## California State Teachers' Retirement System

(A Component Unit of the State of California)

Independent Auditor's Report, Basic Financial Statements, Required Supplementary Information, and Other Supplemental Information

For the Fiscal Year Ended June 30, 2015

#### California State Teachers' Retirement System (A Component Unit of the State of California) For the Fiscal Year Ended June 30, 2015

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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, 2015, 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.

#### **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, 2015, 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, 2014, the System's independent actuaries determined that, at June 30, 2015, the value of the State Teachers Retirement Plan (STRP) total pension liability exceeded the STRP fiduciary net position by \$67.3 billion. Our opinion is not modified with respect to this matter.

#### Fair Value of Investments

As described in Note 5, the financial statements include investments valued at approximately \$53.1 billion as of June 30, 2015, 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

Report on Summarized Comparative Information

We have previously audited the System's 2014 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 1, 2014. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2014 is consistent, in all material respects, with the audited financial statements from which it has been derived.

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis on pages 4-16 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 51 – 56 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.

#### Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The Schedule of Administrative Expenses, Schedule of Investment Expenses and Schedule of Consultant and Professional Services Expenses are presented for purposes of additional analysis and are not a required part of the basic financial statements.

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.

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 8, 2015 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.

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Crowe Horwath LLP

October 8, 2015 Sacramento, California

Management's Discussion and Analysis of the California State Teachers' Retirement System's (CalSTRS) financial performance provides an overview of activities for the fiscal year ended June 30, 2015. 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.

#### **SUSTAINABILITY**

At the center of CalSTRS Core Values is sustainability, an integral component of the framework that governs the business culture. In fact, sustainability and risk management were identified as key priorities this year and extending into the next several years.

From member services to the investment strategy, CalSTRS sustainable practices are designed to create long-term value, promote stewardship of natural resources and sustain the financial integrity of the system for the benefit of its members and community. CalSTRS believes establishing a corporate environment with sustainable values is a blueprint for better performance.

To demonstrate CalSTRS commitment to sustainable business practices, CalSTRS unveiled a new, dedicated Sustainability section on CalSTRS.com. In addition, we completed our inaugural 2013-14 Sustainability Report, The Next 100 Years (available on CalSTRS.com) in May 2015.

By implementing the full-funding plan enacted through Assembly Bill 1469, adopting clarifying regulations on creditable compensation, promoting sound governance policies and practices through proxy voting, and increasing our portfolio of green investments, we solidified our commitment to sustainability through our business efforts.

#### **CORPORATE GOVERNANCE**

The Teachers' Retirement Board understands that the CalSTRS portfolio is the foundation of our members' retirement security and that good corporate governance is essential to the sustainability of the portfolio. All activities of the Corporate Governance program are guided by the CalSTRS Corporate Governance Principles. In February of 2015 the CalSTRS Investment Committee adopted updated corporate governance principles and set the stage for an active proxy season.

#### **GREEN INVESTMENTS**

CalSTRS continues to expand its environmental integration efforts and is widely considered to be a leader among institutional investors integrating environmental considerations. CalSTRS has increased its portfolio of green investments through additional commitments in its Inflation Sensitive asset group and through increased purchases of green bonds in the Fixed Income portfolio. The growth in green bonds aligns with a commitment that CaISTRS Chief Executive Officer Jack Ehnes made during his participation in the 2014 Climate Summit where he announced that CalSTRS will more than double the fund's clean energy and technology investments of \$1.4 billion to \$3.7 billion over the next five years. The Green Initiative Task Force 2014 Annual Report (available on CalSTRS.com) highlights CalSTRS efforts in integrating environmental considerations.

#### **ASSEMBLY BILL 1469**

Under California law, the Defined Benefit (DB) Program of the State Teachers' Retirement Plan (STRP) receives contributions from members and employers set as a percentage of members' creditable earnings, in addition to contributions from the state's General Fund and other sources. CalSTRS investment earnings finance the cost of administering the DB Program and partially offset the amount of contributions required to fund

benefits. Unlike most other pension plans in California, the Teachers' Retirement Board does not have broad authority to raise contribution rates<sup>1</sup>. Because contribution rates are set in statute, the authority to adjust them rests with the Legislature and the Governor.

On June 24, 2014, Governor Brown signed Assembly Bill (AB) 1469 (Bonta) into law. AB 1469 addresses the CalSTRS Defined Benefit Program's unfunded liability by incorporating a detailed funding plan to eliminate the unfunded liability by the year 2046.

Under the funding plan, Defined Benefit Program contribution rate increases are incrementally phased in over three years for members and the state and over seven years for employers. During fiscal year 2014 -15, CalSTRS implemented the provisions of AB 1469 through changes in technology systems, actuarial valuation assumptions and communications with members, employers and other stakeholders. Please refer to Note 1 for more information on the new contribution rates.

#### CREDITABLE COMPENSATION REGULATIONS

The Teachers' Retirement Board adopted regulations to clarify provisions of the Education Code as they relate to classes of employees. creditable compensation and the appropriate crediting of contributions to either the Defined Benefit Program or the Defined Benefit Supplement (DBS) Program effective January 1, 2015. The regulations provide employers and CalSTRS staff comprehensive guidelines to ensure all members are being credited properly, consistently and fairly for their service. The regulations also help CalSTRS identify, evaluate and determine instances of pension spiking - the boosting of pay at the end of a career to increase a pension benefit. These regulations are expected to reduce employer and state contribution costs. CalSTRS consulting actuary estimated maximum savings of \$56.0 million annually for employers and \$22.0 million annually for the state.

#### **BUSINESS TRANSFORMATION**

CalSTRS continues to make progress with its longterm BusinessRenew Program created to lead the transformation of business processes and systems 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. In February 2015, CalSTRS announced it had awarded the Pension Solution contract to CGI Group, Inc. to provide the software solution and technology and hosting platform. The contract was signed on June 30, 2015.

### GOVERNMENTAL ACCOUNTING STANDARDS BOARD

CalSTRS implemented a multi-layered outreach effort to further bolster employer education about the effects of Governmental Accounting Standards Board statements (GASB) 67 and 68. CalSTRS efforts included direct mailings, webinars, employer newsletters, and updated FAQs at CalSTRS.com.

In February 2015, GASB released Statement No. 72, Fair Value Measurement and Application, to address how fair value should be measured and applied by governmental entities. Under GASB 72, investments will generally be measured at fair value and reporting entities will have to expand the related scope of disclosures for the investment portfolio. In June 2015, GASB released Statement Nos. 74 and 75, which relate to accounting and financial reporting for postemployment benefits, and Statement No. 73, which amends GASB Statement Nos. 67 and 68 and establishes requirements for pensions and pension plans that are not administered through a trust. Additional information regarding new GASB statements can be found in Note 8.

<sup>&</sup>lt;sup>1</sup> The board has limited authority to adjust contribution rates for employers and the state from FY 2021-22 through FY 2045-2046 and FY 2017-2018 through FY 2045-2046, respectively. See Note 1 for more information.

#### **FINANCIAL HIGHLIGHTS**

The tables that follow present comparative information and changes to plan net position for State Teachers' Retirement Plan for fiscal years 2014-15 and 2013-14.

NET POSITION			
(Dollars in Thousands)			
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	<u>2015</u>	<u>2014</u>	Percent Change
Investments <sup>1</sup>	\$ 211,960,086	\$ 214,193,243	(1.0%)
Cash	359,992	287,965	25.0%
Investment receivables	3,461,566	2,637,163	31.3%
Member, employer and other receivables	545,570	572,831	(4.8%)
Capital and other assets	226,167	229,080	(1.3%)
Deferred outflows of resources	16,398	-	100.0%
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	\$ 216,569,779	\$ 217,920,282	(0.6%)
LIABILITIES AND DEFERRED INFLOWS OF RESOURCES			
Benefits in process of payment	1,178,524	1,121,034	5.1%
Investment payables	3,725,966	2,908,250	28.1%
Loan payable	1,447,405	944,269	53.3%
Net pension and OPEB obligation	213,427	57,800	269.3%
Other	111,854	103,615	8.0%
Securities lending obligation	18,043,187	22,311,298	(19.1%)
Deferred inflows of resources	27,080	=	100.0%
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	\$ 24,747,443	\$ 27,446,266	(9.8%)
NET POSITION	£ 404 800 306	£ 100 174 016	0.7%
NET POSITION	\$ 191,822,336	\$ 190,474,016	0.7%
Includes securities lending collateral of \$18 billion and \$22.3 billion for 2015 and 201	4, respectively.		

CHANGES IN NET POSITION (Dollars in Thousands)			
ADDITIONS	2015	2014	Percent Change
Member contributions	\$ 2,509,712	\$ 2.263.613	10.9%
Employer contributions	2,677,815	2,272,166	17.9%
State of California	1,425,796	1,383,468	3.1%
Net investment income	7,611,644	30,401,903	(75.0%)
Other	3,935	2,055	91.5%
TOTAL ADDITIONS	\$ 14,228,902	\$ 36,323,205	(60.8%)
DEDUCTIONS			
Benefit payments	12,476,902	11,927,556	4.6%
Refunds of contributions	87,694	107,600	(18.5%)
Administrative expenses	145,239	154,155	(5.8%)
Other	8,840	8,787	0.6%
TOTAL DEDUCTIONS	\$ 12,718,675	\$ 12,198,098	4.3%
NET POSITION INCREASE	1,510,227	24,125,107	(93.7%)
BEGINNING NET POSITION - as previously reported	190,474,016	166,348,909	14.5%
Adjustment for application of GASB 68 (Note 2)	(161,907)	-	100.0%
BEGINNING NET POSITION - as adjusted	190,312,109	166,348,909	14.4%
ENDING NET POSITION	\$ 191,822,336	\$ 190,474,016	0.7%

- Total net position for the STRP increased by \$1.3 billion or 0.7 percent over results at June 30, 2014, to \$191.8 billion.
- CalSTRS investments, excluding securities lending collateral, totaled \$193.9 billion at June 30, 2015, an increase of 1.1 percent from \$191.9 billion as of prior fiscal year-end. The increase in investments was primarily due to modest investment returns covering the difference between contributions and benefit payments, both of which increased over the prior year.
- Net pension and OPEB obligation increased by \$155.6 million or 269.3 percent. This increase is primarily a result of CalSTRS implementation of GASB 68 where CalSTRS recognized its proportionate share of the State's net pension liability amounting to \$145.3 million. In addition to the increase in net pension and OPEB obligation, both deferred outflows and inflows of resources increased by \$16.4 million and 27.1 million, respectively, as a result of this implementation.
- As of June 30, 2015, the net pension liability for the State Teachers' Retirement Plan increased by \$8.9 billion to \$67.3 billion due to lower investment returns during fiscal year ended June 30, 2015 as compared to last year.

The June 30, 2014 funding valuation shows a \$72.7 billion unfunded actuarial obligation of the DB Program compared to \$73.7 billion unfunded actuarial obligation as of June 30, 2013. The improved position of the DB Program is due to strong investment returns during fiscal year ended June 30, 2014.

Although the net pension liability and the unfunded actuarial obligation are both determined using the June 30, 2014 valuation, the net pension liability is adjusted to update the results to the plan's fiscal year end which is June 30,

- 2015. The difference between net pension liability and unfunded actuarial obligation is explained in detail in the Actuarial Valuation section of the report.
- As of June 30, 2015, the STRP fiduciary net position as a percentage of the total pension liability was approximately 74 percent compared to 77 percent as of June 30, 2014. 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 earnings as compared to the assumed rate of return.
- Total contributions for the current fiscal year increased by \$694.0 million (11.7 percent) as a result of increases in employer contributions by \$405.6 million (17.9 percent), member contributions by \$246.1 million (10.9 percent) and state contributions by \$42.3 million (3.1 percent). The increases are due to increases in both creditable compensation and contribution rates implemented through AB 1469.
- Net investment income for the STRP decreased by \$22.8 billion or 75.0 percent to \$7.6 billion due to modest investment returns this year as compared to the robust returns of the prior year.
- Benefit payments for the STRP increased by \$549.3 million or 4.6 percent to \$12.5 billion, reflecting an increase in the number of retirees and beneficiaries. This benefit payment is typically the single retirement benefit CalSTRS members receive as they do not participate in Social Security.

 Refunds of contributions decreased by 18.5 percent from \$107.6 million to \$87.7 million. Refund requests and amounts fluctuate year to year due to changing demographic trends (for example, mortality rates) and economic conditions (for example, employment rates).

In July 2014, Moody's Investors Service upgraded the issuer rating of CalSTRS from Aa3 to Aa2 and affirmed the short-term issuer rating at P-1. Throughout fiscal year 2014-15, CalSTRS maintained its Standard and Poor's long-term issuer credit rating of AA- and short-term rating of A-1+. In May 2015, Standard and Poor's upgraded the long-term outlook to positive from stable.

#### **INVESTMENTS**

CalSTRS primary goal is to maintain a financially sound retirement system. 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 2014-15 goals and targets for the investments were to:

- Achieve an absolute return of 7.5 percent and/or outperform the benchmark
- 2. Outperform the Total Fund Policy benchmark and add additional 60 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

- Expand internal management of public assets
- 6. Provide stable cash flows
- 7. Reinforce CalSTRS reputation as a global leader in corporate governance

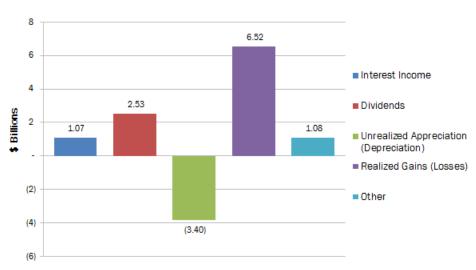
CalSTRS uses a time-weighted return methodology to calculate returns for portfolio performance purposes. For fiscal year 2014-15, CalSTRS earned an approximate 4.8 percent one-year return calculated on a gross of fees basis. The resulting one-year performance is below the actuarially assumed 7.5 percent rate of return. CalSTRS' returns reflect the following longer-term performance:

- 12.3 percent over three years
- 12.1 percent over five years
- 7.0 percent over 10 years
- 7.8 percent over 20 years
- 8.4 percent over 25 years

The money-weighted return net of all investment expenses based on financial statement values reflects an approximate 4.1 percent one-year return as of June 30, 2015. 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.

