefit	Monthly Unmodified Allowance					Total
	Less than \$250	\$250–500	\$500–750	\$750–1,000	\$1,000 & Greater	
Retirement	159	44	19	8	8	238
Disability	0	1	0	0	1	2
Survivors	5	4	0	2	1	12
Total	164	49	19	10	10	252
Type of Payment						
Regular Annuity						
Single Life With Cash	2	—	—	—	—	2
Single Life Without Cash	2	—	—	—	—	2
Participant Only	73	16	6	1	1	97
100% Beneficiary Annuity	27	2	—	1	—	30
75% Beneficiary Annuity	2	—	—	—	—	2
50% Beneficiary Annuity	5	2	—	—	—	7
Period-Certain Annuity						
10 Year	29	9	3	—	—	41
9 Year	1	1	—	—	—	2
8 Year	1	1	—	—	—	2
7 Year	1	3	1	—	—	5
6 Year	—	2	1	—	1	4
5 Year	6	4	4	4	2	20
4 Year	3	—	1	2	1	7
3 Year	12	9	3	2	5	31
Total	164	49	19	10	10	252

CASH BALANCE BENEFIT PROGRAM

Table 4 Principal Participating Employers for the Cash Balance Benefit Program, Current Year and Nine Years Ago

2015–2016			
Rank	Participating Employers	*Covered Employees	Percentage of Total System
1	Los Angeles Community College District	5,367	13.79%
2	Contra Costa Community College District	2,601	6.68%
3	Peralta Community College District	2,395	6.16%
4	West Contra Costa Unified School District	2,112	5.43%
5	City College of San Francisco	1,988	5.11%
6	San Jose/Evergreen Community College District	1,914	4.92%
7	Foothill De Anza Community College District	1,752	4.50%
8	Chabot-Las Positas Community College District	1,736	4.46%
9	Glendale Community College District	1,577	4.05%
10	Santa Rosa Junior College	1,547	3.98%
	Top 10 Total	22,989	59.08%
	All Other	15,921	40.92%
	Total Covered Employees	38,910	100.00%

*Covered employees are calculated as all employees for whom an employer reports service credit during the fiscal year. Covered employees in this table are counted more than once if they are reported by multiple employers. They are also counted if their employer reports service credit for a retired employee from prior fiscal years.

2006–2007			
Rank	Participating Employers	Covered Employees	Percentage of Total System
1	Los Angeles Community College District	2,763	10.44%
2	Contra Costa Community College District	1,958	7.40%
3	West Contra Costa Unified School District	1,838	6.95%
4	Peralta Community College District	1,764	6.67%
5	City College of San Francisco	1,740	6.58%
6	Chabot-Las Positas Community College District	1,558	5.89%
7	San Jose/Evergreen Community College District	1,375	5.20%
8	Santa Rosa Junior College	1,197	4.52%
9	Glendale Community College District	1,091	4.12%
10	Ventura Community College District	1,034	3.91%
	Top 10 Total	16,318	61.68%
	All Other	10,136	38.32%
	Total Covered Employees	26,454	100.00%

PROGRAMS ADMINISTERED OR OVERSEEN BY THE RETIREMENT SYSTEM (PENSION2)

Table 1A Changes in Fiduciary Net Position for Pension2 IRC 403(b) Plan
(Dollars in Thousands)²

Fiscal Year Ending June 30	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions										
Participant Contributions	\$96,724	\$72,343	\$66,545	\$57,273	\$53,111	\$47,181	\$53,536	\$42,966	\$26,289	\$23,338
Net Investment Income	9,548	19,363	66,002	43,151	6,132	43,782	17,175	(28,479)	(12,569)	22,793
Other Income	120	91	179	269	188	225	—	—	17	16
Total Additions	\$106,392	\$91,797	\$132,726	\$100,693	\$59,431	\$91,188	\$70,711	\$14,487	\$13,737	\$46,147
Deductions										
Distributions and Withdrawals ¹	\$32,936	\$32,648	\$22,173	\$25,727	\$19,978	\$16,690	\$11,892	\$8,644	\$9,570	\$8,451
Benefit Payments to Participant	—	—	—	—	—	—	—	—	—	—
Refunds of Participant Contributions	4,965	7,753	2,523	—	—	—	—	—	—	—
Administrative Expenses	1,583	1,405	1,146	754	606	538	374	278	526	782
Total Deductions	\$39,484	\$41,806	\$25,842	\$26,481	\$20,584	\$17,228	\$12,266	\$8,922	\$10,096	\$9,233
Change in Fiduciary Net Position	\$66,908	\$49,991	\$106,884	\$74,212	\$38,847	\$73,960	\$58,445	\$5,565	\$3,641	\$36,914

