# Comprehensive Annual Financial Report 

for the fiscal year ended June 30, 2009

Retirement Systems of Minnesota
60 Empire Drive
Suite 400
Saint Paul, MN 55103-4000
651.296 .2409
800.657.3669

TTY 800.627.3529
www.tra.state.mn.us

Laurie Fiori Hacking
Executive Director

## Content

Introduction
GFOA Certificate of Achievement Award ..... 1
Public Pension Coordinating Council Award ..... 2
Letter of Transmittal .....  3
Board of Trustees and Administrative Staff .....  8
Administrative Organization .....  9
Mission Statement and Our Values ..... 10
Financial Section
Auditor's Report ..... 12
Management Discussion and Analysis ..... 14
Basic Financial Statements
Statement of Plan Net Assets ..... 18
Statement of Changes in Plan Net Assets ..... 19
Notes to the Financial Statements
(an integral part of the financial statements) .......... 20
Required Supplemental Information
Required Supplemental Schedule:
Funding Progress33
Required Supplemental Schedule:
Employer Contributions and Other Contributing Entities ..... 33
Supporting Schedules
Administrative Expenses ..... 36
Schedule of Investment Management Expenses ..... 37
Schedule of Changes in Plan Net Assets ..... 38
Schedule of Professional Consultant Expenses ..... 40
Investments Section
State Board of Investment Letter ..... 42
Investment Summary ..... 44
Basic Retirement Funds (Active Members) ..... 45
Minnesota Post Retirement Investment Fund (Post Fund) ..... 47
Performance of Asset Pools - Combined Funds ..... 50
Portfolio Distribution ..... 51
List of Largest Assets Held ..... 52
Summary of Investments ..... 53

## Actuarial Section

Actuary's Certification Letter ..... 56
Summary of Actuarial Assumptions and Methods ..... 59
Valuation Report Highlights ..... 63
Actuary's Commentary ..... 64
Selected Tables from Actuarial Valuation ..... 66
Solvency Test ..... 75
Schedule of Active Member Valuation Data. ..... 75
Schedule of Retirees and Beneficiaries Added To and Removed From Retirement Rolls ..... 76
Statistical Section
Statistical Summary ..... 78
10-Year History of Plan Net Assets ..... 79
10-Year History of Contribution Rates ..... 79
10-Year History of Changes in Plan Net Assets ..... 80
10-Year History of Pension Assets vs. Pension Liabilities ..... 80
10-Year History of Benefit Recipients by Category ..... 82
Schedule of Benefit Amounts Paid ..... 83
10-Year History of Benefits and Refunds by Type ..... 84
Schedule of Benefit Recipients by Current Age ..... 86
Benefit Recipients by Effective Date of Retirement ..... 86
Schedule of New Retirees and Initial Benefit Paid ..... 87
Distribution of TRA Benefits, Mailing Address of Benefit Recipient ..... 88
Schedule of Benefit Recipients by Type ..... 89
Membership Data (with Average Annual Salary) ..... 90
10-Year Summary of Membership ..... 91
Principal Participating Employers ..... 92
Number of Employer Units ..... 92
Plan Statement
Plan Statement ..... 96

## Certificate of Achievement for Excellence in Financial Reporting

Presented to

# Teachers Retirement Association, Minnesota 

For its Comprehensive Annual
Financial Report for the Fiscal Year Ended

June 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



President


Executive Director

Public Pension Coordinating Council Recognition Award for Administration 2009

Presented to

## Minnesota Teachers Retirement Association

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

Teachers Retirement Association 60 Empire Drive • Suite 400 • St Paul MN 55103-4000

## Letter of Transmittal

January 5, 2010

Members of the Board of Trustees
Teachers Retirement Association
60 Empire Drive, Suite 400
Saint Paul, MN 55103-4000

Dear Trustee:

We are pleased to present this Comprehensive Annual Financial Report (CAFR) of the Teachers Retirement Association (TRA) for the fiscal year ended June 30, 2009, our 78th year of service.
A system of internal controls is in place to help monitor and safeguard assets, ensure transactions are carried out in accordance with Minnesota statutes, and promote efficient operations. Internal controls are designed to provide reasonable, but not absolute assurance regarding the safeguarding of assets against loss. The concept of reasonable assurance recognizes that a cost-benefit analysis requires estimates and judgments by management. All internal control evaluations occur within this framework.

The Minnesota Office of the Legislative Auditor annually conducts a financial and legal compliance audit of the Association. Management believes that the accompanying statements, schedules, and tables are fairly presented. We are solely responsible for the content of this report, including its financial statements, which should be helpful in understanding information about TRA and comparing our operating results with those of other teacher retirement systems.
Readers are encouraged to refer to the Management Discussion and Analysis on pages 14-17 for an overview of additions to and deductions from the TRA Fund and additional financial reporting detail for the fiscal year.

## TRA Profile

Although the TRA Board of Trustees has a broad scope of authority in the operations and management of TRA, the pension fund is also governed by federal laws and state statutes. For financial reporting purposes, TRA is considered a pension trust fund of the State of Minnesota, and TRA financial results are incorporated into the Comprehensive Annual Financial Report of the State of Minnesota.
As of June 30, 2009, TRA had 583 reporting employer units, 77,162 active members and a total of 50,208 retirees, survivors, beneficiaries and disabilitants who were receiving monthly benefits. TRA follows the provisions of statements promulgated by the Governmental Accounting Standards Board (GASB) including GASB Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans. TRA's Comprehensive Annual Financial Report also complies with Minnesota Statutes, Section 356.20. Transactions are reported on the accrual basis of accounting. Contributions from employers and members are recognized as revenue when earned. Expenses are recorded when corresponding liabilities are incurred, regardless of when payment is made.

We contract for actuarial services from the firm Mercer Consulting of Minneapolis, Minnesota to prepare the annual actuarial valuation report. The Minnesota Office of the Attorney General provides legal counsel to our Board of Trustees. Most financial transactions, including the disbursements from the pension fund, are processed through the centralized controls of the Minnesota Accounting and Procurement System, under the supervision of the Department of Minnesota Management and Budget and Department of Administration.

## TRA's Economic Condition

All TRA assets are invested under the authority and direction of the State Board of Investment (SBI). During fiscal year 2009, TRA assets were invested in two legally separate funds: the Active Fund (assets of TRA active and inactive members) and the Minnesota Post Retirement Investment Fund (assets for TRA retirees and benefit recipients). The MPRIF (Post Fund) consisted of the assets of not only TRA benefit recipients, but also the benefit recipients of the other two major statewide public pension associations: the Minnesota State Retirement System and the Public Employees Retirement Association. Effective June 30, 2009, the Post Retirement Fund was abolished and its assets and liabilities merged back to its participating funds. Prospectively after June 30, 2009, all TRA assets are contained in one fund: the TRA Fund. A listing of pooled investments in the TRA Fund can be found on page 53.

The SBI has developed strategic asset allocation and other investment policies to represent the long-term funding needs of our members and benefit recipients. The SBI, along with its Investment Advisory Council (IAC), continually reviews its policies to ensure sufficient assets are available to finance promised benefits. The executive directors of the three statewide retirement systems serve on the seventeen-member IAC and represent their members in advising the SBI on investment-related matters.

## Investment Results

During fiscal year 2009, U.S. capital markets experienced one of the most difficult and volatile periods in recent history. The U.S. equity markets returned negative 26.6 percent for the fiscal year, as measured by the Russell 3000 index. Constrained wages, a weak jobs
market, falling home values and reduced access to credit continued to pressure consumers and business. The credit problems at financial institutions continued while the Federal Reserve began to announce concerns about inflation risks.
The Morgan Stanley Capital International (MSCI) All Country World Index excluding the United States (ACWI ex US), which represents the developed and emerging international markets outside the U.S., returned negative 30.9 percent for the fiscal year. The international markets suffered a second year from an uncertain global economic outlook and worldwide inflation concerns.
The U.S. bond market, as measured by the Barclays Capital Aggregate Bond Index, rose 6.0 percent during the fiscal year. The sub-prime mortgage crisis spilled into the broader financial market, causing a credit crisis and a liquidity freeze. Investors' need for safety caused a flight to quality that drove up Treasury prices and caused Treasury yields to plummet and yields on spread products to widen dramatically.
At the end of fiscal year 2009, the Post Retirement Fund merged with the Basic Retirement Funds, to formally become the Combined Funds.

Within this investment environment, the retirement assets under the SBI's control produced the following results:

- The Basic Retirement Funds (including the TRA Active Fund) for active members returned negative 19.6 percent during fiscal year 2009. Over the latest ten year period, the fund has experienced an annualized return of 2.4 percent.
- The Minnesota Post Retirement Investment Fund (Post Fund) for retired members returned negative 17.5 percent for fiscal year 2009 through the June 29, 2009 valuation date for its dissolution. Overall the Post Fund provided a ten year annualized return of 2.5 percent.

Although the Basic and the Post Fund were legally separate prior to fiscal year end, the two funds were combined for reporting and comparison purposes only. On a combined basis, the investment performance for TRA assets was negative 18.8 percent for fiscal year 2009. The Combined Funds matched the composite index over the past ten years. The Combined Funds trailed the composite index by 0.2 percent over the last five years and by 0.4 percent over the most recent fiscal year.

## Economic Conditions and Outlook (from Minnesota Management and Budget)

The longest and deepest recession since World War II did not skip Minnesota. Payroll employment in the state fell by 117,000 jobs ( 4.3 percent) in fiscal year 2009, and at the end of the fiscal year, the state's unemployment rate was at 8.4 percent, up 3.1 percentage points from the 5.3 percent rate observed at the close of fiscal year 2008. Job losses in the state were slightly more severe than the national average, but the state's unemployment rate ended the fiscal year 1.1 percentage points below the U.S. rate. Per capita personal income in Minnesota fell by 2.4 percent, slightly less than the national average decline of 2.6 percent, but incomes in Minnesota’s volatile farm sector fell by 27 percent. Nonfarm income in the state fell by 2.0 percent, 0.5 percentage points less than the U.S. average.

The combination of fewer jobs and a shorter work week for those who retained their jobs has produced a decline in total nominal wages in Minnesota of 0.9 percent in fiscal year 2009. Nationally, wages declined fiscal year over fiscal year by 1.4 percent. This was the first time since World War II that a decline in nominal wages over a fiscal year has been observed. Non-farm proprietors’ income was also less in fiscal year 2009 than in fiscal year 2008.

Minnesota manufacturing employment fell by 40,000 between June 2008 and June 2009, and professional and business services fell by 37,000, the two largest sectoral declines observed in the state's economy. The only sectors with notable growth during the fiscal year were education and health care, where employment increased by more than 14 percent. That "supersector" showed an employment increase of more than 14,000 jobs. Employment in the health care portion of that sector grew by 13,100, while the education sector added 1,300 jobs. Local government employment increased by 700 jobs over the fiscal year.
While a return to recession is not forecast for either the U.S. economy or the Minnesota economy for the 2010 fiscal year, Global Insight, Minnesota's macroeconomic consultant, believes that the recovery will be much slower than usual. December's baseline forecast for fiscal year 2010 calls for real gross domestic product (GDP) to grow at just a 0.3 percent annual rate during the first year of the 2010-2011
biennium. Even though the Global Insight forecast shows real GDP increases in each quarter of the fiscal year, the consultant believes it will take until the first quarter of calendar 2011 for real GDP to once again reach its pre-recession high.

The outlook for Minnesota in fiscal year 2010 is very similar to the national outlook. Payroll employment is expected to decline by 28,000 jobs between the second quarter of calendar year 2009 and the second quarter of calendar year 2010, a much smaller job loss than the 110,000 observed over the 2009 fiscal year. All of the loss in jobs in fiscal 2010 is expected in the first half of the year. Manufacturing and construction employment jobs are expected to fall another 13,000 and 5,000 , respectively. Wage income is expected to grow by 1.8 percent during the 2010 fiscal year and non-farm proprietors' income by 3.9 percent. Over fiscal year 2009, personal income in Minnesota is expected to grow by less than 1.9 percent, slightly below the 2.2 percent growth rate projected for the nation as a whole.

## Legislation

The 2009 legislature enacted a pension bill that was primarily administrative in nature. The legislation provided statutory revisions to implement the June 30, 2009 dissolution of the Minnesota Post Retirement Investment Fund (Post Fund). As described in previous annual financial reports, the Post Fund had been in a deficit situation since 2001 and was abolished once its funded status fell below 80 percent. Starting July 1, 2009, TRA active member and retiree assets and liabilities are now contained in a single fund.
Other notable provisions passed by the 2009 legislature include a provision that, effective January 1, 2010, allows TRA retirees to retire effective on any day. Previously, a TRA retirement was effective on either the 1st or the 16th of the month of their retirement. Another change was to permit Minnesota State College and University (MnSCU) faculty who become newly tenured to elect TRA retirement coverage. Previously, MnSCU faculty members were required to elect retirement coverage within one year of their retirement eligibility date. Under the new law, any past service bought by the faculty member needs to be purchased under the full actuarial value method.

The 2009 Legislature did not enact initiatives addressing TRA's contribution rate deficiency and benefit provision structure. As described later, we expect the 2010 legislature to review the decline in TRA funding status and consider enacting reforms that will stabilize TRA's funding health.

## Actuarial Funding Status/Investment Report

During fiscal year 2009, global investment markets experienced unprecedented adverse events. The events included an expanded global credit crisis and liquidity constraints in the market. Investment performance during the fiscal year hit their lows in early March 2009 when TRA investments had sustained an investment loss of approximately negative 30 percent; the markets improved afterwards through the fiscal year end on June 30, 2009. As a result of these events, returns on investments held by TRA through the SBI sustained an overall loss of negative 18.8 percent in fiscal year 2009. The SBI invests TRA assets with a long-term horizon. Since the pension promises which TRA has made to its retirees and active members are not all immediately payable, SBI can maintain a longer term investment strategy and weather short-term market fluctuations. The SBI intends to stay with its investment strategy since past evidence is strong that long-term diversified investors can weather up and down cycles and thereby fully participate when the market rebounds and performance improves.
The large investment losses in fiscal year 2009 have significantly worsened TRA's funded status. As defined and specified by Minnesota law, TRA had an actuarial accrued liability funded ratio of 77.36 percent on June 30, 2009. TRA's contribution rate deficiency was determined as 5.12 percent of covered payroll, and is a higher contribution deficiency than the 3.33 percent reported for fiscal year 2008. On June 30, 2009, the TRA actuarial liability totaled $\$ 23.11$ billion and the actuarial value of assets was $\$ 17.88$ billion, resulting in an unfunded actuarial accrued liability of the TRA Fund of $\$ 5.23$ billion. Further, over $\$ 4$ billion of unrecognized investment losses from previous fiscal years exist as of June 30, 2009. Unless strong investment performance occurs to offset them, the losses will be recognized in the succeeding four valuation reports and tend to worsen the contribution deficiency and TRA's funded status we have reported.

On a fair value basis as of June 30, 2009, the contribution deficiency is 11.07 percent and the unfunded actuarial liability is about $\$ 9.30$ billion. The funding ratio under this alternate methodology is 59.8 percent. As reported on page 56, the TRA actuary reports that the funded status will continue to deteriorate unless there is favorable actuarial experience or changes are made in the contribution rate and benefit provision structure. The TRA Board of Trustees has devoted much time during the past year reviewing actuarial projections and evaluating the implications of the recent investment losses and their effect on the funding health of the TRA Fund. The Board of Trustees will make recommendations to the 2010 legislature to increase contribution rates and modify benefit provisions with the goal of stabilizing and improving TRA's funding status. The Minnesota State Legislature and the Governor have the sole authority to enact the recommendations made by the TRA Board of Trustees.

## Major Initiatives

TRA actively works on strategic initiatives that are continually reviewed and prioritized. As a result of the strategic planning process during fiscal year 2009, TRA staff completed nine initiatives including the full integration of former Minneapolis Teachers Retirement Fund Association (MTRFA) retirees and active members to access their accounts on the TRA web site. During fiscal year 2010, the TRA Systems Division's major project involves the conversion of current TRA systems applications to a new computer language called .NET.
The TRA Board of Trustees and management also initiated internal audit and information security management functions during the fiscal year 2009. These functions will improve accountability, document and monitor internal control processes, and assist the board and senior management in its responsibilities to effectively manage the Association.

## Awards and Recognition

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers Retirement Association for its Comprehensive Annual Financial Report for the fiscal year ended June 30, 2008. This was
the eleventh consecutive year that the Association has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.
A Certificate of Achievement is valid for a period of only one year. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.
TRA was also awarded the Public Pension Coordinating Council's Recognition Award for Administration for 2009. This award recognizes TRA's meeting of professional standards in plan administration in categories such as benefits, actuarial valuations, financial reporting and communications to members.

The preparation of this report is possible only through the combined efforts of our employees, employer units, and professional consultants. It is intended to provide a complete and reliable portrayal of the financial status of the pension fund as a basis for making management decisions and determining responsible stewardship over the assets held in trust for the members of the Association. We have notified employer unit officials and other interested persons about the availability of the report on the TRA web site. Copies will be provided upon request. Our sincere appreciation is extended to all who assisted in and contributed toward the completion of this publication.

Respectfully submitted,


Laurie Fiori Hacking Executive Director



John Wicklund
Assistant Executive Director

Administration

In Memory


With many fond memories, the team of TRA employees dedicate the Fiscal Year 2009 Comprehensive Annual Financial Report to:

## Gregory Waldoch

Greg's long battle with cancer ended on April 22, 2009. As a Systems Division employee, Greg worked tirelessly on many projects, including the production of this publication.

His courage and perseverance inspired us all.

## Board of Trustees

As of December 1, 2009

President


Martha Lee (Marti) Zins Retiree Representative Minnetonka, MN


Robert J. Gardner Elected Member Crystal, MN

Vice President


Mary L. Broderick Elected Member St. Cloud, MN


Bob Lowe
Minnesota School Boards
Association
Representative


Richard J. Gendreau Elected Member Bemidji, MN


Leslie Hinz
Representing
Alice Seagren,
Commissioner of Education


Mary B. Supple Elected Representative Richfield, MN


Tom Hanson Commissioner of Minnesota Management \& Budget

## Administrative Staff



Laurie Fiori Hacking Executive Director


John Wicklund Assistant Director of
Administration


Karen Williamson Assistant Director of Operations


Luther Thompson Assistant Director Legal and Legislative Services

## Administrative Organization

As of December 2009


## Consulting Services

Actuary
Mercer Consulting
Minneapolis, Minnesota
Auditor
Office of the Legislative Auditor
Saint Paul, Minnesota
Investment
Minnesota State Board of Investment
Saint Paul, Minnesota
Legal Counsel
Office of the Attorney General
Saint Paul, Minnesota
Medical Advisor
Minnesota Department of Health
Minneapolis, Minnesota

## Our Mission Statement

TRA provides retirement, disability and survivor benefits to Minnesota's public educators assisting them in achieving future income security.

TRA strives to provide benefits that attract and retain competent teachers who serve communities throughout the state, building a stronger education system.

TRA is committed to safeguarding the financial integrity of the fund and takes pride in providing exceptional, innovative services.

## Our Vision

To be an outstanding retirement system pursuing benefits and services that exceed members' expectations.

## Goals

Members and Stakeholders - Be responsive to the needs of TRA members and stakeholders by providing them with innovative, timely and relevant services and education, and adequate benefits that are properly funded.

Organizational Effectiveness - Be a proactive, flexible efficient organization by measuring performance and continuously improving work processes.

Staff Development - Make TRA an "employer of choice" for both existing and potential staff by providing a supportive and challenging environment that encourages teamwork and creativity, fosters professional growth and development, and values employee input.

Finance and Resources - Safeguard the financial integrity of the fund by ensuring adequate funding, legal compliance and responsibly managing fiscal resources.

Technology - Maintain the internal capacity to utilize cutting-edge technologies that continuously improve work processes and enhance service delivery and communication with our members and stakeholders.

## Financial

$$
\begin{aligned}
& \text { Financial } \\
& \text { Financial } \\
& \text { Financial } \\
& \text { Financial } \\
& \text { Financial } \\
& \text { Financial }
\end{aligned}
$$

## Auditor's Report

## Independent Auditor's Report

Members of the Board of Trustees<br>Teachers Retirement Association of Minnesota<br>Ms. Laurie Fiori Hacking, Executive Director<br>Teachers Retirement Association of Minnesota

We have audited the accompanying basic financial statements of the Teachers Retirement Association of Minnesota as of and for the year ended June 30, 2009, as listed in the Table of Contents. These financial statements are the responsibility of the Teachers Retirement Association's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes 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 financial position of the Teachers Retirement Association as of June 30, 2009, and the changes in financial position for the year then ended in conformity with accounting principles generally accepted in the United States of America.

On January 5, 2010, the Teachers Retirement Association revised Figure 3, on page 25, to reallocate its holdings of foreign cash and fixed income investments among the types of foreign currency, as required by Governmental Accounting Standards Board Statement 40.

In accordance with Government Auditing Standards, we have also issued our report dated December 22, 2009, on our consideration of the Teachers Retirement Association's internal control over financial reporting; on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements; and on other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on 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.

[^0]Members of the Board of Trustees
Ms. Laurie Fiori Hacking, Executive Director
Page 2

Management's Discussion and Analysis and the other required supplementary information, as listed in the Table of Contents, are not a required part of the Teachers Retirement Association's 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 inquiries 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 financial statements that collectively comprise the Teachers Retirement Association's basic financial statements. The Introductory, Investment, Actuarial, and Statistical sections, as listed in the Table of Contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements. The Supporting Schedules in the Financial section have been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole. The Introductory, Investment, Actuarial, and Statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on them.

Snow R. yolk
James R. Nobles
Legislative Auditor


Cecile M. Ferkul, CPA
Deputy Legislative Auditor

December 22, 2009, except for Figure 3, on page 25, as to which the date is January 5, 2010.

## Management Discussion and Analysis

June 30, 2009

This discussion and analysis of the Teachers Retirement Association (TRA) of Minnesota provides an overview of TRA financial activities for the fiscal year ended June 30, 2009. We encourage you to consider the information presented here in conjunction with the transmittal letter beginning on page 3 and the additional information presented in the financial statements and required supplementary information.

## Financial Highlights

- The Net Assets Held in Trust for Pension Benefits decreased in value by about $\$ 4.28$ billion during fiscal year 2009 for a total of about $\$ 13.83$ billion. Plan contributions and investment income totaled about negative $\$ 2.86$ billion during the fiscal year. Plan benefits and other expenses totaled about $\$ 1.41$ billion during the fiscal year.
- Investment returns for the TRA Active Fund and the Minnesota Post Retirement Investment Fund for the 2009 fiscal year were negative 19.6 percent and a negative 17.5 percent, respectively resulting in investment losses of about $\$ 3.32$ billion.
- Contributions paid by members and employers during fiscal year 2009 totaled about $\$ 452.8$ million. The fiscal year 2008 total was $\$ 441.2$ million.
- Pension benefits paid to retirees and beneficiaries during fiscal year 2009 was $\$ 1.38$ billion. The fiscal year 2008 total was $\$ 1.33$ billion, representing an increase of about $\$ 50$ million during the year.
- Refunds of member contributions plus interest during fiscal year 2009 were $\$ 14.4$ million. The fiscal year 2008 total was $\$ 11.8$ million.
- Administrative expenses of the fund during fiscal year 2009 were $\$ 10.61$ million. The fiscal year 2008 total was $\$ 10.26$ million, representing an increase of \$347 thousand during the fiscal year.