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.

#### Sources of Investment Income



Investment Income (Gross of Expenses)

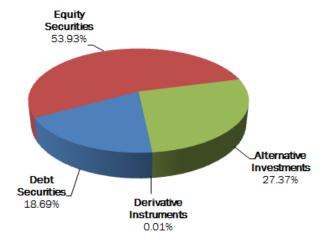
CalSTRS investments earn income in the form of interest and dividends from holding fixed income securities and various types of equity interests in public companies, limited partnerships, and coinvestments. Unrealized appreciation and depreciation is generated by period over period

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 income from term loans and securities litigation.

#### **ASSET ALLOCATION AND PERFORMANCE**

The graph below presents total fund investments, excluding securities lending collateral and obligations, based on asset classification within the Statement of Fiduciary Net Position as of June 30, 2015.

#### Statement of Fiduciary Net Position Investment Distribution



The table below 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, 2015:

Portfolio Allocation Versus Financial Statement Classification				
Portfolio Alloca	ation	Financial Statement (	Classification	
	Asset		% of Asset	
Asset Class	Allocation	Investments	Class	
Global Equity	57.4%	Equity Securities	94.4%	
		Debt Securities	1.1%	
		Alternative Investments	4.2%	
		Other*	0.3%	
Fixed Income	15.7%	Debt Securities	101.2%	
		Equity Securities	0.1%	
		Other*	-1.3%	
Real Estate	12.7%	Alternative Investments	99.1%	
		Debt Securities	0.8%	
		Equity Securities	0.1%	
Private Equity	10.1%	Alternative Investments	98.9%	
		Debt Securities	0.4%	
		Equity Securities	0.2%	
		Other*	0.5%	
Liquidity	1.8%	Debt Securities	100.0%	
Absolute Return	1.5%	Alternative Investments	61.6%	
		Debt Securities	8.2%	
		Equity Securities	26.6%	
		Derivative Instruments	0.2%	
		Other*	3.4%	
Inflation Sensitive	0.8%	Alternative Investments	64.0%	
		Debt Securities	35.9%	
		Other*	0.1%	
Total Fund	100.0%			

<sup>\*</sup> Other 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 57.4 percent of the total investments, the Global Equity Portfolio is comprised of U.S., Non-U.S. Developed Countries and Emerging Markets equity securities. Corporate governance funds are included within the Global Equity Portfolio and are classified as Alternative Investments on the financial statements as reflected in the table above. The Global Equity Policy sets allocation targets of 67 percent and 33 percent to U.S. securities and Non-U.S. securities, respectively. Approximately 61 percent of the Global Equity assets are managed externally, while CalSTRS investment staff managed the remaining 39 percent.

As of June 30, 2015, the STRP held \$104.6 billion in equity securities across all portfolios, an increase of 2.4 percent over last year primarily due to the performance of the global equity markets. Alongside increased overall volatility, global equity markets generated single-digit positive returns while the S&P 500 reached new highs. During the fiscal year, the Federal Reserve ended its quantitative easing program; however, other central banks around the world continued to ease monetary policy. Macroeconomic news from the Eurozone brought about pressure in the markets as the Greek debt crisis escalated.

Emerging markets produced negative returns for the fiscal year largely due to geopolitical tensions

such as the Russian military intervention in Ukraine and speculation on future U.S. monetary policy. The speculation led to continued strength in the U.S. dollar which significantly impacted equity returns. This was primarily noticeable in the Russian and Latin American emerging markets where positive single digit returns in local currency terms were reduced to significant double digit losses in U.S. dollar terms.

#### Fixed Income - Debt Securities

The Fixed Income Portfolio is comprised of investment grade and non-investment grade securities, both U.S. dollar based and non-U.S. dollar based. Fixed income assets are primarily managed internally with approximately 83 percent of the portfolio using enhanced core and high yield strategies, while 17 percent is externally managed using broader core plus and high yield strategies.

Debt securities within the fixed income and other portfolios decreased 0.7 percent from \$36.5 billion at June 30, 2014 to \$36.3 billion, although returns in the global fixed income markets remained mostly positive over the fiscal year. Returns from debt securities are primarily reflected as interest income (please see "Sources of Investment Income" chart at the beginning of the Investments section above).

Over the fiscal year, there were a number of challenges to fixed income investors. Elevated volatility in the markets led investors to move towards riskier underperforming investments in anticipation of their eventual appreciation. Forces driving returns up included the on-going major central banks' policy accommodations, persistent lower oil prices and encouraging updates from Europe, such as the upward revision for inflation expectations.

The 10-year Treasury yield rose in the final quarter of the fiscal year to 2.4 percent as a result of the Federal Reserve's warning to expect interest rate hikes. Corporate bond markets broadly progressed through the beginning of the year and softened as yield curves in the U.S., Germany and U.K. steepened.

#### Alternative Investments

Alternative Investments consist of investments in private equities, real estate, and infrastructure, innovation and corporate governance funds. The decrease of 0.3 percent from \$53.3 billion at June 30, 2014 to \$53.1 billion at June 30, 2015 is primarily due to the decrease of 9.8 percent from \$29.6 billion to \$26.7 billion in privately-held equities and debt. CalSTRS allocation in the Private Equity asset class declined from 11.5 percent to 10.1 percent over the fiscal year due to increasing distributions from private equity funds.

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. Residual investments in debt and equity securities within the Private Equity Portfolio are a result of restructuring and re-organization of limited partnerships.

For the fiscal year, private equity returns were strong relative to public equities. This performance is the key reason for investors' continued desire to increase investments in the asset class. The market environment has been better-suited to selling (rather than buying) investments due to relatively high valuations and readily available financing at low interest rates. The result has been continued strong distributions from private equity investments while the pace of new investments has been restrained.

As investors are receiving more distributions from private equity investments than ever before, confidence in private equity investments is on the rise. Price changes in the public equity markets have generally rippled through the privately held assets over subsequent quarters and price changes experienced in the public markets, either

positive or negative, have generally translated to the private equity markets at lesser magnitudes.

The Real Estate Portfolio is comprised of investments in wholly-owned properties, joint venture investments, co-investments and commingled funds. Approximately 11.5 percent of the investment portfolio represents non-U.S. assets. Leverage has been reduced to levels set by the board in policy. Core portfolio leverage is 34.2 percent as of June 30, 2015. 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 assets increased 11.4 percent from \$23.7 billion at June 30, 2014 to \$26.4 billion at June 30, 2015, reflecting the increase in the allocation to the Real Estate asset class and positive returns in the real estate markets. As the economy moved into an upswing with robust increases in job growth, real estate investments reported gains in all sectors.

Sales along with demand for space rose on a year over year basis indicating increased activity in all property types. As a result of strong performance over several quarters, institutional appetite for real estate remained high. Commercial property prices kept rising with an uneven distribution; office and apartment prices rose above their pre-recession peak; and retail, suburban office and industrial prices remained below levels of previous highs. Real estate construction activity was on the rise, although still below levels from decades ago. Supply will threaten to flood markets if construction activities rise significantly further.

#### Absolute Return - Derivative Instruments

Derivative instruments decreased 41.7 percent from \$14.9 million at June 30, 2014 to \$8.7 million at June 30, 2015 due to value fluctuations and expirations of contracts. For more information on Derivative instruments please see Note 2 within the notes to the basic financial statements.

#### Asset/Liability Study

CalSTRS conducts a full asset/liability (A/L) study once every three 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 was conducted in 2012-13.

The current study, which began in February 2015, is occurring over several Investment Committee meetings and is scheduled to conclude 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 will reflect the new long-term asset targets and set the overall risk limit or acceptable risk parameters for the investment portfolio. 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

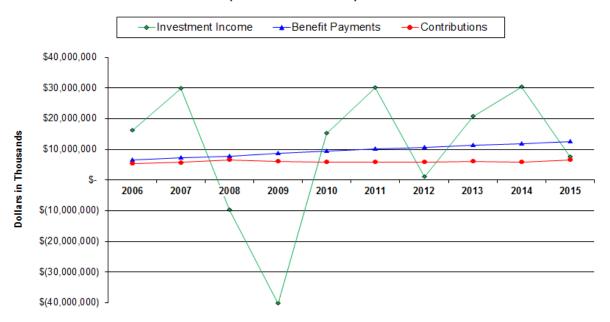
The purpose of the actuarial valuations for funding the programs within the STRP is to guide decisions necessary to sustain the long-term viability of the programs. Specifically, the primary purpose is to analyze the sufficiency of future contributions from members, employers and the state to meet current and future obligations. Separate funding actuarial valuations are performed for the DB, DBS, and Cash Balance Benefit (CBB) programs.

Historically, CalSTRS investment income has contributed approximately 62 percent of the total inflows to the STRP. 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.

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), employer contributions and benefit payments.

### STRP Investment Income, Contributions and Benefit Payments (Years ended June 30)



The above graph shows there has been a growing gap between contributions and benefit payments, known as the funding gap. During fiscal year 2014-15, the funding gap actually decreased by 2.4 percent as a result of contribution increases included in AB 1469. While benefit payments increased 4.6 percent over last fiscal year, contributions increased 11.7 percent. Contributions will continue to increase due to AB 1469 and the Unfunded Actuarial Accrued Liability (UAAL) is scheduled to shrink to zero by the year 2046.

The actuarial assumptions and methods used in the June 30, 2014 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, 2014. This is an increase of 1.6 percent from the estimated 66.9 percent funded ratio as of June 30, 2013. The actuarial valuation also indicates that as of June 30, 2014, the CBB Program had a

funded ratio of 121.7 percent. This is an increase of 11.2 percent from the June 30, 2013 actuarial valuation. Additionally, the valuation indicates that as of June 30, 2014, the DBS Program had a funded ratio of 121 percent, an increase of 11.4 percent from the June 30, 2013 actuarial valuation.

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 3.55 percent for the fiscal year ended June 30, 2015. 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. In June 2015, the board granted additional earnings credit for the DBS and CBB programs totaling \$347.8 million and \$7.5 million, respectively. Awarding the credits reduced the funded ratios cited above from 121 percent to 116.3 percent for the DBS Program and from 121.7 percent to 117.1 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 net pension liability (NPL), as compared to 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 \$67.3 billion as of June 30, 2015.

#### CalSTRS Pension2 PROGRAM

CalSTRS Pension2 (Pension2) offers Internal Revenue Code (IRC) section 403(b) and 457 tax-deferred defined contribution plans. In September 2014, administration and trustee services over Pension2 transitioned from TIAA-CREF to Voya Financial (Voya). Voya's administrative and trustee services provide new features and support at reduced administrative fees.

Net position for Pension2 increased by \$53.8 million or 9.8 percent as combined contributions and net investment income of \$96.3 million exceeded distributions and administrative expenses of \$42.7 million. Contributions increased by 9.2 percent from fiscal year 2013-14 due to an increase in plan participants, and net investment

income decreased \$48.0 million or 70.7 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 \$1.1 million, a decrease of \$0.2 million or 13.8 percent from the prior year. The decrease is primarily due to reduced member fees, some of which was a result of the transition of the Los Angeles Unified School District (LAUSD) 457 plan to a different record keeper.

As of June 30, 2015, TDCF is in a net deficit position amounting to \$64 thousand as a result of an accrual adjustment for the implementation of GASB 68.

#### 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 \$2.9 million to \$30.5 million during fiscal year 2014-15. The THBF paid benefits of \$30.6 million which is a 6.2 percent decrease from the \$32.6 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, 2015 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.

SB 185 (De León) requires the CalSTRS and CalPERS boards to engage with thermal coal companies and to divest the public employee retirement funds of any investments in thermal coal companies and prohibits additional or new investments or the renewal of existing investments in thermal coal companies.

H.R. 973 (Davis) repeals the Windfall Elimination Provision (WEP) and the Government Pension Offset (GPO) of the Social Security Act.

H.R. 711 (Brady) establishes a new formula for the treatment of non-covered earnings in determining Social Security benefits to replace the WEP for individuals who turn age 62 after 2016. It also prescribes a second formula to lessen the effects of the WEP for current beneficiaries and directs the Commissioner of Social Security to recover overpayments from certain individuals.