¹Distributions and withdrawals reflect the benefit payments to participant and refunds of participant contributions combined for fiscal year 2006–07 through 2012–13.

²Certain reclassifications have been made to the totals for fiscal years 2007/2008 and 2008/2009.

Table 1B Changes in Fiduciary Net Position for Pension2 IRC 457(b) Plan
(Dollars in Thousands)

Fiscal Year Ending June 30	2016	2015	2014	2013	2012	2011	2010	2009
Additions								
Participant Contributions	\$4,975	\$4,096	\$3,230	\$2,591	\$6,877	\$1,289	\$674	\$37
Net Investment Income	426	547	1,934	1,081	219	155	60	1
Other Income	4	2	51	37	37	42	—	—
Total Additions	\$5,405	\$4,645	\$5,215	\$3,709	\$7,133	\$1,486	\$734	\$38
Deductions								
Distributions and Withdrawals ¹	\$905	\$807	\$358	\$530	\$19	\$82	\$—	\$—
Benefit Payments to Participant	—	—	—	—	—	—	—	—
Refunds of Participant Contributions	266	—	45	—	—	—	—	—
Administrative Expenses	56	47	36	22	8	2	—	—
Total Deductions	\$1,227	\$854	\$439	\$552	\$27	\$84	\$—	\$—
Change in Fiduciary Net Position	\$4,178	\$3,791	\$4,776	\$3,157	\$7,106	\$1,402	\$734	\$38

The Pension2 IRC 457(b) Plan began in fiscal year 2008-09.

¹Distributions and withdrawals reflects the benefit payments to participant and refunds of participant contributions combined for fiscal year 2006–07 through 2012–13.

PROGRAMS ADMINISTERED OR OVERSEEN BY THE RETIREMENT SYSTEM (PENSION2)

Table 2 Largest Participating Employers for CalSTRS Pension2, Current Year and Nine Years Ago

2016			
Rank	Participating Employers	Covered Employees	Percentage
1	Los Angeles Unified School District	2,658	24.17%
2	San Diego City Unified School District	378	3.44
3	Los Angeles Community College District	348	3.16
4	San Francisco Unified School District	234	2.13
5	Elk Grove Unified School District	186	1.69
6	City College of San Francisco	185	1.68
7	Long Beach Unified School District	179	1.63
8	Sacramento City Unified School District	171	1.55
9	Fremont Unified School District	214	1.95
10	San Juan Unified School District	146	1.33
	Top 10 Total	4,699	42.72
	All Other	6,300	57.28
	Total (844 Employers)*	10,999	100.00%

2007			
Rank	Participating Employers	Covered Employees	Percentage
1	Los Angeles Unified School District	772	19.94%
2	San Diego City Unified School District	88	2.30
3	Long Beach Unified School District	69	1.80
4	San Juan Unified School District	65	1.70
5	Mt. Diablo Unified School District	58	1.50
6	San Francisco Unified School District	57	1.50
7	Sacramento City Unified School District	56	1.40
8	Los Angeles County Office of Education	42	1.10
9	Capistrano Unified School District	39	1.00
9	Elk Grove Unified School District	39	1.00
9	Fresno Unified School District	39	1.00
10	City College of San Francisco	33	0.80
	Top 10 Total	1,357	35.04
	All Other	2,515	64.96
	Total (615 Employers)*	3,872	100.00%

*If employers offer a 403(b) or 457(b), they are counted twice.

