# CALSTRS 

## CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM

COMPREHENSIVE ANNUAL FINANCIAL REPORT
A Component of the State of California for the Fiscal Year Ended June 30, 2009


## Mission Statement



## main goals

No Surprises
CUSTOMER SERVICE
Provide the customer what they need, when they need it.

One and Done
QUALITY
Provide timely, accurate, and cost-effective products and services the first time, every time.

## Trusted Guide

INFORMED DECISIONS
Deliver knowledgeable, compassionate and consistent education and consultation to make smart decisions.

## Rock Solid

ORGANIZATIONAL AND FINANCIAL STRENGTH
Develop and support our people, ensure the integrity of our systems, and strengthen the trust fund.

## Introduction

## CALSTRS <br> california state teachers' retirement system

COMPREHENSIVE ANNUAL FINANCIAL REPORT
A Component of the State of California for the Fiscal Year Ended June 30, 2009
PREPARED BY CALSTRS STAFF
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## Certificate of Achievement for Excellence in Financial Reporting

Presented to

California State Teachers' Retirement System

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
Junc 30, 2008
A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial
reports (CAFRs) achieve the highest
standards in government accounting
and financial reporting.


Executive Director

# PC <br> Public Pension Coordinating Council <br> Recognition Award for Administration 2009 

Presented to

## California State Teachers' Retirement System

In recognition of meeting professional standards for
plan administration as
set forth in the Public Pension Standards.
Presented by the Public Pension Coordinating Council, a confederation of
National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)


Alan H, Winkle
Program Administrator

## CALSTRS



The Comprehensive Annual Financial Report of the California State Teachers' Retirement System for the Fiscal Year Ended June 30, 2009, details the performance of our state funds.

In preparing this report, fiscal year 08-09 events that sent shockwaves through the global financial markets remain fresh in our minds. The aftermath threatened the credibility of our regulatory systems, tested the strategies of our political leaders and forced a deep national reflection on the viability of our retirement and health care systems. This coming year could be one of the most crucial in our 97-year history as we move forward with course corrections and rebuild our financial strength.

## TRANSPARENCY AND GOVERNANCE

We believe there is a universal standard for good corporate governance. It includes transparency and disclosure of board activities, and engaging companies to help maximize their performance-a best practice that we've followed for years. Good corporate governance is an important factor in maintaining the longterm value of CaISTRS portfolio companies and we intend to protect that value for the benefit of California's educators.

Our corporate governance policies address leading issues such as:

- proxy access
- executive compensation
- board diversity
- sustainability

As a long-term owner and lender to corporations around the world, CaISTRS duty is to protect those assets through the pursuit of good governance and operational accountability.

We have called for greater transparency from our portfolio companies and we are committed to leading the way with comprehensive disclosure of our votes. Information is vital for shareholders to make informed decisions about the companies they own and CaISTRS intends to let fellow shareholders, as well as management, know how we intend to vote.

Like a number of large pension plans CaISTRS has, for years, announced its proxy-vote intentions on selective companies. The addition of online disclosure opens the process to all CaISTRS portfolio companies, allowing other shareholders to know how the pension fund will vote.

Corporate accountability has become a high-profile issue and today's economic challenges are forcing a reconsideration of the role of boards of directors in the long-term growth of publicly held companies.

The economic downturn has also highlighted the impact that board diversity plays in providing companies with a full range of talent and experience.

The Teachers' Retirement Board has made diversity a priority in its corporate governance efforts for the second year running. This commitment has helped forge a partnership with Stanford University and other large institutional investors to sponsor a one-day conference on September 10, 2009, titled "Diversity on Corporate Boards: When Difference Makes a Difference." The goal is to raise awareness of the issue and prompt others to actively support diversity on corporate boards.

One of the lessons of this current economic downturn is to be mindful that governance is a significant risk factor and that mechanisms for accountability go a long way toward mitigating that risk.

PERFORMANCE IMPROVEMENTS
Three specific breakthrough factors have been identified for this coming year to narrow the focus of our efforts:

- Improve Financial Strength
- Improve Customer Service
- Design of Future State Architecture

Each of these represents a significant body of activity that will provide long-term value to CaISTRS. The expected results are financial stability, strengthening the member's customer experience
and creating the business systems to support these efforts. We remain committed to the roots of our plan design which provides for guaranteed long-term predictable financial support for our members.

We completed one of our great milestone projects in 2008-09, the Data Integrity Project. In the coming fiscal year, we will complete yet another milestone project with the conclusion of the Employer Reporting Project. Both projects were identified by the board nearly six years ago as efforts that would create significant change in the quality of our data management. The two projects have involved many business areas and consumed considerable internal focus. They now provide a long-term path toward assuring the accuracy of our members' benefits.

We also completed the construction of our new headquarters facility. Similar to our data improvement initiatives, this six-year effort has laid the foundation for a state-of-the-art sustainable facility that will allow us to provide much improved services to members.

## MEMBER PROFILE

Established 97 years ago, the California State Teachers' Retirement System, with a $\$ 118.88$ billion portfolio as of June 30, 2009, is the second largest public pension fund in the United States. It administers retirement, disability and survivor benefits for California's 847,833 public school educators and their beneficiaries, from prekindergarten through community college. The Teachers' Retirement Law, part of the California Education Code, established these programs with CaISTRS as administrator. The law sets required member and employer contribution rates. CaISTRS members included employees of approximately 1,700 school districts, community college districts, county offices of education and regional occupational programs as of June 30, 2009. Our services bridge the new teacher just starting out with the retired educator enjoying the fruits of 30 years in the classroom.

The median CaISTRS pension replaces only 62 percent of final salary for current and retired members. Financial planners recommend income replacement of 80 percent to 90 percent to maintain a similar lifestyle in retirement. Public school teachers do not receive Social Security benefits for their CaISTRS teaching service. Moreover, due to the federal Government Pension Offset and Windfall

Elimination Provision, retirees often have their Social Security benefits reduced when receiving a CalSTRS benefit. Most retired educators also do not have employer-sponsored health insurance after age 65.

We continue to reach members in their communities-from Eureka to San Diego-with counseling services and workshops that explain retirement options and stress the need for early savings. With over 40 publications delivered to their home or workplace, we strive to be their trusted guide to retirement.

CALSTRS FUNDING STRATEGY
As of June 30, 2008, the Defined Benefit Program had an estimated unfunded actuarial obligation of $\$ 22.5$ billion, with an estimated 87 percent of the funds needed to fund the cost of the benefit plan.

The Teachers' Retirement Board voted to approve a Comprehensive Funding Strategy that will guide the long-term effort towards fully funding the Defined Benefit Program. While our investment income goes a long way to maintaining the health of our fund, providing approximately two-thirds of the member benefits paid, we also realize that we need to take additional steps in order to close the funding gap.

Under California state law, the Defined Benefit Program receives contributions from members and employers set at a percentage of the member's earnings plus state General Fund contributions. CaISTRS investment earnings finance the cost of administering the State Teachers' Retirement Plan.

INVESTMENTS OVERVIEW
For fiscal year 2008-09, the investment portfolio declined $\$ 42.6$ billion, or a negative 25.03 percent, in value. Despite the recent turmoil of the markets, our investment professionals continue to adapt and effectively respond to the increasing size and complexity of the CaISTRS investment portfolio.

See the Investments section for more detailed information on the performance of the CaISTRS investment portfolio.

FINANCIAL REVIEW
The financial statements and notes along with the Management Discussion and Analysis in this report present and analyze the changes in CaISTRS fiduciary net assets for the fiscal year ended June 30, 2009. The markets are dynamic and fluid, any judgment of the financial statements should also consider current market conditions.

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

STATISTICAL REPORTS
Past and current data is connected in this section. The section includes tables that reflect the net assets and demographic characteristics of the Defined Benefit, Defined Benefit Supplement, Cash Balance Benefit, CaISTRS Pension2, and Medicare Premium Payment programs. Also captured in the tables, when applicable, is information comparing the last nine years to the previous fiscal year. This look back shows us overall trends in our programs and membership demographics that help us accurately forecast our future ability to meet our member's retirement needs.

GFOA AWARD
The Government Finance Officers Association of the United States and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to the California State Teachers' Retirement System for its comprehensive annual financial report for the year ended June 30, 2008. This is the 14th consecutive year CaISTRS has received this prestigious award. To be awarded the certificate, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. Our report must
satisfy both generally accepted accounting principles and applicable legal requirements.

## PPCC STANDARDS AWARD PROGRAM

The Public Pension Coordinating Council presented CaISTRS with its second Recognition Award for Administration for meeting professional standards for plan administration as set forth in the Public Pension Standards.

The Public Pension Coordinating Council is a coalition of three national associations that represent public retirement systems and administrators. The associations that form the PPCC are: the National Association of State Retirement Administrators, National Council on Teacher Retirement and National Conference on Public Employee Retirement Systems. Together, these associations represent more than 500 of the largest pension plans in the U.S.

## ACKNOWLEDGEMENTS

This 2009 Comprehensive Annual Financial Report reflects the hard work of CaISTRS staff under the leadership and guidance of the Teachers' Retirement Board. While many have contributed to the successful completion of the report, responsibility for both the accuracy of the financial data and the fairness of the presentation rests with me and the management of CaISTRS. I would like to thank all the staff, advisors and the many other stakeholder organizations who have demonstrated their commitment to ensuring that we meet the needs of our members. Our endeavor is to make sure the efforts of California educators are rewarded with a secure retirement now, and into perpetuity.

Respectfully submitted,


Chief Executive Officer


Dana Dillon
Chair
K-12 Classroom Teacher Term:
1/1/08-12/31/11


Michael C. Genest
State Finance Director
Ex-Officio Member


Jack 0'Connell
State Superintendent of Public Instruction Ex-Officio Member


Jerilyn Harris Vice Chair Retiree Representative 1/11/08-12/31/11


Harry M. Keiley K-12 Classroom Teacher Term:
1/1/08-12/31/11


Peter Reinke
Public Representative Term: 02/14/07-02/14/11


Kathy Brugger
School Board Representative
Term:
1/11/08-12/31/11


Roger Kozberg Public Representative Term: 4/28/05-12/31/09


Beth Rogers
Public Representative
Term:
1/11/08-12/31/11


John Chiang State Controller Ex-Officio Member


Bill Lockyer State Treasurer Ex-Officio Member


Carolyn A. Widener Community College Instructor Term: 1/1/08-12/31/11


Pictured from left to right: Kathleen Andleman Christopher J. Ailman Christine Ford Ed Derman Jack Ehnes Janice Hanson Peggy Plett


JACK EHNES
Chief Executive Officer


YEAR IN REVIEW


## Membership

Membership in the CaISTRS Defined Benefit Program includes California public school employees, prekindergarten through community college, who teach, are involved in selecting and preparing instructional materials, or are supervising people engaged in those activities. Membership is in effect as long as contributions remain on deposit with CaISTRS. Members are employed in approximately 1,700 public school districts, community college districts, county offices of education and state reporting entities (Regional Occupational Programs) in California. The CaISTRS Defined Benefit Program includes retirement, disability and survivor benefits.

Beneficiaries of a retired member who elected an option receive a continuing lifetime benefit upon the member's death.

The financial statements, presented in the financial section, contain Defined Benefit Program membership data as of June 30, 2008, due to the timing of the independent auditor's report.

Membership by the Numbers

# 459,009 Active Members 

156,207 Inactive Members 203,649 Retired Members

20,588 Survivor Benefit Recipients
8,380 Disability Benefit Recipients

## 847,833 Total membership

## Benefits to Members and Benefit Recipients

## SERVICE RETIREMENT

CaISTRS is committed to providing exceptional service to its retired members. Staff provides timely and accurate payments and information about application and benefit payment processes.

13,015 | Members who retired in |
| :--- |
| fiscal year 2008-09 |

1.9 percent Increase from fiscal year 2007-08

## DISABILITY BENEFITS

89 percent Applications processed within 150 days

764 Applications received
571 Approved applications
2.69 percent Increase in number of applications from fiscal year 2007-08

SURVIVOR BENEFITS
6,655 Applications received
1.93 percent Decrease in number of applications from fiscal year 2007-08
83 percent Completed applications processed within 30 days of receiving last required document

## Communicating With Our Members and Beneficiaries

## CUSTOMER SERVICE

Members may contact a CaISTRS Contact Center representative by phone, secured
online message, written correspondence or by walking into our Sacramento Member Service Center.

16,715 Members using automated phone system
220,575 Member inquiries
211 seconds Average wait time to talk with Call Center representative

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

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

- 83.5 percent of members reported they were "highly satisfied" with their contact experience.


## MEMBER COMMUNICATIONS

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

## NEWSLETTERS

Five times a year CaISTRS reaches out to members and beneficiaries through the CaISTRS Connections, Retired Educator and Your Money Matters newsletters.

CaISTRS Connections is mailed to active and inactive Defined Benefit members and Cash Balance participants in the spring and fall.

Retired Educator is mailed to retired members and benefit recipients in summer and winter and focuses on matters of special interest to retirees.

Your Money Matters was launched in fall 2008. The annual newsletter targets members in their forties and spotlights the importance of supplemental savings.

## RETIREMENT PROGRESS REPORT

Every year Defined Benefit members and Cash Balance participants receive a personalized Retirement Progress Report that contains detailed account information. For members age 45 and older, the report also includes retirement benefit estimates and information for planning retirement. Retirement Progress Reports are usually mailed in mid-December and provide statement of accounts as of June 30 of that school year. Retired members and benefit recipients do not receive a report.

## MEMBER INFORMATIONAL PUBLICATIONS

CaISTRS offers a number of publications for members at various stages in their careers.

The CaISTRS Member Handbook is a comprehensive resource of CalSTRS programs and benefits, including descriptions, eligibility requirements and worksheets. The Member Handbook was produced on CD for the first time in 200809, allowing our members to choose a green option to learn about CaISTRS benefits and services. The handbook is updated annually.

Your Retirement Guide contains important information and forms for members who are within a year of retirement. The booklet includes helpful checklists, the Service Retirement Application and other forms. The guide is updated annually.

CaISTRS Member Kits contain targeted retirement information and are mailed annually to three groups of CaISTRS members when they reach a career milestone. The three career milestonesvested, mid-career and eligible to retireare based on the member's age and length of service.

In addition, CaISTRS publishes publications that cover specific topics, including:

- Cash Balance: An Exceptional Plan for Your Future (for PreK-12 Part-Time Teachers)
- Cash Balance: An Exceptional Plan for Your Future (for Community College PartTime Instructors)
- Community Property Information
- Introduction to Disability Benefits
- Join CaISTRS? Join CaIPERS?
- Purchase Additional Service Credit
- Refund: Consider the Consequences
- Social Security, CaISTRS and You
- Survivor Benefits: Remember Your Loved Ones
- Tax Considerations for Rollovers
- Unlock Home Ownership
- Welcome to CaISTRS
- Your Disability Benefits Guide


## SPECIAL MESSAGE TO RETIRED MEMBERS AND BENEFICIARIES

In addition to newsletters and conducting an audio town hall, CaISTRS included an insert with benefit payments to more than 200,000 retired members and beneficiaries reassuring them of the strength of the CaISTRS fund during the financial crisis and reaffirming our commitment to securing their retirement.

## CALSTRS.COM AND MYCALSTRS

The CaISTRS Web site, CaISTRS.com, provides information for members, employers and CaISTRS business partners. CaISTRS.com includes many useful features such as online calculators, which allow members to estimate their retirement benefit, calculate the cost to purchase service credit and redeposit funds. Benefits counseling and retirement planning workshops are available for signing up online. Members can also view, print or order forms and publications.

When visiting CaISTRS.com, CaISTRS members can register for a secure, online service called myCaISTRS. With a myCaISTRS account, they can view and update personal account information, send and receive confidential materials, access forms and general retirement information and request to receive newsletters and Retirement Progress Reports online.

## 403BCOMPARE WEB TOOL

CaISTRS also administers 403bCompare. com, which is a Web personal investment tool. With 403bCompare.com, members can easily compare tax-deferred 403(b) retirement investment products such as annuities and mutual funds. The tool features an option that lets members search 403(b) products, place three of them side-by-side and compare features, including fund descriptions, fees and returns.

## E-MAIL ALERTS

In an effort to use all possible communication channels to reach our members, CaISTRS sent out an e-mail alert to more than 280,000 active members about the financial crisis. The e-mail message emphasized CaISTRS ongoing effort to preserve the fund and to be there for members when they need us most.

## BENEFITS COUNSELING

CaISTRS provides members with the opportunity to meet with a benefits counselor for personalized assistance in retirement planning. CaISTRS counseling sessions are available to members at any career stage, but are most beneficial near retirement or when considering a disability benefit. Members have the choice of meeting with a CaISTRS benefits counselor face-to-face or over the telephone.

- Personal retirement counseling was provided to 40,263 members at more than 27 locations throughout California.
- 2,511 members chose a telephone counseling session

Each member receives a complete, personalized retirement package of information before or during their counseling session. This service receives consistent high scores on member satisfaction surveys.

## MEMBER WORKSHOPS

CaISTRS offers a number of workshops designed to meet the needs of members at different career stages. The workshops provide customized content reflecting their needs at each stage:

- The main focus of the early career workshop is basic plan information and supplemental benefits.
- The mid-career workshop covers basic details of CaISTRS benefits and personal financial planning.
- The late-career workshop focuses on the CaISTRS retirement formula, retirement decisions, potential income gaps, postretirement employment and the retirement timeline.
- Another workshop, designed for both late career members and retirees, presents a unique roadmap for members to manage their sources of retirement, identify retirement risks and strategize ways to close income gaps.
- CaISTRS presented 843 workshops to 18,328 members.


## MEMBER OUTREACH

Contact with members at educator conferences and events increases member awareness of CaISTRS benefits and services. In 2008-09, CalSTRS used several new channels of communications for communicating with members throughout the state on retirement-related issues.

- CaISTRS established the Speaker's Bureau. CalSTRS managers spoke directly to members at more than 50 events throughout the state on funding and retirement issues.
- CaISTRS hosted an audio town hall with more than 645 participants at which CaISTRS executive managers addressed funding and retirement issues. A question and answer session followed. The audio town hall was posted to CaISTRS.com.
- Members had the opportunity to join a webinar that covered the CaISTRS Pension2 supplemental savings plan.
- CaISTRS participated in benefit fairs held throughout California through a partnership with CaIPERS.
- Benefits counselors provided outreach services at 81 events that resulted in 3,763 member contacts.


## FORMS SUBMISSION

This year all field offices that contracted for counseling services also provided a convenient, secure location for members to submit forms directly to CaISTRS.

More than 6,750 forms were submitted to CaISTRS from 27 different locations throughout the state.

Providing members the convenience of submitting forms at a local counseling office also gave them the opportunity to have forms checked for completeness before entering the system.

- Of the members who took advantage of submitting their forms at a local counseling office, 99 percent say they would use the service again.


## SERVICES TO EMPLOYERS, MEMBER AND CLIENT ORGANIZATIONS

Two committees meet regularly to provide a forum for active participation in shaping CaISTRS policies and procedures in areas of information dissemination, benefit plan administration and services to members and beneficiaries. The Employer Advisory Committee is composed of county and district employer representatives and CaISTRS staff. The Client Advisory Committee includes members of various organizations representing CaISTRS members and benefit recipients. CaISTRS staff schedule special meetings with both committees to work closely on plan design and other crucial member and employer issues.

CalSTRS staff also conduct field visits to individual counties and school districts. These visits provide specific information to employers about CaISTRS data reporting processes and the Remote Employer Access Program. This program allows employers direct access to the CaISTRS database for verification and review of individual member's service and contribution records, improving the accuracy and timeliness of the reporting process.

In addition, CaISTRS outreach staff and benefits counselors attend meetings of school districts, academic associations and other constituent groups to conduct workshops and provide information on CaISTRS benefits and services. The venues include county fairs, annual conferences of academic organizations and meetings of union councils and school administrators.

- CaISTRS staff and counselors attended 50 events and served more than 8,611 members.



## PROFESSIONAL SERVICES

CaISTRS contracts for the services of various independent consultants essential to the effective and professional operation of the system. Milliman, Inc. provides actuarial services and the independent auditor is Macias Gini \& O'Connell LLP. Lists of investment professionals for investment services and other consultants are provided on Schedules IV and V in the financial section of the report.


Macias Gini \& O'Connell lup
Cortifiç Public Açcountants \& Managemene Consultants
SACRAMENTO
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916.928 .4600

WALMUTGAEEK

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

## INDEPENDENT AUDITOR'S REPORT

We have audited the accompanying statement of fiduciary net assets of the Califormia State Teachers' Retirement System (the System), a component unit of the State of California, as of June 30, 2009, and the related statement of changes in fiduciary net assets for the year then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audit. The prior year surnmarized comparative information has been derived from the System's 2008 financial statements on which our report dated October 17, 2008, expressed an unqualified opinion.

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 of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the pupose of expressing an opinion on the effectiveness of the System's intemal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net assets of the Califomia State Teachers' Retirement System as of June 30, 2009, and the changes in fiduciary net assets for the year then ended in conformity with the accounting principles generally accepted in the United States of America.

As described in Note 3, based on the most recent actuarial valuation as of June 30, 2008, the System's independent actuaries determined that, at June 30, 2008, the value of the Defined Benefit Program's actuarial accrued obligation exceeded the actuarial value of its assets by $\$ 22.5$ billion. The mosit recent actuarial valuation does not reflect the impact of extraordinary declines in investment values subsequent to June 30, 2008.

In accordance with Government Auditing Standards, we have issued our report dated October 14, 2009, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations and contracts, and other matters. The purpose of that report is to describe the scope of our testing of intemal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audit.

The Management's Discussion and Analysis, the Schedule of Funding Progress and the Schedule of Contributions from Employers and Other Contributing Entities as listed in the table of contents are not a required part of the basic financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquinies of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements. The other supplemental information listed in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

# California State Teachers' Retirement System Management's Discussion and Analysis (Unaudited) June 30, 2009 

## MANAGEMENT'S DISCUSSION AND ANALYSIS

Management's Discussion and Analysis (MD\&A) of the California State Teachers' Retirement System's (System) financial performance provide an overview of the System's financial activities for the fiscal year ended June 30, 2009. We designed the MD\&A to focus on the current year's activities, resulting changes, and currently known facts, and we encourage you to read it in conjunction with the System's financial statements and notes to the financial statements.

The System is primarily responsible for administering retirement, disability, survivor and health benefits, as well as a supplemental retirement savings plan for California public school teachers and certain other employees of the State's public school system. The System is comprised of the following:

1. State Teachers' Retirement Plan (STRP)
2. Pension2 Program (IRC 403(b) and 457 Plans)
3. Teachers' Health Benefits Fund (THBF)
4. Teachers' Deferred Compensation Fund (TDCF)

## Financial Highlights

- Total net assets decreased by $\$ 43.1$ billion or $27 \%$ to $\$ 118.6$ billion.
- Net investment loss totaled $\$ 40.4$ billion, a decrease of $\$ 30.7$ billion or $318 \%$.
- In the most recent actuarial valuation as of June 30, 2008, the System's Defined Benefit Program was estimated to be funded at $87 \%$ compared to an estimated funding level of $89 \%$ as of June 30, 2007.
- Benefit payments and premiums increased by $\$ 777.7$ million or $10 \%$ to $\$ 8.6$ billion.
- Securities Lending Program incurred an unrealized depreciation loss of $\$ 599.2$ million, in addition to a $\$ 35.4$ million income loss.


## OVERVIEW OF FINANCIAL STATEMENTS

MD\&A is an introduction to the System's basic financial statements. The System's financial statements include the following components: (1) fund financial statements, (2) notes to the basic financial statements, (3) required supplementary information, and (4) other supplemental information.

Basic financial statements. The statement of fiduciary net assets presents information on all of the System's assets and liabilities, with the difference between the two reported as net assets. Over time, the increase or decrease in net assets serves as a useful indicator of the health of the System's financial position. The statement of changes in fiduciary net assets shows how the System's net assets changed during the fiscal year.

Notes to the financial statements. The financial statement notes provide additional information that is essential to a full understanding of the data provided in the fund financial statements. Below we describe the information available in the notes to the financial statements.

- Note 1 provides a general description of the System, as well as a concise description of each of the funds administered by the System.


## California State Teachers' Retirement System <br> Management's Discussion and Analysis (Unaudited) <br> June 30, 2009

- Note 2 provides a summary of significant accounting policies, including the basis of accounting for the System, management's use of estimates, cash and investment accounting policies, and other significant accounting policies.
- Note 3 provides a summary of the System's funded status for the State Teachers' Retirement Plan and Medicare Premium Payment Program in accordance with GASB Statement Nos. 50 and 43 , respectively.
- Note 4 describes deposits and investments, including disclosures required by GASB Statement No. 40, Deposit and Investment Risk Disclosures, which includes information about the System's investment risk related to credit, (including custodial credit and concentrations of credit risk), interest rate, and foreign currency risks.
- Note 5 generally describes potential contingencies of the System.
- Note 6 provides a summary of significant commitments incurred by the System.
- Note 7 provides a summary of new accounting and financial reporting pronouncements.

Required supplementary information. The required supplementary information consists of two schedules and related notes on the defined benefit pension and other postemployment benefit plans' funding progress and history of contributions from employers and other contributing entities. These schedules provide historical information that assists in understanding the funded status of the System over time.

Other supplemental information. Other supplemental information includes detailed information on administrative expenses, investment expenses, and consultant and professional services expenses.

## Financial Analysis

State Teachers' Retirement Plan (STRP). The STRP is a defined benefit pension plan which provides for retirement, disability, and survivor benefits. The STRP is comprised of four programs: Defined Benefit (DB) Program, Defined Benefit Supplement (DBS) Program, Cash Balance Benefit Program (CB), and the Replacement Benefit Program (RBP).

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The STRP net assets decreased $27 \%$ from $\$ 161.5$ billion in fiscal year 2007-08 to $\$ 118.4$ billion as of June 30, 2009. Investments, excluding securities lending collateral, decreased by $\$ 43.8$ billion or 27\% to $\$ 118.8$ billion as of June 30, 2009. At June 30, 2009, the STRP held $\$ 26.0$ billion in debt securities, a decrease of $\$ 5.6$ billion or $18 \%$ from fiscal year 2007-08. At June 30, 2009, the STRP also held $\$ 62.3$ billion in U.S. and international equity securities, a decrease of $\$ 30.0$ billion or $32 \%$ from fiscal year 2007-08. Remaining holdings in short-term, private equity, and real estate investments totaled $\$ 30.5$ billion at June 30, 2009, a decrease of $\$ 8.2$ billion or $21 \%$ from fiscal year 2007-08. Prior fiscal year asset allocation changes increased our weightings to private equity and real estate by $6 \%$. While public debt increased by $1 \%$, public equities decreased by $7 \%$. Net depreciation on investments of $\$ 42.8$ billion in fiscal year 2008-2009 compared to a net depreciation of $\$ 14.5$ billion in fiscal year 2007-08, totaled a decrease of $\$ 28.3$ billion. The decrease can be attributed to the worldwide credit crisis and a global recession which have created challenges for almost all asset classes resulting in decreasing equity values, credit contraction and drastic de-leveraging of the world economies. Capital assets, increased by $\$ 92$ million or $58 \%$ in the 2008-2009 fiscal year as the construction of the new headquarters building in West Sacramento was nearly completed as of June 30, 2009.

| (Dollars in Thousands) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASSETS | 2009 |  | 2008 |  | Percent Change |  |
| Investments ${ }_{1}$ | \$ | 141,835,839 | \$ | 189,754,592 | - | (26\%) |
| Cash and Cash Equivalents |  | 173,115 |  | 257,976 |  | (33\%) |
| Receivables |  | 3,897,318 |  | 5,070,507 |  | (23\%) |
| Capital Assets |  | 251,551 |  | 159,515 |  | 58\% |
| TOTAL ASSETS |  | 146,157,823 |  | 195,242,590 |  | (25\%) |
| LIABILITIES |  |  |  |  |  |  |
| Benefits in Process of Payment |  | 793,735 |  | 719,028 |  | 10\% |
| Investment Pending Settlement |  | 3,107,026 |  | 4,306,929 |  | (28\%) |
| Obligation Under Reverse Repurchase |  | - |  | 1,500,000 |  | (100\%) |
| Other Liabilities |  | 238,017 |  | 141,804 |  | 68\% |
| Securities Lending Obligation |  | 23,588,972 |  | 27,076,636 |  | (13\%) |
| TOTAL LIABILITIES |  | 27,727,750 |  | 33,744,397 |  | (18\%) |
| TOTAL NET ASSETS | \$ | 118,430,073 | \$ | 161,498,193 |  | (27\%) |

${ }^{1}$ Includes securities lending collateral.
The STRP benefits are funded from employer, member and State contributions, and investment earnings. The State contributions decreased in fiscal year 2008-09 by $\$ 489$ million or $30 \%$ from fiscal year 2007-08. The decrease is attributable to the receipt of a $\$ 500$ million legal settlement that was received from the State in the prior fiscal year. The STRP experienced a net investment loss of $\$ 40.4$ billion in fiscal year 2008-09 compared with a loss of $\$ 9.7$ billion in fiscal year 2007-08. The primary contributor to the loss in fiscal year 2008-09 was the net depreciation of U.S. and international equity securities, which represented nearly $43 \%$ of STRP total assets. For the first time since its inception in 1988, the Securities Lending Program reflects unrealized depreciation of approximately $\$ 599$ million.

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The unrealized depreciation can be attributed to the decline in the fair value of the invested collateral. The result is the liability to return the collateral represented by the securities lending obligation being greater than the fair value of the invested collateral.

## CHANGES IN NET ASSETS

(Dollars in Thousands)

| ADDITIONS | 2009 |  | $\underline{2008}$ |  | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Member/Participant | \$ | 2,500,632 | \$ | 2,511,810 | 0\% |
| Employer |  | 2,464,243 |  | 2,454,974 | 0\% |
| State |  | 1,140,382 |  | 1,629,635 | (30\%) |
| Investment Loss/Other Income |  | $(40,350,170)$ |  | $(9,442,002)$ | 327\% |
| TOTAL ADDITIONS |  | (34,244,913) |  | $(2,845,583)$ | 1103\% |
| DEDUCTIONS |  |  |  |  |  |
| Benefit Payments |  | 8,604,237 |  | 7,823,241 | 10\% |
| Refund of Contributions |  | 105,816 |  | 101,778 | 4\% |
| Administrative Expenses |  | 113,154 |  | 109,368 | 3\% |
| TOTAL DEDUCTIONS |  | 8,823,207 |  | 8,034,387 | 10\% |
| TRANS FERS |  | - |  | 245 | (100\%) |
| NET ASSET DECREAS E |  | $(43,068,120)$ |  | $(10,879,725)$ | 296\% |
| BEGINNING NET ASSETS |  | 161,498,193 |  | 172,377,918 | (6\%) |
| ENDING NET ASS ETS | \$ | 118,430,073 | \$ | 161,498,193 | (27\%) |

Deductions, which include benefit payments, refund of contributions and administrative expenses, totaled $\$ 8.8$ billion for the year. Growth in the number of new retirees, the increase of purchasing power protection and the payment of prior years' additional earnings credits as well as the impact of salary increases on retirement benefit of new retirements over time contributed to an increase in benefit payments to $\$ 8.6$ billion, an increase of $\$ 781$ million or $10 \%$ over the prior year.

The most recent actuarial valuation as of June 30, 2008, indicates that the DB Program is underfunded, with $87 \%$ of the funds needed to pay the actuarial cost of the benefits accrued as of June 30, 2008. This calculation does not reflect the current deferred losses or any investment losses that have occurred since that date which have been significant. This is a decrease from the $89 \%$ estimated funding status as of June 30, 2007. The amount by which the DB Program actuarial obligation exceeded actuarial assets was $\$ 22.5$ billion as of June 30,2008 . The most recent actuarial valuation indicates that the DB Program's expected future revenue will be insufficient to finance its obligations including amortization of the unfunded status over the next 30 years.

Pension2 Program (Pension2). Pension2 offers Internal Revenue Code (IRC), Section 403(b) and 457 plans which are tax-deferred defined contribution plans. TIAA-CREF has been retained to provide administration and trustee services over Pension2. Through Pension2, members have the opportunity to supplement their pension benefits. Pension2 is currently comprised of IRC $403(\mathrm{~b})$ and 457 plan activities and as of June 30, 2009, net assets increased by $\$ 5.6$ million or $3 \%$ due to increased participation and contributions to the plans.

Teachers' Health Benefits Fund (THBF). The THBF is a trust fund created to administer health benefit programs for members of the Defined Benefit Program. 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 members meeting certain eligibility criteria.

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The System funds the MPP Program from current employer contributions, which decreased by $\$ 3.3$ million or $10 \%$ to $\$ 30$ million during fiscal year 2008-09. The THBF paid benefits of $\$ 29.4$ million in fiscal year 2008-09 compared with $\$ 32.7$ million the prior year. In fiscal year 2008-09, the Social Security Administration determined that a group of Medicare Part A members were incorrectly charged for a period of years. This resulted in a reduction in employer contributions and benefit payments. The System invests the assets of the THBF in the State of California's Surplus Money Investment Fund and earned $\$ 106$ thousand in interest income for the fiscal year ended June 30, 2009.