## Actuarial Highlights

The Association's funding objective is to meet longterm benefit obligations through the accumulation of contributions and investment income. This funding is structured so that the burden of paying retirement costs is shared equitably by present and future generations of members and taxpayers. As of June 30, 2009 the accrued liability funding ratio for TRA was 77.36 percent, a decrease from the comparable funding ratio of 81.99 percent as of June 30, 2008. The funded ratio decrease for fiscal year 2009 is largely due to the decline in fair value of TRA investments during fiscal year 2009 .
TRA's unfunded actuarial accrued liability on June 30, 2008 was $\$ 4.00$ billion. The June 30, 2009 unfunded liability increased to $\$ 5.23$ billion, an increase of $\$ 1.23$ billion. The primary force increasing the unfunded liability was the decline in the fair market value of investments during fiscal year 2009. TRA’s unfunded liability, by state law, must be extinguished by June 30, 2037. Key actuarial funding ratios can be seen on page 63.

## Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the financial report of TRA. The financial report consists of:
■ the basic financial statements, comprised of the Statement of Plan Net Assets and the Statement of Changes in Plan Net Assets;

- the notes to the basic financial statements; and
- required and other supplementary information.

The Statement of Plan Net Assets (page 18) presents information on the assets and liabilities of TRA, with the difference between the two reported as net assets. The net assets of the Association reflect the resources available to pay benefits to members when due. Over time, increases and decreases in net assets measure whether the Association's financial position is improving or deteriorating. It can be thought of as a snapshot of the financial position of TRA at that specific point in time.

The Statement of Changes in Plan Net Assets (page 19) presents information detailing the changes in net assets that occurred during the current fiscal year. All changes in net assets are reported on an accrual basis. This means that the revenue or expense is recognized as soon as the underlying event giving rise to the change occurs, regardless of when the actual cash is received or paid. Thus, revenues and expenses are reported in this statement for some items that will not result in cash flows until future fiscal periods. For example, contributions due from a school district, even though not yet paid by fiscal year end, will be reflected as revenue. Earned benefits or refund accruals will be reflected as an expense, even though they may not have been paid to the member until after fiscal year end.

The notes to the financial statements (pages 20-32) provide additional information that is essential to a full understanding of the data provided in the financial statements.

The report also contains required supplementary information in addition to the basic financial statements themselves. The Schedule of Funding Progress (page 33) includes historical trend information about the TRA plan from a long-term, ongoing perspective and the progress made in accumulating assets to pay benefits when due. The Schedule of Employer Contributions (page 33) presents historical trend information about the annual required contributions of employers and the actual contributions made by employers.
Other supporting schedules are also presented. The Schedule of TRA Administrative Expenses (page 36) presents the overall cost of administering the Association. The Schedule of Changes in Plan Net Assets, separated by reserve accounts, is presented on pages 38-39. The Schedule of Investment Management Expenses (page 37) provides summary information of professional investment money management expenses, includes TRA's share of the investment management fees of the Minnesota Post Retirement Investment Fund (MPRIF). These expenses are shown as a reduction of investment income on the Statement of Changes in Plan Net Assets. The Schedule of Professional Consultant Expenses (page 40) further details this category of administrative expense.

## Financial Analysis of the TRA Fund

## Plan Assets

Total plan assets of the TRA Fund as of June 30, 2009, were $\$ 16.13$ billion and were mostly comprised of cash, investments and contributions due from employers. Total plan assets decreased $\$ 3.85$ billion (19.3 percent) from the June 30, 2008, total of $\$ 19.98$ billion. The primary reason for the decrease was the negative investment performance during fiscal year 2009.

## Plan Liabilities

Total liabilities as of June 30, 2009, were $\$ 2.30$ billion, an increase of 23.0 percent from the June 30, 2008, liability amount of $\$ 1.87$ billion. The primary reason for the increase was a higher value of liabilities within the securities lending program. In both years, the liability amounts were mostly comprised of obligations under security lending arrangements and long-term bonds payable for the building co-owned by the Association.

## Net Assets

Association assets exceeded liabilities on June 30, 2009, by $\$ 13.83$ billion. The amount is lower than the June 30, 2008, amount of $\$ 18.11$ billion by $\$ 4.28$ billion. The decrease in the fair value of investments is primarily attributable to the generally unfavorable market conditions experienced during fiscal year 2009, as evidenced by the overall fund investment return of approximately negative 18.8 percent. As a mature public pension plan, TRA relies heavily on investment earnings to help pay benefits and expenses since annual employee and employer contributions are currently less than one-third of the amount needed to fund current cash outflows. As result of its annual expenses, the TRA Fund requires strong investment performance each year to achieve an equilibrium or experience an increase in its level of net assets.

| Plan Net Assets |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dollar Amounts in Thousands |  |  |  |  |  |  |
|  | 2009 |  | 2008 |  | Change |  |
| Cash and Investments | \$ | 16,106,583 | \$ | 19,948,249 | \$ | $(3,841,666)$ |
| Receivables |  | 13,039 |  | 17,587 |  | $(4,548)$ |
| Other |  | 9,635 |  | 10,014 |  | (379) |
| Total Assets |  | 16,129,257 |  | 19,975,850 |  | $(3,846,593)$ |
| Total Liabilities |  | 2,295,431 |  | 1,868,884 |  | 426,547 |
| Plan Net Assets | \$ | 13,833,826 |  | 18,106,966 | + | (4,273,140) |
| Changes in Plan Net Assets |  |  |  |  |  |  |
| Dollar Amounts in Thousands |  |  |  |  |  |  |
|  |  | 2009 |  | 2008 |  | Change |
| Additions |  |  |  |  |  |  |
| Member Contributions | \$ | 212,043 | \$ | 209,592 | \$ | 2,451 |
| Employer Contributions |  | 240,718 |  | 231,561 |  | 9,157 |
| Net Investment Income/(Loss) |  | $(3,318,368)$ |  | $(926,044)$ |  | $(2,392,324)$ |
| Other |  | 6,526 |  | 7,530 |  | $(1,004)$ |
| Total Additions | \$ | $(2,859,081)$ | \$ | $(477,361)$ | \$ | (2,381,720) |
| Deductions |  |  |  |  |  |  |
| Monthly Benefits | \$ | 1,383,668 | \$ | 1,330,837 | \$ | 52,831 |
| Refunds of Contributions |  | 14,429 |  | 11,770 |  | 2,659 |
| Administrative Expenses |  | 10,608 |  | 10,261 |  | 347 |
| Other |  | 5,354 |  | 1,687 |  | 3,667 |
| Total Deductions | \$ | 1,414,059 | \$ | 1,354,555 | \$ | 59,504 |
| Change in Plan Net Assets | \$ | $(4,273,140)$ | \$ | $(1,831,916)$ | \$ | (2,441,224) |

## Revenues - Additions to Plan Net Assets

Total additions to the TRA Fund during fiscal year 2009 were negative $\$ 2.86$ billion, a $\$ 2.38$ billion decline from the negative $\$ 477$ million in fiscal year 2008. Most of the decline is due to lower investment returns and the decline in the fair market value of investments in 2009 as compared to fiscal year 2008.
Total retirement contributions for fiscal year 2009 increased about $\$ 11.6$ million from the previous fiscal year for a combined fiscal year 2009 total of about $\$ 452.8$ million. Retirement contributions during fiscal year 2009 were calculated at 5.5 percent employee and 5.5 percent employer for Coordinated members of TRA.

A negative net investment return of $\$ 3.32$ billion was recorded for fiscal year 2009. This amount increased (worsened) by $\$ 2.39$ billion from fiscal year 2008 when a negative net investment return of $\$ 0.93$ billion occurred. The increase is attributable to lower investment returns for fiscal year 2009. Investment returns for the TRA Active Fund and the Minnesota Post Retirement Investment Fund were negative 19.6 percent and negative 17.5 percent, respectively, for fiscal year 2009 through the June 29, 2009 valuation date for the Post Retirement Fund dissolution. During fiscal year 2008, the comparable investment returns were negative 4.8 percent (Active Fund) and negative 5.2 percent (Post Fund).

## Expenses - Deductions From Plan Net Assets

The primary expenses of TRA include the payment of pension benefits to members and beneficiaries, refunds of contributions to former members, and the cost of administering the system. Retirement benefits expenses increased by about $\$ 52.8$ million due to new retirements and a cost-of-living adjustment of 2.5 percent on January 1, 2009 for most TRA benefit recipients. Member refunds of $\$ 14.4$ million increased by about $\$ 2.6$ million during fiscal year 2009 from the fiscal year 2008 total of $\$ 11.8$ million. Administrative expenses increased by 3.4 percent during the fiscal year - from $\$ 10.2$ million in fiscal year 2008 to about $\$ 10.6$ million for fiscal year 2009. Overall, fund expenses rose nearly $\$ 59.5$ million during fiscal year 2009.

## Actuarial Highlights

The financial health of a public pension plan is not exclusively assessed by analyzing the Basic Financial Statements. These financial statements should also be reviewed in conjunction with the Schedule of Funding Progress (page 33) and the Schedule of Contributions from the Employer and Other Contributing Entities (page 33) to determine if TRA is becoming stronger or weaker over time.

TRA's funding objective is to meet long-term benefit obligations through the accumulation of contributions and investment income. This funding is structured so that the burden of retirement costs is shared equitably by present and future generations of members and taxpayers. As of June 30, 2009, the accrued liability funding ratio for TRA was 77.36 percent, a decrease for the comparable funding ratio of 81.99 percent as of June 30 , 2008. The funding decline is mostly the result of negative investment returns experienced for fiscal year 2009.
TRA's unfunded actuarial liability on June 30, 2008 was $\$ 4.00$ billion. The June 30, 2009 unfunded actuarial liability rose to $\$ 5.23$ billion. Investment performance below the actuarial assumed rate of 8.5 percent was the primary factor increasing the unfunded actuarial liability.
By law, the unfunded liability must be recovered in full by June 30, 2037. TRA's statutory contribution rate of 11.69 percent of member covered payroll is currently trailing the required contribution rate calculated by TRA's actuarial consultant. The
required contribution rate to fund normal pension costs, amortizing the unfunded actuarial liability, plus TRA administrative costs was calculated as 16.81 percent. The resulting contribution deficiency is 5.12 percent of member covered payroll. Employee and employer contribution rates are reviewed and placed into law by the Minnesota legislature.
On June 30, 2009, the Minnesota Post Retirement Investment Fund (Post Fund) - the fund containing the assets and liabilities associated with TRA retired members was abolished. The reader is encouraged to review Note III-C on page 29 for additional information about the merger and transfer of assets and liabilities to the TRA Fund.

## Summary

Due to the long-term nature of defined benefit plans, one must review the financial performance of TRA over a period of years and not at an isolated point in time. The funding ratio of the TRA Fund decreased from 81.99 percent to 77.36 percent for fiscal year 2009 due to investment performance below actuarial expectations. In addition, the contribution deficiency of 5.12 percent has become a significant issue. The Board of Trustees, TRA staff, and the board's actuarial consultant have extensively studied the funding issues and funding projections. The TRA Board will be proposing a package of contribution rate increases for employees and employers and modifications to the TRA benefit structure in order to stabilize and strengthen TRA's funding measures. Modifications proposed may include a freeze on annual increases paid to benefit recipients, and/or a reduced future annual adjustment. Changes to the active and inactive member benefit provisions are also under review.

## Request for Information

The financial report is designed to provide the Board of Trustees, members and other users with financial report with a general overview of the Association's finances and to demonstrate its accountability with the money it holds in trust. If you have any questions about this report, or require additional financial or actuarial information, please contact the Teachers Retirement Association, 60 Empire Drive, Suite 400, Saint Paul, Minnesota 55103 or by telephone toll-free, 800-657-3669.

## Teachers Retirement Fund Statement of Plan Net Assets

As of June 30, 2009
Assets
Cash and short-term investments
Cash
. $\quad 9,888,884$
Short-term investments ..................................................................- 352,651,788

Total Cash and Short-term Investments................................. \$ 362,540,672
Receivables
Employer Contributions .................................................................. \$ 12,704,056
Investment Income ........................................................................ 319,183
Bond Interest.................................................................................-16 16,085
Total Receivables...................................................................\$ 13,039,324
Investments (at fair value)
Domestic Equity Pool ............................................................................. $\mathbf{.}$. 3,776,044,438
Fixed Income Pool ......................................................................... 3,132,738,524
Indexed Equity Pool...................................................................... 2,362,181,646
Global Equity Pool............................................................................. 2,247,201,361
Alternative Investments Pool .......................................................... 1,948,639,837
Minneapolis Pool .......................................................................... 152,238
Total Investments .................................................................. \$ 13,466,958,044
Securities Lending Collateral ................................................................ $2,277,083,708$
Building
Land.............................................................................................. \$ 171,166
Building and Equipment .................................................................... 11,266,265
Reserve for Building Depreciation ............................................... $\quad(2,243,448)$
Deferred Bond Charge ...................................................................... 145, 8 .
Reserve for Deferred Bond Charge Amortization......................... $(40,236)$
Total Building ......................................................................... \$ 9,299,604
Capital Assets Net of Accumulated Depreciation ..................................... \$ 335,441
Total Assets ..................................................................................\$ 16,129,256,793
Liabilities
Current
Accounts Payable ............................................................................ \$ 8,165,849
Accrued Compensated Absences ........................................................ 59 59,621
Accrued Expenses - Building.............................................................. 1,054
Bonds Payable.................................................................................. 236,250
Bonds Interest Payable.................................................................. 45, 458
Securities Lending Liabilities .......................................................... 2,277,083,708
Total Current Liabilities......................................................... \$ 2,285,591,830
Long Term
Accrued Compensated Absences ................................................................ \$ 639,280
Accrued OPEB Liability ...................................................................... 24.000
Bonds Payable.............................................................................. 9,175,950
Total Long Term Liabilities ...................................................... \$ 9,839,230
Total Liabilities..................................................................... \$ 2,295,431,060
Net Assets Held in Trust for Pension Benefits ................................. \$ 13,833,825,733
The accompanying notes are an integral part of this statement.

## Teachers Retirement Fund Statement of Changes in Plan Net Assets

## For the Fiscal Year Ended June 30, 2009

Additions

## Contributions

Employee
\$ 212,042,535

Employer .......................................................................................... 220,270,172
Direct Aid (State/City/County)............................................................ 20,448,028
Earnings Limitation Savings Account (ELSA) ..................................... 2, 2,301,205
Total Contributions
\$ 455,061,940

## Investment Income

Net Appreciation (Depreciation) in Fair Value of Investments ................ \$ (3,320,259,076)
Less Investment Expenses................................................................... (19,864,465)
Net Investment Income
\$ (3,340,123,541)

## From Securities Lending Activities

Securities Lending Income

\$ 39,497,354

Securities Lending Expenses:

Borrower Rebates

$(13,902,381)$

Management Fees ........................................................................ $(3,839,722)$
Total Securities Lending Expenses............................................................. (17,742,103)
Net Income from Securities Lending ................................................... 21,755,251
Total Net Investment Income ................................................................... \$ (3,318,368,290)
Other Income........................................................................................... \$ 4,225,195
Total Additions........................................................................................ \$ $(2,859,081,155)$
Deductions
Retirement Benefits Paid............................................................................ \$ 1,381,366,261
Earnings Limitation Savings Account (ELSA)............................................ 2,301,205
Refunds of Contributions to Members ........................................................ 14,429,351
Administrative Expenses.......................................................................... 10,608,003
Interest Paid to the Post Fund....................................................................... $5,354,052$
Total Deductions
\$ 1,414,058,872
Net Increase (decrease) ............................................................................... \$ (4,273,140,027)

Net Assets Held in Trust for Pension Benefits
Beginning of Year..................................................................................... \$ 18,106,965,760
End of Year ............................................................................................. \$ 13,833,825,733
The accompanying notes are an integral part of this statement.

## Notes to the Financial Statements

For the Fiscal Year Ended June 30, 2009

## I. Summary of Significant Accounting Policies

## A. Organization

The Teachers Retirement Association (TRA) is an administrator of a multi-employer, costsharing retirement fund. TRA administers a Basic Plan (without Social Security coverage) and a Coordinated Plan (coordinated with Social Security coverage) in accordance with Minnesota Statutes, Chapters 354 and 356. Assets of the fund may be used to pay benefits to both Basic and Coordinated members without legal restriction.

## B. Participating Members and Employers

Teachers employed in Minnesota's public elementary and secondary schools, charter schools, and certain educational institutions maintained by the state (except those teachers employed by the cities of Duluth and St. Paul, and by the University of Minnesota system) are required to be TRA members.

State university, community college, and technical college teachers first employed by the Minnesota State College and Universities (MnSCU) may elect TRA coverage within 90 days of first employment. Alternatively, these teachers may elect coverage through the Defined Contribution Retirement Plan (DCR) administered by MnSCU. A teacher employed by MnSCU and electing coverage by DCR is not a member of TRA except for purposes of Social Security coverage.

A schedule of employer units and membership is presented in Figure 1.

## C. Benefit Provisions

TRA provides retirement benefits, as well as disability benefits to members, and benefits to survivors upon the death of eligible members. All benefits vest after three years of eligible service credit. The defined retirement benefits are based on a member's highest average salary for any consecutive 60 months of allowable service, age and years of formula service credit at termination of service. TRA members belong to either the Basic or Coordinated Plan. Coordinated members are covered by Social Security, while Basic members are not. All new TRA members must participate in the Coordinated Plan.

Figure 1

| Employer Units June 30, 2009 |  |
| :---: | :---: |
| Independent school districts | 347 |
| Joint powers units | 34 |
| Colleges and universities | 39 |
| State agencies | 5 |
| Charter schools | 156 |
| Professional organizations | 2 |
| Total Employer Units | 583 |
| Membership |  |
| June 30, 2009 |  |
| Retirees, disabilitants and beneficiaries receiving benefits | 50,208 |
| Terminated employees with deferred vested benefits Total | $\frac{12,490}{62,698}$ |
| Current employees |  |
| Vested | 61,376 |
| Non-vested | 15,786 |
| Total | 77,162 |

Two methods, or tiers, are used to compute benefits for Coordinated and Basic members who were first hired prior to July 1, 1989. Under Tier I, the annuity accrual rate for Basic members is 2.2 percent of average salary for each of the first 10 years of service and 2.7 percent for each remaining year. For a Coordinated member, the annuity accrual rate is 1.2 percent of average salary for each of the first 10 years of service and 1.7 percent for each remaining year prior to July 1 , 2006. Under Tier II, the annuity accrual rate for Coordinated members is 1.7 percent of average salary for each year of service prior to July 1, 2006. All members first hired beginning July 1, 1989 and after are Coordinated members and only eligible for Tier II benefits.

Beginning July 1, 2006, improved formula multipliers for Coordinated members are applicable for years of service provided after June 30, 2006. The formula multiplier increase is 0.2 percent per year ( 1.7 percent to 1.9 percent) for post-June 30, 2006 years of service.

Former Minneapolis Teachers Retirement Fund Association (MTRFA) members with Basic Program eligibility retain the plan provisions of the Basic Program as defined in the MTRFA Articles of Incorporation and Bylaws as they existed at merger. Approximately 50 former MTRFA active members retain Basic Program coverage.

A full annuity is available when age plus years of service equals at least 90 for members whose annuity is calculated under Tier I. For members first hired after June 30, 1989, full retirement annuity benefits are only available upon reaching their normal Social Security retirement age, not to exceed 66 years of age. A reduced retirement annuity is also available to vested members retiring at age 55 or later.

The benefit provisions stated in the preceding paragraphs of this section are current provisions and apply to active plan participants. Vested, terminated members who are entitled to benefits, but are not yet receiving them, are bound by the provisions in effect at the time they last terminated their public service. Pension benefits are funded from member and employer contributions and income from investment of fund assets.

## D. Reporting Entity

TRA functions as a statutory entity created by the Laws of 1931, Chapter 406. The Association maintains rights to sue or be sued in its own name and to hold property in its own name. For financial reporting purposes, TRA is considered a pension trust fund of the State of Minnesota and is included in the State's Comprehensive Annual Financial Report with its fiduciary funds.

The State of Minnesota acts as a fiduciary and trustee of TRA's funds. The Board of Trustees has significant independence in the operations and management of the Association, though the State Legislature actually determines the contribution rates for members and employers. The Board of Trustees is responsible for TRA's administration, but the State Board of Investment (SBI) is responsible for investing plan assets.

## E. Basis of Accounting

TRA financial statements for its defined benefit fund are prepared using the accrual basis of accounting. Employee and employer contributions are recognized as revenue in the year in which they are due pursuant to Minnesota Statute. Expenses including benefit payments and refunds are recorded when the liability is due and payable according to Minnesota Statute.

## F. Investment Policies and Valuation Methodology

1. Pursuant to Minnesota Statutes, Chapter 11 A , the state's retirement fund assets are commingled in various pooled investment accounts, administered by the State Board of Investment (SBI). As of June 30, 2009, the TRA Fund's share of the Combined Funds administered by SBI at fair value was approximately 38.5 percent ( $\$ 13.82$ billion - TRA and $\$ 35.88$ billion total). Figure 2 provides specific totals of TRA investments by category.
2. Minnesota Statutes, section 11A.24, broadly restricts retirement fund investments to obligations and stocks of United States and Canadian governments, their agencies and their registered corporations; short-term obligations of specified high quality; restricted participation as a limited partner in venture capital, real estate or resource equity investments; restricted participation in registered mutual funds; and some qualified foreign instruments.
3. Information about the primary government's (State of Minnesota) investments, including credit risk classification, can be obtained from the Department of Minnesota Management \& Budget, 400 Centennial Office Building, 658 Cedar Street, Saint Paul, Minnesota 55155. Information on investment activity, investment management fees and a listing of specific investments owned by the pooled asset accounts can be obtained from SBI, Suite 355, 60 Empire Drive, Saint Paul, Minnesota 55103.
4. Investments in the pooled accounts are reported at fair value. Figure 2 provides a summary of the cost and fair values of the investments as of June 30, 2009, as reported on the Statement of Plan Net Assets. Short-term investments are reported at cost, which approximates fair

Figure 2

| TRA Investment Portfolio <br> June 30, 2009 |  |  |  |
| :--- | ---: | :--- | :--- |
| Cost |  |  |  |
| TRA Fund | Fair |  |  |
| Pooled Accounts |  |  |  |
| Domestic Equity | $\$ 4,722,637,190$ | $\$ 3,776,044,438$ |  |
| Fixed Income | $3,179,860,342$ |  | $3,132,738,524$ |
| Indexed Equity | $2,632,333,677$ |  | $2,362,181,646$ |
| Global Equity | $2,538,350,891$ |  | $2,247,201,361$ |
| Alternative Investments | $2,093,448,678$ |  | $1,948,639,837$ |
| TRA Minneapolis Equity | 84,179 |  | 152,238 |
| Total | $\underline{\$ 15,166,714,957}$ | $\underline{\$ 13,466,958,044}$ |  |
| Short-Term Pooled Cash | $352,651,788$ | $352,651,788$ |  |
| Total Invested | $\underline{\$ 15,519,366,745}$ | $\underline{\$ 13,819,609,832}$ |  |

value. Securities traded on a national or international exchange are valued using the last reported trade price. The fair value of real estate investments is based on independent yearly appraisals. Investments that do not have an established market are reported at estimated fair value.

The TRA Minneapolis Equity Account was created in 2006 to account for the settlement of investment activity related to the external money managers of the former Minneapolis Teachers Retirement Fund Association (MTRFA). Upon completion of the post-merger investment settlement with the former MTRFA money managers, proceeds will be transferred to other pooled investments in accordance with SBI policies.