#### **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
- 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, 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.
- 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 Medicare Premium Payment 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 and GASB 67, Financial Reporting for Pension Plans. This note discloses information about CalSTRS investment performance and risks related to credit (including custodial credit and concentrations of credit risk), interest rate 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 generally describes potential contingencies of CalSTRS.
- Note 7 provides a summary of CalSTRS significant commitments.
- Note 8 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. These schedules are intended to assist the reader in understanding the net pension liability of the STRP and the funded status of the Medicare Premium Payment 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 (Medicare Premium Payment Program only)

#### OTHER SUPPLEMENTAL INFORMATION

Other Supplemental Information includes details on administrative expenses, investment expenses, and consultant and professional services expenses. The schedules available in the Other Supplemental Information section 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

#### California State Teachers' Retirement System Statement of Fiduciary Net Position As of June 30, 2015 (with Comparative Totals as of June 30, 2014) (Dollars in Thousands)

	State Teachers' Retirement Plan	Pens	sion2	Teachers' Health	Teachers' Deferred	Compara	tive Totals
		403 (b)	457	Benefits	Compensation		
Assets		Plan	Plan			2015	2014
Investments, at fair value:							
	\$ 36,251,711	\$ 229,913	\$ 8,356	\$ 601	\$ 1,180	¢ 26.401.761	¢ 26.710.000
Debt securities				\$ 601	\$ 1,180		
Equity securities	104,580,292	345,617	12,405	-		104,938,314	102,429,520
Alternative investments	53,089,986	-	-	-	-	53,089,986	53,273,29
Derivative instruments	8,718	-	-	-	-	8,718	14,949
Securities lending collateral	18,029,379	-	-	-	-	18,029,379	22,303,19
Total investments	211,960,086	575,530	20,761	601	1,180	212,558,158	214,739,967
Cash	359,992	-	-	-	-	359,992	287,96
Receivables:							
Investments sold	2,996,767	-	-	-	-	2,996,767	2,237,74
Foreign currency forward	87,069					87,069	
contracts (net)	67,069	-	-	-	-	87,009	
Interest and dividends	377,730	-	-	1	1	377,732	399,426
Member, employer and State	501,195	5,677	384	-	-	507,256	523,125
Loan receivable	34,294	1,206	59	-	-	35,559	22,005
Other	10,081	-	-	1	244	10,326	32,818
Total receivables	4,007,136	6,883	443	2	245	4,014,709	3,215,119
Other assets:							
Capital assets, net of							
accumulated depreciation	225,973	-	-	-	-	225,973	228,362
Other	194	-	-	-	-	194	718
Total other assets	226,167			-	-	226,167	229,080
Total assets	216,553,381	582,413	21,204	603	1,425	217,159,026	218,472,133
Deferred outflows of	16,398	-	-	35	68	16,501	
resources							
Total assets and deferred							
outflows of resources	216,569,779	582,413	21,204	638	1,493	217,175,527	218,472,133
Liabilities							
Investments purchased payable	3,725,966					3,725,966	2,901,76
Foreign currency forward	3,723,960	-	-	-	-	3,723,900	6,48
contracts (net) Loan payables	1,447,405	_	_	_	_	1,447,405	944,269
Benefits in process of payment	1,178,524	_	_		_	1,178,524	1,121,03
Net pension and OPEB obligation	213,427	-	-	489	784	214,700	57,80
	111,854	004	200			113,756	
Other		994	200	29	679		105,521
Securities lending obligation	18,043,187	-	-	-	4 400	18,043,187	22,311,298
Total liabilities	24,720,363	994	200	518	1,463	24,723,538	27,448,172
Deferred inflows of resources	27,080			60	94	27,234	
Total liabilities and deferred							
inflows of resources	24,747,443	994	200	578	1,557	24,750,772	27,448,172
Net position restricted for pension/other							
Delia Dillo							

# California State Teachers' Retirement System Statement of Changes in Fiduciary Net Position For the Fiscal Year Ended June 30, 2015 (with Comparative Totals for the Fiscal Year Ended June 30, 2014) (Dollars in Thousands)

	State Teachers' Retirement Plan	Pens	ion2	Teachers' Health	Teachers' Deferred	Comparat	ive Totals
		403 (b) Plan	457 Plan	Benefits	Compensation	2015	2014
Additions							
Contributions:							
Member contributions	\$ 2,509,712	\$ 72,042	\$ 4,025	\$ -	\$ -	\$ 2,585,779	\$ 2,333,388
Employer contributions	2,677,815	301	71	30,527		2,708,714	2,305,763
State of California	1,425,796		-	-	-	1,425,796	1,383,468
Total contributions	6,613,323	72,343	4,096	30,527	-	6,720,289	6,022,619
Investment Income (Loss):							
Net appreciation in fair value of investments	3,129,803	9,928	222	-	-	3,139,953	26,154,356
Interest, dividends and other	4,675,175	9,435	325	-	1	4,684,936	4,515,057
Securities lending income	106,926	-	-	-	-	106,926	104,709
Less investment expenses:							
Cost of lending securities	(13,299)	-	-	-	-	(13,299)	(14,221)
Borrowing costs	(26,616)	-	-	-	-	(26,616)	(20,161)
Other investment expenses	(260,345)	-	-	-	-	(260,345)	(269,887)
Net investment income	7,611,644	19,363	547	-	1	7,631,555	30,469,853
Other income	3,935	91	2	-	1,072	5,100	3,324
Total additions	14,228,902	91,797	4,645	30,527	1,073	14,356,944	36,495,796
<b>Deductions</b> Retirement, disability, death and survivor benefits	12,284,071	-	-	-	-	12,284,071	11,725,324
Premiums paid	-	-	-	30,615	-	30,615	32,632
Distributions and withdrawals	-	32,648	807	-	-	33,455	22,531
Purchasing power benefits	192,831	-	-	-	-	192,831	202,232
Refunds of member contributions	87,694	7,753	-	-	-	95,447	110,168
Administrative expenses	145,239	1,405	47	360	996	148,047	156,538
Other expenses	8,840	-	-	-	14	8,854	8,802
Total deductions	12,718,675	41,806	854	30,975	1,010	12,793,320	12,258,227
Net increase (decrease) in net position	1,510,227	49,991	3,791	(448)	63	1,563,624	24,237,569
Net position restricted for pension/other postemployment benefits							
Beginning of the year - as previously reported	190,474,016	531,428	17,213	870	434	191,023,961	166,786,392
Adjustment for application of GASB							
68 (Note 2)	(161,907)	-	-	(362)	(561)	(162,830)	-
Beginning of the year - as adjusted	190,312,109	531,428	17,213	508	(127)	190,861,131	166,786,392
End of the year	\$ 191,822,336	\$ 581,419	\$ 21,004	\$ 60	\$ (64)	\$ 192,424,755	\$ 191,023,961

#### 1. <u>DESCRIPTION OF CAISTRS AND</u> CONTRIBUTION INFORMATION

The California State Teachers' Retirement System (CalSTRS) administers a hybrid retirement system consisting of a defined benefit plan, two defined contribution plans and another postemployment benefit plan:

- State Teachers' Retirement Plan (STRP)
- CalSTRS Pension2® Program (Internal Revenue Code 403(b) and 457 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. The board makes rules, sets policies and has the power and 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: one member currently serving on a school board, one retired CalSTRS member and three public members;
- Four ex-officio members: the Superintendent of Public Instruction, the

State Treasurer, the State Controller and the Director of Finance; and

• Three members elected by CalSTRS membership.

A new governor-appointed school board representative joined the board in April 2015, and one governor-appointed position remains open as of June 30, 2015.

#### STATE TEACHERS' RETIRMENT PLAN

The State Teachers' Retirement Plan (STRP) is a multiple-employer, cost-sharing defined benefit plan comprised of four programs: Defined Benefit Program, Defined Benefit Supplement Program, Cash Balance Benefit 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

The STRP Defined Benefit 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

At June 30, 2015, there were 1,727 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.

At June 30, 2014, membership consisted of:

	June 30, 2014
Active Members	
Vested	321,875
Nonvested	99,012
Inactive Members	
Vested	36,344
Nonvested	146,471
Retirees and Benefit Recipients	275,627
Total Members, Retirees and Beneficiaries	879,329
Information above is the most recent available as of June	e 30, 2015.

The Defined Benefit 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. 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 for each year 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 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, known as the career factor. The maximum benefit with the career factor is 2.4 percent of final compensation.
- CalSTRS calculates retirement benefits based on one-year final compensation for members who retired on or after January 1, 2001, with 25 or more years of credited service, or for classroom teachers with less 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 a member could earn in a school year while employed on a full-time basis. For members with less than 25 years of credited service, final compensation is the highest average annual compensation earnable for any 36 consecutive months of credited service.

- For 2015, 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 different forms of compensation, including 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 retire on or after January 1, 2001, and 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 for each year 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.
- 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 the changes in the Consumer Price Index. In fiscal year 2014–15, the limit was \$137,941.
- Only compensation paid in cash by an employer, pursuant to a publicly available written contractual agreement, for each pay period in which creditable service is performed is creditable to CalSTRS benefit programs for CalSTRS 2% at 62 members. Other compensation, such as allowances, cash in lieu of fringe benefits, limited-period compensation and compensation determined to have been paid to enhance a benefit, are 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 100 percent vested in retirement benefits.
- After five years of credited service, a member (Prior to age 60 if under Coverage A, no age

- limit if under Coverage B, as defined in Education Code Sections 24001 and 24101, respectively) is eligible for disability benefits of up to 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.
- Any compensation for service in excess of one year in a school year due to overtime or working additional assignments is credited to the Defined Benefit Supplement Program so long as it is under 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, 2015, the rate of interest credited to members' accounts was 0.32 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.
- 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.

 Defined Benefit Program benefits must be forfeited by any 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.

#### 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 of an amount equal to approximately 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. In fiscal year 2014-15, the amount contributed to the SBMA was \$582.2 million, excluding School Lands Revenue. Finally, Education Code Section 24413 directs revenues from the sale of school lands related to the Elk Hills Naval Petroleum Reserve to also be deposited into the SBMA. As part of the budget appropriation bill signed into law by the president on December 17, 2014, CalSTRS received the final \$15.6 million payment from the sale of the Elk Hills Naval Petroleum Reserve.

#### **Contributions**

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

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

#### Members

- Pursuant to Chapter 47, Statutes of 2014 (AB 1469–Bonta), the CalSTRS member contribution rate increases effective for fiscal year 2014–15 and beyond are summarized in the table below:

<b>Effective Date</b>	2% at 60 Members	2% at 62 Members
July 01, 2014	8.15%	8.15%
July 01, 2015	9.20%	8.56%*
July 01, 2016	10.25%	9.205%*

<sup>\*</sup>The rate imposed on CalSTRS 2% at 62 members is based on the normal cost of benefits. The contribution rate shown in future years assumes no change in normal cost.

**Employers** 

 Pursuant to Chapter 47, Statutes of 2014 (AB 1469–Bonta), CalSTRS employer contribution rate increases effective for fiscal year 2014–15 through fiscal year 2045– 46 are summarized in the table below:

Effective Date	Prior Rate	Increase	Total
July 01, 2014	8.25%	0.63%	8.88%
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, 2046	8.25%	Increase from prior rate of	eases in 2046-47*

<sup>\*</sup> The board has limited authority to adjust employer contribution rates from July 1, 2021, through June 2046 in order to eliminate the remaining unfunded actuarial obligation related to service credited to members prior to July 1, 2014. The board cannot adjust the rate by more than 1 percent in a fiscal year, and the increase to the contribution rate in addition to the 8.25 percent cannot exceed 12 percent.

State

- 2.017 percent of the members' creditable earnings from the fiscal year ending in the prior calendar year.

Also as a result of AB 1469 – Bonta, 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 additional state contribution will increase from 1.437 percent in 2014–15 to 4.311 percent in 2016–17. The increased contributions end as of fiscal year 2046–47.

The CalSTRS state contribution rates effective for fiscal year 2014–15 and beyond are summarized in the table below:

Effective Date	Base Rate	AB 1469 Increase For 1990 Benefit Structure	SBMA Funding	Total State Appropriation to DB Program
July 01, 2014	2.017%	1.437%	2.50%	5.954%
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 July 01, 2046 and	2.017%	4.311%*	2.50%	8.828%*
thereafter	2.017%	*	2.50%	4.517%*

<sup>\*</sup> The 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.

#### Receivables for 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. The cost to the employer 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 Defined Benefit Program (currently 7.5 percent). As of June 30, 2015, the outstanding balance of these receivables was \$23.8 million.

### STRP DEFINED BENEFIT SUPPLEMENT PROGRAM

The Defined Benefit Supplement Program, established pursuant to Chapter 74, Statutes of 2000 (AB 1509), is a defined benefit pension program that operates within the STRP. All members of the Defined Benefit Program who make contributions to CalSTRS on creditable compensation earned on and after January 1, 2001, have an account under the Defined Benefit Supplement Program and are eligible to receive a Defined Benefit Supplement benefit based on the amount of funds contributed to the Defined Benefit Supplement account. Membership in the Defined Benefit Supplement 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 3.55 percent for the fiscal year ended June 30, 2015. 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 June 2015, the board granted an additional earnings credit (AEC) of 4.5 percent of active and inactive members' June 30, 2014 nominal accounts, for a total value of approximately \$347.8 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 Defined Benefit Supplement 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' Defined Benefit Supplement Program accounts for CalSTRS 2% at 60 members.

#### STRP CASH BALANCE BENEFIT PROGRAM

The Cash Balance Benefit 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 defined benefit pension program. The Cash Balance Benefit 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 the position. Participation in the Cash Balance Benefit Program is optional; a school district, community college district, county office of education or regional occupational program may elect to offer the Cash Balance Benefit Program. Under such election, the program will automatically cover each eligible employee, unless the employee elects to participate in the Defined Benefit Program or an alternative plan provided by the employer within 60 days of hire or the election period determined by the employer.

Interest is credited to nominal Cash Balance Benefit Program accounts at the minimum guaranteed annual rate established by the board prior to each plan year, which was 3.55 percent for the year ended June 30, 2015. 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 June 2015, the board granted an AEC of 4 percent of active and inactive participants' June 30, 2014 nominal accounts, for a total value of approximately \$7.5 million.

#### Contributions

A summary of statutory contribution rates for the Cash Balance Benefit 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. At June 30, 2015, there were 33 contributing school districts and 36,530 contributing participants.

#### STRP REPLACEMENT BENEFITS PROGRAM

The STRP Replacement Benefits Program is an excess benefits arrangement for Defined Benefit 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 2015, the federal dollar limit applicable to a 65-year-old CalSTRS member is \$179.609. 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 Defined Benefit 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, 2015, there were 287 retirees, beneficiaries and non-member spouses receiving benefits from the Replacement Benefits Program.