The most recent actuarial valuation for the fiscal year ended June 30, 2008, indicates that the MPP Program is underfunded, with less than $1 \%$ of the funds needed to pay the actuarial cost of the benefits accrued as of June 30, 2008. The amount by which the MPP Program actuarial obligation exceeded assets was $\$ 972$ million as of June 30, 2008.

## Teachers' Deferred Compensation Fund (TDCF).

The TDCF is a trust fund established to account for ancillary activities associated with various deferred compensation plans and programs offered by the System to enhance the tax-deferred financial options for the members and their beneficiaries. The TDCF received revenues, fees and interest of $\$ 402$ thousand, a decrease of $36 \%$ from the prior year for the fiscal year ended June 30, 2009. The decrease is due to a one time transfer in fiscal year 2007-08 made in accordance with Education Code Sections 22307.5(e) and 24976(a)(6).

## REQUESTS FOR INFORMATION

This Financial Report is designed to provide a general overview of the System's finances. For questions concerning any information in this report or for additional information contact the California State Teachers' Retirement System, P.O. Box 15275, Sacramento, CA 95851-0275.

## California State Teachers' Retirement System <br> Statement of Fiduciary Net Assets <br> As of June 30, 2009 (with Comparative Totals as of June 30, 2008) (Dollars in Thousands)

|  | State <br> Teachers' <br> Retirement Plan |  | Pension 2 |  |  |  |  | Teachers' <br> Health <br> Benefits <br> Fund |  | Teachers' <br> Deferred Compensation Fund |  | Comparative Totals |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 403 (b) <br> Plan |  | $\begin{array}{r} 457 \\ \text { Plan } \end{array}$ |  |  |  |  | 2009 | 2008 |  |
| Assets |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Investments, at fair value: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Short term | \$ | 2,940,950 | \$ | 10,348 | \$ |  | 15 | \$ | 2,547 |  |  | \$ | 613 | \$ | 2,954,473 | \$ | 1,888,526 |
| Debt securities |  | 26,031,609 |  | - |  |  | - |  | - |  | - |  | 26,031,609 |  | 31,657,373 |
| Equities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Domestic |  | 39,858,585 |  | - |  |  | - |  | - |  | - |  | 39,858,585 |  | 58,466,504 |
| International |  | 22,449,447 |  | - |  |  | - |  | - |  | - |  | 22,449,447 |  | 33,841,198 |
| Mutual funds |  | - |  | 117,639 |  |  | 20 |  | - |  | - |  | 117,659 |  | 133,853 |
| Guaranteed annuity contracts |  | - |  | 50,413 |  |  | 3 |  | - |  | - |  | 50,416 |  | 34,878 |
| Private equity investments |  | 15,170,855 |  | - |  |  | - |  | - |  | - |  | 15,170,855 |  | 16,577,341 |
| Real estate investments |  | 12,394,643 |  | - |  |  | - |  | - |  | - |  | 12,394,643 |  | 20,253,929 |
| Securities lending collateral |  | 22,989,750 |  | - |  |  | - |  | - |  | - |  | 22,989,750 |  | 27,076,636 |
| Total investments |  | 141,835,839 |  | 178,400 |  |  | 38 |  | 2,547 |  | 613 |  | 142,017,437 |  | 189,930,238 |

Cash and cash equivalents

| 173,115 | - | - | - | 2 | 173,117 | 257,977 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Receivables:
Investments sold
Foreign currency contracts
Interest and dividends
Member, employer and other
Total receivables

| $1,084,565$ | - | - | - | - | $1,084,565$ | $1,521,607$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $1,533,289$ | - | - | - | - | $1,533,289$ | $2,192,835$ |
| 363,991 | - | - | 19 | 5 | 364,015 | 484,614 |
| 915,473 | 680 | - | 2,024 | - | 918,177 | 874,209 |
| $3,897,318$ | 680 | - | 2,043 | 5 | $3,900,046$ | $5,073,265$ |
|  |  |  |  |  |  |  |
| 251,551 | - | - | - | - | 251,551 | 159,515 |

Capital assets, net of accumulated depreciation

## Total assets

## Liabilities

Investments purchase payable

Foreign currency contracts payable Benefits in process of payment
Obligation under reverse repurchase agreement
Other liabilities
Securities lending obligation
Total liabilities

| $1,571,031$ | - | - | - | - | $1,571,031$ | $2,106,962$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $1,535,995$ | - | - | - | $1,535,995$ | $2,199,967$ |  |
| 793,735 | - | - | - | 793,735 | 719,029 |  |
|  |  | - | - | - | $1,500,000$ |  |
| - | - | - | - | 612 | 238,698 | 142,371 |
| 238,017 | - | - | - | $23,588,972$ | $27,076,636$ |  |
| $23,588,972$ | - | - | - | 612 | $27,728,431$ | $33,744,965$ |
| $27,727,750$ | - | - |  |  |  |  |

[^0] and other postemployment benefits

| $\$ 118,430,073$ | $\$ 179,080$ | $\$$ | 38 | $\$$ | 4,521 | $\$$ | 8 | $\$ 118,613,720$ | $\$ 161,676,030$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

California State Teachers' Retirement System Statement of Changes in Fiduciary Net Assets For the Fiscal Year Ended June 30, 2009 (with Comparative Totals as of June 30, 2008) (Dollars in Thousands)


The accompanying notes are an integral part of these financial statements

## California State Teachers' Retirement System Notes to the Basic Financial Statements

## 1. Description of the System and Contribution Information

The California State Teachers' Retirement System (System) is the administrator of cost-sharing multiple-employer pension plans, a tax-deferred defined contribution plan, the Medicare Premium Payment Program, and the Deferred Compensation Fund as described below. The Teachers' Retirement Law found at California Education Code (Section 22000 et seq.), as amended and enacted by the California (State) Legislature established these plans and programs and the System as the administrator. The System is a component unit of the State. These financial statements include only the accounts of the System. The State includes the System's basic financial statements as a fiduciary fund in its financial statements. The System provides pension benefits to California full-time and part-time public school teachers from preschool through community college and certain other employees of the public school system.

## State Teachers' Retirement Plan (STRP)

The State Teachers' Retirement Plan (STRP) is comprised of four programs: Defined Benefit Program (DB Program), Defined Benefit Supplement Program (DBS Program), Cash Balance Benefit Program (CB Benefit Program), and the Replacement Benefit Program (RB Program). STRP holds these assets for the exclusive purpose of providing benefits to members and beneficiaries of the DB Program, the DBS Program, and the CB Benefit Program. The System also uses these assets to defray reasonable expenses of administering the STRP.

## STRP Defined Benefit Program (DB Program)

The DB Program is a defined benefit pension plan. At June 30, 2009, there were 1,745 contributing employers (school districts, community college districts, county offices of education and regional occupational programs). The State is also a contributor to the DB Program. Membership is mandatory for all employees meeting certain statutory requirements, and optional for all other employees performing creditable service. At June 30, 2008, membership consisted of:

Active members

Vested
Nonvested
Inactive members
Retirees and benefit recipients
Total members, retirees and beneficiaries

315,558
145,820
147,997
223,968
833,343

Information as of June 30, 2009 will not be available prior to December 2009.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

The DB Program provides defined retirement benefits based on members' final compensation, age, and years of credited service. In addition, the retirement program provides benefits to members upon disability, and to survivors/beneficiaries upon the death of eligible members. Benefit provisions include:

- After five years of credited service, members become $100 \%$ vested in retirement benefits earned to date. Members are eligible for normal retirement at age 60 . The normal retirement benefit is equal to $2 \%$ of final compensation for each year of credited service. Early retirement options are available at age 55 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 $2.4 \%$ at age 63 or older. Members who have 30 years or more of credited service shall receive an additional increase of $0.2 \%$ in the age factor. In no event shall the total benefit factor exceed $2.4 \%$.
- The System calculates retirement benefits based on a one-year final compensation for members who retire 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 elects to pay the additional benefit cost. One-year final compensation means a member's highest average annual compensation earnable calculated by taking the creditable compensation that a member could earn in a school year while employed, if he or she were employed on a full-time basis, and if that person worked full time in that position during any period of 12 consecutive months. For all other members, final compensation is defined as the highest average annual compensation earned during any three consecutive years of credited service.
- Members who retire on or after January 1, 2001, and accumulate at least 30 years of credited service by December 31, 2010, will receive a longevity bonus.
- 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 $50 \%$ of final compensation plus $10 \%$ of final compensation for each eligible child, up to a maximum addition of $40 \%$. The member must have a disability that will exceed a period of twelve or more months to qualify for a benefit.
- A family benefit is available if an active member died and had at least one year of credited service.
- Members' accumulated contributions are refundable with interest upon separation from the System. The State Teachers' Retirement Board determines the credited interest rate each fiscal year. For the year ended June 30, 2009, the rate of interest credited to members' accounts was $4.00 \%$.
- There is an automatic postretirement cost of living increase of $2 \%$ per year on a simple (rather than compound) basis.


## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

Purchasing power protection is provided to members of the DB Program through the Purchasing Power Protection Program. Annual distributions (in quarterly payments) to retired and disabled members and beneficiaries restore purchasing power to a minimum of $85 \%$ of the initial monthly allowance. Funding for the Purchasing Power Protection Program is from School Lands Revenue and the Supplemental Benefit Maintenance Account (SBMA). Public Resources Code Section 6217.5 appropriates School Lands Revenue. The State is required to contribute $2.5 \%$ of teachers' payroll for the fiscal year ending in the prior calendar year to fund the SBMA. In fiscal year 2008-09, the State Legislature authorized the Board to adjust purchasing power protection payments between no more than $85 \%$ and no less that $80 \%$ of the purchasing power initial monthly allowance. Actuarial studies conducted by the System indicate that resources are sufficient to fund the allowance up to the $85 \%$ level for at least 30 years.

In fiscal year 2008-09, the State statutory SBMA contribution is $\$ 597.5$ million.

## Contributions

Required member and employer contribution rates are set by the Teachers' Retirement Law. Contribution rates are expressed as a level percentage of payroll using the entry age normal actuarial cost method. The System also uses the level percentage of payroll method to calculate the amortization of any unfunded liability.

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

Members $\quad-6 \%$ of applicable member earnings through December 31, 2010, increasing to $8 \%$ thereafter.

Employers $\quad-8.25 \%$ of applicable member earnings.
State - Effective July 1, 2003, the rate increased to $2.017 \%$ of the member's creditable earnings from the fiscal year ending in the prior calendar year. State contribution totaled $\$ 535.6$ million in fiscal year 2008-09.

Beginning October 1, 1998, a statutory contribution rate of $0.524 \%$, adjustable annually in $0.25 \%$ increments up to a maximum of $1.505 \%$, of the creditable earnings from the fiscal year ending in the prior calendar year per Education Code Section 22955. This contribution is reduced to zero if there is no unfunded actuarial obligation and no normal cost deficit for benefit plans in place as of July 1, 1990. Based on the most recent actuarial valuation, as of June 30, 2008, there is no normal cost deficit or unfunded obligation for benefits in place as of July 1, 1990. The calculation does not reflect any investment losses that have occurred since that date which have been significant. As a result, the General Fund is not required to contribute quarterly payments starting October 1, 2009.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

STRP Defined Benefit Supplement Program (DBS Program)

The DBS Program, established pursuant to Chapter 74, Statutes of 2000 (AB 1509), is a defined benefit pension plan that operates within the STRP. All persons who were active members of the DB Program on or after January 1, 2001, are also members of the DBS Program.

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 $5.00 \%$ for the fiscal year ended June 30, 2009. 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. Per the Board policy there were no additional earnings or additional annuity credits granted for the fiscal year ending June 30, 2009.

## Contributions

Beginning January 1, 2001, and continuing through December 31, 2010, 2\% of applicable member earnings for service less than or equal to one year of creditable service per fiscal year are credited to the members' nominal DBS Program accounts. In addition, beginning July 1, 2002, for service in excess of one year of service credit within one fiscal year, the member contributions of $8 \%$ and employer contributions of $8 \%$ are credited to the members' nominal DBS Program account. Also, contributions for the compensation as a result of retirement incentives or limited term enhancements are credited to the members account.

## STRP Cash Balance Benefit Program (CB Benefit Program)

The CB Benefit Program, established under Chapter 592, Statutes of 1995 and subsequently merged into the STRP by Chapter 1048, Statutes of 1998 (SB 2085), is a defined benefit pension plan. The CB Benefit Program is designed for employees of California's public schools who are hired to perform creditable service for less than $50 \%$ of the full-time equivalent for the position. Participation in the CB Benefit Program is optional to school districts, community college districts, county offices of education, and regional occupational programs. A school district, community college district, county office of education, or regional occupational program may elect to offer the CB Benefit Program. Under such election, the program will automatically cover each eligible employee, unless the employee elects to participate in the DB Program or an alternative plan provided by the employer within 60 days of hire or the election period determined by the employer.

Interest is credited to the nominal CB Benefit Program accounts at the minimum guaranteed annual rate established by the Board prior to each plan year, which was $5.00 \%$ for the year ended June 30, 2009. 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. Per the Board policy there were no additional earnings or additional annuity credits granted for the fiscal year ending June 30, 2009

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

## Contributions

A summary of statutory contribution rates for the CB Benefit Program is as follows:
Participants - 4\% of applicable member's earnings

Employers - 4\% of applicable member's earnings

Employers may enter into a collective bargaining agreement to pay different rates if certain minimum conditions are met. At June 30, 2009, there were 33 contributing school districts and 31,599 contributing members.

## STRP Replacement Benefit Program (RB Program)

The STRP has an excess benefits arrangement for DB Program members that is administered as a qualified excess benefit arrangement through a separate pension trust apart from the other three STRP programs and was 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 program is funded as needed. Contributions that would otherwise be credited to the DB program each month are instead credited to the RB Program to fund monthly program costs. Monthly employer contributions are received and paid to members in amounts equivalent to the benefits not paid as a result of IRC Section $415(\mathrm{~b})$, subject to withholding for any applicable income or employment taxes. During fiscal year 2008-09, there were 141 retirees participating in the RB Program

Pension2 Program (Pension2). Pursuant to Chapter 291, Statutes of 1994 and Chapter 1095, Statutes of 2002, Pension2 was established to include two tax-deferred defined contribution plans under the Internal Revenue Code (IRC) Sections 403(b) and 457, respectively. The IRC 403(b) plan previously operated under the name of the Voluntary Investment Program. In November 2007, the Voluntary Investment Program was renamed to Pension2. TIAA-CREF is responsible for administrative services, including custody and record keeping services.

As of June 30, 2009, the IRC 403(b) and 457 plans had approximately, 5,632 and 17 plan participants and approximately 427 and 2 participating employers (school districts), respectively. Pension2 is available to all full-time California pre-kindergarten through community college districts and county office of education employees. Part-time employees' eligibility is determined by their employers. Enrollment in the 457 plan is by adoption only. 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 plan. Employer contributions are precluded.

The Pension2 investments are comprised of a selection of mutual funds with underlying investments that include stocks, bonds and real estate investments 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 (THBF)

The THBF was established pursuant to Chapter 1032, Statutes of 2000 (SB 1435) to provide the Medicare Premium Payment Program (MPP Program), a cost-sharing multiple-employer other postemployment benefit plan, to retired members of the DB Program. At June 30, 2009, there were 7,795 retirees participating in the MPP Program. The number of active members and terminated vested members who will participate in the program after they retire is unknown because eligibility cannot be determined.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

The MPP Program was established to pay Medicare Part A premiums and Medicare Parts A and B late enrollment surcharges for DB Program members who had retired or would retire 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 or will retire prior to July 1, 2012. Extending the MPP Program to members who retired or will retire before July 1, 2012, will result in an increase in the costs for the MPP Program of $\$ 133.8$ million.

As a convenience, the System also deducts Medicare Part B premiums from the members' allowance and forwards the premiums to the Centers for Medicare and Medicaid Services, the federal agency that administers Medicare.

## Contributions

The MPP Program is funded on a pay as you go basis from that portion of the monthly DB Program statutory employer contributions that exceeds the amount needed to finance the liabilities of the DB Program based on the June 30, 2000 actuarial valuation of the DB Program. 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 costs do not exceed the amount initially identified as the cost of the program.

## Teachers' Deferred Compensation Fund (TDCF)

The TDCF was established pursuant to Chapter 655, Statutes of 2006 (SB 1466) and used to account for ancillary activities associated with various deferred compensation plans and programs offered by the System to enhance the tax-deferred financial options for the members and their beneficiaries.

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

## 2. Summary of Significant Accounting Policies

## Basis of Accounting

The System maintains its accounting records using the accrual basis of accounting. It recognizes member contributions in the period in which the contributions are due. Furthermore, the System recognizes employer and State contributions when due and the employer or State has made a formal commitment to provide the contributions. Also, it recognizes benefits when due and payable in accordance with the System's retirement and benefits programs.

## Use of Estimates in the Preparation of Financial Statements

The preparation of the System's financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain financial statement amounts and disclosures. Actual results could differ from those estimates.

## Cash and Cash Equivalents

Cash and cash equivalents include cash on deposit and highly liquid financial instruments with original maturities of 90 days or less. Significant cash equivalents held by the System include repurchase agreements, foreign currency, and deposits with the State Treasury.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

## Investments

The majority of the investments held at June 30, 2009, are in the custody of or controlled by State Street Bank, the System's master custodian. State statutes and Board policies allow investments consisting of government, corporate and international debt, domestic and international equities, mutual funds, private equities, real estate, and other investments.

Investments are reported at fair value. The diversity of the investment types which the System has entered into requires a wide range of techniques to determine fair value. The overall valuation processes and information sources by major asset classification are as follows:

## Short term

Short term investments consist primarily of money market funds, certificates of deposit and similar instruments with maturities of less than one year, which are reported at cost or amortized cost, which approximates fair value.

## Debt securities

Debt securities consists primarily of negotiable obligations of the U.S. Government and U.S. Government sponsored agencies, corporations, and securitized offerings backed by residential and commercial mortgages. Certain debt securities, such as U.S. government bonds, have an active market for identical securities. These securities can typically be valued using the close or last traded price on a specific date. The majority of other debt securities are not as actively traded and are thus valued by pricing vendors, which use modeling techniques that include market observable 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 asset type.

## Equities

The majority of domestic and international equity securities held by the System are actively traded on major stock exchanges or over-the-counter. These exchanges make information on trades of identical 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.

In addition, the System holds majority limited partner positions in corporate governance funds, organized to invest strategically in publicly traded equity securities of companies on U.S. exchanges to achieve long-term capital appreciation. These limited partnerships have been valued using the net asset value (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 the System's equity holdings.

## Mutual funds

Mutual funds are held on behalf of individual participants in Pension2. These are open-ended funds that are priced daily at NAV by the fund sponsor based generally upon the exchange traded last or official closing price of the securities held by the fund.

## Private equity

The System has invested as a limited partner in various funds which employ specific strategies. The most common investment categories for these funds include leveraged buyouts, venture capital, growth capital, distressed investments and mezzanine capital. The strategies of all such funds 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. Private equity partnerships are valued using their respective NAV, and are

California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)
audited annually. The most significant input into the NAV of such an entity is the fair value of its investment holdings. These holdings are valued by the general partners on a quarterly or semi-annual basis, in conjunction with management and investment advisors. The management assumptions are based upon the nature of the investment and the underlying business. The valuation techniques vary based upon investment type and involve a certain degree of expert judgment.

## Real estate

Real estate is held either directly, in joint ventures or as a limited partner in a commingled fund. Properties owned directly or in a joint venture structure are subject to independent third party appraisals performed in accordance with the Uniform Standards of Professional Appraisal Practice once every three years. In the interim years, fair values are estimated by the third party advisor or operating partner based upon general market and property specific assumptions that are not observable, but which are reviewed and approved by System management. Real estate investments in a commingled fund 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 interest in commingled funds are valued by the System using the NAV of the partnership. The most significant input into the NAV of such an entity is the value of its investment holdings. These holdings are valued by the general partners on a continuous basis, audited annually and periodically appraised by an independent third party. The valuation assumptions are based upon both market and property specific inputs which are not observable and involve a certain degree of expert judgment.

The System presents, in the statement of changes in fiduciary net assets, the net appreciation (depreciation) in the fair value of its investments, which consists of the realized gains and losses and the unrealized appreciation and depreciation on those investments. Purchases and sales are recorded on the trade date. Interest income is recorded on the accrual basis. Dividends are recorded on the exdividend date.

There are certain market risks, including interest, credit, foreign currency exchange and concentration risk, which may subject the System to economic changes occurring in certain industries, sectors, or geographies. See Note 4 for disclosures related to these risks.

## Investment Risk Management

The STRP enters into forward foreign currency exchange contracts for hedging purposes to minimize the short-term impact of foreign currency fluctuations on the asset positions of its foreign investments. The STRP also enters into futures contracts to minimize exposure to unfavorable fluctuations in the domestic equity markets. The futures contracts are financial instruments that derive their value from underlying indices. The STRP could be exposed to risk if the counter-parties to the contracts are unable to meet the terms of their contracts. The STRP seeks to minimize risk from counter-parties by establishing minimum credit quality standards and maximum credit limits.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

## Capital Assets

Capital assets held by the STRP, which consist of building, furniture, fixtures, and equipment, are recorded at cost. The capitalization threshold for all capital assets is $\$ 5,000$ or more. Depreciation is charged to operations using the straight-line method of depreciation on the estimated useful life of the related asset. Estimated useful lives range from one to five years for furniture, fixtures, and equipment, and forty years for buildings. Accumulated depreciation and depreciation expense for the year ended June 30, 2009 was $\$ 2.2$ million, and $\$ 567$ thousand respectively. The System 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, 2009, there has been no impairment of capital assets.

## Administrative Expenses

The cost of administering the System is financed through contributions and investment earnings.

## Income Taxes

The STRP and THBF are organized as tax-exempt retirement or benefit plans under the IRC. Pension2, which includes an IRC 403 (b) and 457 plans, is organized as a tax-deferred supplemental program under the IRC. The System's 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 have been included as other investment expenses. Some indirect expenses have been allocated.

## Securities Lending Transactions

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

## Reverse Repurchase Agreement Transactions

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

## Reclassification

Certain reclassifications have been made to the comparative totals as of and for the year ended June 30, 2008 to conform to the presentation as of June 30, 2009.

## 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. Accordingly, such information should be read in conjunction with the System's financial statements for the year ended June 30, 2008, from which the summarized information was derived.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

## 3. Funded status

STRP
The funded status of each program within the STRP as of June 30, 2008, the most recent actuarial valuation date, is as follows (dollars in millions):


As of June 30, 2008, the actuarial valuation report indicated future revenue from contributions and appropriations for the DB Program is not expected to be sufficient to finance its obligations.

The most recent actuarial valuation does not reflect the impact of extraordinary declines in investment values subsequent to June 30, 2008. Fiscal year 2008-09 losses will likely result in a considerable increase in the contribution rate needed to amortize the unfunded actuarial obligation in the future. The impact on the funded status and future contribution rates will not be determined until the June 30 , 2009 valuation has been completed.

## THBF

The funded status of the MPP Program, as of June 30, 2008, the most recent actuarial valuation date, is as follows (dollars in millions):

|  |  |  | Actuarial Accrued Liability (AAL) (b) |  | $\begin{gathered} \text { Unfunded } \\ \text { AAL (UAAL) } \\ \text { (b-a) } \\ \hline \end{gathered}$ |  | Funded Ratio (a/b) | Covered Payroll (c) |  | UAAL as a \% of Covered Payroll ((b-a)/c) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MPP Program | \$ | 4 | \$ | 976 | \$ | 972 | 0.4\% | \$ | 6,604 | 15\% |

## Methods and Assumptions

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and 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.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

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

Additional information as of the latest actuarial valuation follows:

|  | DB Program | CB Benefit Program |
| :---: | :---: | :---: |
| Actuarial Cost Method | Entry age normal | Traditional unit credit |
| Amortization Method | Level percent of payroll | Level percent of payroll |
| Amortization Approach | Open | Open |
| Remaining Amortization Period | 30 years | 30 years |
| Asset Valuation Method | Expected value with 33\% adjustment to market value | Fair market value of net assets |
| Actuarial Assumptions: |  |  |
| Investment rate of return | 8.00\% | 7.75\% |
| Interest on accounts | 6.00\% | 7.75\% |
| Wage growth | 4.25\% | 4.25\% |
| Consumer price inflation | 3.25\% | 3.25\% |
| Post-retirement benefit increases | 2.00\% simple | Not applicable |
|  | DBS Program | MPP Program |
| Actuarial Cost Method | Traditional unit credit | Entry Age Normal |
| Amortization Method | Level percent of payroll | Level dollar basis |
| Amortization Approach | Open | Closed |
| Remaining Amortization Period | 30 years | 28 years |
| Asset Valuation Method | Fair market value of net assets | Fair market value of net assets |
| Actuarial Assumptions: |  |  |
| Investment rate of return | 7.75\% | 4.00\% |
| Interest on accounts | 7.75\% | Not applicable |
| Wage growth | 4.25\% | Not applicable |
| Consumer price inflation | 3.25\% | 3.25\% |
| Post-retirement benefit increases | Not applicable | Not applicable |
| Healthcare cost trend rate Part A premiums | Not applicable | 5.00\% |
| Healthcare cost trend rate Part B premiums | Not applicable | $7.00 \%$ grading down <br> $5.00 \%$ in 2011 (1) |

[^1]
## California State Teachers' Retirement System <br> Notes to the Basic Financial Statements (Continued)

## 4. Deposits and Investments

Deposits in the Pooled Money Investment Account (PMIA), administered by the State, represent various investments with average days to maturity of approximately 235 days, and are reported at amortized cost which approximates fair value. The State Treasury pools these monies with the monies of other State agencies for investing.

The investment in the Short-term Investment Fund, administered by State Street Bank, represents various investments with average days to maturity of approximately 53 days, and is reported at amortized cost which approximates fair value.

The repurchase agreement transactions as of June 30, 2009, have underlying collateral with fair values of approximately $102 \%$ of the cost of the repurchase agreement. The agreed-upon yields were $0.01 \%$ with maturity dates through July 1, 2009.

State statutes and Board policy permits the System to enter into reverse repurchase agreements, that is, a sale of securities with a simultaneous agreement to repurchase the exact securities in the future at the same price plus a contract rate of interest. The System had no reverse repurchase agreements outstanding at June 30, 2009.

State statutes and Board policies permit the System to make short-term, collateralized loans of its securities to broker-dealers and other entities in order to earn incremental income. The STRP has contracted with third party securities lending agents and its custodian to lend domestic and international equity and debt securities. The majority of security loans can be terminated on demand by either the STRP or the borrower. Because these loans are collateralized, the underlying securities continue to be reported as assets on the fiduciary statement of net assets. Collateral in the form of cash or other securities is required for $102 \%$ and $105 \%$ of the fair value of domestic and international securities loaned, respectively. Since the majority of these loans are terminable at will, their duration does not generally match the duration of the investments made with the cash collateral. At June 30, 2009, the weighted duration difference between the investments and these loans was 23 days. As of June 30, 2009 the fair value of the securities on loan was $\$ 23.3$ billion. The associated fair value of the invested collateral was $\$ 23.0$ billion. Securities lending obligations at June 30, 2009 were $\$ 23.6$ billion. The invested collateral and corresponding obligation are reflected in the statement of fiduciary net assets as assets and liabilities, respectively. Because of the decline in the fair value of the invested collateral during the last fiscal year, the liability represented by the securities lending obligation is greater than the market value of the invested collateral. The invested collateral securities in this program are typically held to maturity and expected to mature at par.

Certain securities which incurred a loss were transferred out of the Securities Lending Program prior to June 30, 2009. This resulted in a net securities lending income loss of $\$ 35.4$ million and is recognized in the "Securities lending income (loss)" line in the Statement of Changes in Fiduciary Net Assets. The decline in fair value of the invested collateral remaining in the Securities Lending Program as of June 30, 2009 was $\$ 599.2$ million and is reflected in the "Unrealized loss on securities lending" line in the statement of changes in fiduciary net assets.

The STRP is not permitted to pledge or sell collateral securities received unless the borrower defaults. The contracts with the security lending agents require them to indemnify the STRP if the borrowers fail to return the securities (or if the collateral is not sufficient to replace the securities lent) or if the borrower fails to pay the STRP for income distributions by the securities' issuers while the securities are on loan.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

## Real Estate

Real estate investments are classified as investments in accordance with GASB Statement No. 25. Certain real estate investments are leveraged whereby partnerships have been established to purchase properties through a combination of equity contributions from the System, other investors and through the utilization of debt. The System engages real estate advisors and operating partners who are responsible for managing a portfolio's day to day activities, performance and reporting. At June 30,2009 , net estimated fair value of real estate equities totaled approximately $\$ 12.4$ billion. The System's share of outstanding debts is $\$ 10.5$ billion, excluding obligations of limited partnership interests in commingled funds.

The System's portion of real estate debt service requirements include both recourse and non-recourse loans. The chart below details the repayment of real estate debt, excluding obligations of limited partnership interests in commingled funds, as of June 30, 2009:

## Real Estate Debt Service Requirements

(Dollars in Thousands)

|  | Principal | Interest |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended June 30, 2010 \$ | 2,299,757 | \$ | 416,110 | \$ | 2,715,867 |
| 2011 | 2,579,428 |  | 338,251 |  | 2,917,679 |
| 2012 | 1,106,644 |  | 283,222 |  | 1,389,866 |
| 2013 | 990,352 |  | 228,345 |  | 1,218,697 |
| 2014 | 670,215 |  | 203,471 |  | 873,686 |
| 2015-2019 | 2,534,473 |  | 395,717 |  | 2,930,190 |
| 2020-2024 | 36,074 |  | 78,531 |  | 114,605 |
| 2025-2029 | 41,947 |  | 63,662 |  | 105,609 |
| 2030-2034 | 31,522 |  | 54,798 |  | 86,320 |
| 2035-2039 | 105,573 |  | 40,350 |  | 145,923 |
| Total \$ | 10,395,985 | \$ | 2,102,457 | \$ | 12,498,442 |

The real estate debts currently bear interest at variable rates ranging from LIBOR +65 basis points (bps) to LIBOR +550 bps as of June 30, 2009.

CalSTRS Real Estate Investment Policy, effective July 2007, states that "leverage shall be monitored with a long-term goal of maintaining it at no higher than $60 \%$." At $6 / 30 / 09$, the total leverage on the real estate portfolio was $63 \%$.

## Investment Risk Schedules

The following investment risk schedules disclose the System's investments subject to certain types of risk, pursuant to GASB Statement No. 40. Each schedule discloses investments of all funds, except for the interest rate risk for Pension2, managed by the System subject to each type of risk. Some securities are held in internally-managed investment pools shared by all funds.

## 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.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

The System's Investment Guidelines require that, at the time of purchase, at least $95 \%$ of the corporate securities comprising the credit portion of the core fixed income portfolio be rated Baa3/BBB-/BBB- or better by two out of the three nationally recognized statistical rating organizations (NRSROs), such as Moody's Investors Service, Inc, Standard and Poor's Rating Service, or Fitch Ratings. The rating used to determine the quality of the individual securities will be the highest of the ratings supplied by two NRSROs. Furthermore, the total position of the outstanding debt of any one private mortgage-backed and asset-backed securities issuer shall be limited to tenpercent $(10 \%)$ of the market value of the portfolio. Obligations of other issuers are held to a fivepercent ( $5 \%$ ) per issuer limit (at the time of purchase) of the market value of any individual portfolio. The Investment Guidelines also include an allocation to opportunistic strategies which a portion are managed externally and allow for the purchase of bonds rated below investment grade. Limitations regarding the amount of debt of any one issuer a manager may hold is negotiated on a manager by manager basis.