Investment income is recognized as earned. Accrued investment income of the pooled investment accounts is included in participation in the accounts. Gains or losses on sales or exchanges are recognized on the transaction date.

Net Investment Income is summarized on the Statement of Changes in Net Plan Assets. The summarized amounts show a net investment loss of \$3,340,123,541 for fiscal year 2009.

The cost of security transactions is included in the transaction price. Administrative expenses of SBI and investment management fees of the external money managers and the state's master custodian for pension fund assets are allocated to the funds participating in the pooled investment accounts (see page 37). TRA's share of these expenses totaled:

| TRA Active Fund | $\$ 8,325,200$ |
| :--- | ---: |
| MN Post Retirement Fund | $\underline{11,539,265}$ |
| Total | $\underline{\underline{\$ 19,864,465}}$ |

A detailed schedule of fees and commissions by brokerage firm, along with the number of shares traded, total commissions, and commissions per share may be obtained by writing:

Minnesota State Board of Investment
60 Empire Drive, Suite 355
St. Paul, MN 55103-3555

## G. Securities Lending

## Governmental Accounting Standards

 Board (GASB) Statement 28 DisclosuresTRA does not own specific securities, but instead owns shares in pooled funds invested by SBI. The SBI is authorized to use securities lending transactions in accordance with Minnesota Statutes, section 356A.06, subdivision 7, and has, pursuant to a Custodial Trust Agreement, authorized State Street Bank and Trust Company, Boston, Massachusetts, to act as agent in lending securities to brokerdealers and banks.

During the fiscal year, State Street lent, at the direction of the SBI, certain securities held by State Street as custodian and received cash (United States and foreign currency), securities issued or guaranteed by the United States government, sovereign debt of foreign countries, and irrevocable bank letters of credit as collateral. State Street did not have the ability to pledge or sell collateral securities absent a borrower default. Under Minnesota Statutes, Section 11A.24, borrowers were required to deliver collateral for each loan in amounts at least equal to the market value of the loaned securities.

SBI did not impose any restrictions during the fiscal year on the amount of the loans that State Street made on its behalf. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the fiscal year. Moreover, there were no losses during the fiscal year resulting from a default of the borrowers or State Street.

During fiscal year 2009, SBI and the borrowers maintained the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested in a separate investment pool. As of June 30, 2009, such investment pool had an average duration of 37 days and an average weighted maturity of 201 days. Because the loans were terminable at will, their duration did not generally match the duration of the investments made with cash collateral. On June 30, 2009, SBI had no credit risk exposure to borrowers. TRA's portion of the cash collateral held and the fair value of securities on loan from SBI as of June 30, 2009, were $\$ 2,277,083,708$ and $\$ 2,197,070,485$, respectively. Cash collateral is reported on the Statement of Plan Net Assets as an asset. Liabilities resulting from these securities lending transactions are also reported on the Statement of Plan Net Assets.

## H. Investment Risk

## Government Accounting Standards Board (GASB) Statement 40 Disclosures

The Minnesota State Board of Investment (SBI) is responsible for the investing of TRA assets under the authority of Minnesota Statutes, Section 11A.24. The following disclosures apply to TRA investments. Cash deposit disclosures are included in Note M.

Credit risk is the risk that an issuer or counterparty to an investment will be unable to fulfill its obligations. The State Board of Investment (SBI) has policies designed to minimize credit risk. They may invest funds in governmental obligations provided the issue is backed by the full faith and credit of the issuer or the issue is rated among the top four quality rating categories by a nationally recognized rating agency. They may invest funds in corporate obligations provided the issue is rated among the top four quality categories by a nationally recognized rating agency. They may also invest in unrated corporate obligations or in corporate obligations that are not rated among the top four quality categories provided that:

- The aggregate value of these obligations may not exceed 5 percent of the fund for which the state board is investing;
- Participation is limited to 50 percent of a single offering; and
- Participation is limited to 25 percent of an issuer's obligations.

SBI may also invest in bankers acceptances, deposit notes of U.S. banks, certificates of deposit, mortgage securities, and asset backed securities rated in the top four quality categories by a nationally recognized rating agency. Commercial paper must be rated in the top two categories.

TRA's share of the SBI's exposure to credit risk, based on S \& P Quality Ratings, is as follows:

| Quality Rating | Fair Value <br> (in thousands) |
| :--- | :---: |
| BBB or Better | $\$ 3,439,871$ |
| BB or Lower | 249,576 |
| Not Rated | 160,234 |

Interest rate risk is the risk that changes in interest rates of debt instruments could adversely affect the fair value of an investment. The State Board of Investment does not have a policy on interest rate risk. TRA's share of the debt securities are held in external investment pools and have the following weighted average maturities:

Security $\quad$| Weighted Average |
| :---: |
| Maturity (in Years) |

External Cash Equivalent Pools 0.17
U.S. Agencies 5.12

Corporate Debt 6.87
Municipal Bonds $\quad 7.35$
U.S. Treasuries 10.38

Asset-Backed Securities 10.78
Mortgage-Backed Securities 24.55
Foreign currency risk is the risk that changes in exchange rates between the U.S. dollar and foreign currencies could adversely affect the fair value of an investment. Under SBI manager guidelines, approved by the IAC and SBI, each money manager may hedge foreign currency transactions at their own option. Government obligations, including guaranteed or insured issues of the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, and the African Development Bank, must pay interest and principal in U.S. dollars. The principal and interest of obligations of corporations, including those corporations incorporated or organized under the laws of the Dominion of Canada or any province thereof, must also be paid in U.S. dollars. TRA's share of investments as of June 30, 2009, was distributed among the currencies as shown in Figure 3.

Figure 3

## Assessment of Currency Risk International Investment Securities at Fair Value

| Currency | Cash | Debt | Equity |
| :--- | ---: | ---: | ---: |
| Australian Dollar | $\$ 1,911,748$ |  |  |
| Brazilian Real | 925,935 |  | $\$ 9,411,998$ |
| Canadian Dollar | $2,413,250$ | $\$$ | 489,475 |
| Danish Krone | 218,954 |  | $33,931,232$ |
| Euro | $9,191,687$ |  | $134,149,742$ |
| Hong Kong Dollar | 755,074 |  | $18,164,802$ |
| Indian Rupee | 223,696 |  | $516,530,518$ |
| Japanese Yen | $6,665,469$ |  | $138,085,212$ |
| New Taiwan Dollar | 970,994 |  | $40,117,535$ |
| Pound Sterling | $4,929,120$ |  | $385,961,847$ |
| Singapore Dollar | 290,562 |  | $3,108,542$ |
| South African Rand | 460,204 |  | $323,87,500$ |
| South Korean Won | 17,934 |  | $24,474,681$ |
| Swedish Krona | 566,285 |  | $29,107,720$ |
| Swiss Franc | $2,246,564$ |  | $50,196,013$ |
| Other | $1,468,126$ |  | $30,631,248$ |
| Total | $33,255,602$ | $\$ 10,632,043$ | $\$ 2,061,750,411$ |

## I. Accrued Compensated Absences

Employees of TRA accrue vacation leave, sick leave, and compensatory leave at various rates within limits specified in collective bargaining agreements. Accumulated amounts for compensated absences are accrued when incurred. Such leave is liquidated in cash primarily at the time of termination of employment. The total liability at June 30, 2009 is $\$ 698,901$. Of this, \$59,621 is considered a short-term liability and $\$ 639,280$ is shown as a long-term liability on the Statement of Plan Net Assets. The total decreased by $\$ 43,497$ during fiscal year 2009.

## J. Capital Assets

Capital assets are capitalized at the time of acquisition at cost. Assets with a cost in excess of $\$ 2,000$ are capitalized. Depreciation is computed on a straight-line method over the useful life of the related assets. The estimated useful lives by major category are: computer equipment (3 years), general office equipment ( 5 years) and modular office furniture (10 years).

Capital assets are presented on the June 30, 2009, Statement of Plan Net Assets. The year end balance plus changes during the year are:

|  | $\begin{gathered} \text { June } 30 \\ 2009 \end{gathered}$ | $\begin{gathered} \text { June } 30 \\ 2008 \end{gathered}$ | Change |
| :---: | :---: | :---: | :---: |
| Cost Value | \$2,155,969 | \$2,309,755 | \$(153,786) |
| Accumulated Depreciation | 1,820,528 | 1,874,751 | $(54,223)$ |
| Net Capital Asset Value | \$ 335,441 | \$ 435,004 | \$ (99,563) |

## K. Administrative Expenses and Budget

The annual budget of TRA operations is developed by TRA management and approved by the Board of Trustees. The budget is also sent to the Department of Minnesota Management \& Budget for policy analysis and is included in the Governor's Biennial Budget presentation to the legislature. The legislature adopts appropriation and expenditure amounts resulting in an approved budget for the Association.

TRA administrative costs are not financed by any specific type of contribution or other income of the Fund. Administrative costs are budgeted in the annual determination of the actuarial required contribution rate (page 74, line B3).

## L. Retainage

In accordance with Minnesota Statutes, TRA retains 10 percent of professional/technical billings from vendors until successful completion of the contractual obligations. During fiscal year 2009, TRA paid $\$ 425$ for retainage payable. As of June 30, 2009, TRA has no liability for retainage.

## M. Cash

Cash on deposit consists of year-end receipts not processed as of the investment cutoff on June 30. TRA cash funds are held in the state treasury where they are commingled with other state funds. Minnesota Statutes, Section 9.031 , requires that deposits be secured by depository insurance and collateral shall be in amounts sufficient to ensure that deposits do not exceed 90 percent of the sum of the insured amount and the market value of the collateral. Throughout fiscal year 2009, the combined depository insurance and collateral was sufficient to meet legal requirements and secure all TRA deposits.

## N. Accounts Receivable

Amounts classified as accounts receivable consist primarily of member and employer contributions received after the fiscal year end on salaries earned prior to June $30,2009$. Under Minnesota Statutes, section 354.52, subdivision 4, TRA employers must remit contributions within 14 days after the member is paid.

If contributions are not remitted in a timely manner, interest at a rate of 8.5 percent, compounded annually, is assessed. If contributions are not received within 60 days of notification by TRA, the Commissioner of Minnesota Management \& Budget is authorized to deduct the balance due TRA from state aids or appropriations due to that employer unit.

## O. Improved Money Purchase (IMP)

Some TRA members first hired prior to July 1, 1969, are eligible for the Improved Money Purchase (IMP) savings clause of Minnesota Statutes, Section 354.55 , subdivision 17. Eligibility is limited to those teachers who did not formally elect a specific retirement provision by June 30, 1972. Under the savings clause, eligible members obtain the higher of two benefit provisions: 1) the Defined Benefit Provisions described in Note C, or 2) an IMP annuity based on their accumulated employee contributions plus compounded interest and an employer match of 120 percent.

Beginning with fiscal year 1999, some retiring members possessed IMP benefits higher than their benefit under the High-Five Average Formula benefit. This phenomenon occurred as strong annual investment returns during the 1990's generated high interest rates compounding on large employee contribution balances accumulated after long teaching careers. The effect becomes less pronounced and reverses during periods of low or negative investment performance.

TRA has identified those members who remain eligible for the IMP provision. For these members, the actuarial valuation presented estimates retirement benefit amounts under both the IMP provision and the High-Five average salary formula. The liability presented for that member is the higher of the two methods.

As of June 30, 2009, approximately 240 active and inactive members are eligible for the IMP provision. Assuming IMP eligibility remains limited to the existing, closed group of members, TRA management believes the actuarial impact of the remaining IMP-eligible members will not adversely harm the overall financial integrity of the fund.

## P. Earnings Limitation Savings Account (ELSA)

Teachers under age 65 who resume teaching service for a TRA-covered employer after retirement are subject to a $\$ 46,000$ annual earnings limitation. If a member earns more than the limitation, the annuity payable during the following calendar year will be offset one dollar for each two dollars earned in excess of the limitation.

The pension offset amounts are redirected to a separate individual savings account, called the Earnings Limitation Savings Account (ELSA), and later distributed to the retiree. Six percent interest compounded annually accrues on ELSA accounts. A member may apply for a lump-sum payment of their ELSA, plus interest, as long as it has been at least one year after the last deferred amount was redirected to the ELSA account. Alternatively, the retiree may also choose a rollover of their ELSA account balance into an eligible retirement plan or individual retirement account (IRA) as specified by Section 402(c) of the Internal Revenue Code.

As of June 30, 2009, TRA had 1,322 retirees with an ELSA account established. The total dollar value of ELSA accounts totaled $\$ 22.19$ million. The total dollar amount of pension benefits withheld due to excess earnings during fiscal year 2009 was $\$ 2.30$ million. ELSA assets are invested in the TRA Fund until distribution. Distributions of ELSA accounts for 191 retirees occurred during fiscal year 2009 and totaled \$2.81 million and are included as a deduction in the Statement of Changes in Plan Net Assets as a component of Refund of Contributions to Members.

## Q. Participating Pension Plan

All 86 employees of the Teachers Retirement Association are covered by the defined benefit plan administered by TRA. All TRA employees participate in the Coordinated Plan. TRA employees are eligible for the plan provisions described in Note 1, C.

Minnesota Statutes Section 354.42 sets the rates for the employee and employer contributions. These statutes are established and amended by the state legislature. During fiscal year 2009, Coordinated members were required to contribute 5.5 percent of their annual covered salary. Employers contributed 5.5 percent of their annual covered salary for Coordinated members. The total covered payroll salaries for all TRA employees during fiscal year 2009 was approximately $\$ 4.8$ million. The total covered payroll salaries for the entire membership of TRA for fiscal year 2009 was approximately $\$ 3.76$ billion.

Employer pension contributions for TRA employees for the years ending June 30, 2009, 2008 and 2007 were $\$ 267,444$, $\$ 270,920$ and $\$ 246,388$, respectively, equal to the required contributions for each year as set by state statute.

## R. Ownership of Office Building

The 1999 Legislature enacted authorization permitting TRA, the Public Employees Retirement Association (PERA), and the Minnesota State Retirement System (MSRS) to purchase land and construct a 130,000 square foot office building to house the administrative offices of these three state entities. Ownership of the facility is prorated based on the amount of square footage each retirement system occupies in the building.

The building is located on 4.3 acres of land at 60 Empire Drive in Saint Paul. TRA has occupied the 4th Floor of the building since September 2001.

In June 2000, the State of Minnesota, under the authority of the Commissioner of Minnesota Management and Budget, issued 30 -year revenue bonds totaling $\$ 29$ million to pay for the construction of the facility. Each owner (retirement system) is responsible for principal and interest payments based on its ownership percentage. These bonds are backed by the assets of the three retirement systems, excluding equity interest in the Minnesota Post-Retirement Investment Fund (MPRIF). At fiscal year end, TRA's share of the bonds payable is $\$ 9,412,200$. The bond payable decreased by $\$ 226,800$ during the fiscal year. Interest expected to be paid over the remaining term of the bonds is $\$ 7,257,845$. In Figure 4, TRA's share of the long-term bond repayment schedule including interest is summarized.

Figure 4

## Schedule of Building Debt Service Payments

 (TRA Share @ 37.8\%)June 30, 2009

| Fiscal <br> Year | Principal | Interest | Total Principal <br> and Interest |
| :---: | ---: | ---: | ---: |
| 2010 | $\$ 236,250$ | $\$ 546,657$ | $\$ 782,907$ |
| 2011 | 255,150 | 533,958 | 789,108 |
| 2012 | 264,600 | 520,180 | 784,780 |
| 2013 | 283,500 | 505,759 | 789,259 |
| 2014 | 292,950 | 490,167 | 783,117 |
| 2015 | 311,850 | 473,908 | 785,758 |
| 2016 | 330,750 | 456,444 | 787,194 |
| 2017 | 349,650 | 437,757 | 787,407 |
| 2018 | 368,550 | 417,827 | 786,377 |
| 2019 | 396,900 | 396,635 | 793,535 |
| 2020 | 415,800 | 373,814 | 789,614 |
| 2021 | 444,150 | 349,697 | 793,847 |
| 2022 | 472,500 | 323,603 | 796,103 |
| 2023 | 500,850 | 295,844 | 796,694 |
| 2024 | 529,200 | 266,419 | 795,619 |
| 2025 | 567,000 | 235,329 | 802,329 |
| 2026 | 595,350 | 202,017 | 797,367 |
| 2027 | 633,150 | 167,041 | 800,191 |
| 2028 | 680,400 | 129,843 | 810,243 |
| 2029 | 718,200 | 89,019 | 807,219 |
| 2030 | 765,450 | 45,927 | 811,377 |
|  | $\$ 9,412,200$ | $\$ 7,257,845$ | $\$ 16,670,045$ |
|  |  |  |  |

TRA's share of bond issuance costs are shown on the Statement of Plan Net Assets as Deferred Bond Charges and will be amortized over the 30 -year life of the bonds.

TRA is depreciating its share of the facility over 40 years. The depreciation schedule, shown in Figure 5, summarizes the asset valuation of the office building and building equipment.

## Figure 5

| Office Building and Equipment <br> Depreciation Schedule <br> (TRA Share @ 37.8\%) |  |
| :--- | ---: |
| June 30, 2009 |  |
| Historical Cost |  |
| FY 2009 Depreciation Amount | $\$ 11,266,265$ <br> (288,951) <br> Prior Year Accumulated <br> Depreciation <br> Net Asset Value of Building <br> and Equipment |

## S. Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions

Nearly all TRA employees are covered by the State Employees Group Insurance Plan (SEGIP) administered by the Department of Minnesota Management and Budget. At present, this plan subsidizes the cost of retiree insurance by charging a single premium rate for active employees and retirees, regardless of underwriting experience. At June 30, 2009, the SEGIP had an unfunded net obligation for future benefits of $\$ 73,127,000$ to be funded on a pay-as-you-go basis. TRA’s allocated portion of this liability is $\$ 24,000$.

## II. Contributions Required and Made

Minnesota Statutes, Chapter 354 sets the rates (page 74) for employee and employer contributions. These rates, expressed as level percentages of annual covered payroll, are determined to accumulate sufficient assets for paying benefits. Level percentage of payroll contribution rates are calculated using the entry age normal actuarial funding method. TRA also uses the level percentage of payroll method to amortize the fund's unfunded liability over a closed period ending June 30, 2037.

Contributions totaling \$452,760,735
(\$212,042,535 employee and \$240,718,200 employer) were received in accordance with the statutory contribution rates and amounts. On page 74, statutory contributions are projected as insufficient to meet the actuarially determined required contributions. The deficiency as a percent of covered payroll is 5.12 percent. This translates into a contribution deficiency of about $\$ 207.5$ million projected for fiscal year 2010. The Minnesota Legislative Commission on Pensions and Retirement annually reviews the adequacy of TRA's statutory contributions.

## III. Reserve Accounts

## A. Member Reserves

Accumulated member contributions, without interest, less the amounts refunded are recorded in the member reserve. Employees who terminate their employment prior to retirement may elect to receive a refund of their contributions plus interest or wait for a deferred benefit.

Amounts from ELSA Accounts (Note I, P) are considered as a member reserve since these funds are reserved to specific retirees participating in ELSA.

## B. Benefit Reserves

Employer contributions and investment income are recorded in the Benefit Reserve Designation. Administrative expenses, retirement, survivor and disability benefits, and investment management fees are paid from the benefit reserve.

## C. Minnesota Post Retirement Investment Fund (MPRIF)

For all retiring members, the required reserves to pay the cost of their annuity were transferred to the MPRIF where the funds were invested along with funds from other statewide retirement systems. Minnesota Laws (2008) Chapter 349, Articles 1 and 2 were enacted that provided that if the composite funding ratio of the MPRIF fell below 80 percent at the end of any fiscal year, the MPRIF would be abolished. As of June 30, 2008, the MPRIF funding ratio was calculated to be 79.7 percent. By statute, MPRIF was dissolved on June 30, 2009, its assets and liabilities merged back into the Basic (Active) Fund of each participating plan.

On June 30, 2009, the assets and accrued earnings of the MPRIF were valued by State Street Bank. \$16,711,638,000 in investments and \$441,000 in accrued income was distributed to the participating plans’ Basic Funds on June 30, 2009 based on their net participation at fair market value in the MPRIF, as determined using the formula in Minnesota Statutes Section 11A.18, Subd 7. TRA's share of the MPRIF distribution at its dissolution date was 45.888 percent or $\$ 7,668,877,000$, at fair value.

Under the 2008 legislation, future postretirement annual increases were modified. Beginning with the January 1, 2010 increase, TRA benefit recipients will receive a fixed 2.5 percent increase. Benefit recipients whose first benefit was paid after January 1, 2009, but before December 2, 2009 receive a prorated portion of the January 1, 2010 increase. The 2.5 percent increase is fixed, regardless of the underlying investment performance or inflation calculation for a particular fiscal year.

## IV. Funded Status: TRA Plan

## A. Results of Most Recent Valuation

The funded status of the TRA plan as of July 1, 2009, the most recent actuarial valuation date is as follows:
(Dollars in thousands)
Actuarial Accrued Liabilities (AAL) \$23,114,802
Actuarial Value of Assets $\$ 17,882,408$
Unfunded Actuarial
Accrued Liability (UAAL) \$ 5,232,394
Ratio of Assets to AAL
77.36\%

Active Member Payroll
\$ 3,761,484
UAAL as a Percentage of Active Member Payroll 139.10\%

An actuarial valuation of a pension plan involves estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, levels of pay, and mortality. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past assumptions and new estimates are made about the future.

## B. Description of Schedule of Funding Progress (Page 33)

The funding percentage of the actuarial accrued liability funded ratio is a measure intended to help users assess the plan's funding status using a multi-year trend analysis to gauge progress being made in accumulating sufficient assets to pay benefits when due.

The laws governing TRA require that actuarial liabilities be amortized over a fixed amortization date ending June 30, 2037. If actual financial experiences are less favorable than assumed financial experiences, the difference will be added to the unfunded actuarial accrued liability.

In an inflationary economy, the value of the dollar is decreasing. This environment results in employee pay increasing in dollar amount, with a corresponding increase in unfunded actuarial accrued liabilities. Reviewing the dollar amounts of unfunded liabilities in isolation can be misleading. Unfunded actuarial accrued liabilities divided by active employee covered salaries (covered payroll) provide an index that adjusts for the effects of inflation. A stronger system will have a smaller ratio of unfunded actuarial accrued liabilities to active member payroll. Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

On July 1, 2004, TRA was considered actuarially fully funded. For the past five years, TRA has had a funding ratio of less than 100 percent. The large decline in TRA's funding percentage the past two years is primarily due to the negative actuarial experience associated with lower investment earnings than assumed. Due to the current contribution rate deficiency of 5.12 percent and the presence of over $\$ 4$ billion (Page 70, Line 6f) in deferred investment losses produced by the five year smoothing of investment gains and losses, TRA's actuarial consultant has noted that further deterioration should be expected unless plan changes are made or favorable actuarial experience occurs.

## C. Description of the Schedule of Contributions from Employers and Other Contributing Entities (Page 33)

The amount of required employer contributions and actual percentage contributed are presented in the schedule. Employer contribution rates for TRA are set by Minnesota Statute. Minnesota Statute also specifies direct contribution amounts contributed by the State of Minnesota, the City of Minneapolis and the Minneapolis School District.

## D. Actuarial Assumptions and Methods

## Actuarial Cost Method

The entry age normal actuarial cost method is the actuarial valuation to determine benefit liabilities and normal cost. Differences between assumed and actual experience (actuarial gains and losses) become part of the unfunded actuarial accrued liabilities. Unfunded actuarial accrued liabilities are amortized over a closed period ending June 30, 2037.