#### **CaISTRS 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. Voya Financial and

TIAA CREF are responsible for administrative services, including custody and record-keeping services, while CaISTRS performs the investment management functions of determining, monitoring and maintaining the plan's investments.

As of June 30, 2015, the IRC 403(b) plan had 9,147 plan participants and 781 participating employers (school districts) with account balances. On the same date, the IRC 457 plan had 477 plan participants and 33 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 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 Employee's 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 Program (MPP Program), a cost-sharing multiple-employer other postemployment benefit plan, paid from the THBF to eligible retired members of the Defined Benefit Program. At June 30, 2015, there were 7,349 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 was established to pay Medicare Part A premiums and Medicare Parts A and B late enrollment surcharges for Defined Benefit Program members who retired prior to July 1, 2001, and who meet certain other eligibility criteria. Subsequently, 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 20, 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 the monthly Defined Benefit Program employer contributions. Contributions that would otherwise be credited to the STRP each month are instead credited to the MPP Program to fund monthly program and administrative costs. Total redirections to the MPP Program are monitored to ensure that total incurred costs do not exceed the amount initially identified as the cost of the program.

#### TEACHERS' DEFERRED COMPENSATION FUND

The 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.

At the discretion of LAUSD, CalSTRS ceased to provide recordkeeping and administrative services for the LAUSD 457(b) Plan in October 2014.

### 2. <u>SUMMARY OF SIGNIFICANT ACCOUNTING</u> 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 earned. Furthermore, CalSTRS recognizes employer and state contributions when earned 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 the exdividend 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 a commercial bank for operational purposes.

#### **INVESTMENTS**

Under California Constitution, Article 16, Section 17, and the California Education Code, Part 13 Teachers' Retirement Law, Chapter 4, Section 22250, 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 expert" 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 Teachers Retirement Law, Chapter 4, Section 22250 require the diversification of investments so as to minimize the risk of loss and maximize the rate of returns, 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.

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. The overall valuation processes and information sources by major asset classifications are as follows:

#### **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 comprise of debt securities such as bond mutual funds and guaranteed annuity contracts.

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 investments' type.

Global inflation-indexed bonds are bonds where the principal is indexed to inflation. The CalSTRS portfolio consists of inflation-linked bonds issued by governments, including, but not limited to the U.S., which are representative of the countries reflected in the performance benchmark. The values of the U.S. Inflation-Protected Debt Securities are adjusted periodically based on the Consumer Price Index for Urban Consumers (CPI-U), which is calculated monthly by the U.S. Bureau of Labor Statistics. The U.S. inflation-protected securities are actively traded and the prices are readily available from pricing vendors. Similarly, the inflation-linked debt securities issued by a foreign government are also adjusted to reflect a comparable consumer inflation index by that government and the prices are also readily available from pricing vendors.

Short term investments consist of money market funds, certificates of deposits and similar instruments with maturities and/or holding periods of less than one year. Short term investments are reported at fair value or at cost or amortized cost, which approximates fair value. For those investments which are

reported at fair value, the investments are valued using similar methodologies as debt securities traded in active markets.

Pension2 offers bond mutual funds and annuity contracts to the individual participants. The mutual funds offered by Voya and TIAA-CREF are open-ended funds that are priced daily at the net asset value (NAV) based generally upon the exchange traded official closing price of the securities held by the funds. The annuity contract offered by Voya guarantees a specified minimum interest rate which is subject to change at any time, but will never fall below the guaranteed minimum rate of 1.00 percent. CalSTRS allocation in the Voya annuity contracts is carried at contract value, which approximates fair value.

#### **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. 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

Alternative investments consist primarily of limited partnership structures invested in privately held debt, such as distressed and mezzanine debt, or privately held equity, such as 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 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.

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. CalSTRS receives audited financial statements including valuation results from the general partners and reviews valuation policies for a sample of general partners on a periodic basis. 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 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. These 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.

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. Limited partner 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**

CalSTRS holds investments in futures, foreign currency forward contracts, options, swaps, rights and warrants. The fair value of exchange-traded derivative instruments such as futures, options, rights and warrants are determined based on the quoted market 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. Daily settlements of gains and losses occur on the following business day. As a result, the instruments have no fair value at the end of any trading day. Futures variation margins are accounted for as unrealized appreciation or depreciation until the contract is closed.

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. 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, 2015.

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 an asset, or an economic statistic. Cash flows are calculated based on the notional amount, which are usually not exchanged between counterparties.

#### **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 minimum credit quality standards and maximum credit limits. 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, forty years for buildings, and a minimum of five years for amortizable intangible assets. Accumulated

depreciation/amortization and depreciation/amortization expense through June 30, 2015 of fiscal year 2014-15 were \$54.7 million and \$11.3 million, respectively. 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, 2015 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 taxexempt retirement plans under the IRC. Pension2, which includes IRC 403(b) and 457 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 derivatives 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. The Teachers' Retirement Law requires CalSTRS to maintain two types of reserve accounts within two programs of the STRP, the Defined Benefit Supplement Program and the Cash Balance Benefit Program. Teachers' Retirement Law also requires CalSTRS to maintain an account for the SBMA.

#### <u>Defined Benefit Supplement Annuitant</u> <u>Reserve</u>

Part 13, Chapter 2 Section 22104.9 of the Education Code, formed the Defined Benefit Supplement Annuitant Reserve to establish and maintain a segregated account for expenditures on annuities payable under the Defined Benefit Supplement Program. Defined Benefit members may have a Defined Benefit Supplement account that accumulates contributions and interest. The Defined Benefit Supplement Program offers supplemental income in addition to their regular Defined Benefit program benefit. During a member's career, funds are accumulated in the Defined Benefit Supplement Contribution and Accumulated Interest Reserves, and when a member retires the funds are converted to the Defined Benefit Supplement Annuitant Reserve.

#### <u>Defined Benefit Supplement Gain and Loss</u> <u>Reserve</u>

Part 13, Chapter 2 Section 22139.5 of the Education Code, established the Defined Benefit Supplement Gain and Loss Reserve which represents a segregated account to maintain either: 1) credited interest to member Defined Benefit Supplement accounts at the minimum interest rate for plan years in which the obligation cannot be met from the plan's investment earnings, or 2) provide additions to the Annuitant Reserve to meet the plan's obligation for annuities payable under the Defined Benefit Supplement program.

#### Cash Balance Annuitant Reserve

Part 14, Chapter 2 Section 26105 of the Education Code, established the Cash Balance

Annuitant Reserve for the payment of monthly annuities with respect to the Cash Balance Program. The Cash Balance Program is a retirement program that can be an alternative to the CalSTRS Defined Benefit Program, Social Security and other retirement plans. During a participant's career, funds are accumulated in the Cash Balance Active Contribution and Accumulated Interest Reserves. When a participant retires, the funds are transferred to the Cash Balance Annuitant Reserve.

#### Cash Balance Gain and Loss Reserve

Part 14, Chapter 2 Section 26202 of the Education Code, established the Cash Balance Gain and Loss Reserve which represents funds to be drawn upon to the extent necessary to credit interest to participants' accounts at the minimum interest rate during years in which CalSTRS investment earnings with respect to the Cash Balance Program are not sufficient for that purpose, and where necessary, to provide additions to the Annuitant Reserve for monthly annuity payments.

#### **Supplemental Benefit Maintenance Account**

Part 13, Chapter 8 Section 22400 of the Education Code, established the Supplemental Benefit Maintenance Account 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 Supplemental Benefit Maintenance Account is primarily funded by contributions from the state, School Lands monies, and the earned interest on the SBMA reserve balance based on the actuarially assumed interest rate.

#### Other Identified Reserves

CalSTRS established additional reserves for DBS contributions and accumulated interest, and CB contributions and accumulated interest to separately maintain these balances for active and inactive members and participants.

The reserve balances as of June 30, 2015, are summarized in the table below:

		eserve Balance
Reserve Type	(Dol	llars in Thousands)
Defined Benefit Supplement Contribution Reserve	\$	6,415,110
Defined Benefit Supplement Accumulated Interest Reserve		2,125,848
Defined Benefit Supplement Annuitant Reserve		494,743
Defined Benefit Supplement Gain and (Loss) Reserve		2,184,942
Cash Balance Active Contribution Reserve		166,074
Cash Balance Accumulated Interest Reserve		52,146
Cash Balance Annuitant Reserve		3,906
Cash Balance Gain and (Loss) Reserve		33,537
Supplemental Benefit Maintenance Account Reserve		11,506,280
Other Reserves Not Legally Required for Disclosure		169,442,169
Total	\$	192,424,755

#### BEGINNING NET POSITION ADJUSTMENT

Due to the implementation of GASB Statement No. 68, adjustments were made to the State Teachers' Retirement Plan, the Teachers' Health Benefits Fund, and the Teachers' Deferred Compensation Fund, which resulted in a decrease in beginning net position for fiscal year 2014-15 of \$161.9 million, \$362 thousand, and \$561 thousand, respectively. These adjustments were reported as a

restatement of beginning net position for fiscal year 2014-15. This accrual adjustment in the TDCF resulted in a net deficit position as of June 30, 2015. It is not practical to determine the change in net position of the preceding period.

#### **COMPARATIVE TOTALS**

The basic financial statements include certain prior year summarized comparative

information in total but not at the level of detail required for a presentation in conformity with generally accepted accounting principles in the United States of America, Accordingly, such information should be read in conjunction with CalSTRS financial statements for the year ended June 30, 2014, from which the summarized information was derived. The summarized comparative information

presented has not been adjusted to reflect the implementation of GASB 68. Some reclassifications have been made to the comparative totals as of and for the year ended June 30, 2014, to conform to the presentation as of and for the year ended June 30, 2015. The reclassifications had no impact on net position or changes in net position.

#### 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, 2015, are as follows (dollars in millions):

Total pension liability	\$ 259,146
Less: STRP fiduciary net position	(191,822)
Net pension liability of employers and the state	\$ 67,324
STRP fiduciary net position as a percentage of the	
total pension liability	74%

#### 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, 2014, and rolling forward the total pension liability to June 30, 2015. The

> Valuation Date **Experience Study Actuarial Cost Method** Investment Rate of Return <sup>2</sup> Consumer Price Inflation Wage Growth

Post-retirement Benefit

financial reporting actuarial valuation as of June 30, 2014, used the following actuarial methods and assumptions, applied to all prior periods included in the measurement:

July 1, 2006, through June 30, 2010 Entry age normal 7.60% 3.00% 3.75% 2% simple for DB (Annually) Maintain 85% purchasing power level for DB Not applicable for DBS/CBB

June 30, 2014

CalSTRS uses custom mortality tables to best fit the patterns of mortality among its members. These custom tables are based on RP2000 series tables adjusted to fit CalSTRS experience. RP2000 series tables are an industry standard set of mortality rates published by the Society of Actuaries. See CalSTRS July 1, 2006 - June 30, 2010 Experience Analysis for more information.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which bestestimate 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. Based on the model from CalSTRS consulting actuary's (Milliman) investment

<sup>&</sup>lt;sup>2</sup> Net 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.

practice, a best estimate range was determined by assuming the portfolio is re-balanced annually and that annual returns are lognormally distributed and independent from year to year to develop expected percentiles for the long-term distribution of annualized returns. The assumed asset allocation by PCA is based on board policy for target asset

allocation in effect on February 2, 2012, the date the current experience study was approved by the board. Best estimates of 10-year geometric real rates of return and the assumed asset allocation for each major asset class used as input to develop the actuarial investment rate of return are summarized in the following table:

Asset Class	Assumed Asset Allocation	Long-Term* Expected Real Rate of Return
Global Equity	47%	4.50%
Private Equity	12	6.20
Real Estate	15	4.35
Inflation Sensitive	5	3.20
Fixed Income	20	0.20
Cash / Liquidity	1	0.00
* 10-year geometric average		

#### DISCOUNT RATE

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 will be 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 one to three percent lower or one to three percent higher than the current rate:

Discount Rate	Net Pension Liability of Employers and Nonemployer Contributing Entity (Dollars in Millions)			
3% Decrease (4.60%)	\$	194,268		
2% Decrease (5.60%)		143,351		
1% Decrease (6.60%)		101,654		
Current Discount Rate (7.60%)		67,324		
1% Increase (8.60%)		38,793		
2% Increase (9.60%)		14,879		
3% Increase (10.60%)		(5,252)		

#### 4. FUNDED STATUS

#### TEACHERS' HEALTH BENEFITS FUND

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

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

<sup>\*</sup>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, \$341 million based on the June 30, 2014 actuarial valuation of the MPP 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 7.