Below is a table which depicts the fixed income and short-term assets as well as the securities lending collateral by credit rating as of June 30, 2009:

## Fixed Income \& Short Term

(Dollars in Thousands)

| Ratings | Securitized <br> Obligations | Credit <br> Obligations | International Government |  | Money Market Securities |  | PMIA | US Govt \& Agency Obligations | Mutual <br> Fund | Annuity Contracts | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AAA | \$ 8,780,706 | \$ 543,246 | \$ | 367,146 | \$ | - | \$ | \$2,355,916 | \$ 5,640 | \$ | \$12,052,654 |
| AA | 37,190 | 573,758 |  | 65,289 |  | 10,000 | - | 3,348 | 12,981 | - | 702,566 |
| A | 37,359 | 2,724,475 |  | 186,635 |  | - | - | 6,878 | - | - | 2,955,347 |
| BBB | 24,724 | 2,443,573 |  | 22,892 |  | - | - | 11,587 | - | - | 2,502,776 |
| BB | 42,297 | 717,368 |  | 13,529 |  | - | - | 1,463 | - | - | 774,657 |
| B | 13,896 | 1,024,521 |  | 1,954 |  | - | - | - | - | - | 1,040,371 |
| CCC | 41,049 | 498,844 |  | - |  | - | - | - | - | - | 539,893 |
| CC | 2,018 | 67,835 |  | - |  | - | - | - | - | - | 69,853 |
| C | 66 | 9,652 |  | - |  | - | - | - | - | - | 9,718 |
| D | - | 63,351 |  | - |  | - | - | 4,201 | - | - | 67,552 |
| NR | 711,018 | 574,457 |  | 9,099 |  | 1,779,610 | 241,013 | 57,472 | - | 50,416 | 3,423,085 |
| NA | 1,106,447 | - |  | - |  | - | - | 3,810,200 | - | - | 4,916,647 |
| Total | \$10,796,770 | \$ 9,241,080 | \$ | 666,544 | \$ | 1,789,610 | \$241,013 | \$6,251,065 | \$18,621 | \$ 50,416 | \$29,055,119 |
| The PMIA | \$241 million | omprised of |  | wing fun |  | P \$237.9 | ion, THBF | \$2.5 million, | d TDCF | 13 thousa |  |
| The above which are | e table includes <br> reflected in Pe | 10.4 million in <br> sion 2 Program |  | Market S <br> Statemen |  | ties, $\$ 18.6$ m Fiduciary Net | lion in Mut ssets. | ual Fund, and | $50.4 \text { millic }$ | n in Annuity | Contracts |

Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government, are not considered to have credit risk and do not require disclosure of credit quality. NR represents those securities that are not rated and NA represents those securities that are not applicable to the rating disclosure requirements. The System is permitted to purchase securities that are not rated; however a thorough credit review must be completed along with an estimation of comparable credit quality.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

| Securities Lending Collateral (Dollars in Thousands) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ratings |  | oney Market Securities |  | purchase reements | Short Term Investment Fund | US <br> Treasury |  | orporate <br> ating Rate <br> Notes |  | Agency <br> Callable <br> bligations | Agency <br> Bullets <br> (Non- <br> Callables) | $\begin{gathered} \text { Discount } \\ \text { Notes } \\ \hline \end{gathered}$ | Asset <br> Backed Securities |  | Total |
| AAA | \$ | 2,195,152 | \$ | 218,844 | \$ | \$ | \$ | 65,258 | \$ | 370,344 | \$ 155,366 | \$148,532 | \$6,740,730 | \$ | 9,894,226 |
| AA |  | 346,471 |  | - | - | - |  | 1,418,897 |  | - | - | - | 102,401 |  | 1,867,769 |
| A |  | 2,241,925 |  | - | - | - |  | 2,939,780 |  | - | - | - | 73,540 |  | 5,255,245 |
| BBB |  | 40,866 |  | - | - | - |  | 460,078 |  | - | - | - | 6,104 |  | 507,048 |
| BB |  | - |  | - | - | - |  | 391,253 |  | - | - | - | 90,732 |  | 481,985 |
| B |  | - |  | - | - | - |  | - |  | - | - | - | 61,688 |  | 61,688 |
| CCC |  | - |  | - | - | - |  | - |  | - | - | - | 14,740 |  | 14,740 |
| CC |  | - |  | - | - | - |  | - |  | - | - | - | 537 |  | 537 |
| NR |  | 774,454 |  | 18,902 | 3,843,216 | - |  | 154,928 |  | - | - | - | 160,347 |  | 4,951,847 |
| NA |  | - |  | - | - | 24,922 |  | - |  | - | - | - | - |  | 24,922 |
| Total | \$ | 5,598,868 | \$ | 237,746 | \$3,843,216 | \$ 24,922 | \$ | 5,430,194 | \$ | 370,344 | \$ 155,366 | \$148,532 | \$7,250,819 |  | 23,060,007 |

The above amount excludes cash and accruals in the total of a negative \$70,257 (in thousands) which is included
in the Securities Lending Collateral line item in the Statement of Fiduciary Net Assets.

## Interest Rate Risk

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

The Investment Guidelines allow the core long term investment grade portfolios the discretion to deviate within a range of $+/-20 \%$ (.80 to 1.20 ) of the average effective duration of the relevant Barclays Capital benchmark. The permissible range of deviation for the average effective duration within the opportunistic strategy portfolios is negotiated with each manager and detailed within the Investment Guidelines.

Investments may contain terms that increase the sensitivity of their fair values to increasing and decreasing interest rates. Although the System has investments which 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. A change to the Barclays Capital US Aggregate Index as of April 1, 2008 included Hybrid Adjustable Rate Mortgage (ARM) Backed Securities wrapped by Government Sponsored Entities (GSE). These Agency Hybrid ARMs may be fully amortizing or interest only for a period of time and then subsequently amortized. As of June 30, 2009, the System's internally managed interest only Agency Hybrid ARMS held equates to less than $1 \%$ of the long term fixed income investments.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

Below is a table which depicts the duration of the portfolio vs. the benchmark in years on June 30 , 2009:

Long Term Fixed Income Investments
Duration
(Dollars in Thousands)

| Inves tment Type (by portfolio) | Portfolio Net Asset <br> Value |  | Effective DurationBenchmark <br> Duration |
| :--- | :--- | :--- | :--- |
| Difference |  |  |  |
| US Government and Agency Obligations | $\$$ | $5,601,435$ | 4.44 |
| Credit Obligations |  |  | 4.48 |
| Corporate | $5,305,720$ | -0.04 |  |
| High Yield | $2,169,182$ | 5.80 | 5.72 |
| Debt Core Plus | $2,760,775$ | 3.52 | 4.12 |
| Securitized Obligations |  | 4.15 | 4.12 |
| Commercial Mortgage Backed Securities | 644,188 |  | -0.08 |
| Mortgage Backed Securities | $8,639,526$ | 3.92 | 0.03 |
| Structured Products | 498,064 | 2.96 | 3.90 |
| Total |  | $25,618,890$ | 2.79 |

The above amount excludes Debt Opportunistic and Overlay investments with a Net Asset Value of $\$ 353,938$ (in thousands) as of June 30, 2009.
The above table represents the net asset value of the long term fixed income portfolios, which include cash and accruals that are not included in the investments section of the statement of fiduciary net assets.

Below is a table depicting the segmented time distribution for the types of short term fixed income investments based upon the expected maturity, $1^{\text {st }}$ call date and/or $1^{\text {st }}$ reset date, as of June 30, 2009:

Short Term Fixed Income Investments
Segmented Time Distribution
(Dollars in Thousands)

| Investment Type | 0-30 days |  | 31-90 days |  | 91-120 days |  | $\begin{gathered} 121-180 \\ \text { days } \\ \hline \end{gathered}$ |  | $\begin{gathered} 181-365 \\ \text { days } \\ \hline \end{gathered}$ |  | 365+ days |  | TOTALS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Money Market Securities | \$ | 1,644,144 | \$ | 85,000 | \$ | 9,974 | \$ | 29,973 | \$ | - | \$ | - | \$ | 1,769,091 |
| PMIA |  | 241,013 |  | - |  | - |  | - |  | - |  | - |  | 241,013 |
| Credit Obligations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corporate Floating Rate Notes |  | 48,686 |  | 126,827 |  | - |  | - |  | - |  | - |  | 175,513 |
| US Government and Agency Obligations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bullets (Non-Callables) |  | 40,095 |  | 8,011 |  | - |  | 15,080 |  | 95,102 |  | 10,009 |  | 168,297 |
| Discount Notes |  | 104,325 |  | 146,943 |  | 20,979 |  | 74,894 |  | 127,894 |  | - |  | 475,035 |
| Callable |  | 21,970 |  | 39,088 |  | 5,005 |  | 32,034 |  | 30,095 |  | - |  | 128,192 |
| Municipals |  | 31,768 |  | - |  | - |  | - |  | - |  | - |  | 31,768 |
| US Treasury |  | 149,982 |  | - |  | - |  | 24,968 |  | 134,536 |  | 10,232 |  | 319,718 |
| Asset Backed Securities |  | 93,697 |  | 12,263 |  | - |  | - |  | - |  | - |  | 105,960 |
| Total | \$ | 2,375,680 | \$ | 418,132 | \$ | 35,958 | \$ | 176,949 | \$ | 387,627 | \$ | 20,241 | \$ | 3,414,587 |
| Weightings |  | 69.58\% |  | 12.25\% |  | 1.05\% |  | 5.18\% |  | 11.35\% |  | 0.59\% |  | 100.00\% |

The investment objective for the short-term fixed income portfolio is to seek the preservation of capital and liquidity, and to generate the highest possible current income consistent with a prudent level of risk available from investing in a diversified portfolio of short-term fixed income securities. The Investment Guidelines state that the average maturity of the portfolio shall be managed such that it will not exceed 180 days. In addition to short-term securities, the short term fixed income portfolios also contain debt securities as classified in the investments section of the statement of fiduciary net assets.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

Below is a table that depicts the weighted average maturity of investments classified for the Pension2 IRC 403(b) and 457 plans on the statement of net assets as of June 30, 2009:

## Pension2

Weighted Average Maturity
(Dollars in Thousands)

| Investment Type | Fair Value | Maturity |
| :--- | ---: | ---: |
| Money Market Securities | $\$ 10,363$ | 72 days |
| Vanguard Inflation Protected Securities Fund | 5,640 | 9 years |
| Vanguard Short-Term Bond Index Fund |  | 12,981 |
| Total | $\$$ | 28,984 |

Pension2's TIAA Traditional Annuity's primary objective is the guarantee of principal and a specified interest rate. A guaranteed annuity backed by TIAA's claims-paying ability, TIAA Traditional guarantees the principal and a $3 \%$ minimum annual interest rate.

Securities Lending Cash Collateral assets are diversified among different asset classes with the maximum remaining effective maturity of any instrument being five years. The fund must remain liquid to meet collateral returns.

Below is a table depicting the segmented time distribution based upon the expected maturity, $1^{\text {st }}$ call date and/or $1^{\text {st }}$ reset date, as of June 30, 2009:

Securities Lending Collateral
Segmented Time Distribution
(Dollars in Thousands)

| Investment Type (by portfolio) | $\mathbf{0 - 1}$ days | $\mathbf{2 - 6}$ days | $\mathbf{7 - 2 9}$ days | $\mathbf{3 0 - 5 9}$ days | $\mathbf{6 0 - 8 9}$ days | 90+ days | TOTALS |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Money Market Securities | $\$ 364,415$ | $\$ 867,859$ | $\$ 1,211,221$ | $\$ 1,270,168$ | $\$$ | 725,455 | $\$ 1,159,750$ |

The above amount excludes cash and accruals in the total of negative $\$ 70,257$ (in thousands) which is included from the Securities Lending Collateral line item in the Statement of Fiduciary Net Assets.

## Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. As of June 30,2009 , the STRP has no single issuer that exceeds $5 \%$ 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. The System's Investment Policy states that no more than $3 \%$ 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. IRC 403(b) and 457 plans investments have no single issuer that exceeds $5 \%$ of total investments.


## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

## Custodial Credit Risk

Custodial credit risk is the risk that in the event a financial institution or counterparty fails, the System would not be able to recover the value of its deposits, investments, or collateral securities. As of June 30, 2009, all of the System's investments, other than Pension2 investments, are held in the System's name and/or are not exposed to custodial credit risk. There are no general policies relating to the custodial credit risk. As of June 30, 2009, one hundred percent ( $100 \%$ ) of the IRC 403(b) and 457 plans investments are held in the name of TIAA-CREF.

## 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. The System's foreign currencies and investments at June 30, 2009, as shown in the table on the next page, were distributed among the following:

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

## Foreign Currency Risk

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

|  |  |  | Pending Foreign | Fixed Income/ | Currency <br> Exchanges |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Currency Name | Cash | Equity | Debt | Exposure |  |


| Australian Dollar | \$ | 8,529 | \$ | 1,032,767 | \$ | 39,982 | \$ | $(3,191)$ | \$ | 1,078,087 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Brazilian Real |  | 260 |  | 454,995 |  | 5,936 |  | 27,730 |  | 488,921 |
| British Pound Sterlins |  | 16,417 |  | 3,009,547 |  | 10,726 |  | $(6,910)$ |  | 3,029,780 |
| Canadian Dollar |  | 23,062 |  | 1,496,294 |  | - |  | 11,330 |  | 1,530,686 |
| Chilean Peso |  | 155 |  | 3,940 |  | - |  | - |  | 4,095 |
| Colombian Peso |  | - |  | - |  | 1,464 |  | - |  | 1,464 |
| Czech Koruna |  | 577 |  | 28,997 |  | - |  | (218) |  | 29,356 |
| Danish Krone |  | 124 |  | 132,744 |  | - |  | 40 |  | 132,908 |
| Egyptian Pound |  | 187 |  | 45,168 |  | - |  | - |  | 45,355 |
| Euro Currency |  | 29,663 |  | 7,615,673 |  | 224,161 |  | 174,764 |  | 8,044,261 |
| Hong Kong Dollar |  | 6,632 |  | 1,255,809 |  | - |  | 67 |  | 1,262,508 |
| Hungarian Forint |  | - |  | 6,303 |  | - |  | - |  | 6,303 |
| Indian Rupee |  | 884 |  | 215,483 |  | - |  | 3,353 |  | 219,720 |
| Indonesian Rupiah |  | 222 |  | 96,206 |  | - |  | $(3,014)$ |  | 93,414 |
| Israeli Shekel |  | - |  | 66,931 |  | 1 |  | $(1,603)$ |  | 65,329 |
| Japanese Yen |  | 25,167 |  | 3,321,025 |  | - |  | $(5,163)$ |  | 3,341,029 |
| Malaysian Ringgit |  | - |  | 44,725 |  | - |  | 1,714 |  | 46,439 |
| Mexican Peso |  | 8 |  | 270,761 |  | - |  | 2,516 |  | 273,285 |
| New Russian Ruble |  | - |  | - |  | - |  | 2,793 |  | 2,793 |
| New Taiwan Dollar |  | 1,738 |  | 369,835 |  | - |  | 5,490 |  | 377,063 |
| New Turkish Lira |  | 7 |  | - |  | - |  | - |  | 7 |
| New Zealand Dollar |  | 78 |  | 22,987 |  | - |  | - |  | 23,065 |
| Norwegian Krone |  | 895 |  | 108,222 |  | 1,119 |  | 21,906 |  | 132,142 |
| Pakistan Rupee |  | 54 |  | 8,064 |  | - |  | - |  | 8,118 |
| Polish Zloty |  | 4 |  | 20,489 |  | - |  | - |  | 20,493 |
| Singapore Dollar |  | 545 |  | 273,909 |  | - |  | 1,466 |  | 275,920 |
| South African Rand |  | 4,196 |  | 330,165 |  | - |  | 12,171 |  | 346,532 |
| South Korean Won |  | 357 |  | 410,624 |  | - |  | 7,125 |  | 418,106 |
| Swedish Krona |  | 132 |  | 280,969 |  | - |  | 5,000 |  | 286,101 |
| Swiss Franc |  | 4,802 |  | 1,079,282 |  | - |  | 2,107 |  | 1,086,191 |
| Thailand Baht |  | (40) |  | 66,395 |  | - |  | $(1,383)$ |  | 64,972 |
| Turkish Lira |  | - |  | 204,938 |  | - |  | 309 |  | 205,247 |
| Yuan Renminbi |  | - |  |  |  | - |  | 9,322 |  | 9,322 |
| Total: | \$ | 124,655 | \$ | 22,273,247 | \$ | 283,389 | \$ | 267,721 | \$ | 22,949,012 |

This table represents securities purchased in a foreign currency. The investment figures are comprised of numerous portfolios within the international equity, debt securities, private equity, and real estate investment line items on the statement of fiduciary net assets.

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 not held as a form of investment. Foreign currency is held temporarily in foreign accounts until it is able to be repatriated or expended.

California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

In accordance with the Investment Policy and Management Plan, the System 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, the System has recognized the need to implement strategies designed to address the management of currency risk. The System 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. The System's fixed income staff has management responsibilities for the Currency Management Program. The hedging range has been designed to allow for some degree of symmetry around the unhedged program benchmark in order to enable the Currency Management Program 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 hedging range is $-25 \%$ to $50 \%$ of the total market value of the non-dollar public and private equity portfolios. As of June 30, 2009, the IRC 403(b) and 457 plans are not exposed to foreign currency risk.

## 5. Contingencies

The System 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 the System's financial position.

## 6. Commitments

In connection with the purchase of partnership interests under various investment portfolios, the STRP has remaining unfunded commitments of approximately $\$ 26.3$ billion at June 30, 2009. The following table depicts the unfunded commitments by asset class:

| Asset Class | Unfunded Commitments <br> (Dollars in Thousands) |
| :--- | ---: | ---: |
| Fixed Income | 69,793 |
| Corporate Governance | 564,027 |
| Private Equity | $12,481,498$ |
| Real Estate | $13,173,840$ |
| Total | $\mathbf{\$ 2 6 , 2 8 9 , 1 5 8}$ |

The STRP has entered into agreements through its Credit Enhancement Program to guarantee payment of principal and interest on certain debt securities in the event of default. At June 30, 2009, the STRP had commitments of approximately $\$ 2.6$ billion expiring through January 2015. The STRP is paid a fee over the term of such agreements and earned approximately $\$ 5.9$ million for the year ended June 30, 2009.

## California State Teachers' Retirement System Notes to the Basic Financial Statements (Continued)

## 7. New Accounting Pronouncements

GASB Statement No. 51, Accounting and Financial Reporting for Intangible Assets, provides guidance regarding how to identify, account for, and report intangible assets. The new standard characterizes an intangible asset as an asset that lacks physical substance, is non-financial in nature, and has an initial useful life extending beyond a single reporting period. The statement will require that intangible assets be classified as capital assets (except for those explicitly excluded from the scope of the new standard, such as capital leases) and that relevant authoritative guidance for capital assets should be applied to these intangible assets. This statement also established a specifiedconditions approach to recognizing intangible assets that are internally generated. The requirements of this statement will be implemented in the financial statements for fiscal year 2009-10.

GASB Statement No. 53 Accounting and Financial Reporting for Derivative Instruments, addresses the recognition, measurement, and disclosure of information regarding derivative instruments entered into by governmental entities. The statement defines a derivative instrument as an agreement that transfers risk from one party to another and is typically used for risk management or investment purposes. The requirements of this statement will be implemented in the financial statements for fiscal year 2009-10.

Required Supplementary Information-Unaudited


California State Teachers' Retirement System Schedule of Funding Progress (Dollars in Millions)

The information presented in Supplementary Schedules I and II was determined as part of the actuarial valuations at June 30, 2008 except where noted.

| Actuarial |  | Actuarial | Unfunded |  |  | UAAL <br> as a \% of |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation | Actuarial | Accrued | (Funding |  |  |  |
| Date as of | Value of | Liability | Excess) | Funded | Covered | Covered |
| June 30 | Assets (5) | (AAL) | AAL | Ratio | Payroll | Payroll <br>  |
|  | (a) | (b) | (UAAL) | (a/b) | (c) | (b-a)/c) |

State Teachers' Retirement Plan
Defined Benefit Program

2009

| 2008 | $\$ 155,215$ | $\$ 177,734$ |
| :--- | ---: | ---: |
| 2007 | 148,427 | 167,129 |
| 2006 | 131,237 | 150,872 |
| 2005 | 121,882 | 142,193 |
| $2^{2004}{ }_{(2)}$ | 114,094 | 134,677 |
| $2^{2003}$ | 108,667 | 128,104 |

(1)
\$155,215 148,427
131,237
121,882
108,667

Unfunded (Funding Excess)
AAL
(UAAL)
(b-a)

UAAL
as a \% of
Covered
Payroll
((b-a)/c)

# California State Teachers' Retirement System <br> Schedule of Funding Progress 

(4)

At the April 5, 2007 meeting of the Board, the MPP Program was extended to members who retire or will retire before July 2012. Extending the MPP Program to members who retire or will retire before July 1, 2012, will result in an increase in the costs for the MPP Program of $\$ 133.8$ million. The increase in cost is an estimate and the extension of benefits is included as part of the actuarial accrued liability in the June 30, 2008 actuarial valuation.
(5) An actuarial valuation for the MPP Program is performed on a biennial basis.
(6) An actuarial valuation for the MPP Program was not completed as of June 30, 2007. The actuarial accrued liability and the unfunded actuarial accrued liability were estimated based on June 30, 2006 actuarial information.

## California State Teachers' Retirement System

## Schedule of Contributions from Employers

## And Other Contributing Entities

(Dollars in Millions)
Schedule II

| Year | Annual | Contributed | Contributed | Total | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ended | Required | By | By the | Contributed | Contributed |
| June 30 | Contributions <br> (a) | Employers (1) <br> (b) | State/Federal(2) <br> (c) |  |  |
| State Teachers' Retirement Plan |  |  |  |  |  |
| Defined Benefit Program ${ }_{(3)(6)}$ |  |  |  |  |  |
| 2009 | \$4,547 | \$2,331 | \$536 | \$2,867 | 63\% |
| 2008 | 4,362 | 2,363 | 501 | 2,864 | 66\% |
| 2007 | 3,980 | 2,168 | 481 | 2,649 | 67\% |
| 2006 | 3,821 | 2,092 | 348 | 2,440 | 64\% |
| 2005 | 3,709 | 2,002 | 595 | 2,597 | 70\% |
| 2004 | 3,410 | 1,916 | 451 | 2,367 | 69\% |
| Cash Balance Benefit Program (3) |  |  |  |  |  |
| 2009 | \$7.44 | \$7.49 | \$0 | \$7.49 | 101\% |
| 2008 | 6.80 | 7.50 | 0 | 7.50 | 110\% |
| 2007 | 5.61 | 5.93 | 0 | 5.93 | 106\% |
| 2006 | 4.99 | 5.10 | 0 | 5.10 | 102\% |
| 2005 | 4.48 | 4.49 | 0 | 4.49 | 100\% |
| 2004 | 4.05 | 3.85 | 0 | 3.85 | 95\% |
| Defined Benefit Supplement Program (3) |  |  |  |  |  |
| 2009 | \$121 | \$121 | \$0 | \$121 | 100\% |
| 2008 | 78 | 118 | 0 | 118 | 151\% |
| 2007 | 93 | 111 | 0 | 111 | 119\% |
| 2006 | 90 | 104 | 0 | 104 | 116\% |
| 2005 | 86 | 96 | 0 | 96 | 111\% |
| 2004 | 128 | 125 | 0 | 125 | 98\% |
| Purchasing Power Protection Program (4)(5) |  |  |  |  |  |
| 2009 | \$605 | \$1 | \$604 | \$605 | 100\% |
| 2008 | 629 | 1 | 1,128 | 1,129 | 179\% |
| 2007 | 604 | 1 | 603 | 604 | 100\% |
| 2006 | 673 | 3 | 670 | 673 | 100\% |
| 2005 | 626 | 2 | 624 | 626 | 100\% |
| 2004 | 601 | 3 | 98 | 101 | 17\% |
| Teachers' Health Benefits Fund (7) |  |  |  |  |  |
| 2009 | \$62 | \$30 | \$0 | \$30 | 48\% |
| 2008 (8) | 58 | 33 | 0 | 33 | 57\% |
| 2007 | 47 | 32 | 0 | 32 | 68\% |
| 2006 | 47 | 30 | 0 | 30 | 64\% |

The total Employer Contributions for the State Teachers' Retirement Plan excludes the contributions received relating to benefits paid for the Replacement Benefits Program.

[^2]
# California State Teachers' Retirement System <br> Schedule of Contributions from Employers And Other Contributing Entities (Dollars in Millions) 

(3) For the determination of the Annual Required Contribution, an open amortization period of 30 years is used for the Unfunded Actuarial Accrued Liability.
(4) The amount included in the "Contributed by the State/Federal" column includes federal proceeds from School Lands Income and the sale of the Elk Hills Petroleum Reserve. Certain reclassifications of our previous presentations of the Purchasing Power Protection Program for fiscal year 2003-04 were made to be consistent with later years' presentations

An ARC has not been determined for the Purchasing Power Protection Program. The figure is the contractual amount adjusted for proceeds from School Lands Income, the sale of Elk Hills Petroleum Reserve, and employer contributions for 2-year additions.

The ARC's for 2004 and 2005 were revised on an estimated basis to reflect data corrections.

Fiscal year ending June 30, 2006 was the first year that an ARC was determined for the MPP Program.

The ARC for 2007 and 2008 was based on a roll-forward of figures from the June 30, 2006 valuation.

## California State Teachers' Retirement System

Schedule of Contributions from Employers
And Other Contributing Entities
(Dollars in Millions)
Schedule II (Continued)

Additional information as of the latest actuarial valuation follows:
Additional information as of the latest actuarial valuation follows:
Actuarial Cost Method
Amortization Method
Amortization Approach
Remaining Amortization
Period
Asset Valuation Method

## DB Program

Entry age normal Level percent of payroll basis
Open
30 years
Expected value with $33 \%$ adjustment to market value

## CB Benefit Program

Traditional unit credit
Level percent of payroll
basis
Open
30 years
Fair market value of net assets
7.75\%
7.75\%
4.25\%
3.25\%

Not applicable

## MPP Program

Entry Age Normal
Level dollar basis

Closed
28 years
Fair market value of net assets
4.00\%

Not applicable
Not applicable
3.25\%

Not applicable
5.00\%
$7.00 \%$ grading down to
$5.00 \%$ in 2011 (1)

[^3]
## Other Supplemental Information

## California State Teachers' Retirement System

Schedule of Administrative Expenses (Dollars in Thousands)

|  | State <br> Teachers' <br> Retirement Plan |  | Pension2 IRC 403(b) Plan |  | Teachers' <br> Health <br> Benefit Fund |  | Teachers' <br> Deferred Compensation Fund |  | Totals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Personnel services: |  |  |  |  |  |  |  |  |  |  |
| Salaries and wages | \$ | 33,254 | \$ | - | \$ | 151 | \$ | 193 | \$ | 33,598 |
| Staff benefits |  | 16,300 |  | - |  | 58 |  | 69 |  | 16,427 |
| Accrued vacation |  | 1,124 |  | - |  | 2 |  | 28 |  | 1,154 |
| Accrued worker's compensation expense |  | 216 |  | - |  | - |  | - |  | 216 |
| Accrued personal leave |  | (149) |  | - |  | (6) |  | (3) |  | (158) |
| OPEB Expense |  | 6,075 |  | - |  | 15 |  | - |  | 6,090 |
| Total personnel services |  | 56,820 |  | - |  | 220 |  | 287 |  | 57,327 |
| Operating expenses and equipment: |  |  |  |  |  |  |  |  |  |  |
| General |  | 1,003 |  | - |  | 88 |  | 38 |  | 1,129 |
| Depreciation |  | 567 |  | - |  | - |  | - |  | 567 |
| Printing |  | 1,322 |  | - |  | - |  | 5 |  | 1,327 |
| Communications |  | 902 |  | - |  | - |  | - |  | 902 |
| Postage |  | 984 |  | - |  | - |  | - |  | 984 |
| Insurance |  | 9 |  | - |  | - |  | - |  | 9 |
| Travel |  | 978 |  | - |  | 2 |  | 38 |  | 1,018 |
| Training |  | 698 |  | - |  | - |  | - |  | 698 |
| Facilities operations |  | 6,089 |  | - |  | - |  | - |  | 6,089 |
| Consultants and Professional services |  | 26,493 |  | 278 |  | - |  | 164 |  | 26,935 |
| Data Processing |  | 5,749 |  | - |  | - |  | - |  | 5,749 |
| Information technology |  | 3,643 |  | - |  | - |  | - |  | 3,643 |
| Indirect State central services |  | 4,868 |  | - |  | 6 |  | - |  | 4,874 |
| Equipment |  | 2,997 |  | - |  | - |  | - |  | 2,997 |
| Other |  | 32 |  | - |  | - |  | - |  | 32 |
| Total operating expenses and equipment |  | 56,334 |  | 278 |  | 96 |  | 245 |  | 56,953 |
| Total | \$ | 113,154 | \$ | 278 | \$ | 316 | \$ | 532 | \$ | 114,280 |

## California State Teachers' Retirement System

Schedule of Investment Expenses
External Equity Managers:
Domestic:
Ariel Capital Management ..... 550
Barclays Global Investors ..... 920
Batterymarch Financial Management, Inc. ..... 957
Bivium Capital Partners, LLC ..... 1,170
Blackrock Financial Management, Inc. ..... 1,090
Capital Prospects, LLC ..... 687
Chicago Equity Partners ..... 1,197
Delaware Investment Advisors ..... 673
Delphi Management, Inc. ..... 990
Denver Investment Advisor, LLC ..... 812
DSI International Management, Inc. ..... 131
First Quadrant, LP ..... 876
FIS Funds Management, Inc. ..... 1,787
Frank Russell Trust Co. ..... 259
Goldman Sachs Asset Management ..... 716
Leading Edge Investment Advisors, LLC ..... 1,326
Light Green Advisors ..... 163
Mellon Capital Management Corp. ..... 364
NCM Capital Management Group, Inc. ..... 446
New Amsterdam Partners, LLC ..... 264
Northern Trust Global Advisors, Inc. ..... 1,349
Progress Investment Management ..... 1,571
Sasco Capital, Inc. ..... 6,676
State Street Global Advisors ..... 924
Sterling Capital Management, LLC ..... 1,148
T. Rowe Price International, Inc. ..... 717
TCW Asset Management Co. ..... 1,338
UBS Global Asset Management (Americas), Inc. ..... 990
Total Domestic:30,091
International:
Acuity Investment Management ..... 340
Baillie Gifford Overseas Ltd. ..... 4,869
Barclays Global Investors ..... 634
Batterymarch Financial Management, Inc. ..... 1,865
Blackrock International Ltd. ..... 1,500
Capital Guardian Trust Co. ..... 2,968
Templeton Asset Management, Ltd. ..... 1,960
Generation Investment Management US, LLP ..... 1,227
Goldman Sachs Asset Management ..... 422
Lazard Asset Management, LLC ..... 8,446
Mondrian Investment Partners Ltd. ..... 8,163
Morgan Stanley Investment Management ..... 1,808
Nicholas Applegate Capital Management ..... 2,290
Oechsle International Advisors, LLC ..... 2,367
Pyramis Global Advisors Trust Co. ..... 1,895
State Street Global Advis ors ..... 758
T. Rowe Price International, Inc. ..... 8,092
Templeton Asset Management, Ltd. ..... 5,109
UBS Global Asset Management (Americas), Inc. ..... 1,944
(In thousands)
Total International:56,657Total External Equity Managers:86,748

## California State Teachers' Retirement System

Schedule of Investment Expenses (Dollars in Thousands)
External Fixed Income Managers:
Aberdeen Asset Management ..... 1,108
Blackrock Financial Management, Inc. ..... 1,920
EH Williams Capital Management, LLC ..... 665
Goldman Sachs Asset Management ..... 2,385
Julius Baer Investment Management, LLC / Artio Global Investor ..... 2,491
LM Capital Group, LLC ..... 648
Post Advisory Group, LLC ..... 1,490
Pyramis Global Advisors Trust Co. - (Management fee rebate) ..... (266)
Western Asset Management Co. ..... 1,817Total External Fixed Income Managers:12,258
Real Estate Managers/Advis ors:
Blackrock Realty Advis ors ..... 1,268
CB Richard Ellis Investors, LLC ..... 10,617
Heitman Capital Management, LLC ..... 2,692
ING Clarion Partners ..... 606
ING Real Estate ..... 189
Lowe Enterprises Investment Mgmt, LLC ..... 180
Principal Global Investors ..... 5,706
Thomas Properties Group, LLC ..... 550
Total Real Estate Managers/Advisors ..... 21,808
Research and Rating Services:
BCA Publications ..... 175
Capital IQ ..... 23
CEM Benchmarking, Inc ..... 20
Credit Sights ..... 24
Factiva, Inc ..... 24
Factset Research System ..... 255
Fitch Information, Inc ..... 80
Gimme Credit ..... 13
Institutional Investor Journal ..... 21
International Strategy \& Investment Group, Inc. ..... 75
Intex Solutions, Inc ..... 244
Market Axess ..... 10
Market News International, Inc. ..... 11
Moody's Investors Service ..... 229
Morgan Stanley Capital International, Inc. ..... 146
Property \& Portfolio Research, Inc. ..... 113
RealPoint LLC ..... 44
Reuters America, LLC ..... 74
Standard \& Poor's ..... 262
The Yield Book ..... 102
Thoms on Financial, LLC ..... 90
Thoms on Tradeweb, LLC ..... 29
Trans-Lux ..... 86
Trepp, LLC ..... 27
Zephyr Associates, Inc. ..... 18
Total Research and Rating Services:2,195
Risk Management SystemsBarra, Inc.1,152
Blackrock Financial Management, Inc. ..... 3,023
Bloomberg, LP ..... 529
Advisers and Consultants:
Altius Associates Limited ..... 625
Bard Consulting ..... 436
Bonuccelli \& Associates, Inc. ..... 565
Callan Associates ..... 73
Cambridge Associates ..... 2,975
Capital Hotel Management, LLC ..... 198
Courtland Partners, Ltd. ..... 55
Ennis Knupp \& Associates ..... 91
Houlihan Lokey Howard \& Zukin ..... 225
PCA Real Estate Advisors ..... 36
Pension Consulting Alliance ..... 1,307
Terra Search Partner, LLC ..... 40
Townsend Group ..... 244Total Advisers and Consultants:6,870
Attorneys, Master Custodian and Insurers:
Aon Risk Services ..... 741
Manatt, Phelps \& Phillips LLP ..... 42
Cox Castle Nichols on ..... 97
Groom Law Group ..... 97
Sheppard Mullin Richter \& Hampton ..... 46
State Street Bank (Master Custodian) ..... 6,244
Total Attorneys, Master Custodian and Insurers: ..... 7,267
Corporate Goverance:
Administrative Costs ..... 1,168
Asian Corporate Governance Association ..... 22
Audit Integrity ..... 75
Broadridge ICS ..... 30
Carbon Disclosure Project ..... 103
Council of Institutional Investors ..... 30
Dow Jones \& Co., Inc. ..... 12
Egan-Jones Proxy Services ..... 30
Eva Dimensions, LLC ..... 42
Factset Research System ..... 87
First Rain ..... 40
Governance Metics International ..... 26
Grant \& Eis enhofer ..... 16
Investor Responsibility Support Services, Inc. ..... 35
KLD Research \& Analytics ..... 13
Korn / Ferry International ..... 30
Pension Consulting Alliance ..... 50
Proxy Governance, Inc ..... 35
Raymond T White ..... 27
Reuters America, LLC ..... 25
Riskmetrics Group ..... 648
Runyon Saltzman \& Einhorn, Inc. ..... 113
Stanford Law School ..... 10
The Conference Board ..... 31
The Corporate Library ..... 102Total Corporate Goverance:
2,800

## Other Expenses:

Administrative Costs
Miscellaneous

|  | 15,214 |
| :---: | :---: |
| $\$$ | 159,864 |State Teachers' Retirement PlanIndividual or FirmCommission/FeeConsulting and professional services:

Active Strategy, IncAgreeya SolutionsAlameda County Office of EducationBenchmark Consulting ServicesBenchmark Medical ConsultantsBlackstone Technology Group
Business AdvantageCal Gov TechnologyCalifornia Department of General Services
Celer Systems, Inc.Comsys Services LLCContra Costa County Office
Cooperative Personnel ServicesCoretechs, Inc.CrusadeDeloitte \& Touche LLP
Deloitte Financial Advisory
Department of Justice
DSG Group, Incorporated
Dublin Unified School District
Eclipse Solutions, Inc.
Employee Relation, Inc.
Employment Development Department
Folsom Cordova Unified School District
Forward Solutions
Fresno County Office of Education
Gartner, Inc.
Goldlink Pacific, Inc.
Graphic-Focus
Hareline Graphics
Helm Technical Services
Hogan \& Hartson
Humboldt County Office of Education
Huron Consulting Services LLC
I-Level Incorporated
Infiniti Consulting Group, Inc
Informatix Incorporated
Insight Technologies, Inc.Integrative Project Solutions,
Intergalactic Placements
International Network
Investment Training \& Consulting Institute, Inc.
Jaykumar Maistry
Jeve Consulting, Inc.
Kearnford Application Systems
Kern County Superintendent Of Schools
Kiefer Consulting, Inc.
KPMG, LLP
Link One Professionals, LLC
Los Angeles Community Colleges
Los Angeles County Superintendent of Schools
M Corporation

## Nature of Services

Consulting Services
Consulting Services
Regional Counseling Services
Consulting Services
Consulting Services
Consulting Services
Consulting Services
Consulting Services Consulting Services
Consulting Services
Consulting Services Regional Counseling Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Regional Counseling Services Consulting Services Consulting Services Consulting Services Regional Counseling Services Consulting Services Regional Counseling Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Legal Services
Regional Counseling Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Consulting Services Regional Counseling Services Consulting Services Audit Services Consulting Services Regional Counseling Services Regional Counseling Services Consulting Services

## State Teachers' Retirement Plan

## Individual or Firm <br> Consulting and professional services:

Macias, Gini \& O'Connell LLP
Mara Consulting, Inc.
Mayer Hoffman McCann, P.C.
McLagan Partners, Inc.
Milliman, Inc.
Monterey County Office of Education
Montridge Consulting
Mouse Magic
MSLA, A Medical Corporation
Nanran, Inc.
Netprotex, Incorporated
O.C. Tanner Recognition Co.