## Asset Valuation Method

For actuarial purposes, assets related to active members are valued utilizing a method which recognizes market value smoothed over a five-year period. The 2009 legislature modified the calculation of the actuarial value of assets. The investment loss in fiscal year 2009 associated with the Minnesota Post Retirement Investment Fund (Post Fund) will be recognized incrementally over five years at 20 percent per year, similar to the smoothing of active fund assets. Prior to June 30, 2009, Post Fund investment gain and losses were not smoothed.

## Significant Actuarial Assumptions

Assumptions used by the actuary for funding purpose are set by Minnesota Statute. They include:

- Inflation Rate - 3.0 percent
- Investment Return - An investment return of 8.5 percent compounded annually for all members, retirees, and beneficiaries was assumed.
- Salary Scale - The active member payroll growth was assumed to increase 4.5 percent annually. Individual salary increases were based on select and ultimate rates by age, with ultimate rates of 4.5 percent -5.5 percent.
- Benefit Payments - Beginning January 1, 2010, benefit recipients received a fixed annual increase of 2.5 percent, regardless of underlying investment or inflation performance.
- Amortization Method - Level percent, closed.
- Remaining Amortization Period 28 years


## E. Projection of Benefits

Projections of benefits for financial reporting purposes are based on the plan provisions contained in Minnesota Statutes. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in the actuarial value of assets for TRA assets. The preparation of the actuarial valuation report is also defined by the Standards for Actuarial Reporting promulgated by the Minnesota Legislative Commission on Pensions and Retirement.

## Required Supplementary Information

Schedule of Funding Progress (Unaudited)
Dollar Amounts in Thousands

| Actuarial Valuation Date | Actuarial Value of Assets (A) | Actuarial Accrued Liability (AAL) (B) | $\begin{gathered} \text { Unfunded } \\ \text { AAL } \\ (\mathrm{UAAL}) \\ (\mathrm{B}-\mathrm{A}) \end{gathered}$ |  | Actual <br> Covered <br> Payroll <br> (Previous FY) <br> (C) | UAAL as Percentage of Covered Payroll (B - A) / (C) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 07/01/00 | \$15,573,151 | \$14,802,441 | \$ (770,710) | 105.21\% | \$2,704,575 | -28.50\% |
| 07/01/01 | \$16,834,024 | \$15,903,984 | \$ $(930,040)$ | 105.85\% | \$2,812,000 | -33.07\% |
| 07/01/02 | \$17,378,994 | \$16,503,099 | \$ $(875,895)$ | 105.31\% | \$2,873,771 | -30.48\% |
| 07/01/03 | \$17,384,179 | \$16,856,379 | \$ $(527,800)$ | 103.13\% | \$2,952,887 | -17.87\% |
| 07/01/04 | \$17,519,909 | \$17,518,784 | \$ $(1,126)$ | 100.01\% | \$3,032,483 | -0.04\% |
| 07/01/05 | \$17,752,917 | \$18,021,410 | \$ 268,493 | 98.51\% | \$3,121,571 | 8.60\% |
| 07/01/06 | \$19,035,612 | \$20,679,111 | \$1,643,499 | 92.05\% | \$3,430,645 | 47.91\% |
| 07/01/07 | \$18,794,389 | \$21,470,314 | \$2,675,925 | 87.54\% | \$3,532,159 | 75.76\% |
| 07/01/08 | \$18,226,985 | \$22,230,841 | \$4,003,856 | 81.99\% | \$3,645,230 | 109.84\% |
| 07/01/09 | \$17,882,408 | \$23,114,802 | \$5,232,394 | 77.36\% | \$3,761,484 | 139.10\% |

## Schedule of Contributions From the Employer and Other Contributing Entities (Unaudited)

Dollar Amounts in Thousands

| Year Ended June 30 | Actuarially* Required Contribution Rate <br> (a) | Actual Covered Payroll (b) | Actual <br> Member Contributions (c) | (ARC) <br> Annual Required Contributions [(a) x (b)] - (c) | Actual Employer Contribution | Percentage Contributed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 2000 | 8.36\% | \$2,704,575 | \$138,696 | \$ 87,406 | \$134,419 | 153.79\% |
| 2001 | 7.92\% | \$2,812,000 | \$145,075 | \$ 77,635 | \$139,799 | 180.07\% |
| 2002 | 7.85\% | \$2,873,771 | \$152,331 | \$ 73,260 | \$142,222 | 194.13\% |
| 2003 | 7.57\% | \$2,952,887 | \$155,577 | \$ 67,957 | \$149,481 | 219.96\% |
| 2004 | 8.37\% | \$3,032,483 | \$159,140 | \$ 94,679 | \$151,029 | 159.52\% |
| 2005 | 8.46\% | \$3,121,571 | \$160,982 | \$103,103 | \$157,693 | 152.95\% |
| 2006 | 9.05\% | \$3,430,645 | \$177,085 | \$133,389 | \$200,286 | 150.15\% |
| 2007 | 12.16\% | \$3,532,159 | \$199,869 | \$229,642 | \$209,219 | 91.11\% |
| 2008 | 13.44\% | \$3,645,230 | \$209,592 | \$280,327 | \$231,562 | 82.60\% |
| 2009 | 15.08\% | \$3,761,484 | \$212,043 | \$355,189 | \$240,718 | 67.72\% |

[^1]This page intentionally left blank.

## Supporting Schedules to Financial Section

## Teachers Retirement Fund Administrative Expenses

For the Fiscal Year Ended June 30, 2009
Personal Services
Salaries ..... \$ 4,786,367
Employer Contributions to Teachers Retirement Association ..... 267,444
Employer Contributions to Social Security ..... 346,638
Insurance Contributions ..... 963,942
Employee Training ..... 50,855
Workers' Compensation ..... 3,738
Subtotal ..... \$ 6,418,984
Communication
Duplicating and Printing Expense ..... \$ 107,124
Postage ..... 397,337
Telephone ..... 76,948
Subtotal ..... \$ 581,409
Office Building Maintenance
Lease of Office and Storage Space ..... 64,758
Building and Operating Expenses ..... 439,342
Rental of Office Machines/Furnishings ..... 29,319
Repairs and Maintenance ..... 158,060
Building Depreciation ..... 288,950
Deferred Bond Charge Amortization ..... 5,030
Bond Interest Expense ..... 557,924
Subtotal ..... \$ 1,543,383
Professional Services
Actuarial Services ..... \$ 258,430
Audit Fees ..... 123,991
Computer Support Services ..... 953,753
Legal Fees ..... 12,706
Management Consultant Services ..... 85,234
Medical Services ..... 44,560
Subtotal ..... \$ 1,478,674
Other Operating Expenses
Department Head Expenses ..... \$ 1,500
Depreciation of Office Furniture and Equipment ..... 244,878
Dues and Subscriptions ..... 15,375
Insurance Expense ..... 4,959
Miscellaneous Administrative Expenses ..... 13,568
State Indirect Costs ..... 161,377
Stationery and Office Supplies ..... 55,646
Travel - Director and Staff ..... 47,125
Travel - Trustees ..... 41,125
Subtotal ..... 585,553
Total Administrative Expenses ..... \$ 10,608,003

## Teachers Retirement Fund Schedule of Investment Management Expenses

## For the Fiscal Year Ended June 30, 2009

Investment Pool Managers
Bond Pool Managers ..... \$ 1,269,812
Equity Pool Managers ..... 6,329,971
Financial Control Systems ..... 68,476
Investment Board ..... 590,381
MPRIF Managers ..... 11,539,265
Pension Consulting. ..... 6,494
Nuveen Investment Solutions, Inc ..... 60,066
Total Investment Expenses ..... \$ 19,864,465

## Teachers Retirement Fund Schedule of Changes in Plan Net Assets

For Fiscal Year Ended June 30, 2009
Additions
Contributions:
Employee Contributions ..... \$ 210,932,520
Employer Contributions ..... 0
Direct Aid (State/City/County) ..... 0
Earnings Limitation Savings Account (ELSA) ..... 2,301,205
Total Contributions ..... 213,233,725
Investment Income:
Net Appreciation in FMV of Investments ..... 0
Interest ..... 0
Dividends ..... 0
Net Gain on Sales of Pools ..... 0
Distributed Income from Post Fund ..... 0
Investment Management Fees ..... 0
Net Investment Income (Loss) ..... 0
From Securities Lending Activities:
Securities Lending Income ..... 0
Securities Lending Borrower Rebates ..... 0
Securities Lending Management Fees ..... 0
Net Income from Securities Lending. ..... 0
Other Income ..... 0
Total Additions (Subtractions) ..... \$ 213,233,725
Deductions
Benefits Paid ..... \$ 0
Earnings Limitation Savings Account (ELSA) ..... 0
Refunds of Member Contributions ..... 14,150,027
Administrative Expenses ..... 0
Interest Paid Post Fund ..... 0
Total Expenses \$ 14,150,027
Net Increase (Decrease) ..... \$ 199,083,698
Other Changes in Reserves
Annuities Awarded ..... \$ (43,705,906)
Other Transfers ..... 0
Change in Assumptions ..... 0
Mortality Loss (Gain) ..... 0
Total Other Changes ..... \$ $(43,705,906)$
Net Assets Held in Trust for Pension Benefits
Beginning of Year ..... 1,883,371,483
End of Year ..... \$ 2,038,749,275
Note: Reserve amounts rounded to nearest dollar.

Reserves for 2009

| Post <br> Fund | Benefit | $\begin{gathered} \text { Total } \\ \text { June 30, } 2009 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: |
| 0 | \$ 1,110,015 | \$ | 212,042,535 |
| 0 | 220,270,172 |  | 220,270,172 |
| 0 | 20,448,028 |  | 20,448,028 |
| 0 | 0 |  | 2,301,205 |
| 0 | 241,828,215 |  | 455,061,940 |
| (2,964,289,270) | (810,348,778) |  | (3,774,638,048) |
| 0 | 5,169,264 |  | 5,169,264 |
| 0 | (471,117,813) |  | (471,117,813) |
| 0 | $(202,510,917)$ |  | $(202,510,917)$ |
| 1,122,838,438 | 0 |  | 1,122,838,438 |
| $(11,539,265)$ | (8,325,200) |  | $(19,864,465)$ |
| $(1,852,990,097)$ | (1,487,133,444) |  | (3,340,123,541) |
| 0 | 39,497,354 |  | 39,497,354 |
| 0 | $(13,902,381)$ |  | $(13,902,381)$ |
| 0 | (3,839,722) |  | (3,839,722) |
| 0 | 21,755,251 |  | 21,755,251 |
| 0 | 4,225,195 |  | 4,225,195 |
| \$(1,852,990,097) | \$ (1,219,324,783) | \$ | (2,859,081,155) |
| \$ 1,367,258,918 | \$ 14,107,343 | \$ | 1,381,366,261 |
| 2,301,205 | 0 |  | 2,301,205 |
| 0 | 279,324 |  | 14,429,351 |
| 0 | 10,608,003 |  | 10,608,003 |
| 0 | 5,354,052 |  | 5,354,052 |
| \$ 1,369,560,123 | \$ 30,348,722 | \$ | 1,414,058,872 |
| \$ (3,222,550,220) | \$ (1,250,673,505) | \$ | (4,273,140,027) |
| \$ 309,527,559 | \$ (265,821,653) | \$ | 0 |
| $(7,668,877,203)$ | 7,668,877,203 |  | 0 |
| 0 | 0 |  | 0 |
| 0 | 0 |  | 0 |
| \$ (7,359,349,644) | \$ 7,403,055,550 | \$ | 0 |
| 10,581,899,864 | 5,641,694,413 |  | 18,106,965,760 |
| 0 | \$11,795,076,458 | \$ | 13,833,825,733 |

## Teachers Retirement Fund Schedule of Professional Consultant Expenses

## For the Fiscal Year Ended June 30, 2009

Investment Pool Managers
Investment Board ..... \$ 590,381
Financial Control Systems ..... 68,476
Pension Consulting. ..... 6,494
Nuveen Investment Solutions, Inc ..... 60,066
Equity Pool Managers ..... 6,329,971
Bond Pool Managers ..... 1,269,812
MPRIF Managers ..... 11,539,265
Total Investment Pool Managers ..... \$ 19,864,465
MIS Programmers/Analysts
Fulcrum Consulting ..... \$ 270,137
John Carroll ..... 375
Keystone ..... 383,494
Total MIS Programmers/Analysts Expenses ..... \$ 654,005
Actuarial
Mercer HR Consulting ..... \$ 205,215
Segal Company (LCPR) ..... 8,215
Total Actuarial Expenses ..... 258,430
Legal
Attorney General ..... \$ 12,070
Paradigm Reporting and Captioning ..... 636
Total Legal Expenses ..... \$ 12,706
Audit
Berwyn Group ..... \$ 6,010
Legislative Auditor ..... 117,876
Minnesota Department of Health ..... 105
Total Audit Expenses ..... \$ 123,991
Management Consulting
CEM Benchmarking ..... 35,000
McLagan Partners ..... 4,947
Minnesota Department of Administration (Management Analysis) ..... 14,355
VR Election Services ..... 30,932
Total Management Consulting ..... \$ 85,234
Medical
Minnesota Department of Health ..... $\$ \quad 44,560$
Total Medical Expenses ..... $\$ \quad 44,560$
Total Consultant Expenses \$ 21,043,391

## Investments

$$
\begin{aligned}
& \text { Investments } \\
& \text { Investments } \\
& \text { Investments } \\
& \text { Investments } \\
& \text { Investments } \\
& \text { Investments }
\end{aligned}
$$

# State Board of Investment Letter 

MINNESOTA
STATE BOARD OF INVESTMENT


Board Members:
Governor
Tim Pawlenty
State Auditor Rebecca Otto

Secretary of State Mark Ritchie

Attorney General Lori Swanson

## Executive Director

60 Empire Drive Suite 355
St. Paul, MN 55103
(651) 296-3328

FAX (651) 296-9572 E-mail:
minn.sbi@state.mn.us www.sbi.state.mn.us

An Equal Opportunity Employer

December 7, 2009

Fiscal Year 2009 Investment Report: State Board of Investment

## INVESTMENT AUTHORITY

The assets of the Teacher Retirement Association are invested along with the assets of the Public Employees Retirement Association and the Minnesota State Retirement System under the direction and authority of the State Board of Investment in accordance with Minnesota Statutes, Chapters 11A and 356A. The SBI includes Minnesota's governor, auditor, secretary of state and attorney general. The Legislature has established a 17 -member Investment Advisory Council to advise the SBI and its staff on investment-related matters. TRA's executive director is a member of the Council.

## INVESTMENT POLICY

Investment policy stipulates that the SBI will operate within standard investment practices of the prudent person. The SBI will exercise the judgment and care, under prevailing circumstances, which persons of prudence, discretion and intelligence exercise in the management of their own affairs. This work is not for speculation, but for investment, considering the probable safety of their capital, as well as the probable income to be derived from this activity (Minnesota Statutes, section 11A.09). The SBI is authorized to own government obligations, corporate obligations, various short-term obligations, corporate stocks, venture capital interests, mutual funds, resource investments and real estate interests subject to specific boundaries (Minnesota Statutes, Section 11A.24). Particularly, pensionfund assets are to be invested for the exclusive benefit of the fund members (Minnesota Statutes, Section 356.001 , subd. 1).

## INVESTMENT OBJECTIVES

During fiscal year 2009, pension-fund assets under the authority of the Minnesota State Board of Investment were managed as two pools of assets, with distinct asset allocation policies. One pool of assets, the Basic Retirement Funds (Basics), was made up of the assets of active employees, and the other pool of assets, the Post Retirement Investment Fund (Post Fund) was composed of the assets of retired employees.

The 2008 legislature enacted legislation that established minimum funding levels for the Post Retirement Fund. The legislation mandated that if the funding level of the Post Fund fell below a certain percentage, the Post Fund and the Basic Funds would merge at the end of the following fiscal year. This minimum funding event was triggered as of the July 1, 2008 actuarial valuation, and the Post Fund was merged into the Basics Funds on June 30, 2009. In order to effect the transaction on June $30^{\text {th }}$, as required by the legislation, the Post Fund assets were transferred using a value as of the close of business on June 29, 2009. As a result, the Post Fund had a market value of zero as of the last day of the fiscal year, June 30, 2009. All performance reported for the Post Fund is through June 29, 2009. All performance reported for the Basic Fund is through June 30, 2009. The Combined Funds performance included the performance of all retirement assets through June 30, 2009.

Beginning July 1, 2009, all TRA assets are invested in the Combined Funds. Prospectively, the Combined Funds will have a distinct asset allocation, which differs from the historic policy asset allocation of either the Basics or the Post Fund. The new asset allocation policy of the Combined Funds was approved by the State Board of Investment on December 10, 2008, as follows:

| Domestic Equity | $45 \%$ |
| :--- | ---: |
| International Equity | $15 \%$ |
| Alternatives | $20 \%$ |
| Fixed Income | $18 \%$ |
| Cash | $2 \%$ |

TRA's pension contributions from employees and employers are invested in the Combined Funds. TRA does not own any underlying assets, but instead owns shares of the asset class pools of the Combined Funds. Since these assets normally accumulate in the Combined Funds for thirty or more years, SBI's objective is to take advantage of the long investment time horizon offered by public and private investments in order to meet its actuarial return target of 8.5 percent annually and ensure that sufficient funds are available to finance promised benefits at the time of retirement.

## COMBINED FUNDS

The Combined Funds represent the assets of the active and retired public employees who participate in the defined benefit plans of TRA, PERA, and MSRS. The long-term objectives of the Combined Funds are to:

- Provide returns 3 to 5 percentage points greater than inflation over the latest 20 -year period,
- Outperform a composite market index weighted in a manner that reflects the actual asset mix of the Combined Funds over the latest 10 -year period.

As of June 30, 2009, the Combined Funds returned 5.0 percentage points above the Consumer Price Index over the last 20 years and matched the Composite Index ( 2.4 percent) over the past ten years.

## INVESTMENT PRESENTATION

Data reported in the investment section of this comprehensive annual financial report is presented in conformance with the presentation standards of the Chartered Financial Analysts (CFA) Institute. Investment returns were prepared using a time-weighted rate of return methodology in accordance with those standards.

Respectfully submitted,


Howard Bicker<br>Executive Director

## Investment Summary

Prepared by TRA management with data obtained from the State Board of Investment's Fiscal Year 2009 Quarterly Investment Reports

The assets of the Minnesota Teachers Retirement Association (TRA) are invested under the direction and authority of the State Board of Investment (SBI). The investment portfolio of TRA had a fair value of approximately \$ 13.82 billion as of June 30, 2009.
The four-member SBI Board consists of Governor Tim Pawlenty (Chair), Attorney General Lori Swanson, Secretary of State Mark Ritchie, and State Auditor, Rebecca Otto. Howard Bicker serves as SBI’s Executive Director.

The Legislature has established a 17-member Investment Advisory Council (IAC) to advise the SBI and its staff on investment-related matters.

- The mission statement of the Investment Advisory Council is: The IAC fulfills its statutory duty to the SBI by providing advice and independent due diligence review of the investment policy and implementation recommendations that guide the SBI's investment of assets.
- SBI appoints ten members experienced in finance and investment. These members traditionally have come from the Minneapolis and Saint Paul corporate investment community.
- The Commissioner of Minnesota Management and Budget (MMB) and the executive directors of TRA, the Minnesota State Retirement System and the Public Employees Retirement Association are permanent members of the Council.


## Investment Advisory Council

As of December 2009

Jeffery Bailey, Chair
Director, Benefits Finance
Target Corporation
Malcolm W. McDonald, Vice Chair
Director and Corporate Secretary (Retired)
Space Center, Inc.
Frank Ahrens, II
Governor's Appointee
Active Employee Representative

## David Bergstrom

Executive Director
MN State Retirement System
John E. Bohan
Vice Pres., Pension Investments (Retired)
Grand Metropolitan-Pillsbury

## Kerry Brick

Manager, Pension Investments
Cargill, Inc.
Dennis Duerst
Director, Benefit Funds
Investment
3M Company
Douglas Gorence
Chief Investment Officer
U of M Foundation Investment Advisors

## Laurie Fiori Hacking

Executive Director
Teachers Retirement Association
Tom Hanson
Commissioner
MN Management \& Budget
Heather Johnston
Governor’s Appointee
Active Employee Representative
P. Jay Kiedrowski

Senior Fellow
Humphrey Institute
University of Minnesota
LeRoy Koppendrayer
Governor’s Appointee
Retiree Representative
Judith W. Mares
Chief Investment Officer
Alliant Techsystems, Inc.

## Gary Martin

Vice President, Pension
Investments
SUPERVALU, Inc.

## Gary R. Norstrem <br> Treasurer (Retired) <br> City of Saint Paul <br> Mary Vanek <br> Executive Director <br> Public Employees Retirement Association

Nuveen Investment Solutions, Inc. of Chicago are general consultants to the SBI. Pension Consulting Alliance of Studio City, California, serves as a special project consultant. Investment performance methodology is reported in compliance with the mandatory requirements of the Chartered Financial Analyst (CFA) Institute. All investments made by SBI are governed by the prudent person rule and other standards codified in Minnesota Statutes, Chapters 11A and 356A.

- Two active employee representatives and one retiree representative are appointed to the Council by the Governor.
- All proposed investment policies are reviewed by the full Council before they are presented to SBI for action.

During fiscal year 2009, TRA retirement assets were managed as two pools of assets, with distinct asset allocation policies. One pool of assets, the Basic Retirement Funds (Basics) consisted of assets of active employees, and the other pool of assets, the Post Retirement Fund (Post Fund) was composed of the assets of retired employees. At the end of the fiscal year, June 30, 2009, the assets of the two pools were legally merged. To assist the reader, the structure, objectives and investment performance of the Basic and Post Retirement Funds during fiscal year 2009 are separately described. A description of the combined fund after fiscal year end follows.

## Basic Retirement Funds

## Investment Objectives

During fiscal year 2009, the pension contributions of active TRA members were invested through the Basic Retirement Funds (Basic Funds) administered by SBI. SBI had one overriding responsibility with respect to its management of the Basic Funds: to ensure that sufficient funds are available to finance promised benefits at the time of retirement. All assets in the Basic Retirement Funds, including TRA, were managed externally by outside money management firms retained by contract.
The Basic Funds included the pension contributions of most Minnesota public employees, including TRA members, during their working years. Employee and employer contribution rates are specified in state law as a percentage of an employee's salary. The rates are set so that contributions plus expected investment earnings will cover the projected cost of promised pension benefits. In order to meet these projected pension costs, the Basic Funds needed to generate investment returns of at least 8.5 percent on an annualized basis over time.

Normally, pension assets accumulated in the Basic Funds for thirty to forty years during an employee’s years of active service. This provided the Basic Funds with a long investment time horizon and permitted SBI to take advantage of long run return opportunities offered by common stocks and other investments in order to meet its actuarial return target.
SBI measured the performance of the Basic Funds relative to a composite of market indices that is weighted in a manner that reflects their long-term asset allocation policy. The Basic Funds were expected to exceed the composite index over a ten-year period. Investment returns were prepared using a timeweighted rate of return methodology, based upon fair values, net of investment expenses. Performance was measured net of all fees and costs to assure that SBI's focus is on its true net return.