MEDICARE PREMIUM PAYMENT PROGRAM

Table 1 Changes in Fiduciary Net Position
(Dollars in Thousands)

Fiscal Year Ending June 30	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions										
Employer Contributions	\$29,982	30,527	\$33,395	\$35,022	\$34,614	\$36,145	\$31,749	\$29,962	\$33,239	\$32,257
Net Investment Income	9	—	10	6	8	10	33	106	205	240
Total Additions	\$29,991	\$30,527	\$33,405	\$35,028	\$34,622	\$36,155	\$31,782	\$30,068	\$33,444	\$32,497
Deductions										
Premiums Paid	\$29,661	\$30,615	\$32,632	\$34,702	\$34,412	\$35,785	\$35,421	\$29,415	\$32,689	\$31,270
Administrative Expenses	380	360	327	340	370	345	309	316	334	190
Total Deductions	\$30,041	\$30,975	\$32,959	\$35,042	\$34,782	\$36,130	\$35,730	\$29,731	\$33,023	\$31,460
Change in Fiduciary Net Position	(\$50)	(\$448)	\$446	(\$14)	(\$160)	\$25	(\$3,948)	\$337	\$421	\$1,037

Table 2 Benefit and Refund Deductions from Changes in Fiduciary Net Position by Type
(Dollars in Thousands)

Fiscal Year Ending June 30	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Type of Benefit										
Age & Service Benefits										
Retired Members	\$29,661	\$30,615	\$32,632	\$34,702	\$34,412	\$35,785	\$35,421	\$29,415	\$32,689	\$31,270
Total Benefits	\$29,661	\$30,615	\$32,632	\$34,702	\$34,412	\$35,785	\$35,421	\$29,415	\$32,689	\$31,270

MEDICARE PREMIUM PAYMENT PROGRAM

Table 3 Retired Members Enrolled in Medicare Premium Payment Program During Fiscal Year 2015-16 Classified by Age at Retirement

Age	Total
<55	3
55	3
56	8
57	17
58	17
59	30
60	29
61	48
62	8
63	1
64	1
65	—
66	—
67	—
68	—
69	—
70	1
71	—
72	—
73	—
74	—
>=75	—
Grand Total	166

Table 4 Characteristics of All Retired Members Enrolled in Medicare Premium Payment Program

Fiscal Year Ending June 30	Average Age at Retirement	Average Monthly Medicare Premium
2007	60.4	\$394
2008	60.4	414
2009	60.3	464
2010	60.3	438
2011	60.3	431
2012	60.3	417
2013	60.3	413
2014	60.3	400
2015	60.2	383
2016	60.2	374

TEACHERS' DEFERRED COMPENSATION FUND

Table 1 Changes in Fiduciary Net Position for Teachers' Deferred Compensation Fund
(Dollars in Thousands)

Fiscal Year Ending June 30	2016	2015	2014	2013	2012 ⁽⁴⁾	2011 ⁽⁴⁾	2010	2009	2008
Additions									
Net Investment Income	\$6	\$1	\$4	\$3	\$3	\$4	\$5	\$16	\$26
Other Income	1,339	1,072	1,241	563	767	497	539	386	604
Total Additions	\$1,345	\$1,073	\$1,245	\$566	\$770	\$501	\$544	\$402	\$630
Deductions									
Administrative Expenses	1,433	996	874	600	698	569	414	532	404
Other Expenses	14	14	15	30	—	—	—	—	—
Total Deductions	\$1,447	\$1,010	\$889	\$630	\$698	\$569	\$414	\$532	\$404
Transfers									
Transfers In	\$—	—	—	—	—	—	—	—	\$157
Transfers Out	—	—	—	—	—	—	—	—	\$(245)
Total Transfers	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$(88)
Change in Fiduciary Net Position	\$(102)	\$63	\$356	\$(64)	\$72	\$(68)	\$130	\$(130)	\$138

The Teachers' Deferred Compensation Fund began in fiscal year 2007–08.

⁴Certain reclassifications have been made to the additions for fiscal years 2010–11 and 2011–12.



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