Orange County Department of Education
Performance Technology
Personal Enterprises, Inc.
Pillsbury Winthrop Shaw
Pinnacle Consulting
Placer County Office of Education
Princeton Solutions Group
Public Sector Consultants, Inc.
Q Data Consulting
Q Data Usa, Inc.
Quest Media \& Supplies
Renee Taylor Consulting, Inc.
Robert Yetman
Runyon Saltzman \& Einhorn
Russbo, Incorporated
Sacramento IT Consulting,LLC
San Bernardino County Office of Education
San Diego County Office of Education
San Francisco County Office of Education
San Joaquin County Office of Education
San Jose Unified School District
San Mateo-Foster City School District
Santa Barbara County Office of Education
Santa Cruz County of Education
Sap Consulting, Inc.
Segula Technologies, Inc.
Senate Rules Committee
Shasta County Office of Education
Sierra Metrics, Inc.
Solano County Office of Education
Solutionswest Consulting, Inc.
Sonoma County Office of Education
Sonoma County Superintendent of Schools
Stanfield Systems, Inc.
Stanis laus County Office of Education
State Controller's Office
State Personnel Board
Strata Marketing Group
The Ballard Group
The Highlands Consulting

Commission/Fee
Nature of Services

State Teachers' Retirement Plan
Individual or Firm

Consulting and professional services:
ThirdWave Corporation
Thomas V. Ennis Consulting
Thomas/Ferrous
Tulare County Superintendent of Schools
University Enterprises, Inc.
US Bank
Ventura County Superintendent of Schools
Visionary Integration
Volt Services Group
Wright On-Line Systems
Yuba County Office of Education Other

Data Processing:
Department of Technology Services
Tetra Corporate Services, Inc.

Total consultant and professional services expenses

Teacher's Deferred Compensation Fund
Individual or Firm
Consulting and professional services:
JEM Resource Partners, LP
Nature of Services
Meridian Wealth Management
Michelle Emmal
University Enterprises, Inc.
Total consultant and professional services expenses

Pension2 -IRC 403(b)

Individual or Firm

Consulting and professional services:
TIAA-CREF

Total consultant and professional services expenses
$\square$

Commission/Fee

## Commission/Fee

| 488 |
| ---: |
| 156 |
| 206 |
| 81 |
| 1,258 |
| 30 |
| 54 |
| 203 |
| 93 |
| 178 |
| 47 |
| 140 |
| 26,493 |

Commission/Fee
5,746
5,749

32,242

Commission/Fee
$\qquad$
278
278

Consulting Services
Consulting Services
Consulting Services
Regional Counseling Services
Consulting Services
Consulting Services
Regional Counseling Services
Consulting Services
Consulting Services
Consulting Services Regional Counseling Services Various Services under \$10K

Nature of Services
Data Processing
Data Processing

Consulting Services
Consulting Services
Consulting Services
Consulting Services

Nature of Services
Administrative Services


Pension Consulting Alliance, inc.

The CaISTRS investment portfolio decreased by $\$ 42.6$ billion over the past twelve months ending with a value of $\$ 118.9$ billion on June 30, 2009. More recent results have exhibited a significant rebound from this low level. As highlighted below, the CaISTRS portfolio is broadly diversified, holding investments ranging from publicly traded short-term bonds to privately held partnerships. Clearly, the scale and breadth of investments make the management and oversight of these assets highly complex. In light of these factors, CaISTRS has been effective in using its resources in a cost-efficient manner to ensure that benefits continue to flow to CaISTRS participants.

## Investment Allocation

The dramatic market events of 2008 had a major impact on investment performance. The fiscal yearend report reflects strategic allocation guidelines for the 2008-09 fiscal year as adopted January 1, 2008 (see left pie chart). The portfolio's actual allocation is slightly different from policy. Private Equity and Debt are overweighted, while Real Estate is modestly underweighted (see right pie chart).

## Investment Results

Over the last year, the CaISTRS investment portfolio produced an absolute return of -25.0 percent, ranking in the fourth quartile among its large public pension fund peers ${ }^{1}$ (top bar chart). During this period, portfolio results lagged the policy benchmark return by 3.0 percent. ${ }^{2}$ Relative underperformance by the Real Estate asset class contributed to this result. During the last three years, CaISTRS portfolio generated a -4.4 percent average annual return underperforming the policy benchmark by 30 basis points per year and ranked in the fourth quartile versus their peer funds. Over the last five years, the CaISTRS investment portfolio produced an average annual return of 1.9 percent, exceeding its policy benchmark by 40 basis points per



Periods Ending June 30

year (bottom chart). These results are below CaISTRS actuarial rate of return. Successive one-year periods are shown as well. CaISTRS portfolio has outperformed its policy benchmark in four of the last five single-year periods, ending June 30. ${ }^{3}$


[^4]The CaISTRS investment portfolio is designed to perform best in a period of positive economic growth. It is also designed, through diversification, to hold value during economic slowdowns. In fall 2008, the global economy and financial markets suffered a severe downturn. The investment portfolio was not immune from the severe downtown, which has happened just once in an 80-year period. As a result, the portfolio experienced its worst investment performance in CaISTRS history.

The following pages outline the impact to the portfolio and within each asset class. Over the 12 months ending June 30, 2009, the investment portfolio declined $\$ 42.6$ billion in value, which resulted in a negative 25.03 percent annual return. While this annual report provides a great amount of detail into the CaISTRS investment portfolio, it only represents a point in time. Given the tremendous volatility in the financial markets, current information is available at CaISTRS.com/investments.

Asset Allocation as of June 30, 2009
Total investment portfolio of $\mathbf{\$ 1 1 8 . 9}$ billion


In the prior six years, the CalSTRS investment portfolio placed in the top quartile of public pensions in the U.S., an unprecedented streak for CaISTRS and any fund. During the financial crisis, the performance fell relative to peers. Over the past five

Table 1 Growth in Total Investments
(dollars in millions)
\$171,899

years, CaISTRS now ranks just below median for public funds. During fiscal year 2008-09, CaISTRS broke an even longer streak of adding value to the returns above the policy benchmark. For the year, the portfolio underperformed by 300 basis points.

The major factor was the underperformance of the real estate portfolio.

Within each of the asset classes, the fiscal year 2008-09 performance was far below expectations and prior experience. Only one of the asset classes

Table 2 | Growth in CaISTRS Returns (percent)


Table 3 || Time-Weighted Performance Returns for Major Asset Categories

| PORTFOLIO TYPE / ASSOCIATED INDICIES | 1 YR | 3 YR | 5 YR | 10 YR |
| :---: | :---: | :---: | :---: | :---: |
| Total Fund | (25.03\%) | (4.39\%) | 1.93\% | 2.55\% |
| Global Equity | (28.25) | (7.40) | 0.35 | 0.04 |
| Global Equity Custom ${ }^{1}$ | (28.08) | (7.53) | 0.21 | (0.22) |
| U.S. Equity | (27.06) | (8.58) | (1.96) | (1.39) |
| U.S. Equity Custom² | (26.82) | (8.55) | (2.04) | (1.71) |
| Russell 3000 | (26.82) | (8.55) | (2.04) | (1.63) |
| Non-U.S. Equity | (30.43) | (5.13) | 4.85 | 2.84 |
| MSCI All Country World Index ex-U.S. | (31.01) | (5.76) | 4.65 | 2.70 |
| MSCI Europe, Australia, Far East \& Canada | (31.69) | (7.56) | 2.57 | 1.29 |
| MSCI Emerging Market | (28.32) | 2.95 | 14.87 | 8.85 |
| Fixed Income | 4.49 | 5.70 | 4.77 | 6.12 |
| U.S. Debt Custom ${ }^{3}$ | 5.78 | 6.21 | 4.94 | 6.32 |
| Barclays Capital U.S. Aggregate | 6.05 | 6.43 | 5.01 | 5.98 |
| Barclays Capital High Yield Cash Pay | (1.89) | 2.38 | 4.49 | 4.88 |
| Real Estate | (43.01) | (5.39) | 6.83 | 8.69 |
| Real Estate NCRIEF (lagged 1 quarter) | (14.68) | 4.18 | 9.47 | 9.32 |
| Private Equity | (27.66) | 1.00 | 11.18 | 11.54 |
| Private Equity Custom ${ }^{4}$ | (35.50) | (10.32) | (3.51) | 1.80 |
| Liquidity ${ }^{5}$ | (25.19) | (5.20) | (1.35) | 3.08 |
| Barclays Capital 3-Month Treasury Bill ${ }^{6}$ | 1.04 | 3.34 | 3.20 | 3.17 |

[^5]outperformed its benchmark, while four fell short. The lowest performance was from the Real Estate portfolio. Real estate debt investments, leverage on real estate holdings and development risk resulted in substantial write downs at June 30, 2009. In the cash portfolio, CaISTRS was negatively affected by the bankruptcy filings of two financial firms that the day before were considered investment grade credit risks. Short-term investment in the debt of Lehman Brothers and Washington Mutual resulted in write downs of approximately $\$ 600$ million during the fiscal year. In each case, CaISTRS is still pursuing some recovery.

The following pages go into greater detail regarding each asset class and its respective performance. The CaISTRS investment committee, investment staff and external consultants have undergone a very detailed review of the fiscal year 2008-09 results and developed a list of key issues to improve. Over the course of fiscal year 2009-10, the investment committee and staff will be making several changes to the portfolio, investment policies, the internal investment decision process, and internal procedures, to help the fund generate as much return as possible within acceptable risk parameters.

## Innovation and Risk

The Innovation and Risk (IR) Unit's policy was approved in March 2009 and the group has not yet deployed any capital. The IR portfolio's allocation is not to exceed the lesser of either 1.5 percent of the Total Plan assets or $\$ 2$ billion. IR's goal is to identify, research and incubate investment opportunities that currently are not utilized by the fund. Each new strategy that is pursued is expected to improve the risk/return efficiency of the Total Plan or an asset class by increasing its return, decreasing its risk or achieving both. Examples of new opportunities include market neutral funds, commodities and intellectual property. In addition, IR is focused on measuring and monitoring enterprise financial risks at the Total Plan level.

Because IR is a new unit, the latter half of the fiscal year was spent establishing a framework and criteria for identifying, evaluating and monitoring Innovation strategies as well as implementing the BarraOne Risk Management System. IR has also begun to build the first generation of quantitative tools to evaluate new strategies and to develop risk reports at the enterprise level.

## Fixed Income

The fixed income assets within the CaISTRS investment portfolio amounted to $\$ 25.95$ billion at the end of fiscal year 2008-09. Fixed income assets are structured to capitalize on the benefits of both internal and external asset management. More than three-quarters of the fixed income assets follow a Core Strategy, which is designed to generate market level returns with a low to moderate level of risk. The remaining quarter of the fixed income assets follow an Opportunistic Strategy, with higher risk levels and higher expected returns.

The Fixed Income portfolio trailed its benchmark by 129 basis points (1.29 percent) for the twelve months ending June 30, 2009. These disappointing results can be attributed to the extreme volatility caused by the financial turmoil described earlier. However, over the five- and ten-year time periods, the Fixed Income portfolio is still tracking the benchmark within a narrow band. Looking forward we have seen evidence that coordinated global monetary and fiscal policy actions are taking hold and therefore we are positioning the Fixed Income portfolio to take advantage of the opportunities that come with a slow economic recovery.

Currency Management and Securities Lending are two other investment programs managed by the fixed income team.

## CURRENCY MANAGEMENT PROGRAM

CaISTRS has recognized the need to implement strategies designed to address the management of currency risk because of the global nature of the fund and the impact that currency fluctuations can have on the return of dollar-based investors.

Table 4 Largest Fixed Income Holdings as of June 30, 2009
(CaISTRS maintains a complete list of portfolio holdings)

|  | MATURITY |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| ISSUE | INTEREST |  | MARET |
| RATE |  |  |  |

The Currency Management Program is designed to add value to the investment portfolio by protecting the translation value of the fund's non-dollar assets when there is the risk that the U.S. dollar will strengthen and preserving the diversification benefits of holding non-U.S. dollar assets when there is widespread U.S. dollar weakness.

The currency markets were not immune to the extreme volatility brought on by last year's financial crisis. Given the environment, market conditions proved to be very difficult. For the past one- and three-year periods, the Currency Management Program has not been able to add significant value to the fund. However, over the five-year and "since inception" periods, the program has added 29 basis points and 83 basis points, respectively, to the fund.

## SECURITIES LENDING PROGRAM

Securities lending is structured as a low-risk strategy, intended to enable the fund to use its existing asset base and investment expertise to generate incremental income. While some form of risk is inherent in any investment strategy, steps can be taken to mitigate them. The CaISTRS Securities Lending Program has been designed to manage the counterparty and operational risks associated with the unprecedented volatility and illiquidity within the
markets last year, but the unexpected bankruptcy of a major investment grade broker/dealer (i.e., Lehman Brothers) resulted in a loss to the program for the first time since its inception in 1988. While the program continues to be profitable over the long term and has generated almost $\$ 870$ million over the past twenty years, (or $\$ 1.3$ billion when compounded at the growth rate of the investment portfolio), it is anticipated that the recovery of these losses will take several years.

## Home Loan Program

The CaISTRS Home Loan Program, established by legislation in 1984, provides the opportunity for home ownership to qualified CaISTRS members while meeting CaISTRS investment goals by generating a mortgage asset. The Home Loan Program offers members a variety of mortgage programs that best meet their individual needs, while also providing "best in class" customer service throughout the mortgage loan process.

The program also includes a down-payment assistance program and a reverse mortgage program designed to provide a financial alternative to members age 62 and older and/or their parents. The assets created by the Home Loan Program are
purchased and managed as part of the mortgage allocation within the Fixed Income portfolio or sold in the financial markets.

Bank of America Home Loans is a strategic partner to the program. With their assistance, the number of correspondent lenders throughout California has increased to 55. The Home Loan Program also has a dedicated 1-800 number available for inquiries from prospective borrowers as well as a Web site at CaISTRS.com/homeloanprogram for providing information to prospective borrowers.

## Private Equity

During fiscal year 2008-09, CaISTRS made additional commitments of approximately $\$ 2.0$ billion in this segment of the portfolio. The market value plus unfunded commitments now amount to approximately $\$ 27.7$ billion. The Private Equity group invests in the private equity market. The majority of its investments are made through limited partnerships, which consist of pools of capital raised from, among others, pension funds, endowments and high net worth individuals. These funds invest primarily in private companies, providing financial and operational expertise in order to achieve a significant return on investment upon exit.

The Private Equity group also manages a co-investment portfolio of companies in which CaISTRS has invested alongside the partnership that made the direct investment. It also invests in secondary interests. There are 245 partnerships, 41 co-investments and five secondaries in the Private Equity portfolio. At the end of the fiscal year, the total market value was $\$ 15.2$ billion, representing approximately 12.8 percent of the total CaISTRS portfolio.

CaISTRS continues to increase its commitments in this area. The Private Equity asset class has resulted in annualized returns of $-27.7,1.0$, and 11.2 percent, lagged one quarter, for the one-, three-, and five-year periods respectively.

## Credit Enhancement

CaISTRS enters into agreements with a number of issuers of tax-exempt debt to provide the payment of principal and interest in the event of a nonpayment and/or market support in the capital markets. In return, CalSTRS earns fee income for these commitments. As of June 30, 2009, the Credit Enhancement Program had commitments of approximately $\$ 2.6$ billion and fee income earned during the fiscal year was approximately $\$ 5.9$ million.

## Real Estate

CaISTRS portfolio of real estate assets is valued at $\$ 12.3$ billion. Real estate assets are 10.4 percent of the total fund with a 13 percent target allocation. The real estate portfolio is divided into two segments: 1) core, domestic investments either held directly or with a joint venture partner and are diversified by property type and region; and 2) tactical, domestic and international investments held in a joint venture or as a limited partner in a commingled fund. The core portfolio comprises 39 percent of the total Real Estate portfolio and the tactical portfolio comprises the other 61 percent.

The CaISTRS Real Estate portfolio has achieved gross annualized returns of $-43.0,-5.4$, and 6.8 percent for the one-, three-, and five-year periods, respectively. CaISTRS returns underperformed the NCREIF benchmark by 9.6 and 2.6 percent for the three- and five-year periods, primarily due to the unleveraged nature of the NCREIF benchmark.

## Global Equities

The Global Equity portfolio, comprising both internally and externally managed portfolios, continues to be an important investment vehicle to the fund. At the end of fiscal year 2008-09, this segment of the portfolio accounted for 54.2 percent, or $\$ 64.4$ billion, of the total fund. U.S. Equity accounted for 67 percent of the total equity allocation, while non-U.S. Equity accounted for the remaining 33 percent.

The Global Equity portfolio is managed by two internal and 29 external U.S. managers and 20 external non-U.S. managers. Global equity markets continued to experience significant declines in performance during fiscal year 2008-09 with a -31.09 percent rate of return for the MSCI All Country World Index ("ACWI"). The relative returns of the U.S. and non-U.S. composites were mixed during the fiscal year, with U.S. managers lagging the Russell 3000 ex-Tobacco Index by 24 basis points (-27.06 percent vs. -26.82 percent) and non-U.S. managers surpassing the MSCI ACWI ex-U.S. exTobacco Index by 58 basis points ( -30.43 percent vs. -31.01 percent).

## U.S. AND NON-U.S. EQUITY PROGRAMS

During fiscal year 2008-09, the Global Equities group implemented the following key initiatives:

- Staff conducted a three-part study to evaluate the merits of establishing a global equity allocation to replace the existing structure that split the Global Equity portfolio into two separate allocations of U.S. and Non-U.S. assets. Historically, the board made separate asset allocations to both of these components of the portfolio. The study concluded in February 2009 with the board's approval of a single asset allocation structure known as Global Equities for CaISTRS public equity assets. Going forward, a single asset allocation will be made to this asset class.
- The formerly separate Internal and External Equity units were merged into one group, now known as Global Equities. These two units share a great deal in common and in most funds they operate as one unit. By combining the two units into one, we are able to create more value by leveraging off the strengths of both teams.

Table 5 Largest Equity Holdings as of June 30, 2009
(CaISTRS maintains a complete list of portfolio holdings)

|  | SHARES | MARKET VALUE | AVERAGE COST | UNREALIZED <br> GAIN/(LOSS) |
| :--- | ---: | ---: | ---: | ---: |
| Exxon Mobil Corp | $18,488,784$ | $\$ 1,292,550,889$ | $\$ 758,274,547$ | $\$ 534,276,343$ |
| Microsoft Corp | $30,246,140$ | $718,950,748$ | $581,197,955$ | $137,752,793$ |
| Johnson + Johnson | $10,607,243$ | $602,491,402$ | $446,881,539$ | $155,609,864$ |
| AT+T Inc | $23,399,944$ | $581,254,609$ | $641,659,233$ | $(60,404,624)$ |
| International Business Machs | $5,381,883$ | $561,976,223$ | $394,812,462$ | $167,163,761$ |
| Procter and Gamble Co | $10,626,241$ | $543,000,915$ | $420,581,940$ | $122,418,976$ |
| Chevron Corp | $8,089,378$ | $535,921,293$ | $406,622,460$ | $129,298,832$ |
| JPMorgan Chase + Co | $15,178,407$ | $517,735,463$ | $455,290,682$ | $62,444,780$ |
| Apple Inc | $3,490,683$ | $497,177,980$ | $200,531,879$ | $296,646,101$ |
| General Elec Co | $40,838,529$ | $478,627,560$ | $847,436,742$ | $(368,809,183)$ |

## Corporate Governance

During fiscal year 2008-09, CaISTRS staff voted on 61,950 proxy proposals submitted by 4,087 corporations that were held in the portfolio. Some companies had multiple meetings and the fund ended up voting at 4,486 meetings for portfolio companies. The 61,950 proposals represented a 30.5 percent increase from the 47,481 proposals voted on in 2007-08. The primary reasons for the increase in the number of proposals were the addition of markets in which staff voted, changes in regulatory policy and the financial crisis that forced many companies to hold special meetings or include additional items on their proxies.

Importantly, the fund now accounts for each individual director as a separate proposal instead of as a slate as in previous years. This will allow CaISTRS to take full advantage of the majority voting standard that many companies have adopted.

The major proxy issues voted on are summarized below.

1. Election of Directors: CaISTRS generally votes in favor of a director unless the proxy statement shows circumstances contrary to policy. Examples of such circumstances include: potential conflict of interest due to other directorships or employment, providing legal or investment banking advice and poor board meeting attendance (less than 75 percent).
" Number Voted: 17,004
" Voted For: 8,330 (49\%)
" Voted Against: 8,674 (51\%)
2. Selection of Auditors: CaISTRS will vote in favor of the independent auditors recommended by management unless the auditor provides services that run contrary to what CaISTRS policy allows for. Examples of such services are: consulting, information system design and implementation, investment banking support and excessive nonaudit fees (greater than 30 percent of the total fees billed).
" Number Voted: 2,729
„ Voted For: 2,429 (89\%)
" Voted Against: 300 (11\%)
3. Compensation Plans (Stock Option Plans, Employee Stock Purchase Plans, etc.):
Companies provide a variety of compensation plans for executives, employees and nonemployee directors. Many of these plans provide for the issuance of long-term incentives to attract, reward and retain key employees. Compensation plans are evaluated based on CaISTRS Financial Responsibility Criteria.
" Number Voted: 1,645
" Voted For: 640 (39\%)
" Voted Against: 1,005 (61\%)

## 4. Approve Merger/Acquisition-Management:

 CaISTRS evaluates mergers and acquisitions on a case-by-case basis utilizing a total portfolio view." Number Voted: 107
" Voted For: 89 (83\%)
" Voted Against: 18 (17\%)
5. Corporate Actions/Corporate Governance Issues: These are issues related to spin-offs, incorporation, stock issuance and stock splits. CaISTRS votes on these proposals on a case-bycase basis.
" Number Voted: 991
" Voted For: 703 (71\%)
" Voted Against: 288 (29\%)
6. Miscellaneous Issues-Management: CaISTRS will vote in favor of other miscellaneous business recommended by management unless the issue to be voted on is contrary to policy. These issues are voted on a case-by-case basis.
" Number Voted: 425
" Voted For: 155 (36\%)
" Voted Against: 270 (64\%)
7. Shareholder Proposals: CaISTRS votes on a variety of shareholder proposals. Examples of the issues voted on include: removing classified boards of directors, requiring an independent board chairman, eliminating poison pills, tying compensation plans to company performance and requiring shareholder approval for large severance packages.
" Number Voted: 671
" Voted For: 553 (82\%)
" Voted Against: 118 (18\%)
The Corporate Governance unit continues to manage six governance funds, accounting for a combined $\$ 2.2$ billion in assets under management. All funds invest in governance-poor companies and engage management in securing governance and shareholder value improvement. For the year ending June 30, 2009, the Corporate Governance funds returned a negative 26.7 percent.

## CASH BALANCE BENEFIT PROGRAM

The Cash Balance Benefit Program contributions were invested into pooled funds from inception on February 1, 1997 through June 30, 2001. Sixty percent of the contributions were allocated to the S\&P 500 Portfolio and forty percent to the Government Index Portfolio. Beginning July 1, 2002, Cash Balance Benefit Program contributions are invested in the Teachers' Retirement Fund, excluding Private Equity (Alternative) and Real Estate investments. The market value, as of June 30, 2009, is $\$ 91$ million. The rate of return for the Cash Balance Benefit Program for the fiscal year was a negative 20.4 percent.

Table 6 Investment Summary for the Current and Previous Fiscal Year
(dollars in millions)

|  | June 30, 2008 |  |
| :--- | ---: | ---: |


| June 30, 2009 |  |  |  |
| :---: | :---: | :---: | :---: |
| BOOK <br> VALUE | MARKET <br> VALUE | \% OF <br> MARKET <br> VALUE | NET <br> MARKET <br> CHANGE |
| $\$ 66,605$ | $\$ 64,449$ | $54.22 \%$ | $(\$ 29,589)$ |
| 26,415 | 25,953 | 21.83 | $(5,246)$ |
| 18,162 | 15,183 | 12.77 | $(1,407)$ |
| 21,199 | 12,320 | 10.36 | $(8,060)$ |
| 969 | 970 | 0.82 | 467 |
| $\mathbf{\$ 1 3 3 , 3 5 0}$ | $\mathbf{\$ 1 1 8 , 8 7 5}$ | $\mathbf{1 0 0 . 0 0} \%$ | $\mathbf{( \$ 4 3 , 8 3 5 )}$ |
| 0 | 0 | $0.00 \%$ | 1,251 |
| $\mathbf{\$ 1 3 3 , 3 5 0}$ | $\mathbf{\$ 1 1 8 , 8 7 5}$ | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{( \$ 4 2 , 5 8 4 )}$ |


| Adjustments: |  |
| :--- | ---: |
| Securities Lending Collateral | $\$ 27,077$ |
| SSB Accruals | 127 |
| Obligation under Reverse Repurchase | 1,500 |
| Cash \& Cash Equiv | $\mathbf{( 2 5 0 )}$ |
| PLAN NET ASSETS-INVESTMENTS | $\mathbf{\$ 1 8 9 , 9 1 3}$ |


$-$| $\$ 22,990$ |
| ---: |
| 144 |
| 0 |
| $(173)$ |
| $\$ 141,836$ |

## DEFINED BENEFIT SUPPLEMENT PROGRAM

The Defined Benefit Supplement Program contributions are invested in the Teachers' Retirement Fund excluding Private Equity (Alternative) and Real Estate investments. Contributions were first received in the Defined Benefit Supplement Program in January 2001.

The market value as of June 30, 2009, is $\$ 4.9$ billion. Since the inception of the Defined Benefit Supplement Program, the annualized rate of return is 1.8 percent. The rate of return for the Defined Benefit Supplement Program for fiscal year 2008-09 is a negative 20.4 percent.

Table 7 Schedule of Investment Fees from Continuous Appropriation July 1, 2008, Through June 30, 2009 (dollars in thousands)

|  | ASSETS UNDER <br> MANAGEMENT | FEES | BASIS POINTS |
| :---: | :---: | :---: | :---: |
| Investment Managers' Fees |  |  |  |
| Global Equity | $\$ 44,965,922$ | $\$ 86,748$ | 19.3 |
| Fixed Income | $4,929,957$ | 12,258 | 24.9 |
| Private Equity | $14,370,689$ | 3,600 | 2.5 |
| Real Estate | $13,038,471$ | 21,808 | 16.7 |
| TOTAL INVESTMENT MANAGERS' FEES | $\mathbf{\$ 7 7 , 3 0 5 , 0 3 9}$ | $\mathbf{\$ 1 2 4 , 4 1 4}$ | $\mathbf{1 6 . 1}$ |

Table 8 || Global Equity Broker Commissions July 1, 2008, Through June 30, 2009

| BROKER NAME | COMMISSION | SHARES | COMMISSION PER SHARE |
| :---: | :---: | :---: | :---: |
| Credit Suisse Bank | \$3,469,468 | 581,493,627 | \$0.006 |
| J.P. Morgan | 3,306,694 | 336,146,929 | 0.010 |
| Merrill Lynch | 3,144,137 | 398,693,967 | 0.008 |
| Goldman Sach | 2,561,355 | 381,628,420 | 0.007 |
| Citigroup | 2,165,566 | 223,010,264 | 0.010 |
| UBS AG | 1,762,706 | 285,343,125 | 0.006 |
| Instinet | 1,726,268 | 142,617,971 | 0.012 |
| BNY Brokerage Inc | 1,589,180 | 59,353,324 | 0.027 |
| Deutsche Bank Secuirities Corp | 1,336,091 | 240,187,050 | 0.006 |
| State Street Bank and Trust Company | 1,111,796 | 204,562,353 | 0.005 |
| Other Brokers | 22,425,061 | 2,198,297,269 | 0.010 |
| TOTAL COMMISSIONS | \$44,598,322 | 5,051,334,299 | \$0.009 |

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Teachers' Retirement Board
California State Teachers' Retirement System

## Re: Valuation of the Defined Benefit Program

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

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

| Valuation Date | Funded Ratio |
| :---: | :---: |
| June 30, 2006 | $87 \%$ |
| June 30, 2007 | $88 \%$ |
| June 30, 2008 | $87 \%$ |

Based on the current actuarial assumptions, the current projected income from member, employer, and State contributions will not finance the DB Program of the California State Teachers' Retirement System on an actuarially sound basis. That is, the expected contributions are not sufficient to fund the annual cost of the program and amortize the Unfunded Actuarial Obligation over a period of 30 years or less.

Also, it should be noted that the most recent valuation results do not reflect the significant market loss on assets that has occurred since June 30, 2008. Thus, the Funded Ratio is expected to be significantly lower once that market loss is reflected in the 2009 and later valuations.

The June 30, 2008 valuation results are based on the membership data and the asset information provided by CaISTRS. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

Milliman did not prepare Schedules I and II, or the summary of actuarial methods and assumptions in Schedule II of the Financial Section, nor the information included in this Actuarial Section of the 2009 Comprehensive Annual Financial Report. However, the actuarial information contained in Schedule I of the Financial Section and in this Actuarial Section was derived from our June 30, 2008 actuarial valuation report.

# ACTUARY'S CERTIFICATION LETTER, CONTINUED 

## L.milliman

Teachers' Retirement Board<br>January 12, 2010<br>Page 2

The valuation is based on our understanding of the current benefit provisions of the DB Program and the actuarial assumptions which were last reviewed and adopted by the Board on April 3, 2008. The assumptions will be reviewed in detail again in 2012.