## Asset Allocation

The allocation of assets among stocks, bonds, and alternative investments can have a dramatic impact on investment results. In fact, asset allocation decisions overwhelm the impact of individual security selection within a total portfolio. Consequently, SBI focused considerable attention on the selection of an appropriate long-term asset allocation policy for the Basic Funds. The asset allocation policy that was in place during the last quarter of fiscal year 2009 was:

| Basic Funds Asset Mix  <br>  March 31, 2009 <br>  Actual Mix |  |  |
| :--- | :---: | :---: |
| Policy Mix |  |  |
| Domestic Stocks | $41.7 \%$ | $45.0 \%$ |
| International Stocks | $14.1 \%$ | $15.0 \%$ |
| Bonds | $20.5 \%$ | $19.0 \%$ |
| Alternative Assets | $21.4 \%$ | $20.0 \%$ |
| Unallocated Cash | $\underline{2.3 \%}$ | $\underline{1.0 \%}$ |
| Total | $\underline{\underline{100.0 \%}}$ | $\underline{\underline{100.0 \%}}$ |

## Total Return Vehicles

SBI invested the majority of the Basic Funds’ assets in common stocks (both domestic and international). A large allocation was consistent with the investment time horizon of the Basic Funds and the advantageous long-term risk-return characteristics of common stocks. Including international stocks in the asset mix
allowed SBI to diversify its holdings across world markets and offered the opportunity to enhance returns and reduce the risk/volatility of the total portfolio. The rationale underlying the inclusion of private equity alternative assets (e.g., venture capital) was similar.
SBI recognized that this sizable policy allocation to common stock and private equity likely would produce more volatile portfolio returns than a more conservative policy focused on fixed income securities. It was understood that this policy may result in quarters or even years of disappointing results. Nevertheless, the long run return benefits of this policy were expected to compensate for the additional volatility.

## Diversification Vehicles

Other asset classes were included in the Basic Funds both to provide some insulation against highly inflationary or deflationary environments and to diversify the portfolio sufficiently to avoid excessive return volatility.
Real estate and resource (oil and gas) investments provided an inflation hedge that other financial assets did not offer. In periods of rapidly rising prices, these "hard" assets have appreciated in value at a rate at least equal to the inflation rate. Further, even under more normal financial conditions, such as low to moderate inflation, the returns on these assets were not highly correlated with common stocks. As a result, their inclusion in the Basic Funds served to dampen return volatility.

Yield oriented alternative investments provided the opportunity for higher long term returns than those typically available from bonds yet still generate sufficient current income. Typically, these investments (e.g., subordinated debt, mezzanine or resource income investments such as producing properties) were structured more like fixed income securities with the opportunity to participate in the appreciation of the underlying assets. While these investments may have an equity component, they displayed a return pattern more like a bond. As such, they helped reduce the volatility of the total portfolio, while generating higher returns relative to more traditional bond investments.

The allocation to bonds acted as a hedge against a deflationary economic environment. In the event of a major deflation, high quality fixed income assets, particularly long-term bonds, were expected to protect principal and generate significant capital gains. And, like real estate and resource funds, under normal financial conditions, bonds helped to diversify the Basic Funds and thereby controlled return volatility.

## Rate of Return Results

The Basic Funds produced a total rate of return for fiscal year 2009 of a negative 19.6 percent. Over the last five years, the Basic Funds generated an annualized return of 2.6 percent.

As stated earlier, the Basic Funds were expected to exceed the return of a composite of market indices over a ten-year period. Performance relative to this standard measured two effects:

Basic Funds Performance vs. Composite Index


Note: Performance of the Basic Funds through June 29, 2009 and performance of the Merged Fund through June 30, 2009.

- The ability of the managers selected by SBI, in aggregate, to add value to the returns available from the broad capital markets.
- The impact of SBI's rebalancing activity. (SBI rebalances the total fund when market movements take the stock or bond segments above or below their long-term asset allocation targets. The policy imposes a low risk discipline of buy low-sell high among asset classes on a total fund basis.)

For the ten-year period ending June 30, 2009, the Basic Funds matched the composite index investment performance of 2.4 percent annualized. The Funds underperformed the composite index by 0.1 percentage point over the last five years, and underperformed the index over the most recent fiscal year by 0.1 percentage point. Actual returns relative to the total fund composite index over the last five years are shown in the graph on the previous page.

## Post Retirement Fund

During fiscal year 2009, TRA assets of retired members were contained in the Minnesota Post Retirement Investment Fund (Post Fund). The Post Fund included the assets of retired public employees covered by nine statewide retirement plans: the eight plans that participate in the Basic Funds, as well as the Legislative and Survivors Retirement Fund. All assets in the Post Retirement Fund are managed externally by outside money management firms retained by contract.

Based on legislation passed by the 2008 Legislature, the Post Retirement Fund would be merged with the Basic Funds if its actuarial funding condition met certain funding parameters, including falling under the 80 percent funding level at the end of any fiscal year. In November 2008, the Executive Director of the SBI, after reviewing actuarial results of the participating plans, certified that the Post Fund funding ratio on June 30, 2008 equaled 79.7 percent. Under the legislation, the Post Retirement Fund was then set to dissolve one year later, on June 30, 2009.

Once the merger trigger had occurred, special transition rules applied during the remainder of fiscal year 2009. When a teacher retired prior to January 1, 2009, TRA transferred assets from the TRA Basic Fund on behalf of the member to the Post Fund. The lump-sum amount, or required reserves, was determined to equal the present value of the expected benefit payments to be made to the retiring member over an actuarial lifetime. The lump sum transferred amount assumed that the required reserves transferred would earn 6 percent investment earnings annually. Beginning January 1, 2009, TRA did not transfer required reserves to the Post Retirement Fund for newly retiring teachers since the Post Retirement Fund was set to dissolve at the end of the fiscal year.

In order to accomplish the merger by the close of the business day June 30, 2009, the assets were valued using the June 29, 2009 fair value.
On June 29, 2009, TRA assets in the Post Fund of $\$ 7.67$ billion were transferred to and merged with the TRA Fund.

## Investment Objectives

The investment time horizon of the Post Fund was 15-20 years and corresponded to the length of time a typical retiree can be expected to draw benefits. While this was shorter than the time horizon of the Basic Funds, it was still sufficiently long to allow SBI to take advantage of the long-run return opportunities offered by common stock in order to meet its actuarial return target as well as to finance retirement benefit increases. During the last quarter of fiscal year 2009, the asset allocation of the Post Retirement Fund was as follows:

| Post Fund Asset Mix <br> March 31, 2009 <br> Actual Mix |  |  |
| :--- | :---: | :---: |
|  | Policy Mix |  |
| Domestic Stocks | $41.9 \%$ | $45.0 \%$ |
| International Stocks | $14.1 \%$ | $15.0 \%$ |
| Bonds | $25.9 \%$ | $25.0 \%$ |
| Alternative Assets | $13.0 \%$ | $12.0 \%$ |
| Unallocated Cash | $\underline{\underline{100.0 \%}}$ | $\underline{\underline{100.0 \%}}$ |
| Total | $\underline{\underline{3.0 \%}}$ |  |

SBI measured the performance of the Post Fund relative to a composite of market indices that is weighted in a manner that reflected its long-term asset allocation policy. The Post Fund was expected to exceed the composite index over a ten-year period. Investment returns were prepared using a timeweighted rate of return methodology, based upon fair values, net of investment expenses. Performance was measured net of all fees and costs to assure that SBI's focus was on true net return.

## Asset Allocation

The asset allocation policy and actual asset mix of the Post Fund are presented in the table on the previous page. The majority of the Post Fund's assets were invested in common stocks (both domestic and international). A large allocation was consistent with the moderately long time horizon of the Post Fund and the advantageous long-term, risk-return characteristics of common stocks. Including international stocks in the asset mix allowed SBI to diversify its holdings across world markets and offered the opportunity to enhance returns and reduce the risk/volatility of the total portfolio.
SBI recognized that this sizable allocation was likely to produce more volatile portfolio returns than a more conservative policy focused on fixed income securities. It was understood that this policy could result in quarters or even years of disappointing results. Nevertheless, the long-run return benefits of this policy were expected to compensate for the additional volatility.
The Board included other asset classes in the Post Fund both to provide some insulation against highly deflationary environments and to diversify the portfolio sufficiently to avoid excessive return volatility. The Post Fund invested in private equity, real estate, and resource investments as well as yield-oriented investments as part of its allocation to alternative investments.
Real estate and resource (oil and gas) investments provided an inflation hedge that other financial assets could not offer. In periods of rapidly rising prices, these assets have appreciated in value at a rate at least equal to the inflation rate. Further, even under more normal financial conditions, such as low to moderate inflation, the returns on these assets are not highly correlated with common stocks. As a result, their inclusion in the Post Fund also served to dampen return volatility.
The bonds in the Post Fund acted as a hedge against a deflationary economic environment. In the
event of a major deflation, high quality fixed income assets, particularly long term bonds, were expected to protect principal and generate significant gains. And, under normal financial conditions, bonds diversified the Post Fund, thereby controlled return volatility on a year to year basis.
Yield oriented alternative investments provided the opportunity for higher long term returns than those typically available from bonds, yet still generated sufficient current income to be compatible with the objectives of the Post Fund. Typically, these investments (e.g., subordinated debt, mezzanine or resource income investments such as producing properties) were structured more like fixed income securities with the opportunity to participate in the appreciation of the underlying assets. While these investments may have an equity component, they displayed a return pattern more like a bond. As such, they were designed to help reduce the volatility of the total portfolio and generate higher returns relative to more traditional bond investments.

## Investment Management and Performance

For fiscal year 2009, the Post Fund produced a total rate of return of negative 17.5 percent. The Post Fund was expected to exceed the return of a composite of market indices over a ten-year period. Through June 29, 2009, the Post Fund's performance matched

Post Fund Performance vs. Composite Index


Note: Performance figures are through June 29, 2009 and the dissolution of the Post Retirement Fund.
its composite market index of 2.5 percent annualized for the most recent ten year period since July 1, 1999. The fund underperformed the composite index by 0.3 percentage points for the most recent five year period. For the most recent fiscal year, the fund trailed the composite index by 0.7 percentage points. Actual returns relative to the total fund composite index over the last five years are shown in the graph on the previous page.
The Basic Funds and the Post Fund shared the same stock and bond managers. This was accomplished by grouping managers together, by asset class, into several investment pools. The individual funds participated in the investment pools by purchasing units which function much like shares of a mutual fund. This investment management structure allowed SBI to gain greater operating efficiency within asset classes and to keep money management costs as low as possible for all participants. Investment management fees are summarized on the schedule on page 37. Further information on investment activity, management fees and commissions paid, and a listing of specific investments owned by the pooled accounts can be obtained from the Minnesota State Board of Investment, Suite 355, 60 Empire Drive, Saint Paul, MN 55103.

## Investment Performance: Fiscal Year 2009 (Combined Basic and Post Fund)

The Minnesota State Board of Investment reports investment results of the Combined Funds - composed of both the Basic Funds (active members) and the Post Fund (retired members). During fiscal year 2009, the two funds were legally separate, but were "combined" for reporting and comparison purposes only.

On page 50, the investment performance of the Basic Funds and the Post Retirement Fund are combined and reported.

## Investment Management: Beginning July 1, 2009

Beginning July 1, 2009, TRA assets formerly held in the Basic Funds and the Post Retirement Fund are managed in the TRA Fund, a part of the Combined Retirement Funds managed by SBI. Going forward, the Combined Funds will
have a distinct asset allocation policy, differing slightly from the historic asset allocation policies used for either the Basic Funds or the Post Retirement Funds. TRA assets in the Combined Funds upon merger of the two funds were approximately $\$ 13.82$ billion at fair value. The new asset allocation policy of the Combined Funds was approved by the SBI on December 10, 2008 as follows:

| Combined Funds <br> June 30, 2009 |  |  |
| :--- | ---: | ---: |
|  | Actual | Policy Mix |
| Domestic Stocks | $44.6 \%$ | $45.0 \%$ |
| International Stocks | $16.3 \%$ | $15.0 \%$ |
| Bonds | $22.3 \%$ | $18.0 \%$ |
| Alternative Assets | $14.8 \%$ | $20.0 \%$ |
| Unallocated Cash | $\underline{\underline{100.0 \%}}$ | $\underline{\underline{100.0 \%}}$ |
| Total |  |  |

## Post-Retirement Benefit Increases

Post-retirement increases to TRA benefit recipients are determined under Minnesota Statutes. Upon the dissolution of the Post Retirement Fund, the mechanism to provide post-retirement increases to benefit recipients was modified. Beginning January 1, 2010, current law provides an annual fixed 2.5 percent benefit adjustment to benefit recipients retired at least one year or more. Prorated benefit increases on January 1, 2010 will be paid to benefit recipients with effective retirement dates of January 2, 2009 through December 1, 2009.

## Recent Post Retirement Benefit Increases

Rounded to the nearest tenth of one percent


## Combined Funds

## Investment Performance

Combined Funds Performance vs. Composite Index FY 2005-2009


Teachers Retirement Fund
Performance of Asset Pools (Net of Fees)
June 30, 2009 - Combined Funds (Basic Fund and Post Fund)

|  | Rates of Return (Annualized) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | FY 2009 | 3-Year | 5-Year | 10-Year |
| Domestic Stock Pool | -26.9\% | -8.7\% | -2.7\% | -2.0\% |
| Asset Class Target | -26.6\% | -8.3\% | -1.8\% | -1.8\% |
| Bond Pool .............................................................. | 2.5\% | 4.3\% | 4.0\% | 5.6\% |
| Asset Class Target ................................................. | 6.0\% | 6.4\% | 5.0\% | 6.0\% |
| International Stock Pool | -31.0\% | -5.7\% | 4.5\% | 2.6\% |
| Asset Class Target | -30.9\% | -5.7\% | 4.5\% | 2.4\% |
| Alternative Assets (Real Estate, Private Equity, $\qquad$ Resource Pool and Yield Oriented Pool) | -18.0\% | 5.3\% | 16.4\% | 12.7\% |
| CPI-W Inflation (No Established Index for Alternative Assets) .. | -2.0\% | 2.0\% | 2.6\% | 2.6\% |

All investment performance methodology is reported in compliance with the mandatory requirements of the Chartered Financial Analysts (CFA) Institute, as described on page 45.

## Teachers Retirement Fund Portfolio Distribution: Actual Asset Mix



Post Fund - Retirees (March 31, 2009)


Fiscal Year 2010
Combined Fund (June 30, 2009)


## Teachers Retirement Fund List of Largest Assets Held

June 30, 2009
Composite Holdings of Top Ten Equities
By Fair Value

| Security | \$ Fair Value (Millions) | $\%$ of Portfolio |
| :---: | :---: | :---: |
| Exxon Mobil Corp.......................................................... | \$191.2 | 1.38\% |
| Microsoft Corp. | 114.4 | 0.83\% |
| UBS Trumbull Property | 99.3 | 0.72\% |
| Prime Property Fund Morgan. | 93.1 | 0.67\% |
| Proctor and Gamble Co.. | 90.7 | 0.66\% |
| Johnson + Johnson | 90.4 | 0.65\% |
| AT\&T Inc | . 88.9 | 0.64\% |
| Apple, Inc. .......................................................................... | . 88.8 | 0.64\% |
| International Business Machines............................................. | . 87.9 | 0.64\% |
| JP Morgan Chase + Co........................................................... | . 84.8 | 0.61\% |

## Composite Holdings of Top Ten Bond Holdings

By Fair Value

| Security | Coupon | \$ Fair Value (Millions) | $\%$ of Portfolio |
| :---: | :---: | :---: | :---: |
| FNMA TBA JULY 30 SINGLE FAMILY......... | 5.000\% | \$117.2 | 0.85 |
| GNMA II TBA JULY 30 JUMBOS ................ | 5.500\% | 33.6 | 0.24 |
| US TREASURY NB ....................... | 3.125\% | 32.3 | 0.23 |
| FNMA TBA JUL 30 SINGLE FAMILY .......... | 5.500\% | 31.2 | 0.23 |
| ING TRIPARTY C ...................................... | 0.090\% | 28.9 | 0.21 |
| GOLDMAN SACS TRI PARTY C................. | 0.040\% | 25.0 | 0.18 |
| FNMA TBA JULY 30 SINGLE FAMILY........ | 4.500\% | 23.0 | 0.17 |
| HSBC TRI PARTY C.................................. | 0.050\% | 21.2 | 0.15 |
| GENERAL ELECTRIC CAP CORP ............... | 3.712\% | 19.6 | 0.14 |
| BNP TRI PARTY C..................................... | 0.030\% | 19.3 | 0.14 |
| UBS WARBURG TRI PARTY C.................... | 0.100\% | 19.3 | 0.14 |

TRA's assets are commingled in various pooled investment accounts administered by the State Board of Investment (SBI). TRA does not own specific values of the underlying assets. The percentages and fair value shown are those attributable to the TRA Fund based on TRA's participation in the SBI's Combined Funds. Information on investment activity, a listing of specific investments owned by the pooled accounts and a schedule of fees and commissions can be obtained from SBI.

## Teachers Retirement Fund

## Summary of Investments

As of June 30, 2009

|  | Cost Value |  |  | Fair Value | \% of Investments at Fair Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fixed Income Investments |  |  |  |  |  |
| Fixed Income Pool | \$ | 3,179,860,342 | \$ | 3,132,738,524 | 22.7\% |
| Equity Investments |  |  |  |  |  |
| TRA Minneapolis Pool | \$ | 84,179 | \$ | 152,238 | 0.0\% |
| External Indexed Equity Pool |  | 2,632,333,677 |  | 2,362,181,646 | 17.1\% |
| Global Equity Pool |  | 2,538,350,891 |  | 2,247,201,361 | 16.2\% |
| External Domestic Equity Pool |  | 4,722,637,190 |  | 3,776,044,438 | 27.3\% |
| Total Equity Investments | \$ | 9,893,405,937 | \$ | 8,385,579,683 | 60.6\% |
| Alternative Investments |  |  |  |  |  |
| Alternative Investment Pool | \$ | 2,093,448,678 | \$ | 1,948,639,837 | 14.1\% |
| Short Term Investment |  |  |  |  |  |
| Short Term Cash Equivalents | \$ | 352,651,788 | \$ | 352,651,788 | 2.6\% |
| Total Investments | \$ | 15,519,366,745 |  | 13,819,609,832 | 100.0\% |

## General Information Regarding Investment of Funds

TRA's investments are made by SBI and external managers as prescribed by law, and are made only in such securities as are duly authorized legal investments in accordance with Minnesota Statutes, section 11A.24. State Street Bank and Trust of Boston acts as custodian of securities for the Combined Funds. Wells Fargo, Saint Paul, Minnesota, is the current custodian of short term investments of SBI. Examination and verification of securities held by the custodians is performed periodically by the Minnesota Office of the Legislative Auditor.
Investment returns were prepared using a time-weighted rate of return methodology, based upon fair values, net of investment expenses.

This page intentionally left blank.

## Actuarial

## Actuarial

Actuarial

Actuarial

Actuarial
Actuarial
Actuarial

# Actuary's Certification Letter 

## MERCER

MARSH MERCER KROLL GUY CARPENTER OLIVER WYMAN

333 South 7th Street, Suite 1600 Minneapolis, MN 55402-2427 6126428600 Fax 6126428686 www.mercer.com

December 15, 2009
Board of Trustees
Teachers Retirement Association Fund
60 Empire Drive, Suite 400
St. Paul, Minnesota 55103-2088
Members of the Board:
We have prepared and presented to you our annual actuarial valuation of the Minnesota Teachers Retirement Association as of July 1, 2009. Our report was prepared exclusively for Trustees of the Association and the Legislative Commission on Pensions and Retirement for the following purposes:

- Present the results of a valuation of the Teachers Retirement Association Fund as of July 1, 2009 as required by Minnesota Statutes, Section 356.215 and the Standards of Actuarial Work established by the State of Minnesota Legislative Commission on Pensions and Retirement
- Review plan experience for the year ended June 30, 2009
- Provide the Annual Required Contribution for the period beginning July 1, 2009
- Provide reporting and disclosure information for financial statements for governmental agencies pursuant to GASB Statements 25 (as amended by GASB Statement 50 ) and 27.

In this Comprehensive Annual Financial Report (CAFR), all supporting schedules in the Actuarial Section and the Schedule of Funding Progress and the Schedule of Employer Contributions in the Financial Section have been prepared by the Association based on the information included in Mercer's report on the annual actuarial valuation. The annual actuarial valuation reports are available on the Association's website.

As described in the report, the results of the valuation indicate that the fund is $77.4 \%$ funded and that the statutory contribution rates are deficient by $5.12 \%$ of payroll to meet the target of full funding by 2037. Because the valuation smoothes asset returns over five years, these percentages do not reflect the majority of the large asset loss that occurred during the 2009 fiscal year. If all of the prior years' asset returns had been reflected, the deficiency would be $11.07 \%$ of payroll. Without a change in contribution rates or benefit provisions, or favorable actuarial experience, the funded status will continue to deteriorate.

A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a plan's future financial condition or its ability to pay benefits in the future. Over time, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, plan expenses and the amount earned on any assets invested to pay the benefits. These amounts and other variables are

## MERCER

MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN

Page 2
December 15, 2009
Board of Trustees
Teachers Retirement Association Fund
uncertain and unknowable at the valuation date, but are assumed to fall within a reasonable range of possibilities.

To prepare the valuation report, actuarial assumptions are used to select a single scenario from a range of possibilities. The results of that single scenario are included in the valuation report. However, the future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material. In addition, different assumptions or scenarios may also be within the reasonable range and results based on those assumptions would be different. Actuarial assumptions may also be changed from one valuation to the next because of changes in mandated requirements, plan experience, changes in expectations about the future and other factors. Due to the limited scope of our assignment to present an actuarial valuation, and the State's requirements for actuarial reports, the report does not include an analysis of the potential range of future possibilities and scenarios.

Because actual plan experience will differ from the assumptions, decisions about benefit changes, investment policy, funding amounts, benefit security and/or benefit-related issues should be made only after careful consideration of alternative future financial conditions and scenarios, and not solely on the basis of a valuation report.

To prepare our valuation reports and information provided for this CAFR , Mercer has used and relied on financial data submitted by the Teachers Retirement Association of Minnesota as of June 30, 2009, as well as participant data supplied by the Teachers Retirement Association of Minnesota as of June 30, 2009. We have reviewed the financial and participant data for internal consistency and general reasonableness, but we have not verified or audited any of the data or information provided. We have also used and relied on the Statutes and summary of plan provisions supplied by the Teachers Retirement Association of Minnesota. A summary of the plan provisions valued is shown in the CAFR. The Trustees are solely responsible for the accuracy, validity and comprehensiveness of this information. If the data or plan provisions supplied are not accurate and complete the valuation results may differ significantly from the results that would be obtained with accurate and complete information; this may require later revisions for information provided for this report

Neither the July 1, 2009 valuation report nor the information extracted from that report for this CAFR may be relied upon for any other purpose or by any party other than the Trustees, the LCPR or the Association's auditors solely for the purpose of completing an audit related to the matters described. Mercer is not responsible for the consequences of any unauthorized use.

To the best of our knowledge and belief, all information provided by us for this report is complete and accurate and all costs, liabilities and other factors under the plan were determined

## MERCER

MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN

Page 3
December 15, 2009
Board of Trustees
Teachers Retirement Association Fund
in accordance with generally accepted actuarial principles and procedures, in accordance with the requirements of Minnesota Statutes Section 356.215 and the requirements of the Standards of Actuarial Work established by the LCPR. The economic assumptions, including discount rates, are set in Minnesota Statutes, and the remaining assumptions are adopted by the Trustees and the LCPR. We believe these assumptions fall within the parameters established by GASB Statement 25 . These results are based on assumptions, plan provisions, methods and other parameters as summarized in this report and our valuation report. In our opinion, this report fully and fairly discloses the actuarial position of the plan on an ongoing basis.