#### 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 MPPP 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

Wage Growth

Consumer Price Inflation

Healthcare Cost Trend Rate Part A Premiums

Healthcare Cost Trend Rate Part B Premiums

5.70%

## 5. <u>DEPOSITS AND INVESTMENTS</u>

## MONEY-WEIGHTED RATE OF RETURN

For the year ended June 30, 2015, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 4.1 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, 2015, CaISTRS investments, at fair value, (Dollars in Thousands)	are as follows:						
			Pensio	n2			
					Teachers'	Teachers'	
Investments	State Teachers' Retirement Plan	403(b Plan		457 Plan	Health Benefits	Deferred Compensation	Total
						·	
Debt Securities	\$ 36,251,711	\$ 229,	913	8,356	\$ 601	\$ 1,180	\$ 36,491,761
Asset Backed Securities	787,298		-	-	-	-	787,298
Corporate Bonds	11,522,861		-	-	-	-	11,522,861
Foreign Government Issues	1,045,516		-	-	-	-	1,045,516
Mortgage Backed Securities	8,180,156		-	-		-	8,180,156
Municipal Securities	212,235		-	-	-	-	212,235
U.S. Government and Agency Obligations	10,123,805		-	-	-		10,123,805
Short Term Securities	4,379,840		L,775	120 1.240	601	1,180	4,383,516
Mutual Funds-Bond Funds	-		L,866	, -	-	-	43,106
Guaranteed Annuity Contracts	-	186	5,272	6,996		-	193,268
Equity Securities	104,580,292	345,	617	12,405	-		104,938,314
Common Stocks	99,677,859		-	-	-	-	99,677,859
Depository Receipts	1,813,430		-	-	-		1,813,430
Mutual Funds-Stock Funds	124,283	345	5,617	12,405		-	482,305
Preferred Stocks	254,448		-	-		-	254,448
Real Estate Investment Trusts	2,710,272		-	-	-		2,710,272
Alternative Investments	53,089,986		-	-	-		53,089,986
Equity-Privately Held	24,243,503		-	-	-		24,243,503
Debt-Privately Held	2,463,458		-	-	-		2,463,458
Real Estate-Directly Held	7,270,591		-	-	-		7,270,591
Real Estate-Non-Directly Held	19,112,434		-	-		-	19,112,434
Derivative Instruments	8,718		-	-			8,718
Options	3,766		-	-			3,766
Rights and Warrants	2,148		-	-	-	-	2,148
Swaps	2,804		-	-		-	2,804
Securities Lending Collateral	18,029,379		_	_	-		18,029,379
Total Investments	\$211,960,086	\$ 575,	530_	\$ 20,761	\$ 601	\$ 1,180	\$212,558,158

#### SHORT TERM

Deposits in the Pooled Money Investment Account (classified under short-term securities), administered by the State Treasurer, represent various investments with approximately 239 average days to maturity and are reported at amortized cost, which approximates fair value. 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 by state agencies. Deposits in the Shortterm Investment Fund, administered by State Street Bank, represent various investments with approximately 32 average days to maturity and are reported at amortized cost, which approximates fair value.

## SECURITIES LENDING

State of California statutes and board policies permit CalSTRS to make short-term. collateralized loans of its securities to brokerdealers 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 CaISTRS 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, 2015, the weighted duration difference between the investments and these loans was 26 days.

At June 30, 2015, the fair value of the securities on loan was \$19.6 billion. The securities lending cash collateral obligations were \$18.04 billion. The fair value of the reinvested cash collateral was \$18.03 billion, the non-cash collateral was \$2.1 billion and

the calculated mark (additional collateral requested for the next business day) was \$12.3 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 \$2.1 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**

Real estate investments are classified as investments in accordance with GASB Statement No. 67, Financial Reporting for Pension Plans. 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 dayto-day activities, performance and reporting. At June 30, 2015 the estimated fair value of real estate investments (net of all outstanding debt) totaled approximately \$26.4 billion. The CalSTRS share of outstanding debt is \$8.4 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.

The chart below details the repayment of real estate debt, excluding obligations of limited partnership interests in commingled funds, as of June 30, 2015:

Real Estate Debt Ser (Dollars in Thousands)	vice Requi	rements		
		Principal	Interest	Total
Period Ended June 30,	2016	\$1,178,383	\$330,297	\$1,508,680
	2017	2,055,806	277,691	2,333,497
	2018	1,523,980	163,478	1,687,458
	2019	363,236	125,166	488,402
	2020	816,191	103,139	919,330
2021	- 2025	2,225,312	199,411	2,424,723
2026	- 2030	58,581	18,076	76,657
2031	- 2035	6,550	16,698	23,248
2036	- 2040	95,838	12,031	107,869
2041	- Thereafter	56,503	6,745	63,248
	Total	\$8,380,380	\$1,252,732	\$9,633,112

Real estate debt currently bears interest at fixed and variable rates ranging from 1.02 to 10.55 percent and 0.71 to 10.43 percent, respectively.

In fiscal year 2011-2012, CalSTRS entered into three (3) 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. On December 10, 2014, one of the credit facilities matured and was terminated. As of June 30, 2015, the total available lines of credit in the Master Credit Facility Portfolio were \$2.05 billion. The total principal amount borrowed was \$1.45 billion and the remaining amount available was \$600 million. These lines of credit will mature in October 2016 and May 2017.

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 will be regularly monitored and reported to the board for compliance. At June 30, 2015, the total leverage on the real estate portfolio, excluding obligations of limited partnership interests in commingled funds was 44.4 percent. CalSTRS

does not have any debt obligations under the real estate limited partnership interests held in comingled funds.

#### 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, 2015.

## **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 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, a portion of which are managed externally and which allow 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, 2015, the credit ratings of all debt securities and securities lending collateral are as follows:

<b>Debt Secu</b> (Dollars in Th														
Ratings	Asset Backed Securities	Corporate Bonds	G	Foreign overnment Issues	Mortgage Backed Securities		unicipal ecurities	U.S. Government and Agency Obligations	hort Term Securities	,	Mutual Fund		Annuity ontracts	Total
Long Term														
AAA	\$ 430,526	\$ 266,091	\$	64,601	\$ 184,702	\$	46,922	\$ -	\$ -	\$	24,805	\$	-	\$ 1,017,647
AA	9,657	956,236		35,573	1,683,891		108,780	76,369	-		18,301		-	2,888,807
A 	7,765	3,053,380		132,402	54,611		19,709	-	-		-		-	3,267,867
BBB	10,323	3,812,379		178,810	97,413		9,254	-	-		-		-	4,108,179
BB	3,248	1,014,201		3,623	23,158		-	-	-		-		-	1,044,230
В	6,342	936,499		-	24,264		-	-	-		-		-	967,105
CCC	4,169	258,521		654	36,932		-	-	-		-		-	300,276
CC	7,364	401		-	-		-	-	-		-		-	7,765
C	-	245		-	-		-	-	-		-		-	245
D	-	-		-	19,243		-	-	-		-		-	19,243
NR	307,904	1,224,908		629,853	6,055,942		27,570	6,994	-		-		193,268	8,446,439
NA	-	-		-	-		-	10,040,442	-		-		-	10,040,442
Short Term	n Ratings													
NR	\$ -	\$ -	\$	-	\$ -	\$	-	\$ -	\$ 4,134,518	\$	-	\$	-	\$ 4,134,518
NA	-	-		-	-			-	248,998		-			248,998
Total	\$787,298	\$ 11,522,861	\$	1,045,516	\$ 8,180,156	\$:	212,235	\$ 10,123,805	\$ 4,383,516	\$	43,106	\$:	L93,268	\$ 36,491,761

Ratings		set Backed Securities	c	orporate Bonds	Go	Foreign vernment Issues		Mortgage Backed Securities	U.	S. Government and Agency Obligations	Short Term Securities	Total
Long Term Ratings	`	Jecumines		Dollus		155465	Ì	eculliles .		Obligations	Securities	Iotai
AAA	\$	3,183,105	\$	-	\$	-	\$	42,512	\$	-	\$ -	\$ 3,225,617
AA		659		2,140,724		-		99,998		-	-	2,241,383
A		317		706,286		-		12,106		-	-	718,709
BBB		633		-		-		2,193		-	-	2,820
3B		224		-		-		-		-	-	224
CCC		2,110		-		-		-		-	-	2,110
CC		559		-		-		-		-	-	559
)		-		-		-		8,513		-	-	8,51
NR		890,962		230,592		-		119,080		-	-	1,240,63
Short Term Ratings												
A-1	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 964,616	\$ 964,610
<b>A-2</b>		-		-		-		-		-	35,004	35,004
3		-		-		-		-		-	50,021	50,02
NR		-		-		-		-		-	9,521,789	9,521,789
Total	\$	4,078,569	\$3	,077,602	\$		\$	284,402	\$		\$ 10,571,430	\$ 18,012,003

Cash and accruals totaling \$17,376 (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.

## **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, 2015.

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	\$ 689,574	4.38	4.26	0.12
Credit Obligations	7,716,794	6.62	6.65	(0.03)
Mortgage Backed Securities	6,647,753	4.17	3.94	0.23
U.S. Government and Agency Obligations	9,075,634	5.36	5.18	0.18
Debt Opportunistic				
Corporate High Yield	1,952,991	4.09	4.25	(0.16)
Debt Core Plus	3,229,801	5.37	5.13	0.24
Leveraged Loans	695,886	0.53	0.25	0.28
Special Situations	63,926	0.09	5.18	(5.09)
Total Portfolio	\$ 30,072,359	5.19	5.18	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 \$554.0 million with an effective duration of 11.96 compared to the benchmark duration of 11.80. The home loan program had a net asset value of \$165.7 million with a weighted average maturity of

24.15 years. Cash and accruals totaling \$333.9 million and swaps and other collateral totaling \$1.8 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, 2015, 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	8	31-90 days	91-	120 days	12	1-180 days	181	L-365 days	30	66+ days	Total
Asset Backed Securities	\$ 386,631	\$	52,290	\$	-	\$	8,745	\$	-	\$	-	\$ 447,666
Corporate Bonds	313,361		306,297		-		-		-		-	619,658
Foreign Government Issues	-		10,001		-		-		-		-	10,001
Money Market Securities	1,266,630		951,919		-		29,471		-		-	2,248,020
Mortgage Backed Securities	391,013		123,217		80,000		174,952		448,465		25,008	1,242,655
Pooled Money Investment Account	149,796		-		-		-		-		-	149,796
Short Term Investment Fund	784,000		-		-		-		-		-	784,000
U.S. Government and Agency Obligations	10,397		88,175		-		2,500		194,231		-	295,303
Total	\$ 3,301,828	\$	1,531,899	\$	80,000	\$	215,668	\$	642,696	\$	25,008	\$ 5,797,099
Weightings	56.96%		26.42%		1.38%		3.72%		11.09%		0.43%	100.00%

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 \$1.4 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, 2015, the segmented time distribution based upon the expected maturity and/or first reset date for the invested Securities Lending Cash Collateral is as follows:

Segmented Time Distribution							
(Dollars in Thousands)							
Investment Type (by portfolio)	0-1 days	2-6 days	7-29 days	30-59 days	60-89 days	90+ days	TOTAL
Asset Backed Securities	\$ -	\$ -	\$ 3,513,015	\$ 401,075	\$ 53,926	\$ 110,553	\$ 4,078,569
Corporate Bonds	225,082	50,018	965,202	749,084	1,028,251	59,965	3,077,602
Mortgage Backed Securities	-	-	94,837	19,091	70,476	99,998	284,402
Short Term Securities	4,328,906	582,404	2,671,947	1,141,335	1,029,956	816,882	10,571,430
Total	\$ 4,553,988	\$ 632,422	\$7,245,001	\$ 2,310,585	\$ 2,182,609	\$1,087,398	\$18,012,003
Weightings	25.28%	3.51%	40.22%	12.83%	12.12%	6.04%	100.009

The invested Securities Lending Cash Collateral is diversified among different asset classes with the maximum remaining effective maturity of any instrument being three years. 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, 2015, the weighted average maturity of investments classified for the Pension2 IRC 403(b) and 457 plans on the Statement of Fiduciary Net Position are as follows:

Pension2			
Weighted Average Maturity			
(Dollars in Thousands)			
Investment Type	Maturity	Fa	air Value
Federated U.S. Treasury Cash	55.0 days	\$	1,617
Money Market Securities	54.4 days		278
Vanguard Inflation Protected Securities Fund Institutional	8.6 years		21,277
Vanguard Short-Term Bond Index Fund Institutional	2.8 years		18,301
Vanguard Total Bond Market Index Fund	7.9 years		3,528
Total		\$	45,001

## 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, 2015, 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, 2015, CalSTRS was in compliance with this policy. The Pension2's 403(b) and 457 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, 2015, 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.

## 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, 2015, CalSTRS investments in foreign currencies are as follows:

At June 30, 2015, Cals	THO IIIVESUI	icitic	in loreign c		as ronows.		
Foreign Currency Risk							
(Dollars in Thousands)							
(In U.S. Dollar Equivalents)					Spot	Forward	
Currency Name	Cash		Equity	Fixed Income	Contracts	Contracts	Total Exposure
Australian Dollar	\$ 21,832	2 \$	1,656,760	\$ 24,997	\$ -	\$ 45	\$ 1,703,634
Brazilian Real	2,002		484,499	30,165	24	278	516,967
Canadian Dollar	25,881		2,225,829	35,380	1	(311)	2,286,780
Chilean Peso	22,00		28,148	-	1	(439)	27,931
Colombian Peso	123		8,953	-	(38)	883	9,921
Czech Koruna	222		4,416	_	(00)	(375)	4,263
Danish Krone	829		515,618	-	_	(0.0)	516,447
Egyptian Pound	82		4,377	_	_	(48)	4,411
Euro Currency	145,423		11,135,717	315,111	838	71,931	11,669,020
Hong Kong Dollar	22,072		2,079,040	-	-		2,101,112
Hungarian Forint	45		28,821	-	-	(1,183)	27,683
Indian Rupee	866		528,993	-	185	262	530,306
Indonesian Rupiah	554		190,445	-		194	191,193
Japanese Yen	135,413		5,941,933	10,118	11	21,314	6,108,789
Kazakhstan Tenge			-	-	-	15	15
Malaysian Ringgit	286	3	110,798	-	-	188	111,272
Mexican Peso	1,583	3	198,532	56,196	-	(522)	255,789
Moroccan Dirham	,		· -	-	-	(258)	(258)
New Israeli Shegel	2,429	9	110,385	-	(204)	(1,400)	111,210
New Romanian Leu			· -	-	-	89	89
New Russian Ruble			-	-	27	(1,385)	(1,358)
New Taiwan Dollar	9,184	ļ	775,311	-	(32)	(38)	784,425
New Zealand Dollar	1,589	)	44,231	30,622	-	2,716	79,158
Nigerian Naira			-	-	-	(218)	(218)
Norwegian Krone	2,452	2	215,042	-	-	(86)	217,408
Pakistan Rupee	168	3	33,677	-	-	-	33,845
Peruvian Nouveau Sol	38	3	974	-	-	(43)	969
Philippine Peso	263	3	85,161	-	-	(113)	85,311
Polish Zloty	897	7	31,667	-	-	158	32,722
Pound Sterling	48,617	7	5,934,288	218,931	2	(3,519)	6,198,319
Qatari Rial	-		45,389	-	-	-	45,389
Singapore Dollar	7,322	L	446,739	-	1	201	454,262
South African Rand	1,590	)	491,644	-	298	712	494,244
South Korean Won	1,020	)	989,422	-	(4)	33	990,471
Swedish Krona	1,047	7	681,654	5,533	(1)	(699)	687,534
Swiss Franc	1,998	3	2,142,233	153	(1)	(795)	2,143,588
Thailand Baht	260	)	181,224	-	-	106	181,590
Turkish Lira	426	3	205,823	-	-	(7)	206,242
UAE Dirham	2	2	36,233	-	-	-	36,235
Yuan Renminbi			-	-	-	(617)	(617)
Total	\$436,734	\$	37,593,976	\$ 727,206	\$ 1,108	\$ 87,069	\$38,846,093

CalSTRS investments denominated in foreign currencies are reported within debt securities, equity securities, alternative investments, derivative instruments and investment receivables and/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 shall be -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, 2015, the Pension2's 403(b) and 457 plans are not exposed to foreign currency risk.