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

We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement No. 25 for fulfilling financial accounting requirements. Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements as presented in the valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

We certify that the June 30, 2008 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Respectfully submitted,


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


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

MCO/NJC/nlo

## DEFINED BENEFIT PROGRAM

## Summary of Actuarial Assumptions and Methods

CaISTRS, through its consulting actuary, performs an experience study every four years to determine appropriate demographic and economic assumptions. These assumptions are then applied when the consulting actuary performs an actuarial valuation to monitor the funding status of the Defined Benefit Program. The most recent experience study for 2003-2007 was completed as of June 30, 2007.

The study was adopted by the Teachers' Retirement Board on April 3, 2008. The most recent actuarial valuation was completed as of June 30, 2008, and adopted by the Teachers' Retirement Board on September 4, 2009. The following summary and tables were prepared by CaISTRS staff. All of the assumptions used in the actuarial valuation were adopted by the Teachers' Retirement Board when the experience study was adopted on April 3, 2008. All information is considered in the June 30, 2008, actuarial valuation.

Following is a summary of the assumptions adopted by the Teachers' Retirement Board for this program.

- Investment return rate is 8.00 percent.
- Method used to value program assets for actuarial valuation purposes: expected actuarial value adjusted for one-third of the difference between actual market value and expected actuarial value.
- Assumption for general wage increase is 4.25 percent, of which 3.25 percent is due to inflation and 1.00 percent is due to expected gains in productivity.
- The actuarial cost method used by the program is the entry age normal actuarial cost method.
- The extent to which benefits are expected to increase as a result of cost-of-living type adjustments is an annual 2 percent increase to the initial benefit beginning on September 1 following the first anniversary of the effective date of the benefit. Since 1972, this increase is applied to all eligible continuing benefits.


## discussion of recent changes in:

The nature of the program-Since the last experience study as of June 30, 2007, program amendments have been made that have affected the June 30, 2008 actuarial valuation.

## Funding

- The General Fund contribution to the Supplemental Benefit Maintenance Account was reduced by $\$ 500$ million effective for fiscal year 2003-04.
- Subsequently, CaISTRS took legal action to compel the state to contribute the remaining $\$ 500$ million. On August 30, 2007, the Third District Court of Appeal in Sacramento issued a decision requiring the state to pay CaISTRS $\$ 500$ million plus interest for the withheld contribution from fiscal year 2003-04. On September 6, 2007, the State paid CalSTRS $\$ 500$ million in interest plus a portion of the withheld contributions.


## DEFINED BENEFIT PROGRAM

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

Economic assumptions: The two major economic assumptions are investment return and wage growth and each is affected by the underlying assumed rate of inflation. Table 5 provides the economic actuarial assumptions for this program as reflected in the most recent actuarial valuation as of June 30, 2008.

## Demographic assumptions:

Tables 1-4 and 6-9 provide demographic assumption information for this program as reflected in the most recent actuarial valuation as of June 30, 2008.

## Actuarial Methods

Actuarial Cost Method<br>Entry Age Normal

## Asset Valuation Method

Expected Value with one-third adjustment to Market Value (3-Year Asset Smoothing)

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

## VALUATION RESULTS

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

Tables 10-13 provide summaries of the valuation results. The data displayed in Table 10 is as of June 30 of the specified year. Other information, specifically annual payroll amounts, reported in the financial section of this report will generally not be consistent with this data. The reason for this is that the financial data reflects payroll for all individuals who were active during the year, while Table 10 only includes those individuals who are active as of June 30. It does not include those individuals who were active at some point during the year but not as of June 30.

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

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

Because of the potential for post-closing adjustments that are not updated in Table 11, and for post-retirement adjustments that are included in the individual accounts rather than separately maintained, any update of a prior end-of-year total using additions and deletions from the next year most likely will not equal the total provided for the next year.

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

Effective January 1, 2003

- A temporary reduction in the member contribution rates of specified state members of the Defined Benefit Program.


## DEFINED BENEFIT PROGRAM

- A change to the basis for calculation of the postretirement earnings limitation from the increase in the All Urban California Consumer Price Index to the increase in the average earnable salary of active members of the Defined Benefit Program.
- General Fund contributions were increased from 1.975 percent to 2.017 percent.


## Effective January 1, 2004

## Death Before Retirement - Coverage B

- The definition of spouse for purposes of receiving a survivor benefit includes a person married to the member for fewer than 12 months prior to the accidental death of the member or for the period beginning prior to the occurrence of the injury or diagnosis of an illness that resulted in the member's death.


## Funding

- The General Fund contribution to the SBMA was reduced by $\$ 500$ million effective for fiscal year 2003-04.


## Effective January 1, 2005

- Recalculated benefits to part-time and adult education community college employees who were members prior to July 1, 1996.
- Expanded eligibility for partial lump-sum benefits.
- Eliminated one-year prohibition on employment in a California public school for members who receive a Retirement Incentive benefit.
- Extended five-year prohibition on post-retirement employment with an incentive granting employer to Community College and County Office of Education members.
- Existing post-retirement earnings exemption for retired members who fill a vacant administrative position in an emergency situation extended for up to two years.
- Extended retirement date and sunset date for other existing post-retirement earnings exemptions.
- Up to ${ }^{2} / 10$ of one year of unused sick leave service credit to count towards qualifying for one-year final compensation, longevity bonus and other benefit enhancements.

The most recent actuarial valuation of the system as of June 30, 2008, determined there is an unfunded actuarial obligation for this program. The prior actuarial valuation as of June 30, 2007, also indicated there was an unfunded actuarial obligation.

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

Comparing the unfunded actuarial obligation as of two valuation dates does not provide enough information to determine if there were actuarial gains or losses. The correct comparison is between the unfunded actuarial obligation on the valuation date and the expected unfunded actuarial obligation projected from the prior valuation date using the actuarial assumptions in effect for the period of comparison.

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

Effective January 1, 2009
Funding

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


## DEFINED BENEFIT PROGRAM

- Actuarial Valuations for the Defined Benefit Program will be completed every year.


## Independent Actuarial Review

Actuarial services for the California State Teachers' Retirement System are provided under contract by a qualified independent actuarial firm, with additional review provided by the actuarial staff.

The work performed for CaISTRS by the independent actuarial firm may be reviewed by the Bureau of State Audits at the discretion of the Teachers' Retirement Board. Also, through the competitive bid process, the work of a prior actuary will be verified in a subsequent actuarial valuation performed by a new contract actuary. Should the same actuarial firm continue for a period of 10 years, provision is made for an independent review of that firm's work through an actuarial audit completed by another firm. These audit services are acquired using the competitive bid process.

An audit of the 2003 Actuarial Experience Analysis of the Defined Benefit Program was performed by the firm Gabriel, Roeder, Smith and Company. The result of the audit was reported to the Board on May 4, 2005.

An audit of the 2003 Actuarial Valuation of the CaISTRS Defined Benefit Program was performed by the firm Cheiron. The result of the audit was reported to the Board on May 4, 2005.

The current actuarial consultant was retained on January 15,2000 , as a result of the competitive bid process.

## Summary of Defined Benefit Program Provisions

(The following summary and tables were prepared by CaISTRS staff. All information is considered in the June 30, 2008, actuarial valuation.)

## NORMAL RETIREMENT

Eligibility Requirement
Age 60 with five years of credited service.

## Benefit

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

## BENEFIT FACTORS

Credited Service
For each year of membership, credited service is granted based on the ratio of salary earned to fulltime salary earnable for one position.

No more than one full year of service credit is allowed during any school year; however, the contributions for any service in excess of one year are deposited to the member and employer contribution accounts within the Defined Benefit Supplement Program.

## Final Compensation

For members with 25 years of service, the calculation is based on the highest average annual compensation earnable in a consecutive 12-month period. For members with fewer than 25 years of service, the calculation is based on the average salary earnable for the highest three consecutive years of credited service for one position.

## Sick Leave Service Credit

Credited service is granted for unused sick leave at the time of retirement. Sick leave service credit of up to 0.2 years of credited service may be used for eligibility for one-year final compensation or to attain the career factor or the longevity bonus.

## Career Factor

If a member has 30 years of credited service, the age factor is increased up to 0.2 percent. However, the maximum age factor is 2.4 percent.

## DEFINED BENEFIT PROGRAM

## Longevity Bonus

For members attaining 30 years of service by January 1, 2011, a longevity bonus of $\$ 200$ per month is added to the Member-Only Benefit. The bonus is increased to $\$ 300$ per month with 31 years of service and $\$ 400$ per month with 32 or more years of service.

## POST-RETIREMENT BENEFIT ADJUSTMENT

## Benefit Improvement Factor

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

## IRC SECTION 401(A)(17)

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

## IRC SECTION 415(B)

Benefits are subject to limits imposed under Internal Revenue Code section 415(b). However, no limits are imposed in the valuation of the Defined Benefit Program in order to address the potential pay-as-you-go funding needs of the Teachers' Replacement Benefits Program Fund.

## EARLY RETIREMENT

## Eligibility Requirement

Age 55 with five years of credited service, or age 50 with 30 years of credited service.

## Benefit Reduction

A $1 / 2$ percent reduction in the normal retirement benefit for each full month or partial month the member is younger than age 60, plus a reduction of $1 / 4$ percent for each full month or partial month the member is younger than age 55.

## LATE RETIREMENT

## Benefit

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

## DEFERRED RETIREMENT

## Benefit

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

## DISABILITY ALLOWANCE - COVERAGE A

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

## Benefit

Fifty percent of final compensation.

- or -

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

## Children's Benefit

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

## Offsets

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

## DEFINED BENEFIT PROGRAM

## DISABILITY ALLOWANCE - COVERAGE B

## Eligibility Requirement

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

## Benefit

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

## Children's Benefit

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

## Offsets

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

## DEATH BEFORE RETIREMENT - COVERAGE A

## Eligibility Requirement

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

## Lump-Sum Payment

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

## Benefit

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

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

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

## DEATH BEFORE RETIREMENT - COVERAGE B

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

## Lump-Sum Payment

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

## Benefit

A lump-sum payment of the contributions and interest.

- or -

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

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

## DEATH AFTER RETIREMENT

## Lump-Sum Payment

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

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

## Annuity Form

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

## ACTUARIAL

## DEFINED BENEFIT PROGRAM

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

## TERMINATION FROM CALSTRS

## Refund

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

## Re-entry After Refund

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

## FUNDING

## Member Contribution

Eight percent of creditable compensation. Two percent of creditable compensation is directed to the Defined Benefit Supplement Program through December 31, 2010, while six percent of creditable compensation remains with the Defined Benefit Program.

## Employer Contribution

Eight percent of the total creditable compensation on which member contributions are based. In addition, funding for the Teachers' Health Benefits Fund and Teachers' Replacement Benefit Fund is directed as needed from the employer contributions on a pay-as-you-go basis.

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


## State Contribution

The state pays 2.017 percent of the total creditable compensation of the fiscal year ending in the immediately preceding calendar year upon which members' contributions are based, calculated annually on October 1 and paid in four equal quarterly payments.

- plus -

Up to 1.505 percent of the total creditable compensation of the fiscal year ending in the immediately preceding calendar year upon which members' contributions are based, calculated annually on October 1 and paid in four equal quarterly payments. This contribution is made if there is an unfunded obligation or normal cost deficit for benefits in effect on July 1, 1990.

## Changes in Defined Benefit Program Provisions <br> None

All of the assumptions used in the actuarial valuation were adopted by the Teachers' Retirement Board when the experience study was adopted on April 3, 2008. Following are the assumptions adopted by the Teachers' Retirement Board for this program.

| Table 1 | $\begin{array}{l}\text { Post-Retirement Mortality Table } \\ \text { for Sample Ages }\end{array}$ |
| :--- | :--- |


| Age | MALE <br> 2007 CaISTRS <br> Retired-M | FEMALE <br> 2007 CaISTRS <br> Retired-F |
| :---: | :---: | :---: |
| 50 | $0.151 \%$ | $0.112 \%$ |
| 55 | 0.214 | 0.168 |
| 60 | 0.362 | 0.272 |
| 65 | 0.675 | 0.506 |
| 70 | 1.274 | 0.971 |
| 75 | 2.384 | 1.674 |
| 80 | 4.355 | 3.257 |
| 85 | 7.958 | 6.164 |
| 90 | 14.262 | 11.915 |
| 95 | 23.366 | 18.280 |

Table 2 Probabilities of Retirement for Sample Ages ${ }^{1}$

|  | UNDER <br> 30 YEARS |  | 30 OR <br> MORE YEARS |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female |
| 55 | $2.7 \%$ | $4.5 \%$ | $8.0 \%$ | $9.0 \%$ |
| 60 | 6.3 | 9.0 | 27.0 | 31.0 |
| 65 | 13.5 | 14.4 | 30.0 | 32.0 |
| 70 | 100.0 | 100.0 | 100.0 | 100.0 |

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

Table $3 \left\lvert\, \begin{aligned} & \text { Probabilities of Withdrawal from Active Service Before Age and Service } \\ & \text { Retirement for Sample Age }\end{aligned}\right.$

| Duration | ENTRY AGES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 25 | 25-29 | 30-34 | 35-39 | 40-44 | 45+ |
| Male |  |  |  |  |  |  |
| 1 | 13.0\% | 12.5\% | 13.0\% | 13.0\% | 13.0\% | 14.0\% |
| 2 | 9.0 | 7.7 | 9.0 | 9.0 | 9.0 | 10.0 |
| 3 | 6.0 | 6.0 | 6.5 | 6.5 | 6.5 | 7.0 |
| 4 | 4.4 | 4.8 | 5.0 | 5.0 | 5.0 | 4.0 |
| 5 | 3.9 | 3.6 | 3.0 | 3.0 | 3.0 | 3.0 |
| 10 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | - |
| 15 | 1.1 | 1.1 | 1.1 | 1.1 | - | - |
| 20 | 0.6 | 0.6 | 0.6 | - | - | - |
| 25 | 0.4 | 0.5 | - | - | - | - |
| Female |  |  |  |  |  |  |
| 1 | 10.0\% | 11.0\% | 11.0\% | 11.0\% | 10.5\% | 10.5\% |
| 2 | 7.2 | 8.5 | 8.5 | 7.5 | 7.0 | 7.0 |
| 3 | 6.3 | 7.0 | 6.5 | 6.0 | 5.5 | 5.5 |
| 4 | 5.8 | 6.0 | 5.5 | 4.5 | 4.0 | 3.0 |
| 5 | 5.5 | 5.3 | 4.5 | 3.8 | 3.3 | 2.5 |
| 10 | 2.3 | 1.8 | 1.6 | 1.3 | 1.3 | - |
| 15 | 1.0 | 0.9 | 0.9 | 0.9 | - | - |
| 20 | 0.5 | 0.5 | 0.5 | - | - | - |
| 25 | 0.3 | 0.4 | - | - | - | - |

Table 3 Probabilities of Refund by Sample Duration of Members cont. and Sample Entry Ages

| Duration | ENTRY AGES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 25 | 25-29 | 30-34 | 35-39 | 40+ |
| Male |  |  |  |  |  |
| Under 5 | 100\% | 100\% | 100\% | 100\% | 100\% |
| 10 | 46 | 46 | 38 | 36 | 36 |
| 15 | 38 | 38 | 31 | 21 | - |
| 20 | 28 | 31 | 15 | - | - |
| 25 | 15 | 15 | - | - | - |
| Female |  |  |  |  |  |
| Under 5 | 100\% | 100\% | 100\% | 100\% | 100\% |
| 10 | 34 | 32 | 32 | 29 | 29 |
| 15 | 27 | 24 | 24 | 24 | - |
| 20 | 19 | 14 | 14 | - | - |
| 25 | 10 | 10 | - | - | - |

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

|  | ENTRY AGES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Duration | Under 25 | $\mathbf{2 5 - 2 9}$ | $\mathbf{3 0 - 3 4}$ | $\mathbf{3 5 - 3 9}$ | $\mathbf{4 0 - 4 4}$ | $\mathbf{4 5 +}$ |
| 1 | $5.6 \%$ | $5.3 \%$ | $5.1 \%$ | $4.8 \%$ | $4.8 \%$ | $3.5 \%$ |
| 5 | 5.5 | 4.8 | 4.5 | 3.8 | 3.8 | 2.6 |
| 10 | 3.2 | 3.0 | 2.7 | 2.3 | 2.2 | 1.6 |
| 20 | 1.3 | 1.1 | 1.1 | 0.8 | 0.8 | 0.6 |
| 30 | 0.9 | 0.7 | 0.6 | 0.5 | - | - |
| 40 | 0.8 | 0.6 | - | - | - | - |

Table 5 | Economic Assumptions

| Consumer Price Inflation | $3.25 \%$ |
| :--- | :--- |
| Investment Yield (Net of Expenses) | 8.00 |
| Wage Inflation | 4.25 |
| Interest on Member Accounts | 6.00 |

Table 6 Mortality Assumptions

|  | RETIRED MEMBERS ${ }^{\mathbf{1}}$ |
| :--- | :--- |
| Male | 2007 CalSTRS Retired-M |
| Female | 2007 CaISTRS Retired-F |
| ACTIVE MEMBERS |  |
| Male | 2007 CalSTRS Retired-M (-2 years) |
| Female | 2007 CaISTRS Retired-F (-2 years) |
| Male | BENEFICIARIES ${ }^{\mathbf{1}}$ |
| Female | 2007 CaISTRS Beneficiary-M |

${ }^{1}$ Future retirees and beneficiaries are valued with a two-year age setback.

Table 7 | Termination from Disability Due to Death ${ }^{1}$

| Male | RP 2000 -M <br> (Min. $2.5 \%$ with select rates in first 3 years) |
| :--- | :--- |
| Female | RP 2000-F |
|  | (Min. $2.0 \%$ with select rates in first 3 years) |

${ }^{1}$ Future disabled members are valued with a two-year age setback.

Table $8 \quad$ Service Retirement (sample ages) ${ }^{1}$

|  | Age | $1990$ <br> Benefits | DB PROGRAM BENEFITS |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Under 30 years | 30 or <br> More Years |
| Male | 55 | 5.8\% | 2.7\% | 8.0\% |
|  | 60 | 25.0 | 6.3 | 27.0 |
|  | 65 | 20.0 | 13.5 | 30.0 |
|  | 70 | 100.0 | 100.0 | 100.0 |
| Female | 55 | 7.0\% | 4.5\% | 9.0\% |
|  | 60 | 22.0 | 9.0 | 31.0 |
|  | 65 | 18.0 | 14.4 | 32.0 |
|  | 70 | 100.0 | 100.0 | 100.0 |

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

Table 9 Disability Rates (sample ages)

| COVERAGE A |  |  |
| :--- | :---: | :--- |
| Male | 25 | $0.021 \%$ |
|  | 30 | 0.030 |
|  | 40 | 0.081 |
| Female | 50 | 0.159 |
|  | 55 | 0.210 |
|  | 35 | $0.021 \%$ |
|  | 40 | 0.030 |
|  | 50 | 0.090 |
|  | 55 | 0.220 |
|  |  |  |


| COVERAGE B |  |  |
| :---: | :---: | :---: |
|  | Entry Age Under 40 | Entry Age 40 and Up |
| Male |  |  |
| 25 | $0.012 \%$ | - |
| 30 | 0.018 | - |
| 35 | 0.036 | - |
| 40 | 0.090 | - |
| 45 | 0.123 | $0.118 \%$ |
| 50 | 0.171 | 0.202 |
| 55 | 0.252 | 0.312 |

Female

| 25 | $0.021 \%$ | - |
| :--- | :--- | :--- |
| 30 | 0.021 | - |
| 35 | 0.042 | - |
| 40 | 0.078 | - |
| 45 | 0.126 | $0.139 \%$ |
| 50 | 0.219 | 0.252 |
| 55 | 0.318 | 0.367 |

Table 10 Schedule of Active Member Valuation Data

| DATE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| (AS OF JUNE 30) | NUMBER | ANNUAL PAYROLL | ANNUAL <br> AVERAGE PAY | \% INCREASE IN <br> AVERAGE PAY |
| $2003^{1}$ | 448,478 | $\$ 22,654,369,277$ | $\$ 50,514$ | $5.7 \%$ |
| $2004^{1}$ | 444,680 | $22,589,060,244$ | 50,798 | 0.6 |
| 2005 | 450,282 | $23,256,622,046$ | 51,649 | 1.7 |
| 2006 | 453,365 | $24,239,606,097$ | 53,466 | 3.5 |
| 2007 | 455,693 | $25,905,691,360$ | 56,849 | 6.3 |
| 2008 | 461,378 | $27,118,230,762$ | 58,777 | 3.4 |

[^6]Table 11 Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls ${ }^{1}$

|  | ADDED TO ROLLS |  | REMOVED FROM ROLLS |  | ROLLS - END OF YEAR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

${ }^{1}$ Dollars in thousands

Table 12
Solvency Test

| AGGREGATE ACCRUED LIABILITIES FOR (in millions) |  |  |  |  | FUNDING OF LIABILITIES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) |  |  |  |  |
| Valuation Date (as of June 30) | Active Member Contributions on Deposit | Future Benefits to Benefit Recipients | Service Already Rendered by Active Members | Actuarial Value of Assets | (1) | (2) | (3) |
| $2003{ }^{1,2}$ | \$24,313 | \$52,128 | \$51,663 | \$108,667 | 100.0\% | 100.0\% | 62.4\% |
| $2004{ }^{2}$ | 24,442 | 58,225 | 52,010 | 114,094 | 100.0 | 100.0 | 60.4 |
| 2005 | 24,619 | 63,762 | 53,812 | 121,882 | 100.0 | 100.0 | 62.3 |
| 2006 | 25,124 | 68,774 | 56,974 | 131,237 | 100.0 | 100.0 | 65.5 |
| 2007 | 25,895 | 75,612 | 65,622 | 148,427 | 100.0 | 100.0 | 71.5 |
| 2008 | 26,881 | 81,984 | 68,869 | 155,215 | 100.0 | 100.0 | 67.3 |

[^7]
## ACTUARIAL

DEFINED BENEFIT PROGRAM
Table 13
Analysis of Financial Experience
(gains and losses in unfunded actuarial obligation resulting from differences between assumed and actual experience) (dollars in millions)

|  | ACTUARIAL VALUATION AS OF JUNE 30 |  |
| :--- | :---: | :---: |
|  | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 7}$ |
| (2007) |  |  |

## DEFINED BENEFIT SUPPLEMENT PROGRAM

1301 Fifth Avenue<br>Suite 3800<br>Seattle, WA 98101-2605 USA<br>Tel +1 2066247940<br>Fax +1 2066233485<br>milliman.com

January 12, 2010
Teachers' Retirement Board
California State Teachers' Retirement System
Re: Valuation of the Defined Benefit Supplement Program

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

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

| Valuation Date | Funded Ratio |
| :---: | :---: |
| June 30, 2006 | $109 \%$ |
| June 30, 2007 | $116 \%$ |
| June 30, 2008 | $100 \%$ |

It is our opinion that the DBS Program continues to be in sound financial condition as of June 30, 2008. However, it should be noted that the most recent valuation results do not reflect the significant market loss on assets that has occurred since June 30, 2008. Thus, the Funded Ratio is expected to be significantly lower once that market loss is reflected in the 2009 and later valuations.

The June 30, 2008 valuation results are based on the membership data and the asset information provided by CaISTRS. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

Milliman did not prepare Schedules I and II, nor the summary of actuarial methods and assumptions in Schedule II of the Financial Section, nor the information included in this Actuarial Section of the 2009 Comprehensive Annual Financial Report. However, the actuarial information contained in Schedule I of the Financial Section and in this Actuarial Section was derived from our June 30, 2008 actuarial valuation report.

The valuation is based on our understanding of the current benefit provisions of the DBS
Program and the actuarial assumptions which were last reviewed and adopted by the Board on April 3, 2008. The assumptions will be reviewed in detail again in 2012.

# ACTUARY'S CERTIFICATION LETTER, CONTINUED 

## Limilliman

Teachers' Retirement Board January 12, 2010

Page 2

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

We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement No. 25 for fulfilling financial accounting requirements. Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements as presented in the valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

We certify that the June 30, 2008 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Respectfully submitted,


Mark C. Olleman, FSA, EA, MAAA Principal and Consulting Actuary
MCO/NJC/nlo


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

## DEFINED BENEFIT SUPPLEMENT PROGRAM

## Summary of Actuarial

## Assumptions and Methods

CaISTRS, through its consulting actuary, will perform an experience study at least every four years to determine appropriate demographic and economic assumptions. These assumptions are then applied every year when the consulting actuary performs an actuarial valuation to monitor the funding status of the Defined Benefit Supplement Program. The most recent actuarial valuation was completed June 30, 2008, and adopted by the Teachers' Retirement Board June 5, 2009. The following summary and tables were prepared by CaISTRS staff. All information is considered in the June 30, 2008, actuarial valuation.

The Defined Benefit Supplement Program was established January 1, 2001. The economic and demographic assumptions were based on those adopted for the Defined Benefit Program by the Board on April 3, 2008, and used to complete the latest actuarial valuation. The Defined Benefit Program and Defined Benefit Supplement Program share the same population, so it is reasonable to use most of the same assumptions for both programs. The only exception is for the economic assumptions which use a lower investment return assumption because the funds are not invested in private equity or real estate. All of the assumptions used in the actuarial valuation were adopted by the Teachers' Retirement Board when the experience study was adopted on April 3, 2008. Following are the assumptions adopted by the Teachers' Retirement Board for this program.

- Investment return rate is 7.75 percent.
- Method used to value plan assets for actuarial valuation purposes: Fair market value.
- Assumption for general wage increase is 4.25 percent, of which 3.25 percent is due to inflation and 1.00 percent is due to expected gains in productivity.
- The actuarial cost method used by the program is the traditional unit credit cost method.
- The Defined Benefit Supplement Program does not provide cost-of-living adjustments for benefit recipients.


## DISCUSSION OF RECENT CHANGES IN:

The nature of the program-The Defined Benefit Supplement Program is a relatively new program, established January 1, 2001. All provisions of the program were considered when completing the most recent actuarial valuation.

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

Under the traditional unit credit actuarial cost method, neither the economic nor the demographic assumptions affect the actuarial obligation for the DBS Program. Those assumptions for this program will have minimal impact under the traditional unit credit cost method or only have significance when participants elect to annuitize the account balance. Under the program, a member must have at least $\$ 3,500$ in his or her account to elect to annuitize the account balance.

## ACTUARIAL METHODS

Actuarial Cost Method
Traditional Unit Credit
Asset Valuation Method
Fair Market Value
The actuarial methods used for the program's actuarial valuation as of June 30,2008 , result in an actuarial surplus of $\$ 8,769,000$.

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

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

## Independent Actuarial Review

Actuarial services for the California State Teachers' Retirement System are provided under contract by a qualified independent actuarial firm, with additional review provided by the actuarial staff.

The work performed for CaISTRS by the independent actuarial firm may be reviewed by the Bureau of State Audits at the discretion of the Teachers' Retirement Board. Also, through the competitive bid process, the work of a prior actuary will be verified in a subsequent actuarial valuation performed by a new contract actuary. Should the same actuarial firm continue for a period of 10 years, provision is made for an independent review of that firm's work through an actuarial audit completed by another firm. These audit services are acquired using the competitive bid process.

The current actuarial consultant was retained on January 15,2000 , as a result of the competitive bid process.

## DEFINED BENEFIT SUPPLEMENT PROGRAM

## Summary of Defined Benefit Supplement Program Provisions

(The following tables and summary were prepared by CalSTRS staff. All information is considered in the June 30, 2008, actuarial valuation.)

## MEMBERSHIP

Eligibility Requirement
All members of the Defined Benefit Program who perform creditable service and earn creditable compensation after December 31, 2000, have a Defined Benefit Supplement account.

## Member

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

## ACCOUNT BALANCE

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

## Contributions

One-quarter of the 8 percent ( 2 percent) of member contributions on creditable compensation is allocated to the member's DBS account through December 31, 2010.

In addition, member and employer contributions will be credited to the member's DBS account for service greater that one year and compensation for limitedterm enhancements and retirement incentives.

## Minimum Interest Rate

Annual rate determined for the plan year by the Teachers' Retirement Board in accordance with federal laws and regulations. The minimum interest rate is equal to the average of the yields on 30year Treasury Notes for the twelve months ending
in February preceding the beginning of the plan year, rounded to the next highest 0.25 percent. The minimum interest rate is not less than the rate at which interest is credited under the Defined Benefit Program.

## Additional Earnings Credit

Annual rate determined for the plan year by the Teachers' Retirement Board based on the actual earnings during the plan year but only to the extent the earnings are sufficient to credit the minimum interest rate and provide any additions to the gain and loss reserve deemed warranted by the board. The board adopted an additional earnings credit of 2.49 percent for the fiscal year ending June 30, 2006, and an additional earnings credit of 4.41 percent for the fiscal year ending June 30, 2007.

## Additional Annuity Credit

Annual rate determined for the plan year by the Teachers' Retirement Board based on the actual earnings during the plan year, but only to the extent the earnings are sufficient to credit the minimum interest rate and provide any additions to the gain and loss reserve deemed warranted by the Board. The board adopted an additional annuity credit of 2.49 percent for the fiscal year ending June 30, 2006, and an additional annuity credit of 4.41 percent for the fiscal year ending June 30, 2007.

## NORMAL RETIREMENT

## Eligibility Requirement

Receipt of a corresponding benefit under the Defined Benefit Program.

## Benefit

The account balance at the benefit effective date subject to limits imposed under Internal Revenue Code section 415.

## Form of Payment

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

## DEFINED BENEFIT SUPPLEMENT PROGRAM

## EARLY RETIREMENT

Eligibility Requirement
Same as Normal Retirement.
Benefit and Form of Payment
Same as Normal Retirement.

## LATE RETIREMENT

Benefit and Form of Payment
Same as Normal Retirement.
Contributions and earnings may continue to be credited to the account balance.

## DEFERRED RETIREMENT

## Benefit

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

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

## Benefit

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

## Form of Payment

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

## DEATH BEFORE RETIREMENT

Eligibility Requirement
Deceased member has an account balance.

## Benefit

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

## Form of Payment

Similar to Normal Retirement.

## DEATH AFTER RETIREMENT

Eligibility Requirement
The deceased member was receiving an annuity.

## Benefit

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

## TERMINATION FROM THE PROGRAM

Eligibility Requirement
Termination of all CaISTRS-covered employment.

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

## DEFINED BENEFIT SUPPLEMENT PROGRAM

## Benefit and Form of Payment

Lump-sum distribution of the account balance as of the date of distribution.

## Changes in Defined Benefit Supplement Program Provisions

There have been no program amendments that would affect an actuarial valuation of the Defined Benefit Supplement Program since the last CaISTRS annual financial report was issued. All program provisions were considered in the completion of the June 30, 2008, actuarial valuation.

All of the assumptions used in the actuarial valuation were adopted by the Teachers' Retirement Board when the experience study was adopted on April 3, 2008. Following are the assumptions adopted by the Teachers' Retirement Board for this program.