The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. In addition, Mr. Verlautz meets the requirements of "approved actuary" under Minnesota Statutes, Section 356.215 , Subdivision 1, Paragraph (c). We are not aware of any direct or material indirect financial interest or relationship, including investments or other services that could create a conflict of interest, that would impair the objectivity of our work.

Respectfully submitted,


James F. Verlautz, FSA, EA/MAAA


Bonita J. Wurst, ASA, EA, MAAA

The information contained in this document (including any attachments) is not intended by Mercer to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

# Summary of Actuarial Assumptions and Methods 

## (Assumptions adopted by the Legislative Commission on Pensions and Retirement on February 22, 2002 or by statutory modification on May 27, 2008, denoted by asterisk or by statutory modification on May 22, 2009, denoted by double asterisk)

## Summary of Actuarial Assumptions

The following assumptions were used in valuing the liabilities and benefits under the plan.

| Investment return | 6.0\% compounded annually post-retirement <br> $8.5 \%$ compounded annually pre-retirement |
| :--- | :--- |
| Actuarial value of plan <br> assets** | The assets are valued based on a five-year moving average of expected and <br> market values (five-year average actuarial value) determined as follows: <br> - At the end of each plan year, an average asset value is calculated as the average of <br> the market asset value at the beginning and end of the fiscal year net of investment <br> income for the fiscal year; <br> - The investment gain or (loss) is taken as the excess of actual investment income <br> over the expected investment income based on the average asset value as <br> calculated above; <br> - The investment gain or (loss) so determined is recognized over five years at 20 <br> percent per year; <br> The asset value is the sum of the market value plus the scheduled recognition of <br> investment gains or (losses) during the current and preceding four fiscal years. |
| Funding method actuarial | The Entry Age Normal cost method of valuation is used in determining benefit <br> liabilities and normal cost. The Entry Age Normal method is required by <br> Minnesota Statutes. Differences between assumed and actual experience <br> (actuarial gains and losses) become part of actuarial accrued liabilities. Unfunded <br> actuarial accrued liabilities are amortized to produce payments (principal and <br> interest), which are level percents of covered payroll. |
| Benefit increases after | Payment of 2.5 percent annual benefit increases after retirement are accounted for <br> by using the 6.0 percent post-retirement assumption, as required by statute. |
| retirement* |  |$\quad$| Reported salary for prior fiscal year, with new hires annualized, increased |
| :--- |
| according to the ultimate table shown in the rate table to current fiscal year and |
| annually for each future year. During a ten-year select period, 0.30 x (10-T), |
| where T is completed years of service is added to the ultimate rate. See table of |
| sample rates (page 62). |



## Changes in actuarial assumptions since the previous valuation

Changes in Asset Valuation Method
For the purpose of determining the actuarial value of assets, the Minnesota Post Retirement Investment Fund (MPRIF or Post Fund) asset loss for the fiscal year ending June 30, 2009 is recognized incrementally over five years at 20 percent per year, similar to the smoothing of active fund assets. Prior to June 30, 2009, MPRIF asset gains and losses were not smoothed.

## Summary of Actuarial Assumptions

Summary of Rates: Shown below for selected ages:
Rate (\%)

|  | $\begin{array}{c}\text { Pre-Retirement } \\ \text { Mortality }\end{array}$ Withdrawal Disability Retirement |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Male | Female | Male | Female | Male | Female | Rule of 90 Eligible | Other | Salary* <br> Increases |
| 20 | 0.03 | 0.01 | 3.70 | 4.50 | 0.00 | 0.00 | 0.00 | 0.00 | 5.50\% |
| 25 | 0.03 | 0.01 | 3.20 | 4.50 | 0.00 | 0.00 | 0.00 | 0.00 | 5.50 |
| 30 | 0.04 | 0.02 | 2.70 | 4.50 | 0.00 | 0.00 | 0.00 | 0.00 | 5.50 |
| 35 | 0.04 | 0.03 | 2.50 | 3.90 | 0.01 | 0.01 | 0.00 | 0.00 | 5.50 |
| 40 | 0.05 | 0.03 | 2.35 | 2.75 | 0.03 | 0.03 | 0.00 | 0.00 | 5.20 |
| 45 | 0.07 | 0.05 | 2.10 | 2.10 | 0.05 | 0.05 | 0.00 | 0.00 | 4.70 |
| 50 | 0.10 | 0.07 | 1.85 | 1.85 | 0.11 | 0.10 | 0.00 | 0.00 | 4.50 |
| 55 | 0.17 | 0.10 | 0.00 | 0.00 | 0.22 | 0.16 | 50.00 | 7.00* | 4.50 |
| 60 | 0.31 | 0.16 | 0.00 | 0.00 | 0.33 | 0.25 | 50.00 | 12.00 | 4.80 |
| 65 | 0.52 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 50.00 | 45.00* | 5.20 |
| 70 | 0.77 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 | 35.00 | 35.00 | 5.20 |
| 71 | 0.84 | 0.47 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 5.20 |

*Assumption modified by Minnesota Statute on May 27, 2008.

## Valuation Report Highlights

Summary of Key Valuation Results


## Actuary's Commentary

## Highlights

This report has been prepared by Mercer for the Teachers Retirement Association of Minnesota to:

- Present the results of a valuation of the Teachers Retirement Association Fund as of July 1, 2009.
- Review experience under the Plan for the year ended June 30, 2009.
- Provide reporting and disclosure information for governmental agencies and other interested parties.


## Contributions

The following table summarizes important contribution information as described on pages 72-74.

|  | Plan Year Ending |  |
| :--- | :---: | :---: |
|  | July 1, <br> 2009 | July 1, <br> 2008 |
| Contributions | $11.69 \%$ | $11.75 \%$ |
| Statutory Contributions - <br> Chapter 354 (\% of payroll) <br> Required Contributions - <br> Chapter 356 (\% of payroll) <br> Sufficiency/ (Deficiency) | $\mathbf{1 6 . 8 1 \%}$ | $15.08 \%$ |
| (5.12\%) | (3.33\%) |  |

The contribution deficiency increased from ( 3.33 percent) of payroll to ( 5.12 percent) of payroll. On a market value of assets basis, the plan moved from a deficiency of ( 3.51 percent) of payroll to a deficiency of ( 11.07 percent) of payroll. The primary reasons for the increased deficiency are the less than expected return on assets and the impact of insufficient contributions.

## Without a change in contribution rates, benefit provisions, or favorable actuarial experience, the funded status will continue to deteriorate.

The "Plan Assets" section provides detail on the plan assets used for the valuation including a development of the actuarial value of assets. The market value of assets earned ( 18.8 percent) for the plan year ending June 30, 2009. Only 20 percent of that asset loss is recognized in the actuarial value of assets as of June 30, 2009. The remainder will be recognized over the next four years (page 70, line 6(f)). The
actuarial value of assets earned 3.4 percent (after recognition of the asset method change) for the plan year ending June 30, 2009 as compared to the assumed rate of 8.5 percent.
Participant reconciliation and statistics are detailed in the "Membership Data" section. The "Actuarial Basis" section includes a summary of plan provisions and actuarial methods and assumptions used for the calculations in this report. The "Plan Accounting" section details the required accounting information for the Plan under GASB Statement No. 25.
There were no changes in actuarial assumptions since July 1, 2008. Changes in plan provisions and valuation methods are reflected in this report and summarized in the Actuarial Basis and Effects of Changes section.

## Effects of Changes

The following changes in plan provisions and methods were recognized as of July 1, 2009.

## Dissolution of Minnesota Post Retirement Investment Fund (MPRIF)

The 2008 Legislature defined parameters for the dissolution of the MPRIF. Since the MPRIF composite funding ratio was less than 80 percent as of June 30, 2008, the MPRIF was dissolved, and assets were transferred back to TRA and merged with the active member assets. The transfer of assets and liabilities occurred on June 30, 2009.
In conjunction with the dissolution, benefit recipients will receive future annual 2.5 percent cost-of-living adjustments.
The waiting period and proration schedule for the COLA paid in the first year of retirement was also revised.
Other than the asset method change described below, the MPRIF dissolution and COLA changes did not affect the valuation results.

## Accrual Date Change

Beginning January 1, 2010, members applying for retirement may begin receiving benefits on any day of the month, rather than being restricted to either the first or 16th of the month.

As described in our February 2009 letter, the actuarial impact of this change is insignificant.

## MnSCU Faculty

Beginning July 1, 2009, newly tenured faculty of the Minnesota State College and University (MnSCU) can choose TRA membership and purchase prior service credit at full actuarial value.
The liability and service purchase assets of new MnSCU members will be recognized in future valuations as service is purchased.

## Asset Method

For the purpose of determining the actuarial value of assets, the MPRIF asset loss for the fiscal year ending June 30, 2009 is recognized incrementally over five years at 20 percent per year, similar to the smoothing of active fund assets. Prior to June 30, 2009, MPRIF asset gains and losses were not smoothed.

The change in the actuarial asset method for MPRIF assets reduced the required contribution by 3.17 percent of pay.

## Reconciliation of Member Data*

Fiscal Year Ended June 30, 2009

|  |  |  | Benefit Recipients*** |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | Actives | Snactives | Service <br> Retirements | Disability <br> Retirements | Survivors | Total |
| Members on July 1, 2008 | 77,173 | 34,283 | 44,830 | 644 | 3,327 | 160,257 |  |
| New hires | 4,764 | 0 | 0 | 0 | 0 | 4,764 |  |
| Return from inactive | 1,603 | $(1,603)$ | 0 | 0 | 0 | 0 |  |
| Return from zero balance | 870 | 0 | 0 | 0 | 0 | 870 |  |
| Transfer to inactive | $(4,216)$ | 4,216 | 0 | 0 | 0 | 0 |  |
| Transfer from non-status | 0 | 47 | 0 | 0 | 0 | 47 |  |
| Restored writeoff | 0 | 125 | 0 | 0 | 0 | 125 |  |
| Repay refunds | 0 | 52 | 0 | 0 | 0 | 52 |  |
| Refunded | $(356)$ | $(1,203)$ | 0 | 0 | 0 | $(1,559)$ |  |
| Retirements | $(1,774)$ | $(387)$ | 2,165 | $(45)$ | 0 | $(41)$ |  |
| Disability began | 0 | 0 | 0 | 55 | 0 | 55 |  |
| Disability ended | 0 | 0 | 0 | $(3)$ | 0 | $(3)$ |  |
| Payment to beneficiary began | 0 | 0 | 0 | 0 | 330 | 330 |  |
| Deaths | $(60)$ | $(36)$ | $(891)$ | $(25)$ | $(106)$ | $(1,118)$ |  |
| Term completes | 0 | 0 | 0 | 0 | $(70)$ | $(70)$ |  |
| Adjustments | $(218)$ | 69 | 4 | $(2)$ | $(5)$ | $(152)$ |  |
| Net changes | $\mathbf{6 1 3}$ | $\mathbf{1 , 2 8 0}$ | $\mathbf{1 , 2 7 8}$ | $\mathbf{( 2 0 )}$ | $\mathbf{1 4 9}$ | $\mathbf{3 , 3 0 0}$ |  |
| Members on June $\mathbf{3 0}, \mathbf{2 0 0 9}$ | $\mathbf{7 7 , 7 8 6}$ | $\mathbf{3 5 , 5 6 3}$ | $\mathbf{4 6 , 1 0 8}$ | $\mathbf{6 2 4}$ | $\mathbf{3 , 4 7 6}$ | $\mathbf{1 6 3 , 5 5 7}$ |  |

* Provided by the Teachers Retirement Association and checked for reasonableness. Active member count includes certain disabled members. Recipient counts include all pensions in force, including double counting of multiple payee types. Service Retirements include Supplemental and Variable optional joint annuitants.
** Former members include 47 Basic members and 35,516 Coordinated members.
*** Benefit recipients include 5,581 Basic members and 44,627 Coordinated members.

| Former Member Statistics | Vested | Non-Vested | Total |
| :--- | ---: | ---: | ---: |
| Number | 12,490 | 23,073 | 35,563 |
| Average Age | 48.2 years | 42.5 years | 44.5 years |
| Average Service | 7.4 years | 0.9 years | 3.2 years |
| Average annual benefits, with augmentation to Normal Retirement | $\$ 11,406$ | N/A | N/A |
| Date and 4\% CSA load | $\$ 24,802$ | $\$ 1,807$ | $\$ 9,884$ |

## Statement of Plan Net Assets

Fiscal Year Ended June 30, 2009
(Dollars in Thousands)

## Assets

Cash and short term investments
Cash.
\$ 9,889
Building account cash 0

Short term investments 352,652

Total cash and short term investments \$ 362,541

Receivables
Employee contributions \$ 12,704
Investment income ............................................................................ 319
Bond interest 16
Total receivables \$ 13,039
Investments (at fair value)
Fixed income pool.............................................................................. \$ 3,132,739
Minneapolis pool. 152
Alternative investments pool 1,948,640
Indexed equity pool 2,362,182

Domestic equity pool 3,776,044
Global equity pool 2,247,201
Total investments \$ 13,466,958
Securities lending collateral \$ 2,277,084

Building
Land. \$ 171
Building and equipment 11,266

Reserve for building depreciation $(2,243)$
Deferred bond charge 146
Reserve for deferred bond charge amortization ......................... _ (40)
Total building \$ 9,300
Fixed assets net of accumulated depreciation .......................................... \$ 355
Total Assets \$ 16,129,257

## Statement of Plan Net Assets

Fiscal Year Ended June 30, 2009
(Dollars in Thousands) Market Value

## Liabilities

Current
Accounts payable ..... \$ 8,166
Accrued compensated absences ..... 60
Accrued expenses - building ..... 1
Bonds payable ..... 236
Bonds interest payable ..... 45
Securities lending collateral ..... 2,277,084
Total current liabilities ..... \$ 2,285,592
Long term
Accrued compensated absences ..... \$ ..... 639
Accrued OPEB liability ..... 24
Bonds payable ..... 9,176
Total long term liabilities ..... \$ 9,839
Total Liabilities ..... \$ 2,295,431
Net assets held in trust for pension benefits ..... \$ 13,833,826
Earnings Limitation Savings Account (ELSA) accounts payable. ..... $(20,000)$
Net assets held in trust, after adjustment for ELSA accounts ..... \$ 13,813,826

## Reconciliation of Plan Assets

## Fiscal Year Ended June 30, 2009

The following exhibit shows the revenue, expenses and resulting assets of the Fund as reported by the Minnesota State Board of Investment, for the Plan's fiscal year July 1, 2008 to June 30, 2009.

## Change in Assets (dollars in thousands)

1. Fund balance at market value at July 1, 2008
2. Contributions
a. Member
b. Employer
c. Direct aid (state/city/county)
d. Earnings Limitation Savings Account (ELSA)
e. Total contributions
Non-MPRIF
Assets
\$ 7,471,619

MPRIF Reserve \$ 10,635,347

Market Value
\$ 18,106,966

| 2,301 |
| ---: |
| $\$ \quad 455,062$ |

3. Investment income
a. Investment income/(loss)
b. Investment expenses
c. Total investment income/(loss)
4. Other
5. Total income (2.e + 3.c + 4.)
6. Benefits Paid
a. Annuity benefits
b. Refunds
c. Total benefits paid

| \$ | $(1,457,053)$ $(8,325)$ | \$ | $\begin{array}{r} (1,841,451) \\ (11,539) \end{array}$ | \$ | $(3,298,504)$ <br> (19,864) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | $(1,465,378)$ | \$ | $(1,852,990)$ | \$ | $(3,318,368)$ |
|  | 4,225 |  | 0 |  | 4,225 |
| \$ | $(1,006,091)$ | \$ | $(1,852,990)$ | \$ | $(2,859,081)$ |
| \$ | $(14,107)$ | \$ | $(1,367,259)$ | \$ | $(1,381,366)$ |
|  | $(14,430)$ |  | $(2,301)$ |  | $(16,731)$ |
| \$ | $(28,537)$ | \$ | $(1,369,560)$ | \$ | $(1,398,097)$ |

7. Expenses
a. Interest paid to MPRIF
b. Administrative
c. Total expenses
8. Total disbursements (6.c. + 7.c.)

| \$ | $(5,354)$ |
| :--- | ---: |
|  | $(10,608)$ |
| $\$$ | $(15,962)$ |
| \$ | $(44,499)$ |

\$ $0 \quad \$$
$(5,354)$
9. Other changes in reserves
a. Annuities awarded
b. Reserves transferred
c. Mortality gain (loss) not transferred
d. Total other changes
10. Fund balance at market value at July 1, 2009
(1. + 5. + 8. + 9.d.)
11. ELSA accounts payable
\$ $(309,527)$
\$ 309,527

$$
(10,608)
$$

\$ $(15,962)$
\$ $(1,414,059)$
12. Fund balance at market value after adjustment for ELSA accounts
\$ 13,813,826
$(7,668,877)$
$(53,447)$
$\$(7,412,797)$
\$ 0

| $\$$ | 0 |
| :--- | :--- |

\$
0
\$
$\$ \quad 0$

$\$ \quad 0$
\$ 13,833,826
$\$ \quad(20,000)$
\$
13,813,826

## Actuarial Asset Value

Fiscal Year Ended June 30, 2009
(Dollars in Thousands)

1. Market value of assets available for benefits
2. Determination of average balance
a. Assets available at July 1, 2008 $\qquad$
\$
13,813,826
b. Assets available at July 30, 2009 $\qquad$
c. Net investment income for fiscal year ending June 30, 2009 $\qquad$
d. Average balance [a. + b. - c.] / 2 $\qquad$
3. Expected return $[8.5 \%$ * 2.d.] $\qquad$
4. Actual return $\qquad$
5. Current year unrecognized asset return $\qquad$
6. Unrecognized asset recognized asset returns*
Original
Amount
a. Year ended June 30, 2009
b. Year ended June 30, 2008
c. Year ended June 30, 2007
d. Year ended June 30, 2006
f. Total unrecognized return
7. Actuarial value at June 30, 2009 (1. - 6.e.)
\$
$(4,812,478)$
$(1,066,002)$
725,920
653,165
\% Not
Recognized

| $80 \%$ | $\$$ | $(3,849,982)$ |
| :--- | :---: | ---: |
| $60 \%$ |  | $(639,601)$ |
| $40 \%$ |  | 290,368 |
| $20 \%$ |  | 130,633 |
|  | $\$$ | $(4,068,582)$ |
|  | $\$$ | $\mathbf{1 7 , 8 8 2 , 4 0 8}$ |

*Prior to the year ending June 30, 2009, unrecognized asset returns do not include MPRIF gains of losses.

## Changes in Unfunded Actuarial Accrued Liability

## Fiscal Year Ended June 30, 2009

|  | Year Ending |
| :--- | :---: |
| (Dollars in Thousands) | June 30, 2009 |

A. Unfunded actuarial accrued liability at beginning of year
\$ 4,003,856
B. Changes due to interest requirements and current rate of funding

1. Normal cost and actual administrative expenses
\$
347,889
2. Contributions
$(455,062)$
3. Interest on A., B. 1 and B.2.

335,773
4. Total (B.1. + B.2. + B.3.)
\$ 228,600
C. Expected unfunded actuarial accrued liability at end of year (A. + B.4.)
\$ 4,232,456
D. Increase (decrease) due to actuarial losses (gains) because of experience deviations from expected

1. Salary increases
\$
2. Investment return before actuarial asset method change

3,078,494
3. Mortality of benefit recipients 7,566
4. Other items 98,169*
5. Total \$ 3,167,675
E. Unfunded actuarial accrued liability at end of year before plan amendments and changes in actuarial assumptions (C. + D.5.)
\$ 7,400,131
F. Change in unfunded actuarial accrued liability due to changes in plan provisions
\$
G. Change in unfunded actuarial accrued liability due to changes in actuarial assumptions
\$
0
H. Changes in unfunded actuarial accrued liability due to changes in actuarial asset method \$ $(2,167,737)$
I. Unfunded actuarial accrued liability at end of year (E. + F. + G.) \$ 5,232,394

* "Other" losses, equal to 0.4\% of actuarial accrued liability, are attributable to new entrants, retirement, withdrawal, disability, and pre-retirement mortality experience.


## Actuarial Valuation Balance Sheet

The actuarial balance sheet is based on the fundamental equation that at any given time the present value of benefits to be paid in the future must be equal to the assets on hand plus the present value of future contributions to be received. The total rate of contribution is determined as that amount which will make the total present and potential assets balance with the total present value of future benefits. The members' rate of contribution is fixed at the current schedule of compensation. The employer's rate of contribution is the balance required to cover the total rate of contribution.

The contributions made in excess of amounts required for current benefit payments are accumulated as a reserve to help meet benefit payments in later years. This reserve system enables the establishment of a level rate of contribution each year.

## (Dollars in Thousands)

June 30, 2009
A. Actuarial Value of Assets .............................................................................................. \$ 17,882,408
B. Expected Future Assets

1. Present value of expected future statutory supplemental contributions*
\$ 1,730,377
2. Present value of expected future normal cost contributions ....................................... 2,992,500
3. Total expected future assets (1. + 2.) ....................................................................... \$ 4,722,877
C. Total Current and Expected Future Assets ..................................................................... \$ 22,605,285
D. Current Benefit Obligations

Non-Vested Vested
Total

1. Benefit recipients
a. Service retirements
\$
0
\$ 13,267,164
\$ 13,267,164
b. Disability
c. Survivors
0
172,678
172,678
0
764,083
764,083
2. Deferred retirements with augmentation to Normal Retirement Date
$0 \quad 600,194$
600,194
3. Former members without vested rights**
41,676
0
41,676
4. Active members
75,257
7,272,232
7,347,489
5. Total current benefit obligations
\$ 116,933
\$ 22,076,351
\$ 22,193,284
E. Expected Future Benefit Obligations
\$ 3,914,018
F. Total Current and Expected Future Benefit Obligations
\$ 26,107,302
G. Unfunded Current Benefit Obligations (D.5-A)
\$ 4,310,876
H. Unfunded Current and Future Benefit Obligations (F. - C.)
\$ 3,502,017

* Under LCPR guidelines, this amount does not include supplemental payments which could occur after the expiration of the remaining 28 year amortization period.
** Former members with less than three years of service that have not collected a refund of member contributions as of the valuation date.