## **DERIVATIVE INSTRUMENTS**

As of June 30, 2015, 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.

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, 2015:

(Dollars in Thousands)						
	Net Appreciation (Depre	ciatio	n) in Fair Value			
	of Investments throug	şh Jui	ne 30, 2015	Fair Value at	June 30, 201	L5
					Notiona	al
	Classification		Amount	Amount	(Amount / S	hares)
Investment Derivatives Instruments						
Commodities Futures	Investment Income / (Loss)	\$	(12,227)	\$ -	-	
Credit Default Swaps	Investment Income / (Loss)		14	2,112	88,703	
Interest Rate Swaps	Investment Income / (Loss)		1,739	692	7,261	
Foreign Currency Forwards	Investment Income / (Loss)		150,188	87,069	10,928,943	
Futures (Domestic and Foreign)	Investment Income / (Loss)		95,020	-	(437,197)	
Options	Investment Income / (Loss)		(4,004)	3,766	(1,084)	
Rights	Investment Income / (Loss)		(154)	1,601	6,644	Shares
Warrants	Investment Income / (Loss)		105	547	4,599	Shares
Total Derivative Instruments		\$	230,681	\$ 95,787		

The total options amount of \$3,766 is comprised of options bought and options written of \$7,827 and \$(4,061), respectively (Dollars in Thousands).

At June 30, 2015, all derivatives are reported as Derivative Instruments with the exception of foreign currency forward contracts, which are

reported as net receivable or payable on the Statement of Fiduciary Net Position.

## **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, 2015.

Counterparty Credit Rating (Dollars in Thousands)							
	Cred	dit Default	Fore	ign Currency	Inte	rest Rate	
S&P Rating		Swaps	F	orwards	5	Swaps	Total
AA	\$	-	\$	24,318	\$	-	\$ 24,318
A		2,132		80,189		692	83,013
BBB		-		941		-	941
Subtotal Investments in Asset Position	\$	2,132	\$	105,448	\$	692	\$ 108,272
Investments in Liability Position		(20)		(18,379)		-	(18,399
Total Investments in Asset / (Liability)	\$	2,112	\$	87,069	\$	692	\$ 89,873
Position							

The ratings used to determine the quality of the individual counterparty are the S&P ratings. The aggregate fair value of investment derivative instruments in an asset position subject to counterparty credit risk at June 30, 2015 was \$108.3 million. This represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform as contracted.

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, 2015, there were assets of \$59.5 million, including cash collateral held by CalSTRS, and liabilities of \$29.3 million from non-exchange traded derivatives subject to master netting agreements. At June 30, 2015, CalSTRS did not have any significant exposure

to counterparty credit risk with any single party.

#### **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, 2015, all of CalSTRS investments in derivative instruments are held in CalSTRS name or CalSTRS nominee name and/or are not exposed to custodial credit risk as of June 30, 2015.

## **INTEREST RATE RISK**

At June 30, 2015, CalSTRS is exposed to interest rate risk on its derivative instruments described below by maturity period.

Investment Maturities (Dollars in Thousands)										
					Inv	estment Matu	ıriti	es (in years)		
Investment Type	Fa	ir Value	Les	s Than 1		1 - 5		6 - 10	M	ore than 10
Credit Default Swaps Bought	\$	(2,321)	\$	-	\$	(2,321)	\$	-	\$	-
Credit Default Swaps Written		4,433		-		4,436		(3)		-
Interest Rate Swaps		692		-		-		-		692
Total	\$	2,804	\$	-	\$	2,115	\$	(3)	\$	692

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	Fai	ir Value	Notional						
Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.39211%	\$	692	7,261						
Total		\$	692	7,261						

## **FOREIGN CURRENCY RISK**

At June 30, 2015, 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 Forwa	ard Contracts	
Currency Name	Options	Rights	Warrants	Net Receivables	Net Payables	Total Exposure
Australian Dollar	-	-	-	557	(512)	45
Brazilian Real	-	-	-	808	(530)	278
Canadian Dollar	-	2	-	1,265	(1,576)	(309)
Chilean Peso	-	-	-	6	(445)	(439)
Colombian Peso	-	-	-	883	-	883
Czech Koruna	-	-	-	-	(375)	(375)
Egyptian Pound	-	-	-	79	(127)	(48)
Euro Currency	3,639	1,353	472	71,931	-	77,395
Hungarian Forint	-	-	-	177	(1,360)	(1,183)
Indian Rupee	-	-	-	396	(134)	262
Indonesian Rupiah	-	-	-	246	(52)	194
Japanese Yen	-	-	-	21,314	-	21,314
Kazakhstan Tenge	-	-	-	16	(1)	15
Malaysian Ringgit	-	-	-	233	(45)	188
Mexican Peso	-	-	-	765	(1,287)	(522)
Moroccan Dirham	-	-	-	-	(258)	(258)
New Israeli Sheqel	-	-	-	159	(1,559)	(1,400)
New Romanian Leu	-	-	-	89	-	89
New Russian Ruble	-	-	-	-	(1,385)	(1,385)
New Taiwan Dollar	-	-	-	-	(38)	(38)
New Zealand Dollar	-	-	-	4,914	(2,198)	2,716
Nigerian Naira	-	-	-	-	(218)	(218)
Norwegian Krone	-	-	-	45	(131)	(86)
Peruvian Nouveau Sol	-	-	-	5	(48)	(43)
Philippine Peso	-	-	-	-	(113)	(113)
Polish Zloty	-	-	-	209	(51)	158
Pound Sterling	-	-	-	5,636	(9,155)	(3,519)
Singapore Dollar	-	218	-	246	(45)	419
South African Rand	-	-	-	797	(85)	712
South Korean Won	-	-	-	58	(25)	33
Swedish Krona	-	-	-	-	(699)	(699)
Swiss Franc	-	-	-	-	(795)	(795)
Thailand Baht	-	-	14	109	(3)	120
Turkish Lira	-	-	-	507	(514)	(7)
Yuan Renminbi	-	-	-	48	(665)	(617)
Total	\$ 3,639	\$ 1,573	\$ 486	<b>\$</b> 111,498	\$ (24,429)	\$ 92,767

At June 30, 2015, the net unrealized gain on the foreign currency forward contracts was \$87.1 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, 2015:

	Previous Target Allocation as of	Current Target Allocation as of		Actual Allocation as of
Asset Class	July 2009	June 30, 2015	Policy Range	June 30, 2015
Global Equity	53.0%	55.0%	+/-6%	57.4%
Fixed Income	20.0%	17.0%	+/-3%	15.7%
Real Estate	12.0%	13.0%	+/-3%	12.7%
Private Equity	12.0%	13.0%	+/-3%	10.1%
Cash / Liquidity	1.0%	1.0%	+/-3%	1.8%
Inflation Sensitive	2.0%	1.0%	+/-3%	0.8%
Absolute Return	-	-	+/-3%	1.5%
Total Asset Allocation	100.0%	100.0%		100.0%

## 6. **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.

## 7. COMMITMENTS

In connection with the purchase of partnership interests under various investment portfolios, CalSTRS has remaining unfunded commitments of approximately \$19.1 billion at the June 30, 2015.

The following table depicts the unfunded commitments by asset strategy:

Annat Chuatago	Unfunded Commitments
Asset Strategy	(Dollars in Thousands)
Corporate Governance	\$ 569,782
Infrastructure	802,714
Innovation	44,346
Private Equity	9,237,656
Real Estate	8,438,639
Total	\$ 19,093,137

Real Estate's total unfunded commitment amount of \$8.4 billion is comprised of discretionary and non-discretionary amounts of \$4.3 billion and \$4.1 billion, respectively. Non-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, 2015, CalSTRS had commitments of approximately \$463.0 million expiring through March 2017. CalSTRS is paid a fee over the term of such agreements and earned approximately \$5.8 million for the period ended June 30, 2015.

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, 2014, actuarial valuation for the Defined Benefit Program, the future employer contributions committed to funding the MPP Program obligations total \$341 million.

## 8. NEW ACCOUNTING PRONOUNCEMENTS

GASB Statement No. 68, Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27, requires recognition of net pension liability and a more comprehensive measure of pension expense. Decision-usefulness and accountability are enhanced through new note disclosures and required supplementary information. The comparability of reported pension information is improved by the changes related to the attribution method used to determine service cost and the total pension liability, requirements for immediate recognition in pension expense of certain items, and the establishment of standardized expense recognition periods for amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions. CalSTRS has recognized its proportionate share of the liability, deferred outflows of resources, deferred inflows of resources, and expense related to its participation in the Public Employees' Retirement Fund required to be recognized under GASB Statement No. 68 in the financial statements for the fiscal year ending June 30, 2015. Impact of GASB 68 is not material to the financial statements as a whole and CalSTRS does not believe it adds value to for financial statement readers. CalSTRS is not providing additional note disclosures or

supplementary information required by GASB Statement No. 68 because CalSTRS concluded that presenting information about CalSTRS pension obligations as an employer under GASB Statement No. 68, in addition to the pension obligation of employers which participate in the STRP under GASB Statement No. 67, may confuse or mislead the users of CalSTRS financial statements.

GASB Statement No. 71. Pension Transition for Contributions Made Subsequent to the Measurement Date—an amendment of GASB Statement No. 68, requires governments to recognize a beginning deferred outflow of resources if there are any contributions made after the measurement date, but before the end of the government's reporting period. Application of GASB Statement No. 71 eliminates potential understatement of restated beginning net position and expense in the first year of implementation. The provisions of this statement are required to be applied simultaneously with the provisions of GASB Statement No. 68 and have been implemented in the financial statements for the fiscal year ending June 30, 2015.

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 is evaluating GASB Statement No. 72 and its impact to CalSTRS financial reporting and will implement it in the financial statements for the fiscal year ending 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 is evaluating GASB Statement No. 73 and its impact to CalSTRS financial reporting and, if applicable, will implement it in the financial statements for the fiscal year ending June 30, 2016.

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. This statement requires an OPEB liability to be included in 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 GASB Statement No. 74 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. 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 GASB Statement No. 75 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.

GASB Statement No. 76, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments, supersedes Statement No. 55, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments and amends Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, paragraphs 64, 74, and 82. This Statement establishes the hierarchy of generally accepted accounting principles (GAAP) for state and local governments. Management has evaluated GASB Statement No. 76 and determined it does not have an effect on CalSTRS financial reporting.

Required Supplementary Information—Unaudited

# California State Teachers' Retirement System Schedule of Changes in Net Pension Liability for Employers and Nonemployer Contributing Entity

(Dollars in Millions) Schedule I

State Teachers' Retirement Plan		
Year ended June 30 <sup>1</sup>	2015	2014
Total Pension Liability		
Service Cost	\$ 5,556	\$ 5,338
Interest	18,556	17,822
Changes of benefit terms	-	-
Differences between expected and actual experience	(1,312)	-
Changes of assumptions	-	-
Benefit payments, including refunds of member contributions	(12,565)	(12,035)
Net change in total pension liability	\$ 10,235	\$ 11,125
Total pension liability—beginning	248,911	237,786
Total pension liability—ending (a)	\$ 259,146	\$ 248,911
Plan fiduciary net position		
Contributions- member	2,510	2,264
Contributions- employer	2,678	2,272
Contributions- state	1,426	1,383
Net investment income	7,612	30,402
Other income	4	2
Benefit payments, including refunds of member contributions	(12,565)	(12,035)
Administrative expense	(145)	(154)
Other expenses	 (10)	(9)
Net change in plan fiduciary net position	\$ 1,510	\$ 24,125
Plan fiduciary net position—beginning		
(as previously stated)	190,474	166,349
Adjustment for application of GASB 68 <sup>2</sup>	 (162)	
Plan fiduciary net position—beginning (as adjusted)	\$ 190,312	\$ 166,349
Plan fiduciary net position—ending (b)	\$ 191,822	\$ 190,474
Net pension liability (asset) of employers		
and the state—ending (a) - (b)³	\$ 67,324	\$ 58,437

- 1) This 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.
- 2) Adjustment 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.
- 3) The 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.