Table 1 Post-Retirement Mortality Table for Sample Ages

|  | MALE | FEMALE |
| :---: | :---: | :---: |
| Age | 2007 CaISTRS <br> Retired-M | 2007 CaISTRS <br> Retired-F |
| 50 | $0.151 \%$ | $0.112 \%$ |
| 55 | 0.214 | 0.168 |
| 60 | 0.362 | 0.272 |
| 65 | 0.675 | 0.506 |
| 70 | 1.274 | 0.971 |
| 75 | 2.384 | 1.674 |
| 80 | 4.355 | 3.257 |
| 85 | 7.958 | 6.164 |
| 90 | 14.262 | 11.915 |
| 95 | 23.366 | 18.280 |

## Table 2 Probabilities of Retirement for Sample Ages ${ }^{1}$

|  | UNDER <br> 30 YEARS |  | 30 OR <br> MORE YEARS |  |
| :--- | :---: | :---: | :---: | :---: |
| Age | Male | Female | Male | Female |
| 55 | $2.7 \%$ | $4.5 \%$ | $8.0 \%$ | $9.0 \%$ |
| 60 | 6.3 | 9.0 | 27.0 | 31.0 |
| 65 | 13.5 | 14.4 | 30.0 | 32.0 |
| 70 | 100.0 | 100.0 | 100.0 | 100.0 |

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

## DEFINED BENEFIT SUPPLEMENT PROGRAM

## Table 3 Probabilities of Withdrawal from Active Service Before Age and Service Retirement for Sample Ages

|  | ENTRY AGES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Duration | Under 25 | 25-29 | 30-34 | 35-39 | 40-44 | 45+ |
| Male |  |  |  |  |  |  |
| 1 | 13.0\% | 12.5\% | 13.0\% | 13.0\% | 13.0\% | 14.0\% |
| 2 | 9.0 | 7.7 | 9.0 | 9.0 | 9.0 | 10.0 |
| 3 | 6.0 | 6.0 | 6.5 | 6.5 | 6.5 | 7.0 |
| 4 | 4.4 | 4.8 | 5.0 | 5.0 | 5.0 | 4.0 |
| 5 | 3.9 | 3.6 | 3.0 | 3.0 | 3.0 | 3.0 |
| 10 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | - |
| 15 | 1.1 | 1.1 | 1.1 | 1.1 | - | - |
| 20 | 0.6 | 0.6 | 0.6 | - | - | - |
| 25 | 0.4 | 0.5 | - | - | - | - |
| 30 | 0.3 | - | - | - | - | - |
| Female |  |  |  |  |  |  |
| 1 | 10.0\% | 11.0\% | 11.0\% | 11.0\% | 10.5\% | 10.5\% |
| 2 | 7.2 | 8.5 | 8.5 | 7.5 | 7.0 | 7.0 |
| 3 | 6.3 | 7.0 | 6.5 | 6.0 | 5.5 | 5.5 |
| 4 | 5.8 | 6.0 | 5.5 | 4.5 | 4.0 | 3.0 |
| 5 | 5.5 | 5.3 | 4.5 | 3.8 | 3.3 | 2.5 |
| 10 | 2.3 | 1.8 | 1.6 | 1.3 | 1.3 | - |
| 15 | 1.0 | 0.9 | 0.9 | 0.9 | - | - |
| 20 | 0.5 | 0.5 | 0.5 | - | - | - |
| 25 | 0.3 | 0.4 | - | - | - | - |
| 30 | 0.3 | - | - | - | - | - |

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

|  | ENTRY AGES |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Duration | Under <br> $\mathbf{2 5}$ | $\mathbf{2 5 - 2 9}$ | $\mathbf{3 0 - 3 4}$ | $\mathbf{3 5 - 3 9}$ | $\mathbf{4 0} \mathbf{- 4 4}$ | $\mathbf{4 5 +}$ |  |
| 1 | $5.6 \%$ | $5.3 \%$ | $5.1 \%$ | $4.8 \%$ | $4.8 \%$ | $3.5 \%$ |  |
| 5 | 5.5 | 4.8 | 4.5 | 3.8 | 3.8 | 2.6 |  |
| 10 | 3.2 | 3.0 | 2.7 | 2.3 | 2.2 | 1.6 |  |
| 20 | 1.3 | 1.1 | 1.1 | 0.8 | 0.8 | 0.6 |  |
| 30 | 0.9 | 0.7 | 0.6 | 0.5 | - | - |  |
| 40 | 0.8 | 0.6 | - | - | - | - |  |

Table 5 | Economic Assumptions

| Consumer Price Inflation | $3.25 \%$ |
| :--- | :--- |
| Investment Yield | 7.75 |
| Wage Inflation | 4.25 |
| Interest on Member Accounts | 6.00 |

## DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 6 | Mortality Assumptions

|  | RETIRED MEMBERS ${ }^{\mathbf{1}}$ |
| :--- | :--- |
| Male | 2007 CaISTRS Retired-M |
| Female | 2007 CaISTRS Retired-F |
|  | ACTIVE MEMBERS |
| Male | 2007 CaISTRS Retired-M (-2 years) |
| Female | 2007 CaISTRS Retired-F (-2 years) |
| BENEFICIARIES ${ }^{\mathbf{1}}$ |  |
| Male | 2007 CaISTRS Beneficiary-M |
| Female | 2007 CaISTRS Beneficiary-F |

${ }^{1}$ Future retirees and beneficiaries are valued with a 2-year age setback.

Table $7 |$| Termination from Disability Due to Death |
| :--- | :--- |

| Male | RP 2000-M (Min. 2.5\% with select rates in first 3 years) |
| :--- | :--- |
| Female | RP 2000-F (Min. 2.0\% with select rates in first 3 years) |

${ }^{1}$ Future disabled members are valued with a two-year age setback.

Table 8 | Service Retirement (sample ages) ${ }^{1}$

|  | DB PROGRAM BENEFITS |  |
| :---: | :---: | :---: |
| Male | Age | Under 30 years |
| 30 or More Years |  |  |
|  | 55 | $2.7 \%$ |
|  | $6.0 \%$ |  |
| Female | 60 | 13.5 |
|  | 65 | 100.0 |
|  | 70 | $4.5 \%$ |
|  | 95 | 14.4 |

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

Table 9 | Disability Rates - Coverage B (sample ages)

| COVERAGE A |  |  |
| :---: | :---: | :--- |
| Male | 25 | $0.021 \%$ |
| 30 | 0.030 |  |
| Female | 40 | 0.081 |
|  | 50 | 0.159 |
|  | 25 | 0.210 |
|  | 30 | $0.021 \%$ |
| 40 | 0.090 |  |
| 50 | 0.220 |  |
| 55 | 0.280 |  |


| COVERAGE B |  |  |
| :---: | :---: | :---: |
|  | Entry Age Under 40 | Entry Age 40 and Up |
| Male |  |  |
| 25 | $0.012 \%$ | - |
| 30 | 0.018 | - |
| 35 | 0.036 | - |
| 40 | 0.090 | - |
| 45 | 0.123 | $0.118 \%$ |
| 50 | 0.171 | 0.202 |
| 55 | 0.252 | 0.312 |
| Female |  | - |
| 25 | $0.021 \%$ | - |
| 30 | 0.021 | - |
| 35 | 0.042 | - |
| 40 | 0.078 | $0.139 \%$ |
| 45 | 0.126 | 0.252 |
| 50 | 0.219 | 0.367 |
| 55 | 0.318 |  |

## DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 10 Schedule of Active Member Valuation Data

| DATE <br> (AS OF JUNE 30) | ANNUAL <br> PAYROLL | ANNUAL <br> AVERAGE PAY | \% INCREASE IN <br> AVERAGE PAY |  |
| :---: | :---: | :---: | :---: | :---: |
| 2003 | 447,620 | $\$ 23,867,428,000$ | $\$ 53,321$ | $8.499 \%$ |
| 2004 | 444,316 | $23,764,350,000$ | 53,485 | 0.309 |
| 2005 | 449,773 | $24,481,444,000$ | 54,431 | 1.768 |
| 2006 | 453,131 | $25,524,878,188$ | 56,330 | 3.489 |
| 2007 | 455,453 | $27,076,457,044$ | 59,450 | 5.539 |
| 2008 | 460,961 | $28,574,701,507$ | 61,989 | 4.270 |

${ }^{1}$ Annual payroll includes limited term enhancement and extra service credit pay which is different from covered payroll in Schedule I of the Schedule of Funding Progress in the RSI.

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

|  | ADDED TO ROLLS |  | REMOVED FROM ROLLS |  | ROLLS - END OF YEAR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

${ }^{1}$ Revised in 2007

Table 12
Solvency Test

| AGGREGATE ACCRUED LIABILITIES FOR |  |  |  |  | FUNDING OF LIABILITIES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date (as of June 30) | (1) <br> Active Member Contributions on Deposit | (2) <br> Future Benefits to Benefit Recipients | (3) <br> Service Already Rendered by Active Members | Actuarial Value of Assets | (1) | (2) | (3) |
| 2003 | \$1,358,635,000 | \$0 | 0 | \$1,311,269,000 | 97.0\% | - | - |
| 2004 | 2,025,400,000 | 9,652,000 | 0 | 2,203,682,000 | 100.0 | 100.0\% | - |
| 2005 | 2,722,432,000 | 33,767,000 | 0 | 3,023,177,000 | 100.0 | 100.0 | - |
| 2006 | 3,546,575,000 | 69,684,000 | 0 | 3,951,327,000 | 100.0 | 100.0 | - |
| 2007 | 4,498,170,000 | 123,876,000 | 0 | 5,381,585,000 | 100.0 | 100.0 | - |
| 2008 | 5,434,171,000 | 193,173,000 | 0 | 5,636,113,000 | 100.0 | 100.0 | - |

## ACTUARIAL

## DEFINED BENEFIT SUPPLEMENT PROGRAM

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

|  | ACTUARIAL VALUATION AS OF JUNE 30 |  |
| :---: | :---: | :---: |
|  | $\begin{aligned} & 2008 \\ & (2007) \end{aligned}$ | $\begin{aligned} & 2007 \\ & (2006) \end{aligned}$ |
| Actuarial Obligation at June 30 | \$4,622,046,000 | \$3,616,259,000 |
| Expected Changes: |  |  |
| Contributions | 802,380,000 | 749,844,000 |
| Benefits Paid | (157,151,000) | $(115,247,000)$ |
| Expected Earnings/Credits | 383,211,000 | 314,685,000 |
| Expected Actuarial Obligation at June 30 | 5,650,486,000 | 4,565,541,000 |
| Expected Actuarial Value of Assets at June 30 | 6,468,889,000 | 4,927,414,000 |
| Expected UAO at June 30 | $(818,403,000)$ | $(361,873,000)$ |
| Actuarial (Gains) or Losses |  |  |
| (Gain) on Actuarial Obligation | (23,142,000) | $(138,718,000)$ |
| (Gain) on Assets | 832,776,000 | $(454,171,000)$ |
| Total Actuarial Gains \& Losses | 809,634,000 | $(592,889,000)$ |
| Additional Earnings and Annuity Credits |  |  |
| Additional Earnings Credit | 0 | 189,991,000 |
| Additional Annuity Credit | 0 | 5,232,000 |
| Total Additional Earnings and Annuity Credits | 0 | 195,223,000 |
| Unfunded Actuarial Obligation (Surplus) at June 30 | (\$8,769,000) | (\$759,539,000) |
| Funded Ratio | 100\% | 116\% |

## CASH BALANCE BENEFIT PROGRAM | ACTUARY'S CERTIFICATION LETTER

## - Milliman

1301 Fifth Avenue<br>Suite 3800<br>Seattle, WA 98101-2605 USA<br>Tel +1 2066247940<br>Fax +1 2066233485<br>milliman.com

Teachers' Retirement Board
California State Teachers' Retirement System
Re: Valuation of the Cash Balance Benefit Program

Dear Members of the Board:
The basic financial goal of the Defined Benefit Supplement (DBS) Program of the California State Teachers' Retirement System (CaISTRS) is to fully fund the obligations based on member and employer contributions which are fixed, as a percentage of payroll, and remain level for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

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

| Valuation Date | Funded Ratio |
| :---: | :---: |
| June 30, 2006 | $109 \%$ |
| June 30, 2007 | $117 \%$ |
| June 30, 2008 | $101 \%$ |

It is our opinion that the CBB Program continues in sound financial condition as of June 30, 2008. However, it should be noted that the most recent valuation results do not reflect the significant market loss on assets that has occurred since June 30, 2008. Thus, the Funded Ratio is expected to be significantly lower once that market loss is reflected in the 2009 and later valuations.

The June 30, 2008 valuation results are based on the membership data and the asset information provided by CaISTRS. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

Milliman did not prepare Schedules I and II, nor the summary of actuarial methods and assumptions in Schedule II of the Financial Section, nor the information included in this Actuarial Section of the 2009 Comprehensive Annual Financial Report. However, the actuarial information contained in Schedule I of the Financial Section and in this Actuarial Section was derived from our June 30, 2008 actuarial valuation report.

The valuation is based on our understanding of the current benefit provisions of the CBB Program and the actuarial assumptions which were last reviewed and adopted by the Board on April 3, 2008. The assumptions will be reviewed in detail again in 2012.

# ACTUARY'S CERTIFICATION LETTER, CONTINUED 

## Limilliman

Teachers' Retirement Board<br>January 12, 2010<br>Page 2

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

We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement No. 25 for fulfilling financial accounting requirements. Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements as presented in the valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

We certify that the June 30, 2008 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Respectfully submitted,


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


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

## CASH BALANCE BENEFIT PROGRAM

## Summary of Actuarial

 Assumptions and MethodsCaISTRS, through its consulting actuary, will perform an experience study at least every four years to determine appropriate demographic and economic assumptions. These assumptions are then applied every year when the consulting actuary performs an actuarial valuation to monitor the funding status of the Cash Balance Benefit Program. The most recent actuarial valuation was completed as of June 30, 2008, and adopted by the Teachers' Retirement Board June 5, 2009. The following summary and tables were prepared by CalSTRS staff. All information is considered in the June 30, 2008, actuarial valuation.

The Cash Balance Benefit Program was established July 1, 1996. The most recent experience study of the program was completed June 30, 2007. The experience study was adopted by the Teachers' Retirement Board on April 3, 2008, and used to complete the latest actuarial valuation. All of the assumptions used in the actuarial valuation were adopted by the Teachers' Retirement Board when the experience study was adopted on April 3, 2008. Following are the assumptions adopted by the Teachers' Retirement Board for this program.

- Investment return rate is 7.75 percent.
- Method used to value plan assets for actuarial valuation purposes: Fair market value.
- Assumption for general wage increase is 4.25 percent, of which 3.25 percent is due to inflation and 1.00 percent is due to expected gains in productivity.
- The actuarial cost method used by the program is the traditional unit credit cost method.
- The Cash Balance Benefit Program does not provide cost-of-living adjustments for benefit recipients.


## DISCUSSION OF RECENT CHANGES IN:

The nature of the program-The Cash Balance Benefit Program was established July 1, 1996.

Program amendments include:

## Effective January 1, 2006

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

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

Neither the economic nor the demographic assumptions for the actuarial valuation as of June 30,2008 , affected the actuarial surplus. Those assumptions for this program will have minimal impact under the traditional unit credit cost method or only have significance when participants elect to annuitize the account balance. Under the program, a participant must have at least $\$ 3,500$ in his or her account to elect to annuitize the account balance.

## Actuarial Methods

Actuarial Cost Method
Traditional Unit Credit
Asset Valuation Method
Fair Market Value
The actuarial methods used for the program's actuarial valuation as of June 30,2008 , result in an actuarial surplus of $\$ 861,000$.

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

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

## Independent Actuarial Review

Actuarial services for the California State Teachers' Retirement System are provided under contract by a qualified independent actuarial firm, with additional review provided by the actuarial staff.

The work performed for CaISTRS by the independent actuarial firm may be reviewed by the Bureau of State Audits at the discretion of the Teachers' Retirement Board. Also, through the competitive bid process, the work of a prior actuary will be verified in a subsequent actuarial valuation performed by a new contract actuary. Should the same actuarial firm continue for a period of 10 years, provision is made for an independent review of that firm's work through an actuarial audit completed by another firm. These audit services are acquired using the competitive bid process.

The current actuarial consultant was retained on January 15,2000 , as a result of the competitive bid process.

## CASH BALANCE BENEFIT PROGRAM

## Summary of Cash Balance Benefit Program Provisions

(The following tables and summary were prepared by CaISTRS staff. All information is considered in the June 30, 2008, actuarial valuation.)

## MEMBERSHIP

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

## Participant

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

## ACCOUNT BALANCE

## Account Balance

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

## Contributions

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

Rules for contribution rates may differ for participants covered by a collective bargaining agreement, but the sum of the participant and employer contributions must equal or exceed 8 percent of salary, and in no event can the employer contribution rate be less than 4 percent of salary.

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

## CASH BALANCE BENEFIT PROGRAM

## Minimum Interest Rate

Annual rate determined for the plan year by the Teachers' Retirement Board in accordance with federal laws and regulations. The minimum interest rate is equal to the average of the yields on 30-year Treasury Notes for the 12 months ending in February preceding the beginning of the plan year, rounded to the next highest 0.25 percent.

## Additional Earnings Credit

Annual rate determined for the plan year by the Teachers' Retirement Board based on the actual earnings during the plan year, but only to the extent the earnings are sufficient to credit the minimum interest rate and provide any additions to the gain and loss reserve deemed warranted by the Board. The board adopted an additional earnings credit of 1.18 percent for the fiscal year ending June 30, 2006, and an additional earnings credit of 4.69 percent for the fiscal year ending June 30, 2007.

## Additional Annuity Credit

Annual rate determined for the plan year by the Teachers' Retirement Board based on the actual earnings during the plan year, but only to the extent the earnings are sufficient to credit the Minimum Interest Rate and provide any additions to the Gain and Loss Reserve deemed warranted by the Board. The board adopted an additional annuity credit of 1.18 percent for the fiscal year ending June 30, 2006, and an additional annuity credit of 4.69 percent for the fiscal year ending June 30, 2007.

## NORMAL RETIREMENT

Eligibility Requirement
Age 60.

## Benefit

The account balance at the retirement date subject to limits imposed under Internal Revenue Code section 415.

## Form of Payment

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

## EARLY RETIREMENT

Eligibility Requirement Age 55.

## Benefit and Form of Payment

Same as Normal Retirement.

## LATE RETIREMENT

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

## DEFERRED RETIREMENT

## Benefit

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

## DISABILITY BENEFIT

Eligibility Requirement
Determination by the Teachers' Retirement Board that the participant has a total and permanent disability.

## Benefit

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

Form of Payment
Same as Normal Retirement.

## DEATH BEFORE RETIREMENT

## Eligibility Requirement

Deceased participant has an account balance.

## Benefit

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

## Form of Payment

Normal distribution is a lump-sum benefit. A participant's beneficiary may elect to receive the benefit in the form of a period-certain annuity if the sum of the balance of credits to the participant's employee and employer accounts equals or exceeds \$3,500.

## DEATH AFTER RETIREMENT

Eligibility Requirement
The deceased participant was receiving an annuity.

## CASH BALANCE BENEFIT PROGRAM

## TERMINATION FROM THE PROGRAM

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

## Benefit and Form of Payment

Lump-sum distribution of the account balance as of the date of distribution. The benefit is payable six months from the termination of creditable service.

## Changes in Cash Balance Benefit Program Provisions

There have been no program amendments that would affect an actuarial valuation of the Cash Balance Benefit Program since the last CaISTRS annual financial report was issued. All program provisions were considered in the completion of the June 30, 2008, actuarial valuation.

## Benefit

According to the terms of the annuity elected by the participant.

All of the assumptions used in the actuarial valuation were adopted by the Teachers' Retirement Board when the experience study was adopted on April 3, 2008. Following are the assumptions adopted by the Teachers' Retirement Board for this program.

Table 1 Post-Retirement Mortality Table for Sample Ages

| Age | MALE <br> 2007 CaISTRS <br> Retired-M | FEMALE <br> 2007 CaISTRS <br> Retired-F |
| :---: | :---: | :---: |
| 50 | $0.151 \%$ | $0.112 \%$ |
| 55 | 0.214 | 0.168 |
| 60 | 0.362 | 0.272 |
| 65 | 0.675 | 0.506 |
| 70 | 1.274 | 0.971 |
| 75 | 2.384 | 1.674 |
| 80 | 4.355 | 3.257 |
| 85 | 7.958 | 6.164 |
| 90 | 14.262 | 11.915 |
| 95 | 23.366 | 18.280 |

## Table 2 Probabilities of Retirement for Sample Ages ${ }^{1}$

|  | UNDER 30 |  | YEARS | 30 OR MORE YEARS |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Male | Female | Male | Female |  |
| 55 | $2.7 \%$ | $4.5 \%$ | $8.0 \%$ | $9.0 \%$ |  |
| 60 | 6.3 | 9.0 | 27.0 | 31.0 |  |
| 65 | 13.5 | 14.4 | 30.0 | 32.0 |  |
| 70 | 100.0 | 100.0 | 100.0 | 100.0 |  |

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

Table 3 | Probabilities of Withdrawal from Active Service Before |
| :--- | :--- |
| Age and Service Retirement for Sample Ages |

| Duration | ENTRY AGES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 25 | 25-29 | 30-34 | 35-39 | 40-44 | 45+ |
| Male |  |  |  |  |  |  |
| 1 | 13.0\% | 12.5\% | 13.0\% | 13.0\% | 13.0\% | 14.0\% |
| 2 | 9.0 | 7.7 | 9.0 | 9.0 | 9.0 | 10.0 |
| 3 | 6.0 | 6.0 | 6.5 | 6.5 | 6.5 | 7.0 |
| 4 | 4.4 | 4.8 | 5.0 | 5.0 | 5.0 | 4.0 |
| 5 | 3.9 | 3.6 | 3.0 | 3.0 | 3.0 | 3.0 |
| 10 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | - |
| 15 | 1.1 | 1.1 | 1.1 | 1.1 | - | - |
| 20 | 0.6 | 0.6 | 0.6 | - | - | - |
| 25 | 0.4 | 0.5 | - | - | - | - |
| 30 | 0.3 | - | - | - | - | - |
| 35 | - | - | - | - | - | - |
| 40 | - | - | - | - | - | - |
| Female |  |  |  |  |  |  |
| 1 | 10.0\% | 11.0\% | 11.0\% | 11.0\% | 10.5\% | 10.5\% |
| 2 | 7.2 | 8.5 | 8.5 | 7.5 | 7.0 | 7.0 |
| 3 | 6.3 | 7.0 | 6.5 | 6.0 | 5.5 | 5.5 |
| 4 | 5.8 | 6.0 | 5.5 | 4.5 | 4.0 | 3.0 |
| 5 | 5.5 | 5.3 | 4.5 | 3.8 | 3.3 | 2.5 |
| 10 | 2.3 | 1.8 | 1.6 | 1.3 | 1.3 | - |
| 15 | 1.0 | 0.9 | 0.9 | 0.9 | - | - |
| 20 | 0.5 | 0.5 | 0.5 | - | - | - |
| 25 | 0.3 | 0.4 | - | - | - | - |
| 30 | 0.3 | - | - | - | - | - |
| 35 | - | - | - | - | - | - |
| 40 | - | - | - | - | - | - |

## CASH BALANCE BENEFIT PROGRAM

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

|  | ENTRY AGES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Duration | Under <br> $\mathbf{2 5}$ | $\mathbf{2 5 - 2 9}$ | $\mathbf{3 0 - 3 4}$ | $\mathbf{3 5 - 3 9}$ | $\mathbf{4 0 - 4 4}$ | $\mathbf{4 5 +}$ |
| 1 | $5.6 \%$ | $5.3 \%$ | $5.1 \%$ | $4.8 \%$ | $4.8 \%$ | $3.5 \%$ |
| 5 | 5.5 | 4.8 | 4.5 | 3.8 | 3.8 | 2.6 |
| 10 | 3.2 | 3.0 | 2.7 | 2.3 | 2.2 | 1.6 |
| 20 | 1.3 | 1.1 | 1.1 | 0.8 | 0.8 | 0.6 |
| 30 | 0.9 | 0.7 | 0.6 | 0.5 | - | - |
| 40 | 0.8 | 0.6 | - | - | - | - |

Table 5 Economic Assumptions

| Consumer Price Inflation | $3.25 \%$ |
| :--- | :--- |
| Investment Yield | 7.75 |
| Wage Inflation | 4.25 |
| Interest on Member Accounts | 6.00 |

Table 6 | Mortality Assumptions

|  | RETIRED MEMBERS ${ }^{\mathbf{1}}$ |
| :--- | :---: |
| Male | 2007 CaISTRS Retired-M |
| Female | 2007 CaISTRS Retired-F |
| ACTIVE MEMBERS |  |
| Male | 2007 CaISTRS Retired-M (-2 years) |
| Female | 2007 CaISTRS Retired-F (-2 years) |
| Male | 2007 CaISTRS Beneficiary-M |
| Female | 2007 CaISTRS Beneficiary-F |

${ }^{1}$ Future retirees and beneficiaries are valued with a 2-year age setback.

Table 7 | Termination from Disability Due to Death ${ }^{1}$

| Male | RP $2000-\mathrm{M}$ (Min. 2.5\% with select rates in first 3 years) |
| :--- | :--- |
| Female | RP $2000-\mathrm{F}$ (Min. 2.0\% with select rates in first 3 years) |
| ${ }^{1}$ Future disabled members are valued with a two-year age setback. |  |

Table 8 Service Retirement (sample ages)

|  |  | CB PROGRAM BENEFITS |  |
| :---: | :---: | :---: | :---: |
| Male | AGE | $\begin{array}{c}\text { UNDER } \\ \text { 30 YEARS }\end{array}$ |  | \(\left.\begin{array}{c}30 OR MORE <br>


YEARS\end{array}\right]\)|  | 55 | $2.7 \%$ | $8.0 \%$ |
| :--- | :---: | :---: | :---: |
| 60 | 6.3 | 27.0 |  |
| Female | 65 | 13.5 | 30.0 |
| 70 | 100.0 | 100.0 |  |
|  | 55 | $4.5 \%$ | $9.0 \%$ |
| 60 | 9.0 | 31.0 |  |
|  | 65 | 14.4 | 32.0 |

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

Table 9 Disability Rates - Coverage B (sample ages)

| COVERAGE A |  |  |
| :---: | :---: | :--- |
| Male | 25 | $0.021 \%$ |
|  | 30 | 0.030 |
|  | 40 | 0.081 |
| Female | 50 | 0.159 |
|  | 55 | 0.210 |
|  | 25 | $0.021 \%$ |
|  | 40 | 0.030 |
|  | 00 | 0.090 |
|  | 55 | 0.280 |


| COVERAGE B |  |  |
| ---: | :---: | :---: |
|  | Entry Age Under 40 | Entry Age 40 and Up |
| Male |  |  |
| 25 | $0.012 \%$ | - |
| 30 | 0.018 | - |
| 35 | 0.036 | - |
| 40 | 0.090 | - |
| 45 | 0.123 | $0.118 \%$ |
| 50 | 0.171 | 0.202 |
| 55 | 0.252 | 0.312 |


| Female |  |  |
| :---: | :---: | :---: |
| 25 | $0.021 \%$ | - |
| 30 | 0.021 | - |
| 35 | 0.042 | - |
| 40 | 0.078 | - |
| 45 | 0.126 | $0.139 \%$ |
| 50 | 0.219 | 0.252 |
| 55 | 0.318 | 0.367 |

Table 10 Schedule of Active Participant Valuation Data

| Date <br> (as of June 30) | Number | Annual <br> Payroll | Annual <br> Average Pay | \% Increase <br> In Average Pay |
| :---: | :---: | :---: | :---: | :---: |
| 2003 | 8,980 | $\$ 81,080,000$ | $\$ 9,029$ | $(7.0 \%)$ |
| 2004 | 9,114 | $96,199,000$ | 10,555 | 16.9 |
| 2005 | 9,385 | $106,951,000$ | 11,396 | 8.0 |
| 2006 | 9,869 | $122,316,000$ | 12,394 | 8.8 |
| 2007 | 10,579 | $144,516,000$ | 13,661 | 10.2 |
| 2008 | 11,627 | $181,104,000$ | 15,571 | 14.0 |

Table 11 Schedule of Retired Participants and Beneficiaries Added to and Removed from Annuity Rolls

|  | ADDED TO ROLLS ${ }^{\mathbf{1}}$ | REMOVED FROM ROLLS |  | ROLLS-END OF YEAR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

${ }^{1}$ The Cash Balance Benefit Program was established July 1, 1996. As of June 30, 2003, all participants who had retired or become disabled had elected a lump-sum distribution. No annuities had been paid.

## CASH BALANCE BENEFIT PROGRAM

## Table 12 Solvency Test

| AGGREGATE ACCRUED LIABILITIES FOR |  |  |  |  | FUNDING OF LIABILITIES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date (as of June 30) | (1) <br> Active Member Contributions on Deposit | (2) <br> Future Benefit to Benefit Recipients | (3) <br> Service Already Rendered by Active Members | Actuarial Value of Assets | (1) | (2) | (3) |
| 2003 | \$33,836,853 | \$0 | 0 | \$29,963,000 | 89.0\% | - | - |
| 2004 | 41,972,042 | 31,000 | 0 | 42,003,000 | 100.0 | 100.0\% | - |
| 2005 | 51,728,731 | 52,000 | 0 | 53,918,000 | 100.0 | 100.0 | - |
| 2006 | 62,749,487 | 140,000 | 0 | 68,797,000 | 100.0 | 100.0 | - |
| 2007 | 79,691,000 | 191,000 | 0 | 93,182,000 | 100.0 | 100.0 | - |
| 2008 | 97,802,000 | 229,000 | 0 | 98,892,000 | 100.0 | 100.0 |  |

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

|  | ACTUARIAL VALUATION AS OF JUNE 30 |
| :--- | :---: | :---: |

## MEDICARE PREMIUM PAYMENT PROGRAM \| ACTUARY'S CERTIFICATION LETTER

1301 Fifth Avenue<br>Suite 3800<br>Seattle, WA 98101-2605 USA<br>Tel +1 2066247940<br>Fax +1 2066233485<br>milliman.com

Teachers' Retirement Board
California State Teachers' Retirement System
Re: GASB 43 Reporting for the Medicare Premium Payment Program

Dear Members of the Board:
The basic financial goal of the Medicare Premium Payment (MPP) Program of the California State Teachers' Retirement System (CaISTRS) is to maintain sufficient resources to fully fund the obligations. Actuarial valuations used for GASB 43 reporting are performed every two years and measure the progress toward this goal, as well as test the adequacy of the contribution rates. The most recent valuation was as of June 30, 2008.

The MPP Program is essentially funded on a pay-as-you-go basis with a portion of contributions to the DB Program diverted to the Teachers' Health Benefit Fund to make MPPP payments. $\$ 625$ million of future employer contributions to the DB Program has been allocated to pay the MPPP benefits; however, this amount is not included for GASB 43 reporting. This gives the appearance that the MPP Program is significantly underfunded in the GASB 43 results. However, based on the commitment to transfer assets from the DB Program to fund the MPP Program, it is our opinion that the MPP Program continues in sound financial condition as of June 30, 2008.

The June 30, 2008 valuation results are based on the membership data and the asset information provided by CaISTRS. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is found to be materially inaccurate or incomplete, our calculations will need to be revised.

Milliman did not prepare Schedules I and II, nor the summary of actuarial methods and assumptions in Schedule II of the Financial Section, nor the information included in this Actuarial Section of the 2009 Comprehensive Annual Financial Report. However, the actuarial information contained in Schedule I of the Financial Section and in this Actuarial Section was derived from our June 30, 2008 actuarial valuation report.

The valuation is based on our understanding of the current benefit provisions of the MPP Program and the actuarial assumptions which were last reviewed and adopted by the Board at the June 2009 meeting. The assumptions will be reviewed in detail again in 2012.

We believe the actuarial assumptions and methods are internally consistent, reasonable and meet the parameters of Governmental Accounting Standards Board Statement No. 43 for fulfilling financial accounting requirements. Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the

# ACTUARY'S CERTIFICATION LETTER, CONTINUED 

## Milliman

Teachers' Retirement Board January 12, 2010

Page 2
current measurements as presented in the valuation report due to many factors. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

We certify that the June 30, 2008 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

In conclusion, the results presented in this report satisfy GASB 43 reporting purposes. Based on the current actuarial assumptions, the current assets of the MPPP program fund $0.4 \%$ of the accrued liabilities. It should be noted that these calculations do not include $\$ 625$ million of future employer contributions to the DB Program that has been allocated to pay the MPPP benefits.

Respectfully submitted,


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

MCO/NJC/nlo


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

## MEDICARE PREMIUM PAYMENT PROGRAM

## Summary of Actuarial Assumptions and Methods

CaISTRS, through its consulting actuary, will perform an experience study at least every four years to determine appropriate demographic and economic assumptions. These assumptions are then applied every two years when the consulting actuary produces GASB 43 reporting information for the Medicare Premium Payment Program. The GASB 43 reporting information was completed as of June 30, 2008, and adopted by the Teachers' Retirement Board September 4, 2009. The following tables and summary were prepared by CaISTRS staff. All information is considered when preparing June 30, 2008, GASB 43 reporting information.

The Medicare Premium Payment Program was established January 1, 2001. Temporary onetime assumptions were adopted for the Medicare Premium Payment Program by the Teachers' Retirement Board on February 9, 2007. The economic and demographic assumptions were based on those adopted for the Defined Benefit Program by the Teachers' Retirement Board on March 4, 2004. The economic, demographic and medical assumptions were used for GASB 43 reporting information. The Defined Benefit Program and the Medicare Premium Payment Program share the same population, so it is reasonable to use most of the same assumptions for both programs. Following are the assumptions adopted by the Teachers' Retirement Board for GASB 43 reporting:

- GASB 43 discount rate is 4.00 percent.
- Method used to value plan assets for GASB 43 reporting purposes: market value of assets held in the Health Benefit Trust Fund.
- Assumption for general wage increase is 4.25 percent, of which 3.25 percent is due to inflation and 1.00 percent is due to expected gains in productivity.
- The actuarial cost method used for GASB 43 reporting purposes is entry age normal.


## DISCUSSION OF RECENT CHANGES IN:

The nature of the program-The Medicare Premium Payment Program is a relatively new program, established January 1, 2001. All provisions of the program as of June 2008 were considered when producing GASB 43 reporting information.

Actuarial Assumptions-There have been several changes to the assumptions since the June 30, 2006, valuation. The most significant changes were the mortality assumptions which increased life expectancies and the probabilities of enrollment in the MPP Program. The following assumptions were used to complete the valuation for this program.

## Actuarial Methods

Actuarial Cost Method
Entry Age Normal
Asset Valuation Method
Fair Market Value in the Health
Benefit Trust Fund
The actuarial methods used for GASB 43 reporting purposes as of June 30, 2008, result in an unfunded actuarial accrued liability of $\$ 972.1$ million.

## MEDICARE PREMIUM PAYMENT PROGRAM

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

There are no other specific assumptions that have a material impact on GASB 43 reporting information.

## Independent Actuarial Review

Actuarial services for the California State Teachers' Retirement System are provided under contract by a qualified independent actuarial firm, with additional review provided by the staff actuary.

The work performed for CaISTRS by the independent actuarial firm may be reviewed by the Bureau of State Audits at the discretion of the Teachers' Retirement Board. Also, through the competitive bid process, the work of a prior actuary will be compared for reasonableness in subsequent work performed by a new contract actuary. Should the same actuarial firm continue for a period of 10 years, provision is made for an independent audit completed by another firm. These audit services are acquired using the competitive bid process.