## Determination of Unfunded Actuarial Accrued Liability (UAAL) and Supplemental Contribution Rate

July 1, 2009
(Dollars in Thousands)

| Actuarial |
| :---: |
| Present Value |
| of Projected |
| Benefits |

A. Determination of Actuarial Accrued Liability (AAL)

1. Active Members

| a. Retirement annuities | \$ | 10,170,960 | \$ | 2,315,304 | \$ | 7,855,656 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| b. Disability benefits ............................... |  | 195,467 |  | 73,955 |  | 121,512 |
| c. Survivor benefits |  | 81,817 |  | 32,236 |  | 49,581 |
| d. Deferred retirements |  | 683,694 |  | 354,796 |  | 328,898 |
| e. Refunds |  | 129,568 |  | 216,209 |  | $(86,641)$ |
| f. Total.................................................. | \$ | 11,261,506 | \$ | 2,992,500 | \$ | 8,269,006 |

2. Deferred retirements with future augmentation to Normal Retirement Age $\qquad$
600,194

| Actuarial |  |
| :---: | :---: |
| Present Value | Actuarial <br> of Future <br> Normal Costs |

Actuarial Accrued Liability

## Determination of Contribution Sufficiency/(Deficiency) - Total

July 1, 2009

(Dollars in Thousands)
A. Statutory Contributions - Chapter 354

1. Employee contributions $\qquad$
2. Employer contributions* $\qquad$

Dollar Amount
Percent of
Payroll
$5.50 \% \quad \$ \quad 222,860$
3. Supplemental contributions**

| a. 1993 Legislation | 0.12\% |  | 5,007 |
| :---: | :---: | :---: | :---: |
| b. 1996 Legislation | 0.06\% |  | 2,487 |
| c. 1997 Legislation | 0.32\% |  | 12,954 |
| Total. | 11.69\% | \$ | 473,633 |

B. Required Contributions - Chapter 356

1. Normal Cost
a. Retirement benefits $\qquad$
$7.05 \% \quad \$ \quad 285,553$
b. Disability benefits $\qquad$
$0.20 \% \quad 8,234$
c. Survivor......................................................................................... 0.09\% 3,557
d. Deferred retirement benefits........................................................... 0.99\% 39,864
e. Refunds......................................................................................... 0.55\% 22,371
f. Total 8.88\% \$ 359,579
2. Supplemental contribution amortization by July 1, 2037 of Unfunded Actuarial Accrued Liability .
7.65\% \$ 310,170
3. Allowance for expenses
0.28\%

11,338
4. Total annual contribution for fiscal year ending June 30, 2010***
$\underline{16.81 \%} \quad \$ \quad 681,087$
C. Contribution Sufficiency/(Deficiency) (A.4-B.4)*** $\qquad$ $\underline{\underline{(5.12 \%)}} \quad \underline{ }$

Projected annual payroll for fiscal year beginning on the valuation date $\qquad$ \$

4,049,217

[^2]
## Solvency Test

(Dollar Amounts in Thousands)

Aggregate Accrued Liabilities

| Valuation <br> as of <br> June 30 | (1) <br> Member <br> Contributions | (2) <br> Retirees <br> and <br> Beneficiaries | (3) <br> Members <br> (Employer <br> Financed <br> Portion) | Valuation <br> Assets | (1) | (2) | (3) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | $\$ 1,354,683$ | $\$ 8,055,622$ | $\$ 5,392,136$ | $\$ 15,573,151$ | $100 \%$ | $100 \%$ | $100.0 \%$ |
| 2001 | $\$ 1,403,755$ | $\$ 9,106,198$ | $\$ 5,394,031$ | $\$ 16,834,024$ | $100 \%$ | $100 \%$ | $100.0 \%$ |
| 2002 | $\$ 1,483,243$ | $\$ 9,555,364$ | $\$ 5,464,492$ | $\$ 17,378,994$ | $100 \%$ | $100 \%$ | $100.0 \%$ |
| 2003 | $\$ 1,561,048$ | $\$ 9,713,507$ | $\$ 5,581,824$ | $\$ 17,384,179$ | $100 \%$ | $100 \%$ | $100.0 \%$ |
| 2004 | $\$ 1,632,995$ | $\$ 10,092,955$ | $\$ 5,792,834$ | $\$ 17,519,909$ | $100 \%$ | $100 \%$ | $100.0 \%$ |
| 2005 | $\$ 1,704,913$ | $\$ 10,438,051$ | $\$ 5,878,446$ | $\$ 17,752,917$ | $100 \%$ | $100 \%$ | $95.4 \%$ |
| 2006 | $\$ 1,765,117$ | $\$ 12,526,588$ | $\$ 6,387,406$ | $\$ 19,035,612$ | $100 \%$ | $100 \%$ | $74.3 \%$ |
| 2007 | $\$ 1,799,910$ | $\$ 13,112,891$ | $\$ 6,557,513$ | $\$ 18,794,389$ | $100 \%$ | $100 \%$ | $59.2 \%$ |
| 2008 | $\$ 1,883,371$ | $\$ 13,567,065$ | $\$ 6,780,405$ | $\$ 18,226,985$ | $100 \%$ | $100 \%$ | $40.9 \%$ |
| 2009 | $\$ 2,038,749$ | $\$ 14,203,926$ | $\$ 6,872,127$ | $\$ 17,882,408$ | $100 \%$ | $100 \%$ | $23.9 \%$ |

## Schedule of Active Member Valuation Data

| Year <br> Ended <br> June 30 | Active <br> Members |
| :---: | :---: |
| 2000 | 70,508 |
| 2001 | 71,097 |
| 2002 | 71,690 |
| 2003 | 71,916 |
| 2004 | 72,008 |
| 2005 | 74,552 |
| 2006 | 79,164 |
| 2007 | 77,694 |
| 2008 | 76,515 |
| 2009 | 77,162 |


| (\$ in thousands) |
| :---: |
| Annual |
| Covered Payroll |
| $\$ 2,704,575$ |
| $\$ 2,812,000$ |
| $\$ 2,873,771$ |
| $\$ 2,952,887$ |
| $\$ 3,032,483$ |
| $\$ 3,121,571$ |
| $\$ 3,430,645$ |
| $\$ 3,532,159$ |
| $\$ 3,645,230$ |
| $\$ 3,761,484$ |


| $\%$ <br> Increase in <br> Covered Payroll | $\$$ <br> Annual <br> Average |
| :---: | :---: |
| $3.0 \%$ | $\$ 38,858$ |
| $4.0 \%$ | $\$ 39,552$ |
| $2.2 \%$ | $\$ 40,086$ |
| $2.8 \%$ | $\$ 41,060$ |
| $2.7 \%$ | $\$ 42,113$ |
| $2.9 \%$ | $\$ 41,871$ |
| $9.9 \%$ | $\$ 43,336$ |
| $3.0 \%$ | $\$ 45,462$ |
| $3.2 \%$ | $\$ 47,641$ |
| $3.2 \%$ | $\$ 48,748$ |

# Schedule of Retirees and Beneficiaries Added To and Removed From Retirement Rolls 

Through June 1, 2009 - End of Budget Year for Benefit Payments - Prepared by TRA Rolls:

|  | Added To Rolls |  | Removed From Rolls |  | June 1, 200X Payment |  | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Annual |  | Annual |  | Annual | Annual |
| Fiscal Year | Number | Allowances | Number | Allowances | Number | Allowances | Allowances |


| 2009 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retirement | 2,282 |  | 65,082,777 | 874 | \$ | 25,678,679 | 45,790 | \$ | 1,271,277,327 | \$ | 27,763 |
| Disability | 48 | \$ | 959,551 | 26 | \$ | 507,524 | 634 | \$ | 12,364,085 | \$ | 19,502 |
| Beneficiaries | 343 | \$ | 7,938,855 | 213 | \$ | 2,997,929 | 3,747 | \$ | 94,308,262 | \$ | 25,169 |
| 2008* |  |  |  |  |  |  |  |  |  |  |  |
| Retirement | 7,757 |  | 67,146,737 | 1,580 | \$ | 95,109,782 | 44,382 | \$ | 1,231,768,186 | \$ | 27,754 |
| Disability | 105 | \$ | 2,596,324 | 93 | \$ | 2,408,229 | 612 | \$ | 11,635,841 | \$ | 19,011 |
| Beneficiaries | 585 |  | 24,054,314 | 398 | \$ | 10,168,388 | 3,617 | \$ | 93,067,932 | \$ | 25,730 |
| 2007 |  |  |  |  |  |  |  |  |  |  |  |
| Retirement | 2,222 | \$ | 62,734,162 | 767 | \$ | 20,372,241 | 38,205 | \$ | 1,059,731,231 | \$ | 27,738 |
| Disability | 59 | \$ | 998,126 | 63 | \$ | 1,347,548 | 600 | \$ | 11,447,746 | \$ | 19,080 |
| Beneficiaries | 355 | \$ | 8,269,118 | 141 | \$ | 2,933,302 | 3,430 | \$ | 79,182,006 | \$ | 23,085 |
| 2006 |  |  |  |  |  |  |  |  |  |  |  |
| Retirement | 2,300 |  | 62,956,636 | 670 | \$ | 18,431,998 | 36,750 | \$ | 1,016,543,840 | \$ | 27,661 |
| Disability | 83 | \$ | 1,363,524 | 66 | \$ | 1,427,682 | 604 | \$ | 11,586,536 | \$ | 19,183 |
| Beneficiaries | 337 | \$ | 7,296,282 | 149 | \$ | 2,867,820 | 3,216 | \$ | 72,667,165 | \$ | 22,596 |
| 2005 |  |  |  |  |  |  |  |  |  |  |  |
| Retirement | 2,106 |  | 57,668,914 | 661 |  | 16,831,656 | 35,120 | \$ | 971,477,075 | \$ | 27,661 |
| Disability | 58 | \$ | 1,011,616 | 59 | \$ | 1,288,335 | 587 | \$ | 11,409,732 | \$ | 19,437 |
| Beneficiaries | 297 | \$ | 6,475,987 | 154 | \$ | 3,016,273 | 3,028 | \$ | 67,280,901 | \$ | 22,219 |
| 2004 |  |  |  |  |  |  |  |  |  |  |  |
| Retirement | 1,726 |  | 48,266,626 | 689 | \$ | 17,942,943 | 33,675 | \$ | 933,150,918 | \$ | 27,710 |
| Disability | 74 | \$ | 1,431,398 | 45 | \$ | 943,335 | 588 | \$ | 11,462,253 | \$ | 19,494 |
| Beneficiaries | 299 | \$ | 6,196,059 | 137 | \$ | 2,506,367 | 2,885 | \$ | 62,690,339 | \$ | 21,730 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  |
| Retirement | 1,752 |  | 45,213,170 | 681 |  | 16,595,867 | 32,638 | \$ | 905,702,949 | \$ | 27,751 |
| Disability | 60 | \$ | 838,012 | 54 | \$ | 1,199,063 | 559 | \$ | 10,839,002 | \$ | 19,355 |
| Beneficiaries | 278 | \$ | 6,006,648 | 136 | \$ | 2,022,035 | 2,723 | \$ | 58,540,855 | \$ | 21,499 |
| 2002 - Total Benefit Recipients |  |  |  |  |  |  | 34,974 | \$ | 946,344,333 |  |  |
| 2001 - Total Benefit Recipients |  |  |  |  |  |  | 33,757 | \$ | 861,787,476 |  |  |
| 2000 - Total Benefit Recipients |  |  |  |  |  |  | 31,946 | \$ | 755,036,577 |  |  |

[^3]Note: Detailed data on retirees and beneficiaries added to and removed from rolls is not available prior to fiscal year 2003.

## Statistical

Statistical

Statistical

Statistical

Statistical

Statistical

Statistical

## Statistical Summary

TRA complies with GASB Statement No. 44, Economic Condition Reporting: The Statistical Section, issued in May 2004. The pronouncement establishes and modifies requirements related to the supplementary information presented in this section of the report. This section of the report provides detailed information about TRA as a context for understanding what the information in the financial statement note disclosures, and required supplementary information indicates about the Association's overall financial condition.
The schedules and graphs beginning on page 79 show trend information about the growth of TRA assets over the past 10 years. These schedules, and others, provide detailed information about the trends of key sources of additions and deductions to plan assets.

The schedule of Pension Assets Compared to Pension Liabilities, found on pages 80-81, show the funding progress of the plan for the past 10 years on accumulating assets to cover projected pension liabilities which will ultimately be due at retirement.

The Contribution Rate chart on page 79 provides historical information on the total member and employer contribution rates.
The schedules on pages 82-89 include detailed information regarding the number and type of benefit recipients, and information as to the benefit amount.

The chart on page 90 provides a profile of TRA active members on June 30, 2009, by age and service credit totals.

The chart on page 91 contains information on the total number of members by type.
The schedules on page 92-93 detail the largest TRA employer units by covered employees and by types of employer.
All non-accounting data is derived from TRA internal sources.

## 10-Year History of Plan Net Assets

| June 30 <br> Fiscal Year End | Plan Net Assets | \% Change <br> From Prior Year |
| :---: | :---: | :---: |
| 2000 | $\$ 17,749,580,369$ | - |
| 2001 | $\$ 15,902,335,962$ | $-10.4 \%$ |
| 2002 | $\$ 13,997,762,175$ | $-12.0 \%$ |
| 2003 | $\$ 13,061,606,463$ | $-6.7 \%$ |
| 2004 | $\$ 15,095,803,651$ | $15.6 \%$ |
| 2005 | $\$ 15,928,603,867$ | $5.5 \%$ |
| 2006 | $\$ 17,764,526,441$ | $11.5 \%$ |
| 2007 | $\$ 19,938,881,872$ | $12.2 \%$ |
| 2008 | $\$ 18,106,965,760$ | $-9.2 \%$ |
| 2009 | $\$ 13,833,825,733$ | $-23.6 \%$ |

## 10-Year History of Contribution Rates

Yasic Program
Employee
Contribution

Rate \begin{tabular}{c}
Basic Program <br>
Employer <br>
Contribution <br>
Rate

$\quad$

Basic Program <br>
Total <br>
Contribution <br>
Rate

$\quad$

Coordinated <br>
Employee <br>
Contribution <br>
Rate

$\quad$

Coordinated <br>
Employer <br>
Contribution <br>
Rate

 


| Coordinated |
| :---: |
| Total |
| Contribution |
| Rate | <br>

\hline 2000
\end{tabular}

## Teachers Retirement Association 10-Year History of Changes in Plan Net Assets

|  |  | 2000 |  | 2001 |  | 2002 |  | 2003 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions |  |  |  |  |  |  |  |  |
| Member Contributions | \$ | 138,696,271 | \$ | 145,075,285 | \$ | 152,331,067 | \$ | 155,577,148 |
| Employer Contributions |  | 134,418,833 |  | 139,799,408 |  | 142,221,589 |  | 149,480,510 |
| Net Income (Loss) From Investing Activity |  | 1,555,989,313 |  | (1,244,340,580) |  | $(1,236,187,539)$ |  | 293,085,074 |
| Other Income, Net |  | 2,387,928 |  | 3,156,294 |  | 4,488,404 |  | 4,416,909 |
| Total Additions to Plan Net Assets | \$ | 1,831,492,345 | \$ | $(956,309,593)$ | \$ | $(937,146,479)$ | \$ | 602,559,641 |
| Deductions |  |  |  |  |  |  |  |  |
| Pension Benefits | \$ | 755,036,577 | \$ | 861,767,476 | \$ | 946,344,333 | \$ | 978,466,617 |
| Refunds |  | 7,262,919 |  | 7,608,839 |  | 7,353,363 |  | 6,656,191 |
| Administrative Expenses |  | 8,137,683 |  | 13,077,718 |  | 12,911,651 |  | 13,158,348 |
| Other |  | 3,903,332 |  | 8,460,781 |  | 817,961 |  | 434,197 |
| Total Deductions from Plan Net Assets | \$ | 774,340,511 | \$ | 890,914,814 | \$ | 967,427,308 | \$ | 998,715,353 |
| Net Increase (Decrease) | \$ | 1,057,151,834 |  | (1,847,224,407) |  | $(1,904,573,787)$ | \$ | (396,155,712) |
| Net Assets Held in Trust, Beginning of Year |  | 6,692,428,535 |  | 7,749,580,369 |  | 5,902,335,962 |  | 3,997,762,175 |
| Net Assets Held in Trust, End of Year |  | 7,749,580,369 |  | 5,902,355,962 |  | 3,997,762,175 |  | 3,601,606,463 |

*"Net assets held in trust, beginning of year" were restated to reflect \$745,214,858 of assets assumed as a result of merger with MTRFA.

## 10-Year History of Pension Assets vs. Pension Liabilities

|  | 2000 | 2001 | 2002 | 2003 |
| :---: | :---: | :---: | :---: | :---: |
| Pension Assets (Actuarial Value) | \$15,573,151,000 | \$16,834,024,000 | \$17,378,994,000 | \$17,384,179,000 |
| Accrued Liabilities | \$14,802,441,000 | \$15,903,099,000 | \$16,503,099,000 | \$16,856,379,000 |
| Unfunded Liabilities (Sufficiency) | \$ (770,710,000) | \$ (930,925,000) | \$ (875,895,000) | \$ (527,800,000) |
| Funded Ratio | 105.2\% | 105.9\% | 105.3\% | 103.1\% |


| 2004 |  | 2005 |  | 2006* |  | 2007 |  | 2008 | 2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ 159,139,548 | \$ | 160,982,004 | \$ | 177,084,906 | \$ | 199,868,969 | \$ | 209,592,461 | \$ | 212,042,535 |
| 151,028,911 |  | 157,693,090 |  | 200,285,886 |  | 209,219,130 |  | 231,561,322 |  | 240,718,200 |
| 2,204,787,495 |  | 1,575,519,541 |  | 1,951,778,366 |  | 3,056,492,094 |  | (926,044,140) |  | (3,318,368,290) |
| 7,266,004 |  | 6,295,759 |  | 11,412,062 |  | 7,901,279 |  | 7,529,753 |  | 6,526,400 |
| \$ 2,522,221,958 | \$ | 1,900,490,394 | \$ | 2,340,561,220 | \$ | 3,473,481,472 | \$ | (477,360,604) |  | (2,859,081,155) |
| \$ 1,008,410,471 | \$ | 1,048,440,525 |  | \$1,224,212,024 | \$ | 1,273,093,384 | \$ | 1,330,836,947 |  | 1,383,667,466 |
| 6,861,708 |  | 6,744,116 |  | 11,872,504 |  | 12,088,193 |  | 11,770,086 |  | 14,429,351 |
| 12,179,212 |  | 10,883,151 |  | 11,912,701 |  | 10,635,365 |  | 10,261,139 |  | 10,608,003 |
| 573,379 |  | 1,622,386 |  | 1,856,275 |  | 3,309,099 |  | 1,687,335 |  | 5,354,052 |
| \$ 1,028,024,770 | \$ | 1,067,690,178 |  | 1,249,853,504 | \$ | 1,299,126,041 |  | 1,354,555,508 |  | 1,414,058,872 |
| \$ 1,494,197,188 | \$ | 832,800,216 |  | 1,090,707,716 | \$ | 2,174,355,431 |  | (1,831,916,112) |  | (4,273,140,027) |
| \$13,601,606,463 |  | 5,095,803,651 |  | 16,673,818,725 |  | 7,764,526,441 |  | 9,938,881,872 |  | 8,106,965,760 |
| \$15,095,803,651 |  | 5,928,603,867 |  | 17,764,526,441 |  | 9,938,881,872 |  | 8,106,965,760 |  | 3,833,825,733 |


| 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$17,519,909,000 | \$17,752,917,000 | \$19,035,612,000 | \$18,794,389,076 | \$18,226,985,000 | \$ 17,882,408,000 |
| \$17,518,784,000 | \$18,021,410,000 | \$20,679,111,000 | \$21,470,314,497 | \$22,230,841,000 | \$ 23,114,802,000 |
| \$ (1,125,000) | \$ 268,493,000 | \$ 1,643,499,000 | \$ 2,675,925,421 | \$ (4,003,856,000) | \$ (5,232,394,000) |
| 100.0\% | 98.5\% | 92.0\% | 87.5\% | 82.0\% | 77.4\% |

## 10-Year History of Benefit Recipients by Category

June 30, 200X: Fiscal Year End

| Year | Annuitants | Disabilitants | Survivors | Total |
| :---: | :---: | :---: | :---: | :---: |
| 2000 | 29,525 | 509 | 1,912 | 31,946 |
| 2001 | 31,169 | 518 | 2,070 | 33,757 |
| 2002 | 32,231 | 551 | 2,192 | 34,974 |
| 2003 | 33,290 | 558 | 2,351 | 36,199 |
| 2004 | 34,581 | 589 | 2,479 | 37,649 |
| 2005 | 35,779 | 581 | 2,597 | 38,957 |
| 2006 | 40,973 | 630 | 3,080 | 44,683 |
| 2007 | 42,679 | 636 | 3,223 | 46,538 |
| 2008 | 43,041 | 641 | 3,299 | 46,981 |
| 2009 | 46,009 | 624 | 3,575 | 50,208 |

## Schedule of Benefit Amounts Paid

For Month of June 2009
Monthly
Benefit Amount
Number of
Recipients
Cumulative Total

## Percent

Cumulative Percent

| Under \$100-499 |  |  | 6,670 | 6,670 | 13.29\% | 13.29\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ 500 | - | 999 | 5,346 | 12,016 | 10.66\% | 23.95\% |
| \$ 1,000 | - | 1,499 | 5,392 | 17,408 | 10.75\% | 34.70\% |
| \$ 1,500 | - | 1,999 | 6,447 | 23,855 | 12.85\% | 47.55\% |
| \$ 2,000 | - | 2,499 | 6,785 | 30,640 | 13.52\% | 61.07\% |
| \$ 2,500 | - | 2,999 | 5,584 | 36,224 | 11.13\% | 72.20\% |
| \$ 3,000 | - | 3,499 | 4,133 | 40,357 | 8.24\% | 80.44\% |
| \$ 3,500 | - | 3,999 | 2,975 | 43,332 | 5.93\% | 86.37\% |
| \$ 4,000 | - | 4,499 | 2,148 | 45,480 | 4.28\% | 90.65\% |
| \$ 4,500 |  | 4,999 | 1,580 | 47,060 | 3.15\% | 93.80\% |
| \$ 5,000 | - | 5,499 | 993 | 48,053 | 1.98\% | 95.78\% |
| \$ 5,500 | - | 5,999 | 691 | 48,744 | 1.38\% | 97.16\% |
| \$ 6,000 | - | 6,499 | 465 | 49,209 | 0.93\% | 98.09\% |
| \$ 6,500 | - | 6,999 | 349 | 49,558 | 0.70\% | 98.79\% |
| \$ 7,000 | - | 7,499 | 217 | 49,775 | 0.43\% | 99.22\% |


| $\$ 7,500-7,999$ | 147 | 49,922 | $0.29 \%$ | $99.51 \%$ |
| :--- | ---: | ---: | :--- | ---: |
| $\$ 8,000-8,499$ | 91 | 50,013 | $0.18 \%$ | $99.69 \%$ |
| $\$ 8,500-8,999$ | 54 | 50,067 | $0.11 \%$ | $99.80 \%$ |
| $\$ 9,000-9,499$ | 32 | 50,099 | $0.06 \%$ | $99.86 \%$ |
| $\$ 9,500-9,999$ | 24 | 50,123 | $0.05 \%$ | $99.91 \%$ |
| $\$ 10,000-10,499$ |  |  | $0.03 \%$ | $99.94 \%$ |
| $\$ 10,500-10,999$ | 15 | 50,147 | $0.02 \%$ | $99.96 \%$ |
| $\$ 11,000-11,499$ | 9 | 50,157 | $0.02 \%$ | $99.98 \%$ |
| $\$ 11,500-11,999$ | 4 | 50,161 | $0.01 \%$ | $99.99 \%$ |
| $\$ 12,000-12,499$ | 4 | 50,165 | $0.01 \%$ | $100.00 \%$ |
| $\$ 12,500$ and $\mathbf{~}-2 v e r$ | 6 | 50,171 | $0.01 \%$ | $100.00 \%$ |