# California State Teachers' Retirement System Schedule of Net Pension Liability of Employers and Nonemployer Contributing Entity

(Dollars in Millions) Schedule II

State Teach Year Ended June 30 <sup>1</sup>	Retirement Plai Total Pension Liability (a)	Plan F Net P	iduciary osition b)	(As	: Pension Liability set) of Employers and the State (a - b)³	Plan Fiducial Net Position a Percentage o Total Pensio Liability (b/a)	s a of	Covered- Employee Payroll <sup>2</sup> (c)	Net Pension Li (Asset) of Emp and the State Percentage Covered-Emp Payroll (a-b)/c	loyers as a of
2015	\$ 259,146	\$ 1	191,822	\$	67,324	-	74% \$	\$ 32,026		210%
2014	248,911	1	190,474		58,437	-	77%	27,486		213%

- 1) This 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.
- 2) CalSTRS reported estimated total compensation (pensionable and non-pensionable compensation) beginning fiscal year 2014-15; compared to pensionable compensation only for fiscal year 2013-2014.
- 3) The 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.

# California State Teachers' Retirement System 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.

Year Ended June 30	Dete	uarially ermined ibutions (a)	Re Cont for E	egally quired ributions mployers d State	nployer tributions (2)(3) (b)	State tributions (4) (c)	Con	Total tributions (b + c)	De (e	ntribution eficiency excess) - (b + c)	Covered- Employee Payroll <sup>5</sup> (d)	Contributions as % of Covered- Employee Payroll (b + c)/d
2015	\$	7,707 7.158	\$	4,093 3.641	\$ 2,667 2.258	\$ 1,426 1.383	\$	4,093 3.641	\$	3,614 3.517	\$ 32,026 27,486	13% 13%

- 1) This is a 10-year schedule. However, the information in this schedule is not required to be presented retroactively because CalSTRS has not previously determined the actuarially determined contribution for the STRP. Years will be added to this schedule in future fiscal years until 10 years of information is available.
- 2) Excludes \$12.5 million and \$14.5 million for fiscal year 2014-15 and 2013-14, respectively, in contributions to separately finance specific liabilities of an individual employer, such as benefit enhancements.
- 3) Includes employer contributions under Education Code sections 22711, 22713, 22905, 22950, 22951, 24260, and 26503, as well as Government Code section 7522.
- 4) Includes state contributions under Education Code sections 22954 and 22955, as well as Public Resources Code section 6217.
- CalSTRS reported estimated total compensation (pensionable and non-pensionable compensation) beginning fiscal year 2014-15; compared to pensionable compensation only for fiscal year 2013-14.

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

Year Ended June 30	Annı Requi Contrib (a)	ired ution	Employ Contribut (b)		State Contributions (c)	Co	Total ntributions (b + c)	Percentage Contributed (b + c)/a
2015	\$	32	\$	31	\$	- \$	31	97%
2014 <sup>(1)</sup>		38		33		-	33	87%
2013		38		35		-	35	92%
2012 <sup>(1)</sup>		57		35		-	35	61%
2011		57		36		-	36	63%
2010 <sup>(1)</sup>		64		32		-	32	50%

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

## California State Teachers' Retirement System 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. 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, 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 the Schedule of Contributions from Employers and Nonemployer Contributing Entity:

	State Teachers' Retirement	
	Plan <sup>1</sup>	MPP Program
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percent of payroll basis	Level Dollar Basis
Amortization Period	Open	Closed
Remaining Amortization Period	32 years	22 years
Asset Valuation Method	adjustment to market value	Fair market value of net assets
Actuarial Assumptions:		
Investment Rate of Return	$7.5\%^{2}$	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%

- 1) The 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.
- 2) The 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.

## California State Teachers' Retirement System Schedule of Money-Weighted Investment Returns

Schedule IV

Year Ended June 30 <sup>1</sup>	Annual Money-Weighted Rate of Return, Net of Investment Expenses
2015	4.1%
2014	18.6%

1) This 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.

## California State Teachers' Retirement System Schedule of Funding Progress (Medicare Premium Payment Program only) (Dollars in Millions)

Schedule V

Actuarial Valuation Date as of June 30 Teachers' He	Valı As: (	uarial ue of sets a)	Actuarial Accrued Liability (AAL) (b)	AAL ( Ex	funded (Funding (cess) JAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll (b-a)/c
Medicare Pren								
2015	•	(1)	(1)		(1)	(1)	(1)	(1)
2014	\$	0.9	482.0	\$	481.1	0.2%	(2)	N/A
2013		(1)	(1)		(1)	(1)	(1)	(1)
2012		0.4	582.0		581.6	0.1%	(2)	N/A
2011		(1)	(1)		(1)	(1)	(1)	(1)
2010		0.6	905.0		904.4	0.1%	5,011	18%
2009		(1)	(1)		(1)	(1)	(1)	(1)

<sup>1)</sup> An actuarial valuation for the MPP Program Fund is performed on a biennial basis and not available as of 2009, 2011, 2013, and 2015.

<sup>2)</sup> As 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

## California State Teachers' Retirement System Schedule of Administrative Expenses

(Dollars in Thousands) Schedule VI

	State eachers' etirement Plan	Pension2 RC 403(b) Plan	Pension2 IRC 457 Plan	Teachers' Health Benefits	eachers' Deferred npensation	Totals
Personnel Services:						
Salaries and Wages	\$ 57,796	\$ -	\$ -	\$ 165	\$ 272	\$ 58,23
Staff Benefits	13,175	-	-	41	84	13,30
Accrued Pension and OPEB Expense	18,478	-	-	50	87	18,61
Total Personnel Services	\$ 89,449	\$ -	\$ -	\$ 256	\$ 443	\$ 90,148
Operating Expenses and Equipment:						
General	\$ 998	\$ -	\$ -	\$ 88	\$ 42	\$ 1,12
Depreciation/amortization	11,335	-	-	-	-	11,33
Printing	588	-	-	-	6	59
Communications	858	-	-	-	-	85
Postage	835	-	-	-	-	83
Travel	648	-	-	-	7	65
Training	629	-	-	-	-	62
Facilities Operations	7,881	-	-	-	-	7,88
Consultants and Professional Services	11,452	1,405	47	-	467	13,37
Information Technology	9,190	-	-	-	-	9,19
Indirect State Central Services	6,771	-	-	16	31	6,81
Equipment	4,196	-	-	-	-	4,19
Other	409	-	-	-	-	40
Total Operating Expenses and						
Equipment:	\$ 55,790	\$ 1,405	\$ 47	\$ 104	\$ 553	\$ 57,899
Total	\$ 145,239	\$ 1,405	\$ 47	\$ 360	\$ 996	\$ 148,04°

(Dollars in Thousands) Schedule VII

	Contract Start Date	<u>Amount</u>
Investment Management Fees		
Aberdeen Asset Management Inc.	12/15/06	\$ 2,435
AGF Investments America, Inc.	3/19/07	873
Analytic Investors, LLC	9/1/14	239
AQR Capital Management Holdings, LLC	12/1/14	294
Baillie Gifford Overseas, Ltd.	1/15/06	6,234
Batterymarch Financial Management, Inc.	5/11/99	2,240
Bivium Capital Partners, LLC	2/15/08	2,516
BlackRock Financial Management, Inc.	3/12/07	3,790
BlackRock Institutional Trust, N.A.	10/27/98	1,685
BlackRock International, Ltd.	5/12/99	1,818
BlackRock Realty Advisors, Inc.	1/1/14	3,044
Capital Prospects, LLC	2/15/08	1,403
CBRE Global Investors	7/1/99	10,008
Chicago Equity Partners	11/1/98	811
Columbia Management Investment Advisers, LLC	10/1/11	1,151
Credit Suisse Asset Management, LLC	9/1/11	1,358
Delaware Investment Advisors	11/1/98	3,882
Delphi Management, Inc.	1/1/99	1,213
Denver Investments Advisors, LLC	1/1/99	163
DuPont Capital Management Corporation	10/1/11	2,032
FDO Partners, LLC	1/1/10	3,188
First Quadrant, LP	11/1/98	1,187
FIS Group, Inc.	2/27/04	2,405
Gateway Investment Advisers, LLC	12/1/14	140
Generation Investment Management	3/19/07	12,691
Heitman Captial Management, LLC	7/1/99	3,716
ING Clarion Partners	1/1/14	3,611
JP Morgan Investment Management, Inc	1/1/14	1,181
Lazard Asset Management, LLC	5/18/99	12,940
Leading Edge Investment Advisors, LLC	2/15/08	2,110
Lee Overlay Partners, Ltd.	10/15/09	5,738
Light Green Advisors	4/30/07	200
LM Capital Group, LLC	12/19/06	859
Mellon Capital Management Corp.	1/27/13	72
Millennium Global Investments, Ltd.	7/1/10	3,188
Mondrian Investment Partners, Ltd.	5/13/99	7,562
Morgan Stanley Investment Management, Inc.	5/18/99	1,235
New Amsterdam Partners, LLC	3/19/07	426
Northern Trust Global Advisors, Inc.	1/23/04	1,362
Oechsle International Advisors, LLC	5/19/99	2,281

(Dollars in Thousands)

	Contract Start Date		<u>Amount</u>
Parametric Portfolio Associates, LLC	12/1/14	\$	132
Post Advisory Group, LLC	1/31/02		1,811
Principal Global Investors	2/15/02		11,945
Progress Investment Management	2/15/08		2,982
Pyramis Global Advisors Trust Co.	2/1/00		2,635
Sasco Capital, Inc.	10/30/98		1,028
Schroder Investment Management	9/1/14		2,662
Silvercrest Asset Management	7/1/11		1,179
State Street Global Advisors Trust Co.	12/1/00		2,548
Sterling Capital Management, LLC	3/11/04		1,006
T. Rowe Price Associates, Inc.	1/15/06		3,897
TCW Asset Management Company	12/15/98		174
Templeton Asset Management, Ltd.	5/18/99		3,228
The Lionstone Group	1/1/14		3,783
Thomas Properties Group, LLC	11/15/99		246
UBS Global Asset Management (Americas)	11/1/98		1,427
Western Asset Management Co.	10/30/06		1,690
Miscellaneous	N/A		5
Total law star and Manadam and Face			455.050
Total Investment Management Fees		\$	155,659
-		<b>Þ</b>	155,659
Advisors and Consultants	6/1/08	<b>\$</b>	
Advisors and Consultants Altius Associates, Ltd.	6/1/08 9/20/07	\$	513
Advisors and Consultants Altius Associates, Ltd. Bard Consulting, LLC	9/20/07	\$	513 959
Advisors and Consultants Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting	9/20/07 12/1/09	<b>\$</b>	513 959 146
Advisors and Consultants  Altius Associates, Ltd.  Bard Consulting, LLC  Bickmore Risk Services and Consulting  Callan Associates	9/20/07 12/1/09 9/20/07	<b>\$</b>	513 959 146 116
Advisors and Consultants  Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting Callan Associates Cambridge Associates, LLC	9/20/07 12/1/09 9/20/07 6/1/08	<b>\$</b>	513 959 146 116 3,121
Advisors and Consultants  Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting Callan Associates Cambridge Associates, LLC Capital Hotel Management, LLC	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07	<b>\$</b>	513 959 146 116 3,121 42
Advisors and Consultants  Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting Callan Associates Cambridge Associates, LLC Capital Hotel Management, LLC Courtland Partners, Ltd.	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07 9/20/07	<b>\$</b>	513 959 146 116 3,121 42 145
Advisors and Consultants  Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting Callan Associates Cambridge Associates, LLC Capital Hotel Management, LLC Courtland Partners, Ltd. David L. Bonuccelli & Associates, Inc.	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07 9/20/07	<b>\$</b>	513 959 146 116 3,121 42 145 1,329
Advisors and Consultants  Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting Callan Associates Cambridge Associates, LLC Capital Hotel Management, LLC Courtland Partners, Ltd. David L. Bonuccelli & Associates, Inc. Hewitt Ennisknupp, Inc.	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07 9/20/07 9/20/07 7/15/11	<b>\$</b>	513 959 146 116 3,121 42 145 1,329 25
Advisors and Consultants  Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting Callan Associates Cambridge Associates, LLC Capital Hotel Management, LLC Courtland Partners, Ltd. David L. Bonuccelli & Associates, Inc. Hewitt Ennisknupp, Inc. Invesco Advisers, Inc	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07 9/20/07 9/20/07 7/15/11 1/1/14	<b>*</b>	513 959 146 116 3,121 42 145 1,329 25 938
Advisors and Consultants  Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting Callan Associates Cambridge Associates, LLC Capital Hotel Management, LLC Courtland Partners, Ltd. David L. Bonuccelli & Associates, Inc. Hewitt Ennisknupp, Inc. Invesco Advisers, Inc LP Capital Advisors, LLC	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07 9/20/07 9/20/07 7/15/11 1/1/14 1/1/12	<b>\$</b>	513 959 146 116 3,121 42 145 1,329 25 938 50
Advisors and Consultants  Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting Callan Associates Cambridge Associates, LLC Capital Hotel Management, LLC Courtland Partners, Ltd. David L. Bonuccelli & Associates, Inc. Hewitt Ennisknupp, Inc. Invesco Advisers, Inc LP Capital Advisors, LLC Lyxor Asset Management, Inc.	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07 9/20/07 9/20/07 7/15/11 1/1/14 1/1/12 8/1/11	<b>\$</b>	513 959 146 116 3,121 42 145 1,329 25 938 50 1,841
Advisors and Consultants  Altius Associates, Ltd.  Bard Consulting, LLC  Bickmore Risk Services and Consulting  Callan Associates  Cambridge Associates, LLC  Capital Hotel Management, LLC  Courtland Partners, Ltd.  David L. Bonuccelli & Associates, Inc.  Hewitt Ennisknupp, Inc.  Invesco Advisers, Inc  LP Capital Advisors, LLC  Lyxor Asset Management, Inc.  Meketa Investment Group, Inc.	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07 9/20/07 9/20/07 7/15/11 1/1/14 1/1/12 8/1/11 1/1/12	<b>*</b>	513 959 146 116 3,121 42 145 1,329 25 938 50 1,841 490
Advisors and Consultants  Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting Callan Associates Cambridge Associates, LLC Capital Hotel Management, LLC Courtland Partners, Ltd. David L. Bonuccelli & Associates, Inc. Hewitt Ennisknupp, Inc. Invesco Advisers, Inc LP Capital Advisors, LLC Lyxor Asset Management, Inc. Meketa Investment Group, Inc. Pension Consulting Alliance, Inc.	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07 9/20/07 9/20/07 7/15/11 1/1/14 1/1/12 8/1/11 1/1/12 7/1/10	<b>*</b>	513 959 146 116 3,121 42 145 1,329 25 938 50 1,841 490 1,505
Advisors and Consultants  Altius Associates, Ltd.  Bard Consulting, LLC  Bickmore Risk Services and Consulting  Callan Associates  Cambridge Associates, LLC  Capital Hotel Management, LLC  Courtland Partners, Ltd.  David L. Bonuccelli & Associates, Inc.  Hewitt Ennisknupp, Inc.  Invesco Advisers, Inc  LP Capital Advisors, LLC  Lyxor Asset Management, Inc.  Meketa Investment Group, Inc.	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07 9/20/07 9/20/07 7/15/11 1/1/14 1/1/12 8/1/11 1/1/12	<b>*</b>	513 959 146 116 3,121 42 145 1,329 25 938 50 1,841 490
Advisors and Consultants  Altius Associates, Ltd. Bard Consulting, LLC Bickmore Risk Services and Consulting Callan Associates Cambridge Associates, LLC Capital Hotel Management, LLC Courtland Partners, Ltd. David L. Bonuccelli & Associates, Inc. Hewitt Ennisknupp, Inc. Invesco Advisers, Inc LP Capital Advisors, LLC Lyxor Asset Management, Inc. Meketa Investment Group, Inc. Pension Consulting Alliance, Inc. The Townsend Group, Inc.	9/20/07 12/1/09 9/20/07 6/1/08 9/20/07 9/20/07 9/20/07 7/15/11 1/1/14 1/1/12 8/1/11 1/1/12 7/1/10 3/1/13	\$	513 959 146 116 3,121 42 145 1,329 25 938 50 1,841 490 1,505 372