## Summary of Medicare Premium Payment Program Provisions

(The following tables and summary were prepared by CaISTRS staff. All information is considered for GASB 43 reporting purposes as of June 30, 2008.)

## MEMBERSHIP

Eligibility requirement - Part A

## Member - satisfies either:

1) Retired or disabled prior to January 1, 2001; hired prior to April 1, 1986; age 65 or above; enrolled in Medicare Part A and Part B; and not eligible for Part A without premium payment.

- or -

2) Meet all above requirements, except retired or disabled before July 1, 2007; district completed a Medicare Division election prior to retirement; and active member less than 58 years of age at the time of the election.

## Spouse eligibility

Spouses of members are not eligible to participate in the program.

Eligibility requirement - Part B
Only those currently enrolled are eligible.

## Benefits Paid

Part A - Part A premium (\$443 per month in 2009)
Part B - Part B penalty. Based on Part B premium ( $\$ 96.40$ per month in 2009). Small group of high earners will have higher premiums, up to $\$ 161.40$ in 2007.

## Changes in the Medicare Premium Payment Program Provisions

The following amendments were considered for June 30, 2008 GASB 43 reporting:

Effective April 5, 2007

- Medicare Premium Payment Program was extended for a five-year period to include members retiring or becoming disabled prior to July 1, 2012.


## MEDICARE PREMIUM PAYMENT PROGRAM

Assumptions used for GASB 43 reporting were adopted by the Teachers' Retirement Board on April 5, 2007. Additional assumptions specific to the MPP Program were adopted at the board's June 5, 2009, meeting. Following are the assumptions adopted by the Teachers' Retirement Board for this program.

Table 1
Post-Retirement Mortality Table
for Sample Ages

| Age | MALE <br> 2007 CaISTRS <br> Retired-M | FEMALE <br> 2007 CaISTRS <br> Retired-F |
| :---: | :---: | :---: |
| 50 | $0.151 \%$ | $0.112 \%$ |
| 55 | 0.214 | 0.168 |
| 60 | 0.362 | 0.272 |
| 65 | 0.675 | 0.506 |
| 70 | 1.274 | 0.971 |
| 75 | 2.384 | 1.674 |
| 80 | 4.355 | 3.257 |
| 85 | 7.958 | 6.164 |
| 90 | 14.262 | 11.915 |
| 95 | 23.366 | 18.280 |


| Table 2 | $\begin{array}{l}\text { Probabilities of Retirement } \\ \text { for Sample Ages }\end{array}$ |
| :--- | :--- |


|  | UNDER 30 YEARS |  | 30 OR MORE YEARS |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Male | Female | Male | Female |
| 55 | $2.7 \%$ | $4.5 \%$ | $8.0 \%$ | $9.0 \%$ |
| 60 | 6.3 | 9.0 | 27.0 | 31.0 |
| 65 | 13.5 | 14.4 | 30.0 | 32.0 |
| 70 | 100.0 | 100.0 | 100.0 | 100.0 |

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

Table 3 | Probabilities of Withdrawal from Active Service Before Age and Service |
| :--- | :--- |
| Retirement for Sample Age |



[^8]
## MEDICARE PREMIUM PAYMENT PROGRAM

Table 7 | Termination from Disability Due to Death ${ }^{1}$

| Male | RP 2000-M (Min. 2.5\% with select rates in first 3 years) |
| :--- | :--- |
| Female | RP 2000-F (Min. 2.0\% with select rates in first 3 years) |

${ }^{1}$ Future disabled members are valued with a two-year age setback.

Table 8 Service Retirement (sample ages) ${ }^{1}$

|  | AGE | UNDER <br> 30 YEARS | 30 OR MORE <br> YEARS |
| :--- | :---: | :---: | :---: |
| Male | 55 | $2.7 \%$ | $8.0 \%$ |
| 60 | 6.3 | 27.0 |  |
| Female | 65 | 13.5 | 30.0 |
| 70 | 100.0 | 100.0 |  |
|  | 55 | $4.5 \%$ | $9.0 \%$ |
| 60 | 9.0 | 31.0 |  |
|  | 14.4 | 32.0 |  |

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

| Investment Yield <br> GASB Reporting | $4.00 \%$ |
| :--- | :--- |
| Medical Inflation |  |
| Part A Premiums | $5.00 \%$ |
| Part B Premiums | $7.0 \%$ grading down to $5.0 \%$ in 2011 |
| Price Inflation | $3.25 \%$ |

Table 6 Mortality Assumptions

|  | RETIRED MEMBERS ${ }^{\mathbf{1}}$ |
| :--- | :--- |
| Male | 2007 CaISTRS Retired-M |
| Female | 2007 CaISTRS Retired-F |
| ACTIVE MEMBERS |  |
| Male | 2007 CaISTRS Retired-M (-2 years) |
| Female | 2007 CaISTRS Retired-F (-2 years) |
| BENEFICIARIES ${ }^{\mathbf{1}}$ |  |
| Memale | 2007 CaISTRS Beneficiary-M |

${ }^{1}$ Future retirees and beneficiaries are valued with a 2-year age setback.

Table 9 Disability Rates (sample ages)

| COVERAGE A |  |  |
| :--- | :---: | :--- |
| Male | 25 | $0.021 \%$ |
|  | 30 | 0.030 |
|  | 40 | 0.081 |
| Female | 50 | 0.159 |
|  | 55 | 0.210 |
|  | 30 | $0.021 \%$ |
|  | 40 | 0.090 |
|  | 50 | 0.220 |
|  |  | 0.280 |


| COVERAGE B |  |  |
| :---: | :---: | :---: |
|  | Entry Age Under 40 | Entry Age 40 and Up |
| Male |  |  |
| 25 | $0.012 \%$ | - |
| 30 | 0.018 | - |
| 35 | 0.036 | - |
| 40 | 0.090 | - |
| 45 | 0.123 | $0.118 \%$ |
| 50 | 0.171 | 0.202 |
| 55 | 0.252 | 0.312 |
| Female |  | - |
| 25 | $0.021 \%$ | - |
| 30 | 0.021 | - |
| 35 | 0.042 | - |
| 40 | 0.078 | $0.139 \%$ |
| 45 | 0.126 | 0.252 |
| 50 | 0.219 | 0.367 |
| 55 | 0.318 |  |

Table 10 | Schedule of Medicare Part A Enrollment Rates

| ASSUMPTION | BEST ESTIMATE |  |
| :--- | :---: | :---: |
|  | Male | Female |
| \% of Actives and Under 65 Retirees <br> Enrolling (Retired On or After 2001) | $3.50 \%$ | $3.50 \%$ |
| \% of Under 65 Retirees Enrolling <br> (Retired Before 2001) | 4.50 | 4.50 |
| \% of Over 65 Retirees Enrolling <br> (For Those Not Currently Enrolled) at Age: |  |  |
| 65 | 2.50 | 2.50 |
| 66 | 1.00 | 1.00 |
| 67 | 0.25 | 0.25 |
| 68 | 0.15 | 0.15 |
| 69 | 0.10 | 0.10 |
| $70-74$ | 0.05 | 0.05 |
| $75 \&$ above | 0.05 | 0.05 |

## MEDICARE PREMIUM PAYMENT PROGRAM

Table 11 Schedule of Retired Members Added to and Removed from Medicare Part A Premium Rolls

|  | ADDED TO ROLLS ${ }^{\mathbf{1}}$ |  | REMOVED FROM ROLLS |  |  | ROLLS-END OF YEAR |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

${ }^{1}$ The Medicare Premium Payment Program was established July 1, 2001.
${ }^{2}$ Dollars in thousands.
${ }^{3}$ This does not include the $\$ 8.04$ million credit adjustments and deletions. If including the credit adjustments and deletions, the Total Annual Benefits would be $\$ 28.3$ million, the percentage increase in annual benefits would be $-9.6 \%$ and the average annual benefit would be $\$ 4,402$.

Table 12 Solvency Test ${ }^{1}$

| AGGREGATE ACCRUED LIABILITIES FOR (in millions) |  |  |  |  | FUNDING OF LIABILITIES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date (as of June 30) | (1) <br> Active Member Contributions on Deposit | (2) <br> Future Benefit to Benefit Recipients | (3) <br> Service Already Rendered by Active Members | Actuarial Value of Assets | (1) | (2) | (3) |
| 2006 | \$0 | \$796.5 | \$0 | \$2.7 | 100\% | 0.3\% | 0\% |
| 2008 | 0 | 976.3 | 0 | 4.2 | 100 | 0.4 | 0 |

[^9]Analysis of Financial Experience ${ }^{1}$
(gains and losses in unfunded actuarial obligation resulting from differences between assumed and actual experience) (dollars in millions)

|  | GASB 43 REPORTING AS OF JUNE 30 |  |
| :---: | :---: | :---: |
|  | 2008 <br> (2007) | 2006 <br> (2005) |
| Actuarial Obligation at June 30: | not calculated | not calculated |
| Expected Changes: |  |  |
| Eligibility Extended | not calculated | not calculated |
| Benefits Paid | (\$33.0) | (\$29.3) |
| Interest | not calculated | not calculated |
| Expected Actuarial Obligation at June 30: | not calculated | not calculated |
| Expected Actuarial Value of Assets at June 30: | not calculated | not calculated |
| Expected UAO at June 30 | not calculated | not calculated |
| Actuarial (Gains) or Losses |  |  |
| (Gain) on Medical Trend Assumption | not calculated | not calculated |
| (Gain) on Premium/Penalty | not calculated | not calculated |
| (Gain) on Part B Premium for higher earners | not calculated | not calculated |
| (Gain) other sources | not calculated | not calculated |
| Total Actuarial Gains \& Losses | not calculated | not calculated |
| Unfunded Actuarial Obligation (Surplus) at June 30 | \$972.1 | \$793.8 |
| Funded Ratio | 0.4\% | 0.3\% |

[^10]The Statistical section presents additional detailed information that assists users in using the basic financial statements, notes to basic financial statements and required supplementary information to assess the economic condition of the California State Teachers' Retirement System. The section provides information for the Defined Benefit, Defined Benefit Supplement, Cash Balance Benefit, Pension2 and Medicare Premium Payment programs. The remaining funds are deemed immaterial.

The schedules presented on the following pages include information on financial trends and operating information. The financial trend schedules assist users in understanding and assessing how the system's financial position has changed over time and include:

- Changes in Net Assets
- Benefit and Refund Deductions from Net Assets by Type

The operating information schedules provide data about the system's operations and resources to assist users in understanding CaISTRS benefits and services, and include:

- Members and Benefit Recipient Statistics
- Participating Employers Statistics

The information in this section was derived from the pension administration system, except where noted.

Notes:
Supplemental statistical tables are available upon request by calling CaISTRS at 800-228-5453.

The assets of the Defined Benefit, Defined Benefit Supplement and Cash Balance Benefit programs comprise the Teachers' Retirement Fund, which is part of the State Teachers' Retirement Plan (STRP) as reported on the statement of changes in fiduciary net assets. The STRP also includes the Replacement Benefit Program (RBP). The RBP is funded as needed and detailed information is not included in the statistical section as it is deemed immaterial.

## DEFINED BENEFIT PROGRAM

Table 1 Change in Net Assets (dollars in millions)

| FISCAL YEAR ENDING JUNE 30 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions |  |  |  |  |  |  |  |  |  |  |
| Member Contributions | \$1,792.3 | \$1,820.1 | \$1,690.5 | \$1,626.1 | \$1,748.3 | \$1,640.7 | \$1,557.9 | \$1,381.9 | \$1,630.4 | \$1,529.8 |
| Employer Contributions | 2,331.8 | 2,328.2 | 2,168.4 | 2,094.5 | 2,004.6 | 1,918.3 | 1,892.1 | 1,721.4 | 1,880.9 | 1,588.5 |
| State of California/ <br> Federal Government ${ }^{1}$ | 1,140.4 | 1,629.6 | 1,084.4 | 1,018.7 | 1,218.6 | 548.7 | 1,015.0 | 915.8 | 946.2 | 939.2 |
| Investment Income | $(39,215.5)$ | (9,260.3) | 29,027.7 | 15,732.6 | 13,897.6 | 16,354.3 | 3,622.9 | $(6,268.5)$ | $(10,230.9)$ | 12,689.8 |
| Other Income | 7.5 | 213.1 | 0.5 | 0.1 | 1.4 | (0.3) | 0.0 | 0.7 | 0.4 | 0.2 |
| Total Additions | (\$33,943.5) | (\$3,269.3) | \$33,971.5 | \$20,472.0 | \$18,870.5 | \$20,461.7 | \$8,087.9 | (\$2,248.7) | (\$5,773.0) | \$16,747.5 |
| Deductions |  |  |  |  |  |  |  |  |  |  |
| Benefit Payments to Members | \$8,094.7 | \$7,451.2 | \$6,839.5 | \$6,334.4 | \$5,835.9 | \$5,279.5 | \$4,715.6 | \$4,244.0 | \$3,764.6 | \$3,435.2 |
| Refunds of Member Contributions | 74.9 | 83.5 | 87.5 | 82.9 | 79.1 | 79.2 | 78.7 | 73.9 | 77.4 | 80.0 |
| Purchasing Power Benefits | 348.1 | 229.8 | 230.3 | 215.3 | 221.3 | 223.5 | 233.8 | 257.0 | 189.4 | 190.5 |
| Administration Expenses | 109.7 | 106.4 | 103.4 | 93.6 | 92.9 | 93.5 | 72.1 | 63.5 | 54.5 | 50.5 |
| Other Expenses | 0.0 | (0.2) | 0.0 | 0.0 | 10.1 | 1.7 | 0.1 | 2.3 | 0.0 | 0.0 |
| Total Deductions | \$8,627.4 | \$7,870.7 | \$7,260.7 | \$6,726.2 | \$6,239.3 | \$5,677.4 | \$5,100.3 | \$4,640.7 | \$4,085.9 | \$3,756.2 |
| Change in Net Assets | (\$42,571.0) | (\$11,140.0) | \$26,710.8 | \$13,745.8 | \$12,631.2 | \$14,784.3 | \$2,987.6 | (\$6,889.4) | (\$9,858.9) | \$12,991.3 |

There may be immaterial rounding differences between the figures presented in this table and in the Statement of Changes in Fiduciary Net Assets.
${ }^{1}$ Includes Elder Full Funding, SBMA contributions and school lands revenue.

Table 2 Benefit and Refund Deductions from Net Assets by Type (dollars in millions)

| FISCAL YEAR <br> ENDING JUNE 30 | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 1}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Type of Benefit |  |  |  |  |  |  |  |  |  |
| Age \& Service Benefits |  |  |  |  |  |  |  |  |  |
| Retired Members |  |  |  |  |  |  |  |  |  |

There may be immaterial rounding differences between the figures presented in this table and in the Statement of Changes in Fiduciary Net Assets.

Table 3 | Active Member Characteristics

| FISCAL YEAR <br> ENDING JUNE 30 | COUNT | AVERAGE <br> EARNABLE SALARY ${ }^{\mathbf{1}}$ | AVERAGE <br> AGE | AVERAGE <br> SERVICE CREDIT | AVERAGE SERVICE <br> PROJECTED TO AGE 60 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | 420,530 | 46,677 | 44.2 | 10.7 | 26.5 |
| 2001 | 428,741 | 51,478 | 44.3 | 10.7 | 26.4 |
| 2002 | 442,208 | 53,113 | 44.3 | 10.5 | 26.2 |
| 2003 | 448,478 | 54,065 | 44.3 | 10.5 | 26.2 |
| 2004 | 444,680 | 54,978 | 44.5 | 10.7 | 26.2 |
| 2005 | 450,282 | 55,900 | 44.5 | 10.7 | 26.2 |
| 2006 | 453,365 | 57,698 | 44.6 | 10.8 | 26.1 |
| 2007 | 61,097 | 44.7 | 10.8 | 26.1 |  |
| 2008 | 461,693 | 63,281 | 44.7 | 10.8 | 26.2 |

[^11]

DEFINED BENEFIT PROGRAM
Table 4 Members Retired for Service During Fiscal Year 2008-09, Classified by Member-Only Benefit ${ }^{1}$

| MONTHLY MEMBER-ONLY BENEFIT ${ }^{2}$ | COUNT | AVERAGE AGE AT RETIREMENT | AVERAGE SERVICE CREDIT | AVERAGE FINAL COMPENSATION | AVERAGE BENEFIT PAYABLE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Less than \$500 | 541 | 62.0 | 6.148 | \$3,110 | \$307 |
| 500-1000 | 775 | 62.0 | 9.449 | 4,266 | 723 |
| 1000-1500 | 811 | 61.4 | 12.969 | 5,175 | 1,202 |
| 1500-2000 | 717 | 61.4 | 16.176 | 5,681 | 1,676 |
| 2000-2500 | 726 | 61.3 | 18.879 | 6,078 | 2,148 |
| 2500-3000 | 762 | 61.8 | 21.394 | 6,358 | 2,643 |
| 3000-3500 | 770 | 62.3 | 23.304 | 6,617 | 3,108 |
| 3500-4000 | 732 | 61.9 | 26.001 | 6,807 | 3,590 |
| 4000-4500 | 745 | 61.8 | 28.384 | 6,847 | 4,059 |
| 4500-5000 | 743 | 61.3 | 30.836 | 6,928 | 4,529 |
| 5000-5500 | 913 | 61.6 | 32.062 | 7,058 | 4,999 |
| 5500-6000 | 959 | 61.7 | 33.660 | 7,166 | 5,451 |
| 6000 \& Greater | 3,559 | 62.4 | 36.579 | 8,573 | 7,122 |
| Total | 12,753 | $61.9^{3}$ | $26.311^{3}$ | \$6,796 ${ }^{\mathbf{3}}$ | \$4,158 ${ }^{\mathbf{3}}$ |

${ }^{1}$ Does not include formerly disabled members.
${ }^{2}$ As of the June 30, 2004, population report the longevity bonus is included in the Member-Only Benefit.
${ }^{3}$ Overall averages.

## DEFINED BENEFIT PROGRAM

Table 5 Members Retired for Service During Fiscal Year 2008-09¹, Classifed by Age and Option Elected ${ }^{2}$

| Age | Total | MemberOnly | 2 | 3 | 4 | 5 | OPTION TY <br> 100\% <br> Beneficiary | ES <br> 50\% Beneficiary | Compound | 75\% Beneficiary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 55 | 42 | 25 | 0 | 0 | 0 | 0 | 11 | 3 | 0 | 3 |
| 55 | 513 | 345 | 0 | 0 | 0 | 0 | 100 | 45 | 1 | 22 |
| 56 | 447 | 275 | 0 | 1 | 0 | 0 | 80 | 58 | 2 | 31 |
| 57 | 497 | 270 | 2 | 1 | 0 | 0 | 102 | 73 | 4 | 45 |
| 58 | 728 | 380 | 14 | 4 | 0 | 1 | 140 | 126 | 5 | 58 |
| 59 | 924 | 410 | 29 | 4 | 0 | 0 | 241 | 149 | 7 | 84 |
| 60 | 1,358 | 651 | 52 | 6 | 0 | 1 | 310 | 209 | 14 | 115 |
| 61 | 1,949 | 894 | 60 | 9 | 0 | 1 | 487 | 316 | 20 | 162 |
| 62 | 1,974 | 898 | 90 | 8 | 2 | 2 | 445 | 353 | 21 | 155 |
| 63 | 1,153 | 623 | 35 | 3 | 0 | 0 | 228 | 182 | 17 | 65 |
| 64 | 752 | 422 | 26 | 1 | 1 | 0 | 132 | 115 | 15 | 40 |
| 65 | 680 | 423 | 21 | 2 | 2 | 0 | 124 | 79 | 3 | 26 |
| 66 | 529 | 315 | 13 | 0 | 0 | 0 | 101 | 66 | 4 | 30 |
| 67 | 312 | 196 | 0 | 2 | 0 | 0 | 63 | 33 | 6 | 12 |
| 68 | 212 | 132 | 5 | 1 | 0 | 0 | 35 | 27 | 4 | 8 |
| 69 | 160 | 105 | 4 | 0 | 0 | 0 | 28 | 14 | 3 | 6 |
| 70 | 127 | 83 | 4 | 0 | 0 | 0 | 19 | 14 | 4 | 3 |
| 71 | 94 | 67 | 0 | 1 | 0 | 0 | 13 | 8 | 3 | 2 |
| 72 | 74 | 39 | 2 | 0 | 0 | 0 | 22 | 7 | 2 | 2 |
| 73 | 53 | 32 | 3 | 0 | 0 | 0 | 7 | 4 | 3 | 4 |
| 74 | 38 | 25 | 1 | 0 | 2 | 1 | 6 | 3 | 0 | 0 |
| 75 and over | 137 | 104 | 4 | 0 | 0 | 0 | 9 | 16 | 2 | 2 |
| Age Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 12,753 | 6,714 | 365 | 43 | 7 | 6 | 2,703 | 1,900 | 140 | 875 |
| \% of Total | 100\% | 52.65\% | 2.86\% | 0.34\% | 0.05\% | 0.05\% | 21.20\% | 14.90\% | 1.10\% | 6.86\% |

${ }^{1}$ Does not include formerly disabled members
${ }^{2}$ Option Elected:
Option 2 - Beneficiary receives 100\% of member's reduced benefit
Option 3 - Beneficiary receives 50\% of member's reduced benefit
Option 4 - Beneficiary receives $2 / 3$ of member's reduced benefit
Option 5 - Survivors receive $50 \%$ of member's reduced benefit, upon death of either member of beneficiary
$100 \%$ Beneficiary Option (formerly known as Option 6) - Beneficiary receives $100 \%$ of member's reduced benefit. If beneficiary pre-deceases the member, the benefit pops up to the Member-Only benefit amount
$50 \%$ Beneficiary Option (formerly known as Option 7) - Beneficiary receives $50 \%$ of member's reduced benefit. If beneficiary pre-deceases the member, the benefit pops up to the Member-Only benefit amount
Compound Option (formerly known as Option 8) that allows the member to provide for more than one beneficiary
Option 9 - Beneficiary receives $75 \%$ of member's reduced benefit. If beneficiary pre-deceases the member, the benefit pops up to the Member-Only benefit amount

Table 6 Characteristics of Members Going on Disability

| FISCAL YEAR ENDING JUNE 30 | COUNT | AVERAGE DISABILITY BENEFIT PAYABLE | AVERAGE SERVICE CREDIT | AVERAGE FINAL COMPENSATION | AVERAGE AGE AT DISABILITY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | 454 | \$2,124 | 15.224 | \$4,190 | 52.6 |
| 2001 | 486 | 2,270 | 15.802 | 4,476 | 53.9 |
| 2002 | 554 | 2,272 | 14.840 | 4,580 | 53.6 |
| 2003 | 614 | 2,385 | 14.894 | 4,849 | 53.0 |
| 2004 | 580 | 2,409 | 14.453 | 4,899 | 53.3 |
| 2005 | 538 | 2,488 | 14.016 | 5,103 | 53.5 |
| 2006 | 402 | 2,522 | 14.061 | 5,134 | 54.5 |
| 2007 | 501 | 2,579 | 13.959 | 5,281 | 54.7 |
| 2008 | 510 | 2,660 | 14.074 | 5,478 | 54.5 |
| 2009 | 511 | 2,728 | 13.934 | 5,567 | 53.8 |

Table 7 | Total Number of Benefit Recipients by Type of Benefit

| FISCAL YEAR <br> ENDING JUNE 30 | SERVICE <br> RETIREMENT | DISABILITY <br> BENEFITS | BENEFITS FOR <br> SURVIVORS | TOTAL BENEFIT <br> RECIPIENTS |
| :---: | :---: | :---: | :---: | :---: |
| 2000 | 145,415 | 5,885 | 13,982 | 165,282 |
| 2001 | 149,727 | 6,477 | 14,768 | 170,972 |
| 2002 | 154,884 | 6,723 | 15,465 | $177,072^{1}$ |
| 2003 | 159,172 | 6,949 | 15,747 | 181,868 |
| 2004 | 169,022 | 7,311 | 16,912 | 193,245 |
| 2005 | 176,008 | 7,571 | 17,662 | 201,241 |
| 2006 | 181,833 | 7,683 | 18,330 | 207,846 |
| 2007 | 188,659 | 7,915 | 19,067 | 215,641 |
| 2008 | 195,960 | 8,170 | 19,838 | 223,968 |
| 2009 | 203,649 | 8,380 | 20,588 | 232,617 |

${ }^{1}$ Disability and survivor counts revised in 2003.

Table 8 Members Retired for Service Characteristics ${ }^{1}$ by Year of Retirement (Does not include formerly disabled members)
$\left.\begin{array}{ccccc}\begin{array}{c}\text { EFFECTIVE DATE OF } \\ \text { RETIREMENT BY } \\ \text { SERVICE CREDIT }\end{array} & \begin{array}{c}\text { NUMBER OF } \\ \text { RETIREMENTS }\end{array} & \begin{array}{c}\text { AVERAGE } \\ \text { SERVICE CREDIT }\end{array} & \begin{array}{c}\text { AVERAGE } \\ \text { MEMBER-ONLY BENEFIT }\end{array} & \begin{array}{c}\text { AVERAGE FINAL } \\ \text { COMPENSATION }\end{array} \\ \text { AVERAGE AGE RETIREMENT }\end{array}\right]$

| Table 8 | $\begin{array}{l}\text { Members Retired for Service Characteristics }\end{array}{ }^{1}$ by Year of Retirement |
| :--- | :--- |
| (Does not include formerly disabled members) (Continued) |  |

$\left.\begin{array}{ccccc}\hline \begin{array}{c}\text { EFFECTIVE DATE OF } \\ \text { RETIREMENT BY } \\ \text { SERVICE CREDIT }\end{array} & \begin{array}{c}\text { NUMBER OF } \\ \text { RETIREMENTS }\end{array} & \begin{array}{c}\text { AVERAGE } \\ \text { SERVICE CREDIT }\end{array} & \begin{array}{c}\text { AVERAGE } \\ \text { MEMBER-ONLY BENEFIT }\end{array} & \begin{array}{c}\text { AVERAGE FINAL } \\ \text { COMPENSATION }\end{array} \\ \text { AT RETIREMENT }\end{array}\right]$

| Table 8 | $\begin{array}{l}\text { Members Retired for Service Characteristics }{ }^{1} \text { by Year of Retirement } \\ \text { (Does not include formerly disabled members) (Continued) }\end{array}$ |
| :--- | :--- |

$\left.\begin{array}{cccccc}\begin{array}{c}\text { EFFECTIVE DATE OF } \\ \text { RETIREMENT BY } \\ \text { SERVICE CREDIT }\end{array} & \begin{array}{c}\text { NUMBER OF } \\ \text { RETIREMENTS }\end{array} & \begin{array}{c}\text { AVERAGE } \\ \text { SERVICE CREDIT }\end{array} & \begin{array}{c}\text { AVERAGE } \\ \text { MEMBER-ONLY BENEFIT }\end{array} & \begin{array}{c}\text { AVERAGE FINAL } \\ \text { COMPENSATION }\end{array} \\ \text { AT RETIREMENT }\end{array}\right]$

Table 8 Members Retired for Service Characteristics ${ }^{1}$ by Year of Retirement (Does not include formerly disabled members) (Continued)

| EFFECTIVE DATE OF RETIREMENT BY SERVICE CREDIT | NUMBER OF RETIREMENTS | AVERAGE SERVICE CREDIT | AVERAGE <br> MEMBER-ONLY BENEFIT | AVERAGE FINAL COMPENSATION | AVERAGE AGE AT RETIREMENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7/1/2008 thru 6/30/2009 ${ }^{2}$ |  |  |  |  |  |
| 0-5 | 126 | 2.4 | \$291 | \$5,814 | 62.4 |
| 5-10 | 1,022 | 7.4 | 668 | 4,236 | 62.8 |
| 10-15 | 1,145 | 12.4 | 1,336 | 5,140 | 62.1 |
| 15-20 | 1,323 | 17.7 | 2,235 | 5,995 | 61.8 |
| 20-25 | 1,535 | 22.3 | 3,116 | 6,537 | 62.1 |
| 25-30 | 1,406 | 27.1 | 4,125 | 7,076 | 62.2 |
| 30-35 | 3,161 | 32.4 | 5,687 | 7,506 | 61.1 |
| 35-40 | 2,574 | 37.2 | 7,122 | 7,866 | 61.7 |
| 40 \& over | 461 | 42.2 | 8,594 | 8,316 | 64.9 |
| Total | 12,753 | 26.3 | \$4,396 | \$6,796 | 61.9 |

[^12]Table 9 || Members Retired for Service Characteristics ${ }^{1}$

| FISCAL YEAR <br> ENDING JUNE 30 | AVERAGE AGE <br> AT RETIREMENT | AVERAGE YEARS OF <br> SERVICE CREDIT | AVERAGE FINAL <br> COMPENSATION | AVERAGE CURRENT <br> BENEFIT PAYABLE |
| :---: | :---: | :---: | :---: | :---: |
| 2000 | 60.7 | 25.0 | $\$ 3,175$ | $\$ 1,824$ |
| 2001 | 60.7 | 25.4 | 3,356 | 2,033 |
| 2002 | 60.7 | 25.7 | 3,539 | 2,183 |
| 2003 | 60.7 | 25.9 | 3,735 | 2,339 |
| 2004 | 60.7 | 26.0 | 3,931 | 2,488 |
| 2005 | 60.8 | 26.1 | 4,103 | 2,617 |
| 2006 | 60.8 | 26.2 | 4,264 | 2,741 |
| 2007 | 60.8 | 26.3 | 4,437 | 2,878 |
| 2008 | 60.8 | 26.3 | 4,798 | 3,021 |

[^13]
## DEFINED BENEFIT PROGRAM

Table 10 Retired Members by Type of Benefit and Option Elected

${ }^{1}$ Type of Benefit:

1) Service Retirement.
2) Disability Benefits.
3) Benefits to Survivors.
${ }^{2}$ Option Selected:
Option 2 - Beneficiary receives 100\% of member's reduced benefit.
Option 3 - Beneficiary receives 50\% of member's reduced benefit.
Option 4 - Beneficiary receives $2 / 3$ of member's reduced benefit.
Option 5 - Survivors receives 50\% of member's reduced benefit, upon death of either member or beneficiary.
$100 \%$ Beneficiary Option (formerly known as Option 6) - Beneficiary receives $100 \%$ of member's reduced benefit. If beneficiary pre-deceases the member, the benefit pops up to the Member-Only benefit amount.
$50 \%$ Beneficiary Option (formerly known as Option 7) - Beneficiary receives 50\% of member's reduced benefit. If beneficiary pre-deceases the member the benefit pops up to the Member-Only benefit amount.
Compound Option (formerly known as Option 8) - Option that allows the member to provide for more than one beneficiary.
$75 \%$ Beneficiary Option (formerly known as Option 9) - Beneficiary receives $75 \%$ of member's reduced benefit. If beneficiary pre-deceases the member, the benefit pops up to the Member-Only benefit amount.
${ }^{3}$ Does not include formerly disabled members
${ }^{4}$ As of the June 30, 2004, population report the longevity bonus is included in the Member-Only benefit.

DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 1 Change in Net Assets (dollars in millions) ${ }^{1}$

| FISCAL YEAR ENDING JUNE 30 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions |  |  |  |  |  |  |  |  |  |
| Member Contributions | \$700.8 | \$684.8 | \$638.5 | \$599.1 | \$574.1 | \$565.8 | \$532.6 | \$487.2 | \$210.2 |
| Employer Contributions | 121.2 | 117.6 | 111.4 | 104.0 | 95.6 | 125.3 | 72.2 | 0.0 | 0.0 |
| Investment Income | $(1,122.5)$ | (387.8) | 798.1 | 339.0 | 235.5 | 247.6 | 63.9 | (27.7) | (0.2) |
| Total Additions | (\$300.5) | \$414.6 | \$1,548.0 | \$1,042.1 | \$905.2 | \$938.7 | \$668.7 | \$459.5 | \$210.0 |
| Deductions |  |  |  |  |  |  |  |  |  |
| Benefit Payments to Members | \$156.4 | \$139.4 | \$97.2 | \$98.0 | \$75.4 | \$42.0 | \$0.6 | \$0.1 | \$0.0 |
| Refunds of Member Contributions | 29.8 | 17.7 | 18.0 | 14.0 | 8.6 | 3.1 | 0.7 | 0.0 | 0.0 |
| Administration Expenses | 3.4 | 2.9 | 2.5 | 2.0 | 1.7 | 1.2 | 0.6 | 0.3 | 0.1 |
| Other Expenses | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 | 0.0 |
| Total Deductions | \$189.6 | \$160.0 | \$117.7 | \$114.0 | \$85.7 | \$46.3 | \$1.9 | \$4.3 | \$0.1 |
| Change in Net Assets | (\$490.1) | \$254.6 | \$1,430.3 | \$928.1 | \$819.5 | \$892.4 | \$666.8 | \$455.2 | \$209.9 |

${ }^{1}$ There may be immaterial rounding differences between the figures presented in this table and in the Statement of Changes in Fiduciary Net Assets.
Defined Benefit Supplement Program began in 2001.

Table 2 Benefit and Refund Deductions from Net Assets by Type (dollars in millions) ${ }^{1}$

| FISCAL YEAR ENDING JUNE 30 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Benefit |  |  |  |  |  |  |  |  |  |
| Age \& Service Benefits |  |  |  |  |  |  |  |  |  |
| Retired Members | \$146.7 | \$129.6 | \$91.3 | \$94.0 | \$71.4 | \$39.0 | \$0.5 | \$0.0 | \$0.0 |
| Survivors | 0.7 | 0.4 | 0.2 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| Death | 4.3 | 4.2 | 2.6 | 1.9 | 2.0 | 1.1 | 0.1 | 0.1 | 0.0 |
| Disability Benefits |  |  |  |  |  |  |  |  |  |
| Retired Members | 4.8 | 5.2 | 3.1 | 2.0 | 2.0 | 1.6 | 0.0 | 0.0 | 0.0 |
| Total Benefits | \$156.5 | \$139.4 | \$97.2 | \$98.0 | \$75.4 | \$42.0 | \$0.6 | \$0.1 | \$0.0 |
| Type of Refund |  |  |  |  |  |  |  |  |  |
| Separation | \$29.8 | \$17.7 | \$18.0 | \$14.0 | \$8.6 | \$3.1 | \$0.7 | \$0.0 | \$0.0 |
| Total Refunds | \$29.8 | \$17.7 | \$18.0 | \$14.0 | \$8.6 | \$3.1 | \$0.7 | \$0.0 | \$0.0 |

[^14]Table 3 Members Retired for Service During Fiscal Year 2008-09¹, Classified by Age and Option Elected ${ }^{2}$

|  |  | Regular Annuity |  |  |  | Period Certain |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Total | Single Life with Cash | $\begin{gathered} 100 \% \\ \text { Beneficiary } \\ \text { Annuity } \end{gathered}$ | $\begin{gathered} \text { 75\% } \\ \text { Beneficiary } \\ \text { Annuity } \end{gathered}$ | $\begin{aligned} & \text { 50\% } \\ & \text { Beneficiary } \\ & \text { Annuity } \end{aligned}$ | $\begin{aligned} & 10 \\ & \text { Years } \end{aligned}$ | $\begin{gathered} 9 \\ \text { Years } \end{gathered}$ | $\begin{gathered} 8 \\ \text { Years } \end{gathered}$ | 7 Years | $\begin{gathered} 6 \\ \text { Years } \end{gathered}$ | $\begin{gathered} 5 \\ \text { Years } \end{gathered}$ | $\begin{gathered} 4 \\ \text { Years } \end{gathered}$ | $\begin{gathered} 3 \\ \text { Years } \end{gathered}$ |
| Under 55 | 33 | 12 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 1 | 2 | 1 | 5 |
| 55 | 318 | 107 | 29 | 3 | 16 | 44 | 5 | 1 | 8 | 6 | 46 | 11 | 42 |
| 56 | 209 | 68 | 19 | 3 | 9 | 23 | 4 | 4 | 5 | 2 | 33 | 2 | 37 |
| 57 | 269 | 62 | 39 | 8 | 9 | 45 |  | 5 | 6 | 3 | 46 | 5 | 41 |
| 58 | 421 | 102 | 54 | 6 | 22 | 56 | 1 | 3 | 17 | 12 | 63 | 16 | 69 |
| 59 | 549 | 117 | 97 | 7 | 24 | 75 | 4 | 5 | 5 | 22 | 100 | 17 | 76 |
| 60 | 812 | 173 | 143 | 19 | 30 | 124 | 11 | 4 | 12 | 13 | 177 | 17 | 89 |
| 61 | 1,142 | 245 | 188 | 16 | 57 | 167 | 16 | 8 | 10 | 18 | 218 | 49 | 150 |
| 62 | 786 | 186 | 129 | 11 | 50 | 113 | 6 | 12 | 15 | 15 | 105 | 23 | 121 |
| 63 | 524 | 141 | 72 | 12 | 30 | 76 | 6 | 1 | 8 | 9 | 77 | 8 | 84 |
| 64 | 317 | 88 | 46 | 0 | 16 | 50 | 2 | 2 | 6 | 7 | 43 | 9 | 48 |
| 65 | 316 | 94 | 41 | 4 | 15 | 45 | 5 | 1 | 2 | 5 | 54 | 6 | 44 |
| 66 | 218 | 64 | 30 | 7 | 12 | 32 | 4 | 0 | 3 | 4 | 32 | 5 | 25 |
| 67 | 149 | 47 | 22 | 2 | 6 | 21 | 1 | 0 | 1 | 5 | 19 | 4 | 21 |
| 68 | 94 | 27 | 10 | 1 | 4 | 17 | 1 | 0 | 1 | 0 | 16 | 3 | 14 |
| 69 | 84 | 29 | 12 | 0 | 3 | 15 | 1 | 1 | 0 | 0 | 14 | 1 | 8 |
| 70 | 45 | 12 | 6 | 0 | 3 | 8 | 1 | 0 | 0 | 0 | 5 | 0 | 10 |
| 71 | 42 | 14 | 4 | 1 | 1 | 3 | 0 | 2 | 0 | 2 | 9 | 0 | 6 |
| 72 | 32 | 5 | 5 | 0 | 4 | 2 | 0 | 0 | 1 | 0 | 6 | 0 | 9 |
| 73 | 23 | 4 | 4 | 0 | 2 | 6 | 0 | 1 | 0 | 0 | 3 | 0 | 3 |
| 74 | 16 | 1 | 1 | 2 | 3 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 3 |
| 75 and Over | 55 | 17 | 8 | 1 | 2 | 8 | 0 | 1 | 1 | 1 | 7 | 1 | 8 |
| Age <br> Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 6,454 | 1,615 | 965 | 103 | 318 | 940 | 68 | 51 | 101 | 125 | 1,077 | 178 | 913 |

${ }^{1}$ Does not include formerly disabled members.

Table 4 | Characteristics of All Members Retired for Service and Receiving an Annuity

| FISCAL YEAR ENDING JUNE 30 | COUNT | AVERAGE MONTHLY RETIREMENT ANNUITY | AVERAGE ACCUMULATED BALANCE ${ }^{2}$ | AVERAGE AGE AT RETIREMENT |
| :---: | :---: | :---: | :---: | :---: |
| $2002{ }^{1}$ | - | - | - | - |
| 2003 | - | - | - | - |
| 2004 | 1,902 | \$94 | \$3,120 | 61.1 |
| 2005 | 5,394 | 118 | 4,317 | 61.3 |
| 2006 | 9,153 | 138 | 5,257 | 61.3 |
| 2007 | 13,299 | 158 | 6,379 | 61.4 |
| 2008 | 17,517 | 176 | 7,636 | 61.4 |
| 2009 | 22,474 | 203 | 9,019 | 61.6 |

${ }^{1}$ The Defined Benefit Supplement Program was established January 1, 2001. As of June 30, 2003, all members who had retired or become disabled had elected a lump-sum distribution.
${ }^{2}$ Neither service credit nor final compensation are factors in determining a benefit from the Defined Benefit Supplement Program and therefore are not included in this table.

Table 5 | Characteristics of All Members Retired for Disability and Receiving an Annuity

| FISCAL YEAR <br> ENDING JUNE 30 | COUNT | AVERAGE MONTHLY <br> DISABILITY ANNUITY | AVERAGE ACCUMULATED <br> BALANCE | AVERAGE AGE <br> AT RETIREMENT |
| :---: | :---: | :---: | :---: | :---: |
| $2002^{1}$ | - | - | - | - |
| 2003 | - | - | - | - |
| 2004 | 25 | $\$ 82$ | $\$ 2,152$ | 55.4 |
| 2005 | 52 | 94 | 2,765 | 55.2 |
| 2006 | 76 | 106 | 3,335 | 55.8 |
| 2007 | 125 | 121 | 4,367 | 55.6 |
| 2008 | 175 | 163 | 5,332 | 55.2 |

${ }^{1}$ The Defined Benefit Supplement Program was established January 1, 2001. As of June 30, 2003, all members who had retired or become disabled had elected a lump-sum distribution.
${ }^{2}$ Neither service credit nor final compensation are factors in determining a benefit from the Defined Benefit Supplement Program and therefore are not included in this table.

## DEFINED BENEFIT SUPPLEMENT PROGRAM

Table 6 || Retired Members by Type of Benefit and Option Elected

|  | MONTHLY MEMBER-ONLY BENEFIT |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Benefit | Less than \$250 | \$250-500 | \$500-750 | \$750-1,000 | \$1,000 \& Greater | Total |
| Retirement | 16,267 | 4,728 | 1231 | 166 | 82 | 22,474 |
| Disability | 201 | 25 | 9 | 1 |  | 236 |
| Survivors | 213 | 64 | 12 | 2 | 1 | 292 |
| Total | 16,681 | 4,817 | 1252 | 169 | 83 | 23,002 |

Type of Payment
Regular Annuity

| Single Life Without Cash Refund | 1,138 | 1 | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Single Life With Cash Refund | 4,870 | 125 | 5 | 0 | 5,000 |  |
| $100 \%$ Beneficiary Annuity | 4,018 | 104 | 6 | 1 | 0 |  |
| $75 \%$ Beneficiary Annuity | 356 | 12 | 0 | 0 | 0 | 3,129 |
| $50 \%$ Beneficiary Annuity | 1,137 | 42 | 3 | 1 | 0 | 1,183 |


| Period-Certain Annuity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 Year | 2,372 | 417 | 57 | 2 | 1 | 2,849 |
| 9 Year | 232 | 47 | 5 | 1 | 1 | 286 |
| 8 Year | 153 | 46 | 4 | 1 | 0 | 204 |
| 7 Year | 244 | 113 | 9 | 5 | 0 | 371 |
| 6 Year | 247 | 172 | 20 | 2 | 1 | 442 |
| 5 Year | 1,579 | 1,937 | 244 | 32 | 11 | 3,803 |
| 4 Year | 130 | 390 | 81 | 7 | 6 | 614 |
| 3 Year | 205 | 1,411 | 818 | 117 | 63 | 2,614 |
| Total | 16,681 | 4,817 | 1252 | 169 | 83 | 23,002 |

Table 7 || Principal Participating Employers for Current Year and Nine Years Ago ${ }^{1}$

| PARTICIPATING GOVERNMENT | 2009 |  |  | 2000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | COVERED EMPLOYEES | RANK | PERCENTAGE OF TOTAL SYSTEM | COVERED EMPLOYEES | RANK | PERCENTAGE OF TOTAL SYSTEM |
| Los Angeles Unified | 48,206 | 1 | 9.09\% | 48,766 | 1 | 10.52\% |
| San Diego City Unified | 13,840 | 2 | 2.61 | 13,413 | 2 | 2.89 |
| Long Beach Unified | 7,466 | 3 | 1.41 | 6,992 | 3 | 1.51 |
| Fresno Unified | 6,264 | 4 | 1.18 | 6,128 | 4 | 1.32 |
| San Bernardino City Unified | 5,948 | 5 | 1.12 | 4,448 | 7 | 0.96 |
| San Francisco Unified | 5,327 | 6 | 1.00 | 5,297 | 5 | 1.014 |
| Sacramento City Unified | 4,771 | 7 | 0.90 | 4,097 | 8 | 0.88 |
| Elk Grove Unified | 4,411 | 8 | 0.83 |  |  | - |
| San Juan Unified | 3,725 | 9 | 0.70 | 3,863 | 9 | 0.83 |
| Oakland Unified | 3,677 | 10 | 0.69 | 4,467 | 6 | 0.96 |
| Santa Ana | - | - | - | 3,591 | 10 | 0.77 |
| All Other | 426,795 | - | 79.79 | 362,297 | - | 78.19 |
| Total (64 Counties) |  |  | 100.00\% |  |  | 100.00\% |

${ }^{1}$ The Defined Benefit Supplement Program was established January 1, 2001. The 2000 information is for the Defined Benefit Program.

CASH BALANCE BENEFIT PROGRAM

Table 1 | Change in Net Assets (dollars in thousands)

| FISCAL YEAR ENDING JUNE 30 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | $2000^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions |  |  |  |  |  |  |  |  |  |  |
| Participant Contributions | \$7,481.4 | \$6,921.4 | \$5,952.9 | \$5,503.4 | \$4,149.1 | \$3,866.6 | \$3,580.9 | \$3,535.1 | \$2,936.1 | \$2,589.8 |
| Employer Contributions | 7,489.5 | 7,497.2 | 5,930.5 | 5,102.3 | 4,490.1 | 3,844.9 | 3,589.6 | 3,586.0 | 3,035.0 | 2,364.8 |
| Investment Income | $(19,727.8)$ | $(6,994.7)$ | 14,093.1 | 6,111.4 | 4,540.2 | 5,384.4 | 1,381.9 | (943.8) | (942.2) | 812.0 |
| Total Additions | (\$4,756.9) | \$7,423.9 | \$25,976.5 | \$16,717.1 | \$13,179.4 | \$13,095.9 | \$8,552.4 | \$6,177.3 | \$5,028.9 | \$5,766.6 |
| Deductions |  |  |  |  |  |  |  |  |  |  |
| Benefit Payments to Participant | \$1,221.9 ${ }^{1}$ | \$1,053.3 ${ }^{1}$ | \$883.9 ${ }^{1}$ | \$1,329.7 ${ }^{1}$ | \$1,235.2 ${ }^{1}$ | \$580.3 ${ }^{1}$ | \$188.0 | \$105.5 ${ }^{\text {² }}$ | \$0.0 | \$0.0 |
| Refunds of Participant Contributions | 1,054.4 | 608.1 | 664.3 | 472.4 | 244.8 | 196.7 | 132.5 | 89.8 ${ }^{2}$ | 118.7 | 58.5 |
| Administration Expense | 65.5 | 52.1 | 44.1 | 36.0 | 34.0 | 27.7 | 16.8 | 10.8 | 8.2 | 4.8 |
| Other Expense | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 42.0 |
| Total Deductions | \$2,341.8 | \$1,713.5 | \$1,592.3 | \$1,838.1 | \$1,514.0 | \$804.7 | \$337.3 | \$206.1 | \$126.9 | \$63.3 |
| Change in Net Assets | (\$7,098.7) | \$5,710.4 | \$24,384.2 | \$14,879.0 | \$11,665.4 | \$12,291.2 | \$8,215.1 | \$5,971.2 | \$4,902.0 | \$5,703.3 |

There may be immaterial rounding differences between the figures presented in this table and in the Statement of Changes in Fiduciary Net Assets.
${ }^{1}$ The benefit payments for fiscal years 2003-04, 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09 include member elected Administrative Transfers to purchase service credit in the Defined Benefit program. The amounts were $\$ 220,255, \$ 603,499, \$ 594,133, \$ 278,210, \$ 354,751$ and $\$ 169,976$ respectively.
${ }^{2}$ In prior years, all payments were categorized as refunds however in fiscal year 2001/02 benefit payments and refunds were identified separately.
${ }^{3}$ Due to the merger of the Cash Balance Plan with the Teachers' Retirement Plan in fiscal year 1999-00, there was a decrease in administrative expenses. These expenses were absorbed by the Teachers' Retirement Plan (California Education Code 22001.5 and 26000).

Table 2 Benefit and Refund Deductions from Net Assets by Type (dollars in thousands)

| FISCAL YEAR ENDING JUNE 30 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Benefit |  |  |  |  |  |  |  |  |  |  |
| Age \& Service Benefits |  |  |  |  |  |  |  |  |  |  |
| Retired Members | \$824.0 | \$993.5 | \$829.6 | \$1,237.0 ${ }^{1}$ | \$1,143.2 ${ }^{1}$ | \$535.4 ${ }^{1}$ | \$132.2 | \$82.7 | \$0.0 | \$0.0 |
| Death | 397.9 | 59.8 | 48.0 | 91.4 | 92.0 | 44.9 | 48.3 | 22.8 | 0.0 | 0.0 |
| Disability Benefits |  |  |  |  |  |  |  |  |  |  |
| Retired Members | 0.0 | 0.0 | 5.8 | 1.3 | 0.0 | 0.0 | 7.5 | 0.0 | 0.0 | 0.0 |
| Total Benefits | \$1,221.9 | \$1,053.3 | \$883.4 | \$1,329.7 | \$1,235.2 | \$580.3 | \$188.0 | \$105.5 | \$0.0 | \$0.0 |
| Type of Refund |  |  |  |  |  |  |  |  |  |  |
| Separation | \$1,054.4 | \$608.1 | \$664.3 | \$472.4 | \$244.8 | \$196.7 | \$132.5 | \$89.8 | \$118.7 | \$58.5 |
| Total Refunds | \$1,054.4 | \$608.1 | \$664.3 | \$472.4 | \$244.8 | \$196.7 | \$132.5 | \$89.8 | \$118.7 | \$58.5 |

There may be immaterial rounding differences between the figures presented in this table and in the Statement of Changes in Fiduciary Net Assets.
${ }^{1}$ The benefit payments for fiscal years 2003-04, 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09 include member-elected Administrative Transfers to purchase service credit in the Defined Benefit program. The amounts were $\$ 220,255, \$ 603,499, \$ 594,133, \$ 278,210, \$ 354,751$ and $\$ 169,976$ respectively.

## STATISTICAL

## CASH BALANCE BENEFIT PROGRAM

Table 3 || Members Retired for Service During Fiscal Year 2008-09 ${ }^{1}$ Classified by Age and Type of Annuity Selected

| Age | Total | REGULAR ANNUITY |  |  |  | PERIOD CERTAIN ANNUITY |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Participant Only ${ }^{2}$ | 100\% <br> Beneficiary ${ }^{3}$ | 75\% <br> Beneficiary ${ }^{4}$ | 50\% <br> Beneficiary ${ }^{5}$ | 10 <br> Years | 9 <br> Years | 8 <br> Years | 7 <br> Years | 6 <br> Years | 5 <br> Years | 4 <br> Years | $3$ <br> Years |
| Under 55 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 55 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |
| 56 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 57 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 58 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 59 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 60 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 61 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |
| 62 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 63 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |
| 64 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |
| 65 | 2 | 1 |  |  |  | 1 |  |  |  |  |  |  | 1 |
| 66 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 67 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 68 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 69 | 2 |  |  |  |  | 1 |  |  |  |  |  |  | 1 |
| 70 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 71 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |
| 72 | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |
| 73 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 74 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 75 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| Over 75 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Age Unknown |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Total | 12 | 3 | 2 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |

${ }^{1}$ Does not include formerly disabled members.
${ }^{2}$ Formerly known as the Single Life Annuity with Cash Refund.
${ }^{3}$ Formerly known as the 100\% Joint and Survivor Annuity.
${ }^{4}$ New option available for selection effective 1/1/2007.
${ }^{5}$ Formerly known as the 50\% Joint and Survivor Annuity.

## STATISTICAL

## CASH BALANCE BENEFIT PROGRAM

Table 4 | Characteristics of All Members Retired for Service and Receiving an Annuity

| FISCAL YEAR <br> ENDING JUNE 30 | AVERAGE AGE <br> AT RETIREMENT | AVERAGE ANNUITANT <br> RESERVE | AVERAGE MONTHLY <br> ANNUITY |
| :---: | :---: | :---: | :---: |
| 2002 | - | - | - |
| 2003 | - | - | - |
| 2004 | 67.8 | $\$ 10,344$ | $\$ 134$ |
| 2005 | 65.0 | 13,187 | 191 |
| 2006 | $67.5^{1}$ | 11,596 | 185 |
| 2007 | 66.9 | 10,892 | 183 |
| 2008 | 67.2 | 12,400 | 206 |

${ }^{1}$ Revised 2007.

Table 5 | All Participants Receiving an Annuity by Type of Benefit and Type of Annuity Selected

|  | MONTHLY MEMBER-ONLY BENEFIT |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Benefit | Less than $\mathbf{\$ 2 5 0}$ | $\mathbf{\$ 2 5 0 - 5 0 0}$ | $\mathbf{\$ 5 0 0 - 7 5 0}$ | $\mathbf{\$ 7 5 0 - 1 , 0 0 0}$ | $\mathbf{\$ 1 , 0 0 0} \boldsymbol{\&}$ Greater | Total |
| Retirement | 24 | 6 | 2 |  |  |  |
| Disability | 0 | 0 | 0 | 0 | 0 | 0 |
| Survivors | 0 | 0 | 0 | 0 | 0 |  |
| Total | $\mathbf{2 4}$ | $\mathbf{6}$ | $\mathbf{2}$ | 0 | 0 |  |

Type of Payment
Regular Annuity

| Single Life Without Cash Refund | 2 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Participant Only | 8 | 0 | 0 | 0 | 0 |
| $100 \%$ Beneficiary Annuity | 3 | 0 | 0 | 0 | 0 |
| $75 \%$ Beneficiary Annuity | 0 | 0 | 0 | 0 | 0 |
| $50 \%$ Beneficiary Annuity | 1 | 0 | 0 | 0 | 0 |
| Period-Certain Annuity | 4 | 0 | 0 | 0 | 0 |
| 10 Year | 1 | 0 | 0 | 0 | 0 |
| 9 Year | 0 | 0 | 0 | 0 | 0 |
| 8 Year | 0 | 1 | 0 | 0 | 0 |
| 7 Year | 0 | 0 | 0 | 0 | 0 |
| 6 Year | 4 | 1 | 0 | 0 | 0 |
| 5 Year | 0 | 1 | 0 | 0 | 0 |
| 4 Year | 1 | 0 | 0 | 0 | 0 |
| 3 Year | 24 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 |  |

Table 6 Principal Participating Employers for the Cash Balance Benefit Program, Current Year and Nine Years Ago

|  | $\mathbf{2 0 0 9}$ |  |  |  |  | 2000 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |

## PROGRAMS ADMINISTERED OR OVERSEEN BY THE RETIREMENT SYSTEM <br> PENSION2

Table 1A \| Change in Net Assets for Pension2 IRC 403(B) (dollars in thousands) ${ }^{1}$

| FISCAL YEAR <br> ENDING JUNE 30 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 | 1999 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions |  |  |  |  |  |  |  |  |  |  |  |
| Participant Contributions | \$40,680 | \$24,925 | \$23,338 | \$21,509 | \$20,379 | \$19,535 | \$17,481 | \$14,472 | \$14,732 | \$13,792 | \$8,675 |
| Interest, Dividends and Investment Income | $(28,479)$ | $(12,569)$ | 22,793 | 10,245 | 6,143 | 9,754 | 1,054 | $(6,158)$ | $(5,099)$ | 3,116 | 4,121 |
| Other Income | 0 | 17 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Additions | \$12,201 | \$12,373 | \$46,147 | \$31,754 | \$26,522 | \$29,289 | \$18,535 | \$8,314 | \$9,633 | \$16,908 | \$12,796 |
| Deductions |  |  |  |  |  |  |  |  |  |  |  |
| Distributions and Withdrawals | \$6,358 | \$8,206 | \$8,451 | - | - | - | - | - | - | - | - |
| Benefit Payments to Participant | 0 | 0 | 0 | \$2,286 | \$2,645 | \$1,617 | \$1,965 | \$453 | \$250 | \$250 | \$237 |
| Refunds of Participant Contributions | 0 | 0 | 0 | 7,481 | 6,131 | 6,440 | 3,478 | 2,553 | 2,288 | 2,201 | 1,610 |
| Administration Expenses | 278 | 526 | 782 | 935 | 917 | 807 | 504 | 372 | 344 | 275 | 205 |
| Total Deductions | \$6,636 | \$8,732 | \$9,233 | \$10,702 | \$9,693 | \$8,864 | \$5,947 | \$3,378 | \$2,882 | \$2,726 | \$2,052 |
| Change in Net Assets | \$5,565 | \$3,641 | \$36,914 | \$21,052 | \$16,829 | \$20,425 | \$12,588 | \$4,936 | \$6,751 | \$14,182 | \$10,744 |

${ }^{1}$ Distributions and Withdrawals reflects the Benefit Payments to Participant and Refunds of Participant Contributions combined for fiscal year 2006/07 and thereafter.

Table 1B Change in Net Assets for Pension2 IRC 457 Plans (dollars in thousands)

| FISCAL YEAR ENDING JUNE $\mathbf{3 0}$ | $\mathbf{2 0 0 9}$ |
| :--- | :---: |
| Additions |  |
| Participant Contributions | $\$ 37$ |
| Interest, Dividends and Investment Income | 1 |
| Other Income | 0 |
| Total Additions | $\$ 38$ |
| Deductions |  |
| Distributions and Withdrawals | $\mathbf{\$ 0}$ |
| Benefit Payments to Participant | 0 |
| Refunds of Participant Contributions | 0 |
| Administration Expenses | 0 |
| Total Additions | $\$ 0$ |
| Change in Net Assets | $\$ 38$ |

Table 2 || Largest Participating Employers for CaISTRS Pension2 ${ }^{1}$, Current Year

| PARTRICIPATING GOVERNMENT | 2009 |  |  |
| :---: | :---: | :---: | :---: |
|  | COVERED EMPLOYEES | RANK | PERCENTAGE OF TOTAL SYSTEM |
| Los Angeles USD | 1230 | 1 | 21.28\% |
| San Diego City USD | 154 | 2 | 2.04 |
| Long Beach Unified | 95 | 3 | 2.22 |
| San Juan Unified | 72 | 4 | 1.25 |
| San Diego Comm Col | 68 | 5 | 1.05 |
| Sacramento City USD | 70 | 6 | 1.03 |
| City Col of San Fran | 65 | 7 | 1.11 |
| LA Comm Col District | 60 | 8 | 0.75 |
| San Francisco USD | 58 | 9 | 1.42 |
| Capistrano Unified | 55 | 10 | 1.12 |
| All Other | 3,785 | - | 66.73 |
| Total (640 Districts) | 5,707 | - | 100\% |

MEDICARE PREMIUM PAYMENT PROGRAM

Table 1 | Change in Net Assets (dollars in thousands)

| FISCAL YEAR ENDING JUNE 30 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$29,962 | \$33,239 | \$32,257 | \$29,602 | \$28,483 | \$26,496 | \$22,221 | \$19,060 | \$4,800 |
| Interest, Dividends and Investment Income | 106 | 205 | 240 | 143 | 87 | 41 | 53 | 118 | 26 |
| Other Income | 0 | 0 | 0 | 0 | (158) | 8 | 0 | 31 | 0 |
| Total Additions | \$30,068 | \$33,444 | \$32,497 | \$29,745 | \$28,412 | \$26,545 | \$22,274 | \$19,209 | \$4,826 |
| Deductions |  |  |  |  |  |  |  |  |  |
| Premiums Paid | \$29,415 | \$32,689 | \$31,270 | \$29,313 | \$27,416 | \$25,648 | \$22,026 | \$21,536 | \$0 |
| Administration Expenses | 316 | 334 | 190 | 359 | 429 | 373 | 355 | 377 | 453 |
| Total Deductions | \$29,731 | \$33,023 | \$31,460 | \$29,672 | \$27,845 | \$26,021 | \$22,381 | \$21,913 | \$453 |
| Change in Net Assets | \$337 | \$421 | \$1,037 | \$73 | \$567 | \$524 | (\$107) | $(\$ 2,704)$ | \$4,373 |

Medicare Premium Payment Program began in 2001.

Table 2 Benefit and Refund Deductions from Net Assets by Type (dollars in thousands)

| FISCAL YEAR ENDING JUNE 30 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Benefit |  |  |  |  |  |  |  |  |  |
| Age \& Service Benefits |  |  |  |  |  |  |  |  |  |
| Retired Members | \$29,415 | \$32,689 | \$31,270 | \$29,313 | \$27,416 | \$25,648 | \$22,026 | \$21,536 | \$0 |
| Total Benefits | \$29,415 | \$32,689 | \$31,270 | \$29,313 | \$27,416 | \$25,648 | \$22,026 | \$21,536 | \$0 |

[^15]Table 3 Retired Members Enrolled in Medicare Premium Payment Program During Fiscal Year 2007-08 Classified by Age at Retirement

| AGE | TOTAL |
| :---: | :---: |
| Under 55 | 2 |
| $55-56$ | 42 |
| $56-57$ | 23 |
| $57-58$ | 24 |
| $58-59$ | 31 |
| $59-60$ | 46 |
| $60-61$ | 78 |
| $61-62$ | 75 |
| $62-63$ | 28 |
| $63-64$ | 21 |
| $64-65$ | 9 |
| $65-66$ | 5 |
| $66-67$ | 5 |
| $67-68$ | 3 |
| $68-69$ | 1 |
| $69-70$ | 1 |
| $70-71$ | 2 |
| $71-72$ | 1299 |
| $72-73$ | 1 |
| $73-74$ | 15 |
| 0 Total 75 | 0 |
|  | 1 |
|  |  |

Table 4 Characteristics of All Retired Members Enrolled in Medicare Premium Payment Program

| FISCAL YEAR <br> ENDING JUNE 30 | AVERAGE AGE <br> AT RETIREMENT | AVERAGE MONTHLY <br> MEDICARE PREMIUM |
| :---: | :---: | :---: |
| 2002 | 60.4 | $\$ 301$ |
| 2003 | 60.4 | 301 |
| 2004 | 60.4 | 339 |
| 2005 | 60.4 | 354 |
| 2006 | 60.4 | 368 |
| 2007 | 60.4 | 394 |
| 2008 | 60.4 | 414 |


[^0]:    Net assets held in trust for pension

[^1]:    (1) The prior assumption was $9.00 \%$ grading down the $6.00 \%$ in 2011 . The assumption was changed to better reflect actual and anticipated experience.

[^2]:    (1) For the DB Program amounts include employer contributions under Education Code Sections 22135, 22714 (less amounts deposited in the SBMA), 22718, 22950 and 22951 and reduced for transfers per Education Code 24255.
    (2) The DB and Purchasing Power Protection Programs include State contributions under Education Code Section 22954 and 22955.

[^3]:    (1) The prior assumption was $9.00 \%$ grading down to $6.00 \%$ in 2011 . The assumption was changed to better reflect actual and anticipated experience.

[^4]:    ${ }^{1}$ Per TUCS Universe for Public Funds with assets in excess of $\$ 1$ billion.
    ${ }^{2}$ The policy benchmark consists of passively managed asset class portfolios weighted by CaISTRS' policy allocations. The difference between actual results and the benchmark are due to two factors: i) deviations from policy and ii) active decisions on the part of CalSTRS and its investment managers.
    ${ }^{3}$ CalSTRS investment performance is calculated using a daily time-weighted return geometrically linked to calculate a monthly return. Periods longer than one month are geometrically linked to calculate annualized 'time-weighted' rates of return.

[^5]:    CaISTRS investment performance is calculated using a daily time-weighted return geometrically linked to calculate a monthly return. Periods longer than one month are geometrically linked to calculate annualized 'time-weighted' rates of return.
    ${ }^{1}$ Weighted blend of Russell 3000 tobacco free and MSCI All Country World Index ex-U.S. tobacco free
    ${ }^{2}$ Blend S\&P500 and Russell Small Cap Completeness after 7/1/01; Russell 3000 from 7/1/96; Russell 3000 tobacco free after 9/1/00
    ${ }^{3} 95 \%$ Barclays Capital US Aggregate tobacco free $+5 \%$ US High Yield Cash Pay 2\% Issuer Constrained Index tobacco free from 10/31/2008. Salomon LPF through 7/1/02; LB US Aggregate tobacco free through 4/1/07; a blend of LB US Aggregate and LB High Yield Cash Pay tobacco free through 10/31/08
    ${ }^{4}$ Blend of the Russell $3000+3 \%$ \& State Street Private Equity Index cumulative pooled internal rate of return data weighted by sub-asset type; lagged 1 quarter. Previously Russell $3000+5 \%+90$ day T-Bill from 4/1/99 to 6/30/08; CPI + 12\% prior to 4/1/99; lagged 1 quarter
    ${ }^{5}$ Includes the Securities Lending Program loss incurred in FY 08-09
    ${ }^{6}$ Barclays Capital 3-Mo T-Bill from 10/31/2008; LB 3-Mo T-Bill from 7/1/06; Citigroup 3-Mo T-Bill prior to 7/1/06

[^6]:    ${ }^{1}$ Annual Payroll and Annual Average Pay were revised on an estimated basis to reflect date corrections.

[^7]:    ${ }^{1}$ Effective January 2001, program changed to direct 25 percent of the 8 percent member contributions to the Defined Benefit Supplement Program.
    ${ }^{2}$ Service Already Rendered by Active Members was revised on an estimated basis to reflect data corrections.

[^8]:    ${ }^{1}$ Probabilities of retirement are adjusted for members with service between 25 and 30 years.

[^9]:    ${ }^{1}$ GASB 43 reporting information was determined for the first time as of June 30, 2006.

[^10]:    ${ }^{1}$ GASB 43 reporting information was determined for the first time as of June 30, 2006.

[^11]:    ${ }^{1}$ Average salary that would be paid if members worked full-time basis.

[^12]:    ${ }^{1}$ Does not include formerly disabled members
    ${ }^{2}$ The Average Member-Only Benefit for this fiscal year includes the Longevity Bonus.

[^13]:    ${ }^{1}$ Does not include formerly disabled members.

[^14]:    ${ }^{1}$ There may be immaterial rounding differences between the figures presented in this table and in the Statement of Changes in Fiduciary Net Assets. Defined Benefit Supplement Program began in 2001.

[^15]:    Medicare Premium Payment Program began in 2001.