(Dollars in Thousands)

	Contract Start Date	<u>Amount</u>
External Services-Legal and Attorney Fee		
Berman DeValerio	4/19/11	\$ 170
BLA Schwartz, PC	11/1/13	49
Covington & Burling, LLP	4/20/11	64
Cox, Castle & Nicholson, LLP	11/30/09	1,733
Freshfields Bruckhaus Deringer	5/1/12	22
Girard Gibbs, LLP	7/1/11	20
Grant & Eisenhofer	9/1/10	30
Groom Law Group, Chartered	7/1/12	86
Hanson Bridgett, LLP	5/31/14	24
Morgan, Lewis & Bockius, LLP	12/9/10	214
Pepper Hamilton, LLP	4/1/11	57
Proskauer, LLP	3/9/11	770
Reed Smith, LLP	4/13/10	17
Sheppard Mullin Richter & Hampton LLP	4/5/10	109
Miscellaneous	N/A	10
	,	
Total External Services-Legal and Attorney Fe	е	\$ 3,375
Master Custodian		
State Street Bank & Trust Co	7/1/01	7,197
Total Master Custodian		\$ 7,197
Research and Rating Services		
Accounting Research & Analytics, LLC	1/1/15	25
CEM Benchmarking Inc.	7/1/14	70
Cornerstone Macro, LP	1/1/15	50
CoStar Portfolio Strategy, Inc.	5/3/11	34
Covenant Review, LLC	1/1/15	50
Creditsights, Inc.	12/30/14	24
EIRIS Conflict Risk Network Ltd	2/1/15	13
Equilar, Inc.	7/1/14	40
eVestment Alliance Holdings, Inc.	8/1/14	24
FactSet Research System, Inc.	7/1/12	645
Farient Advisors LLC	3/1/14	36
Fitch Ratings, Inc.	1/1/15	82
Glass Lewis & Co., LLC	6/1/10	726
GMI Ratings	7/1/14	96
GNA Services, LLC	1/1/15	25
·		
IdealsWork, Inc.	7/1/14	12

(Dollars in Thousands)

	Contract Start Date	<u>Amount</u>
Informa Investment Solutions	1/12/15	\$ 24
Institutional Shareholder Services	1/1/14	440
Investor Communications Network, LLC	1/1/14	19
KDP Investment Advisors, Inc.	10/1/14	37
Moody's Investors Service	1/1/15	348
Morningstar, Inc.	7/1/14	50
MSCI ESG Research, Inc.	1/1/14	354
MSCI, Inc.	5/1/13	142
Preqin Limited	4/30/15	29
Real Estate Research Corporation	9/20/07	235
Russell Investment Group	7/1/14	40
Standard & Poor's	8/1/12	435
Strategas Securities, LLC	1/1/14	25
Sustainable Investments Institute	7/1/14	27
Technical Analysis Group, LLC	2/3/15	28
Thomson Reuters Markets, LLC	9/1/13	129
Trepp, LLC	1/1/10	56
Trucost PLC	7/1/14	59
University of Toronto	5/1/14	21
Miscellaneous	N/A	13
Total Research and Rating Services		\$ 4,463
Risk Management Systems		
Barclays Risk Analytics and Index Solutions Limited	7/1/15	75
BlackRock Financial Management, Inc.	7/1/06	5,142
MSCI, Inc. d/b/a Barra, LLC	4/1/15	95
Total Risk Management Systems		\$ 5,312
Trading Systems		
Trading Systems Bloomberg, LP	0/6/12	677
	9/6/12	677
Fixed Income Clearing Corp	7/1/12	12
Intex Solutions, Inc.	9/1/11	145
IPC Systems, Inc	7/1/14	36
Market Axess Corporation	10/1/12	23
Markit N.America Inc. / Markit Group	7/15/12	124
Omgeo, LLC	11/1/09	13
Miscellaneous	N/A	1
Total Trading Systems		\$ 1,031
		-

(Dollars in Thousands)

	Contract Start Date	<u>Amount</u>
Operating Expenses		
Administrative Costs		\$ 21,518
Alliant Insurance Services		893
Council of Institutional Investors		30
EFL Associates		24
Miscellaneous		8
Total Operating Expenses		\$ 22,473
Subtotal		\$ 211,157
Other Investment Expenses		
Foreign Tax Withheld		39,150
Real Estate		126
Miscellaneous		9,912
Total Other Investment Expenses		\$ 49,188
Total		\$ 260,345

## California State Teachers' Retirement System Schedule of Consultant and Professional Services Expenses (Dollars in Thousands)

Schedule VIII

ndividual or Firm	Comr	nission/Fee	Nature of Services
Teachers' Retirement Plan			
filliman, Inc.	\$	527	
	\$	527	Actuarial Services
Annua Harristh II D		0.400	
crowe Horwath LLP		2,108	
(PMG LLP Macias, Gini & O'Connell, LLP		40 18	
racias, Gilli & O'Collifell, LLF	\$	2,166	Auditing Services
	Ψ	2,100	Additing Services
22nd Century Technologies, Inc.		72	
dtech Global Solutions, Inc.		133	
Illegiance, Inc.		49	
ngus-Hamer, Inc.		45	
udio Fidelity Communications Corp.		41	
Background Profiles, Inc.		45	
calGov Technology		40	
EM Benchmarking Inc.		45	
liber, Inc.		4,873	
Clifton Larson Allen, LLP		36	
Daniel J. Edelman, Inc.		172	
Department Of Human Resources		45	
Department of General Services		195	
Digital Deployment, Inc.		65	
r. Robert Yetman		56	
imployment Development Department		44	
interprising Service Providers, LLC		210	
intisys Solutions, Inc.		65	
xamWorks, Inc.		77	
orrester Research, Inc.		178	
Cartner, Inc.		260	
Alobal Governance Advisors, LLC		40	
GoldLink Pacific, Inc.		149	
Government Operations Agency		196	
Grant Thornton, LLP		516	
Group One Consultants, Inc.		27	
Guardian Protection Force, Inc.		124	
lewitt EnnisKnupp, Inc.		102	
nformatix, Inc.		79 25	
ntegratech, Inc. nternational Network Consulting		35 173	
aykumar Maistry		210	
ones Lang LaSalle Americas, Inc.		30	
_		510	
RWL, Inc.		2010	

## California State Teachers' Retirement System Schedule of Consultant and Professional Services Expenses (Dollars in Thousands)

IcLagan Partners, Inc. IetaVista Consulting Group Ietric Studios, LLC Iontridge Consulting Iorningstar Credit Ratings, LLC exus IS, IncC. Tanner Recognition Company Iffice of Administrative Hearings nCore Consulting, LLC ace Harmon, LLC atriot IT Corporation ension Benefit Information, Inc. innacle Consulting	\$ 13 16 13 115 17 31 48 71 763 172	
letric Studios, LLC Iontridge Consulting Iorningstar Credit Ratings, LLC exus IS, IncC. Tanner Recognition Company ffice of Administrative Hearings nCore Consulting, LLC ace Harmon, LLC atriot IT Corporation ension Benefit Information, Inc.	13 115 17 31 48 71 763 172	
Iontridge Consulting Iorningstar Credit Ratings, LLC exus IS, IncC. Tanner Recognition Company ffice of Administrative Hearings nCore Consulting, LLC ace Harmon, LLC atriot IT Corporation ension Benefit Information, Inc.	115 17 31 48 71 763 172	
Iorningstar Credit Ratings, LLC exus IS, IncC. Tanner Recognition Company ffice of Administrative Hearings nCore Consulting, LLC ace Harmon, LLC atriot IT Corporation ension Benefit Information, Inc.	17 31 48 71 763 172	
exus IS, IncC. Tanner Recognition Company ffice of Administrative Hearings nCore Consulting, LLC ace Harmon, LLC atriot IT Corporation ension Benefit Information, Inc.	31 48 71 763 172	
.C. Tanner Recognition Company ffice of Administrative Hearings nCore Consulting, LLC ace Harmon, LLC atriot IT Corporation ension Benefit Information, Inc.	48 71 763 172	
ffice of Administrative Hearings nCore Consulting, LLC ace Harmon, LLC atriot IT Corporation ension Benefit Information, Inc.	71 763 172	
ffice of Administrative Hearings nCore Consulting, LLC ace Harmon, LLC atriot IT Corporation ension Benefit Information, Inc.	763 172	
ace Harmon, LLC atriot IT Corporation ension Benefit Information, Inc.	172	
ace Harmon, LLC atriot IT Corporation ension Benefit Information, Inc.		
atriot IT Corporation ension Benefit Information, Inc.	4.0	
ension Benefit Information, Inc.	16	
	23	
innacie Consulting	214	
roProse, LLC	32	
rovidence Technology Group	464	
&P Capital IQ	27	
HI International Corp.	43	
ierra Metrics, Inc.	202	
oftSol Technologies, Inc.	830	
tate Controller's Office	1,670	
tate Personnel Board	28	
	211	
homas V. Ennis Consulting		
nomas/Ferrous, Inc.	107	
pastmasters International	13	
nisys Corporation	203	
niversity Enterprises, Inc.	51	
ST Global Inc.	30	
isionary Integration Professionals	204	
	\$ 14,608	Consulting Services
alifornia Department Of Justice	511	
ogan Lovells US, LLP	247	
Turphy Austin Adams Schoenfeld, LLP	48	
Ison, Hagel & Fishburn, LLP	135	
eed Smith, LLP	486	
eeu Jillilli, LLF	\$ 1,427	Legal Services
	Ψ 1,421	Legal Gervices
resno County Office Of Education	283	
umboldt County Office Of Education	41	
ern County Office of Education	228	
range County Office of Education	106	
lacer County Office Of Education	106	
an Bernardino County of Education	51	
an Diego County Office Of Education	289	
an Jose Unified School District	(24)	

## California State Teachers' Retirement System Schedule of Consultant and Professional Services Expenses (Dollars in Thousands)

Individual or Firm	<u>Com</u> ı	mission/Fee	Nature of Services
San Joaquin County Office Of Education	\$	84	
Santa Barbara County Office of Education		124	
Santa Cruz County Office of Education		143	
Stanislaus County Office of Education		83	
	\$	1,514	Regional Counseling Services
Other		455	
Others	\$	155 <b>155</b>	Various Services Under \$10K
	Ψ	199	various Services Officer \$10K
Gross Consulting and Professional Services	\$	20,397	
-			
Less: Amounts Capitalized		8,945	
Consulting and Professional Services Net of			
Amounts Capitalized:	\$	11,452	
IRC 403(b) Plan			
TIAA-CREF		505	
Voya Institutional Plan		900	
Consulting and Professional Services:	\$	1,405	Administrative Services
IRC 457 Plan			
TIAA-CREF		16	
Voya Institutional Plan		31	
Consulting and Professional Services:	\$	47	Administrative Services
Teachers' Deferred Compensation Fund			
JEM Resource Partners, LP		375	
Meridian Fiduciary Consulting		87	
Morningstar Credit Ratings, LLC		5	
Consulting and Professional Services:	\$	467	Consulting Services