## 10-Year History of Benefits and Refunds by Type

| Pension Benefits | 2000 | 2001 | 2002 | 2003 |
| :---: | :---: | :---: | :---: | :---: |
| Annuities | \$ 734,173,055 | \$838,646,379 | \$919,648,266 | \$952,017,588 |
| Disabilities | 9,837,686 | 10,530,210 | 11,477,973 | 11,346,039 |
| Survivor Benefits | 11,025,836 | 12,222,381 | 14,096,110 | 13,613,284 |
| Total Pension Benefits | \$ 755,036,577 | \$861,398,970 | \$945,222,349 | \$976,976,911 |
| Annuities Redirected to Earnings <br> Limitation Savings Account (ELSA) | NA | \$ 388,508 | \$ 1,121,984 | \$ 1,489,708 |
| Refunds | \$ 7,262,919 | \$ 7,608,838 | \$ 7,353,363 | \$ 6,656,191 |
| Total Benefits and Refunds | \$ 762,299,496 | $\underline{\underline{\text { 8869,396,316 }}}$ | $\underline{\underline{\$ 953,697,696}}$ | $\underline{\underline{\$ 985,122,810}}$ |


| 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$ 979,108,590 | \$1,019,776,085 | \$1,190,295,077 | \$ 1,241,862,723 | \$1,297,772,858 | \$1,352,741,935 |
| 11,734,673 | 11,810,137 | 13,118,722 | 11,923,494 | 12,049,579 | 12,076,621 |
| 14,201,212 | 13,869,225 | 17,616,002 | 15,774,162 | 17,460,466 | 16,547,705 |
| \$1,005,044,475 | \$1,045,455,447 | \$1,221,029,801 | \$ 1,269,560,379 | \$1,327,282,903 | \$1,381,366,261 |
| \$ 3,365,997 | \$ 2,985,078 | \$ 3,182,223 | \$ 3,533,005 | \$ 3,554,045 | \$ 2,301,205 |
| \$ 6,861,707 | \$ 6,744,116 | \$ 11,872,504 | \$ 12,088,193 | \$ 11,770,086 | \$ 14,429,351 |
| \$1,015,272,179 | \$1,055,184,641 | \$1,236,084,528 | \$ 1,285,181,577 | \$1,342,607,034 | \$1,398,096,817 |

## Schedule of Benefit Recipients by Current Age

For Month of June 2009


## Benefit Recipients by Effective Date of Retirement

For Month of June 2009
Total Recipients: 50,171


## Schedule of New Retirees and Initial Benefit Paid

For the Ten Fiscal Years Ending June 30, 2009

|  | Years of Formula Service |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | >30 |  |  |
|  | $<10$ | 10-15 | 16-20 | 21-25 | 26-30 | $\begin{gathered} \text { (FY 2000-200 } \\ 31-35 \end{gathered}$ | >35 | Total |
|  |  |  |  |  |  | (FY 2009) |  |  |
| 2000 |  |  |  |  |  |  |  |  |
| Avg. Monthly Benefit | \$233 | \$668 | \$1,164 | \$1,661 | \$2,344 | \$3,115 |  | \$2,229 |
| Number of Retirees | 244 | 234 | 190 | 269 | 432 | 1,308 |  | 2,677 |
| 2001 |  |  |  |  |  |  |  |  |
| Avg. Monthly Benefit | \$213 | \$740 | \$1,114 | \$1,743 | \$2,523 | \$3,262 |  | \$2,312 |
| Number of Retirees | 236 | 191 | 175 | 245 | 362 | 1,125 |  | 2,334 |
| 2002 |  |  |  |  |  |  |  |  |
| Avg. Monthly Benefit | \$242 | \$777 | \$1,247 | \$1,638 | \$2,298 | \$3,137 |  | \$2,089 |
| Number of Retirees | 249 | 172 | 138 | 203 | 201 | 813 |  | 1,776 |
| 2003 |  |  |  |  |  |  |  |  |
| Avg. Monthly Benefit | \$249 | \$7589 | \$1,242 | \$1,605 | \$2,451 | \$3,204 |  | \$2,266 |
| Number of Retirees | 213 | 147 | 129 | 162 | 191 | 911 |  | 1,753 |
| 2004 |  |  |  |  |  |  |  |  |
| Avg. Monthly Benefit | \$260 | \$738 | \$1,155 | \$1,832 | \$2,393 | \$3,227 |  | \$2,324 |
| Number of Retirees | 258 | 162 | 119 | 158 | 157 | 1,102 |  | 1,956 |
| 2005 |  |  |  |  |  |  |  |  |
| Avg. Monthly Benefit | \$267 | \$768 | \$1,235 | \$1,688 | \$2,515 | \$3,224 |  | \$2,424 |
| Final Average Salary | \$28,747 | \$35,240 | \$44,812 | \$52,867 | \$58,063 | \$60,069 |  | \$53,257 |
| Number of Retirees | 204 | 110 | 118 | 132 | 169 | 1,055 |  | 1,788 |
| 2006 |  |  |  |  |  |  |  |  |
| Avg. Monthly Benefit | \$239 | \$843 | \$1,349 | \$1,820 | \$2,523 | \$3,320 |  | \$2,422 |
| Final Average Salary | \$21,194 | \$37,339 | \$50,455 | \$36,045 | \$58,519 | \$62,537 |  | \$54,018 |
| Number of Retirees | 230 | 144 | 170 | 151 | 207 | 1,094 |  | 1,996 |
| 2007 |  |  |  |  |  |  |  |  |
| Avg. Monthly Benefit | \$257 | \$781 | \$1,455 | \$1,932 | \$2,608 | \$3,548 |  | \$2,465 |
| Final Average Salary | \$22,846 | \$38,717 | \$50,770 | \$58,606 | \$61,332 | \$63,080 |  | \$55,098 |
| Number of Retirees | 256 | 162 | 183 | 181 | 190 | 1,238 |  | 2,210 |
| 2008 |  |  |  |  |  |  |  |  |
| Avg. Monthly Benefit | \$284 | \$917 | \$1,471 | \$1,943 | \$2,663 | \$3,474 |  | \$2,524 |
| Final Average Salary | \$23,542 | \$42,298 | \$52,288 | \$58,998 | \$62,353 | \$65,360 |  | \$56,822 |
| Number of Retirees | 252 | 147 | 150 | 216 | 237 | 1,107 |  | 2,109 |
| 2009 |  |  |  |  |  |  |  |  |
| Avg. Monthly Benefit | \$295 | \$885 | \$1,319 | \$1,975 | \$2,670 | \$3,463 | \$3,859 | \$2,507 |
| Final Average Salary | \$25,301 | \$39,270 | \$50,616 | \$59,550 | \$63,268 | \$66,179 | \$69,949 | \$56,972 |
| Number of Retirees | 285 | 139 | 160 | 180 | 223 | 793 | 257 | 2,037 |

Note: Final Average Salary by years of service is unavailable for years prior to fiscal year 2005.

## Distribution of TRA Benefits <br> Mailing Address of Benefit Recipient

February 2009
Total Recipients: 50,002


Note: 56 recipients reside outside the United States Minnesota Recipients $=85.7$ percent

## Distribution of TRA Benefits

## Mailing Address of Benefit Recipient

June 2009
Total Recipients: 50,171


Note: 56 recipients reside outside the United States Minnesota Recipients $=87.0$ percent

## Schedule of Benefit Recipients by Type

For Month of June 2009

|  | Monthly <br> Benefit Amount | Number of Recipients |
| :---: | :---: | :---: |
| \$ | 1 - \$ 250 | 3,491 |
| \$ | 251 - \$ 500 | 3,190 |
| \$ | 501 - \$ 750 | 2,785 |
| \$ | 751 - \$ 1,000 | 2,567 |
| \$ | 1,001 - \$ 1,250 | 2,620 |
| \$ | 1,251 - \$ 1,500 | 2,767 |
| \$ | 1,501 - \$ 1,750 | 3,118 |
| \$ | 1,751 - \$ 2,000 | 3,333 |
| \$ | 2,001 - \$ 2,250 | 3,388 |
| \$ | 2,251 - \$ 2,500 | 3,397 |
| \$ | 2,501 - \$ 2,750 | 2,997 |
| \$ | 2,751 - \$ 3,000 | 2,620 |
| \$ | 3,001 - \$ 3,250 | 2,211 |
| \$ | 3,251 - \$ 3,500 | 1,904 |
| \$ | 3,501 - \$ 3,750 | 1,596 |
| \$ | 3,751 - \$ 4,000 | 1,382 |
| \$ | 4,001 - \$ 4,250 | 1,177 |
| \$ | 4,251 - \$ 4,500 | 949 |
| \$ | 4,501 - \$ 4,750 | 884 |
| \$ | 4,751 - \$ 5,000 | 692 |
| \$ | 5,001 - \$ 5,250 | 534 |
| \$ | 5,251 - \$ 5,500 | 456 |
| \$ | 5,501 - \$ 5,750 | 383 |
| \$ | 5,751 - \$ 6,000 | 306 |
| \$ | 6,001 - \$ 6,250 | 262 |
| \$ | 6,251 - \$ 6,500 | 203 |
| \$ | 6,501 - \$ 6,750 | 171 |
| \$ | 6,751 - \$ 7,000 | 177 |
| \$ | 7,001 - \$ 7,250 | 117 |
| \$ | 7,251 - \$ 7,500 | 98 |
| \$ | 7,501 - \$ 7,750 | 80 |
| \$ | 7,751 - \$ 8,000 | 67 |
| \$ | 8,001 - \$ 8,250 | 56 |
| \$ | 8,251 - \$ 8,500 | 35 |
| \$ | 8,501 - \$ 8,750 | 28 |
| \$ | 8,751 - \$ 9,000 | 26 |
| \$ | 9,001 - \$ 9,250 | 16 |
| \$ | 9,251 - \$ 9,500 | 16 |
| \$ | 9,501 - \$ 9,750 | 16 |
|  | 9,751 - \$10,000 | 8 |
|  | 10,001 and over | 48 |
|  | Total | 50,171 |

Type of Retirement

| Regular | Disability | Beneficiary |
| :---: | :---: | :---: |
| 3,220 | 35 | 236 |
| 2,855 | 54 | 281 |
| 2,433 | 58 | 294 |
| 2,276 | 51 | 240 |
| 2,293 | 53 | 274 |
| 2,450 | 62 | 255 |
| 2,799 | 52 | 267 |
| 3,022 | 55 | 256 |
| 3,088 | 47 | 253 |
| 3,137 | 49 | 211 |
| 2,750 | 42 | 205 |
| 2,446 | 26 | 148 |
| 2,057 | 19 | 135 |
| 1,799 | 12 | 93 |
| 1,495 | 7 | 94 |
| 1,296 | 1 | 85 |
| 1,112 | 2 | 63 |
| 890 | 1 | 58 |
| 838 | 1 | 45 |
| 648 | 2 | 42 |
| 506 | 0 | 28 |
| 424 | 0 | 32 |
| 356 | 1 | 26 |
| 284 | 1 | 21 |
| 246 | 1 | 15 |
| 185 | 1 | 17 |
| 155 | 0 | 16 |
| 163 | 0 | 14 |
| 112 | 0 | 5 |
| 92 | 0 | 6 |
| 73 | 0 | 7 |
| 60 | 0 | 7 |
| 51 | 0 | 5 |
| 34 | 0 | 1 |
| 26 | 0 | 2 |
| 23 | 1 | 2 |
| 15 | 0 | 1 |
| 14 | 0 | 2 |
| 16 | 0 | 0 |
| 7 | 0 | 1 |
| 44 | 0 | 4 |
| 45,790 | 634 | 3,747 |

## Membership Data

June 30, 2009

## Distribution of Active Participants*

Years of Service as of June 30, 2009

| Age | <3 | 3-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40+ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <25 | 2,360 | 42 | - | - | - | - | - | - | - | - | 2,402 |
| AE*** | 20,064 | 40,624 |  |  |  |  |  |  |  |  | \$20,423 |
| 25-29 | 4,645 | 3,072 | 1,734 | 1 | - | - | - | - | - | - | 9,452 |
| AE*** | 25,479 | 39,772 | 45,838 | 24,561 |  |  |  |  |  |  | \$33,859 |
| 30-34 | 1,907 | 1,502 | 5,151 | 1,485 | - | - | - | - | - | - | 10,045 |
| AE*** | 24,236 | 38,995 | 47,906 | 57,785 |  |  |  |  |  |  | \$43,540 |
| 35-39 | 1,425 | 816 | 2,450 | 4,512 | 953 | - | - | - | - | - | 10,156 |
| AE*** | 20,385 | 38,403 | 47,013 | 58,825 | 65,450 |  |  |  |  |  | \$49,563 |
| 40-44 | 1,473 | 607 | 1,644 | 2,448 | 3,275 | 585 | - | - | - | - | 10,032 |
| AE*** | 17,093 | 35,746 | 45,739 | 57,876 | 65,629 | 68,140 |  |  |  |  | \$51,689 |
| 45-49 | 1,293 | 580 | 1,456 | 1,596 | 1,928 | 2,422 | 496 | - | - | - | 9,771 |
| AE*** | 16,394 | 33,900 | 46,677 | 56,989 | 64,069 | 68,769 | 69,265 |  |  |  | \$53,650 |
| 50-54 | 1,028 | 464 | 1,145 | 1,402 | 1,478 | 1,598 | 2,034 | 964 | 1 | - | 10,114 |
| AE*** | 14,816 | 31,121 | 45,716 | 57,068 | 63,324 | 68,028 | 69,205 | 70,415 | 50,593 |  | \$56,656 |
| 55-59 | 803 | 356 | 907 | 1,144 | 1,441 | 1,367 | 1,360 | 2,182 | 505 | - | 10,065 |
| AE*** | 12,231 | 31,171 | 42,108 | 54,258 | 62,323 | 68,218 | 71,002 | 72,083 | 71,560 |  | \$59,039 |
| 60-64 | 486 | 180 | 368 | 483 | 591 | 663 | 559 | 359 | 410 | 68 | 4,167 |
| AE*** | 7,955 | 23,240 | 35,446 | 52,104 | 60,936 | 68,368 | 72,026 | 75,779 | 75,362 | 75,047 | \$55,452 |
| 65-69 | 249 | 43 | 87 | 74 | 79 | 60 | 47 | 44 | 36 | 30 | 749 |
| AE*** | 5,190 | 9,723 | 29,945 | 50,860 | 62,676 | 75,657 | 77,218 | 91,313 | 103,511 | 83,959 | \$42,006 |
| 70+ | 117 | 20 | 20 | 10 | 9 | 6 | 5 | 8 | 7 | 7 | 209 |
| AE*** | 2,806 | 9,513 | 17,930 | 31,985 | 50,041 | 53,575 | 86,874 | 81,619 | 102,966 | 90,396 | \$21,099 |
| Total | 15,786 | 7,682 | 14,962 | 13,155 | 9,754 | 6,701 | 4,501 | 3,557 | 959 | 105 | **77,162 |
| AE*** | 20,137 | 37,162 | 46,193 | 57,409 | 64,143 | 68,433 | 70,208 | 72,264 | 74,592 | 78,612 | 49,076 |

[^4]In each cell, the top number is the count of active participants for the age/service combination and the bottom number is the amount of average annual earnings. Earnings shown in this exhibit are actual salaries earned during the fiscal year ending June 30, 2009, as reported by the Teachers Retirement Association of Minnesota.

## 10-Year Summary of Membership

| Year Ended <br> June 30 | Active <br> Members | Inactive <br> Members | Benefit <br> Recipients |
| :---: | :---: | :---: | :---: |
| 2000 | 70,508 | 25,208 | 31,946 |
| 2001 | 71,097 | 27,256 | 33,757 |
| 2002 | 71,690 | 27,702 | 34,974 |
| 2003 | 71,916 | 28,560 | 36,199 |
| 2004 | 72,008 | 28,990 | 37,649 |
| 2005 | 74,552 | 29,031 | 38,957 |
| 2006 | 79,164 | 33,729 | 44,683 |
| 2007 | 77,694 | 35,550 | 46,538 |
| 2008 | 76,515 | 34,283 | 46,981 |
| 2009 | 77,162 | 35,563 | 50,208 |

## 10-Year Summary of Membership



## Principal Participating Employers

As of June 30, 2009

| Employer Unit Name | 2009 |  |  | 2008 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Covered <br> Employees | Rank | Percentage of Active Membership | Covered <br> Employees | Rank | Percentage of Active Membership |
| Minneapolis - Special School District \#1 | 3,473 | 1 | 4.50 | 3,406 | 2 | 4.45 |
| Anoka-Hennepin - ISD \#11 | 3,466 | 2 | 4.49 | 3,487 | 1 | 4.56 |
| MnSCU (MN State Colleges and Universities) | 3,019 | 3 | 3.91 | 3,146 | 3 | 4.11 |
| Rosemount-Apple ValleyEagan - ISD \#196 | 2,741 | 4 | 3.55 | 2,679 | 4 | 3.50 |
| Osseo - ISD \#279 | 1,745 | 5 | 2.26 | 1,923 | 5 | 2.52 |
| Rochester - ISD \#535 | 1,483 | 6 | 1.92 | 1,457 | 7 | 1.91 |
| South Washington County ISD \#833 | 1,476 | 7 | 1.91 | 1,461 | 6 | 1.91 |
| Robbinsdale - ISD \#281 | 1,086 | 8 | 1.41 | 1,181 | 8 | 1.54 |
| Bloomington - ISD \#271 | 1,033 | 9 | 1.34 | 1,020 | 9 | 1.33 |
| Burnsville - ISD \#191 | 976 | 10 | 1.26 | NA | NA | NA |
| St. Cloud - ISD \#742 | NA | NA | NA | 967 | 10 | 1.26 |
| Lakeville - ISD 94 | NA | NA | NA | NA | NA | NA |
| All Other | 56,664 |  | 73.45 | 55,788 |  | 72.91 |
| Total | 77,162 |  | $\underline{\underline{100.00}}$ | 76,515 |  | 100.00 |

*Information not available prior to 2007.

## Number of Employer Units

As of June 30, 2009

|  | Independent <br> School | Moint Power <br> Units | MN State <br> Colleges and <br> Universities <br> (MnSCU) | Charter <br> Schools | State <br> Agencies | Others | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | 342 | 40 | 40 | 25 | 16 | 2 | 465 |
| 2001 | 340 | 40 | 40 | 28 | 14 | 1 | 463 |
| 2002 | 340 | 39 | 40 | 32 | 11 | 1 | 463 |
| 2003 | 340 | 38 | 40 | 88 | 8 | 1 | 515 |
| 2004 | 345 | 37 | 39 | 110 | 6 | 1 | 538 |
| 2005 | 345 | 38 | 39 | 136 | 6 | 1 | 565 |
| 2006 | 348 | 37 | 39 | 142 | 6 | 1 | 573 |
| 2007 | 343 | 37 | 39 | 139 | 7 | 1 | 566 |
| 2008 | 344 | 33 | 39 | 157 | 5 | 2 | 580 |
| 2009 | 347 | 34 | 39 | 156 | 5 | 2 | 583 |


| 2007 |  |  |
| :---: | :---: | :---: |
| Covered <br> Employees | Rank | Percentage of Active Membership |
| 4,217 | 1 | 5.43 |
| 3,506 | 2 | 4.51 |
| 3,253 | 3 | 4.19 |
| 2,685 | 4 | 3.46 |
| 1,973 | 5 | 2.54 |
| 1,412 | 7 | 1.81 |
| 1,454 | 6 | 1.87 |
| 1,245 | 8 | 1.60 |
| 994 | 10 | 1.28 |
| NA | NA | NA |
| NA | NA | NA |
| 1,078 | 9 | 1.39 |
| 55,877 |  | 71.92 |
| $\underline{\underline{77,694}}$ |  | $\underline{\underline{100.00}}$ |

This page intentionally left blank.

Plan Statement

## Plan Statement

June 30, 2009

## Purpose

The Minnesota Teachers Retirement Association (TRA) was established on July 1, 1931, by the state legislature. Its purpose is to improve educational service and better compensate teachers in order to make the occupation of teaching in Minnesota more attractive to qualified persons by providing a retirement benefit schedule that rewards faithful and continued service.

## Administration

TRA is managed by eight trustees - three are statutorily appointed and five are elected. The statutory trustees are the Commissioner of Education, the Commissioner of the Minnesota Department of Management and Budget (MMB) and a representative of the Minnesota School Boards Association. Four of the five elected trustees are active members and one is a retiree. Administrative management of the fund is vested in an Executive Director who is appointed by the Board of Trustees. The Board also contracts with an actuary and uses legal counsel provided by the office of the Attorney General.

## Membership

All teachers employed in public elementary and secondary schools, joint powers, charter schools and all other educational institutions maintained by the State of Minnesota (except those teachers employed by the cities of St. Paul and Duluth, or by the University of Minnesota) are required to be members of TRA.
Teachers employed by Minnesota State Colleges and Universities (MnSCU) may elect TRA coverage within one year of their hire date. Beginning July 1, 2009, newly-tenured MnSCU members also have a oneyear period to elect TRA coverage. The individual must pay for the past service covered by TRA, and the cost of past service is based on full actuarial cost. No Minnesota state college or university teacher is a member except for purposes of Social Security coverage if that teacher has coverage by the Defined Contribution Retirement Plan administered by the MnSCU Board.

## Retirement Service Credit

Service credit for benefits is earned from teaching service performed on a full-time, part-time or substitute basis up to a maximum of 170 full days per fiscal year (July 1 - June 30). Service credit may also be obtained by using paid accumulated sick leave or by purchasing service for a qualified leave of absence. If a teacher teaches less than 170 full days, fractional service credit is given as the ratio of the number of full days taught to 170 . If a teacher teaches only a fractional part of a day, the service credit earned is the actual hours taught divided by a five-hour standard for the day. Even though a teacher may teach more than five hours per day, not more than one day of service credit can be earned on any day. Service credit for MnSCU members is based on a full-time equivalence method. No more than one year of service credit may be earned during any fiscal year.

## Financing

Benefits are financed by employee contributions, employer contributions, investment earnings and turnover gains. Turnover gains are employer contributions retained by the fund when members take refunds of their own contributions.

## Vesting

In a pension plan, vesting means a member has earned sufficient service credit to be eligible for a monthly benefit.
TRA members who have performed covered service after May 15, 1989, are vested after three years of teaching service. TRA members who last worked prior to May 16, 1989, require five years or, in some cases, ten years of service credit earned in order to be eligible for a monthly annuity benefit.

## Employee Contributions

TRA members pay a percentage of their gross annual salary as determined by their membership plan. Basic Plan members (without Social Security coverage) contribute 9.0 percent of their annual salary, while Coordinated Plan members (coordinated with Social Security coverage) contribute 5.5 percent of their annual salary.

## Employer Contributions

Local school districts and other TRA-covered employer units provide contributions of 9.5 percent of total salary for members in the Basic Plan and 5.5 percent of total salary for members in the Coordinated Plan. For Coordinated Plan members the employer unit also makes the required matching contribution to the Social Security Administration.
Minneapolis Special School District \#1 pays an employer additional contribution of 3.64 percent of annual salary for TRA members employed by that school district.

TRA also receives approximately $\$ 20.7$ million annually in state and local direct aid. The aid payments are designed to offset unfunded liabilities associated with the 2006 merger of the Minnesota Teachers Retirement Fund Association (MTRFA).

## Retirement Benefit

The retirement benefit is determined by a formula based on the average of the member's highest five successive annual salaries, an accumulated percentage factor based on the total years of service credit, and the member's age at retirement. The retirement benefits for members who were first hired before July 1, 1989, are different from the retirement benefits for members who were first hired after June 30, 1989.

## Coordinated Members First Hired Before

 July 1, 1989For members first hired before July 1, 1989, the retirement benefits (with average salary defined as the average of the highest five successive annual salaries) are the greater of:
a. The sum of:

- $\quad 1.20$ percent of average salary for the first 10 years of allowable service;
- 1.70 percent of average salary for each subsequent year prior to July 1, 2006; and
- $\quad 1.90$ percent of average salary for each year of allowable service July 1, 2006 and after.
- No actuarial reduction if age plus years of service totals 90. Otherwise, reduction of 0.25 percent for each month the member is under age 65 (or age 62 if 30 years of allowable service) at the time of retirement.
b. The sum of:
- $\quad 1.70$ percent of average salary for each year of allowable service prior to July 1, 2006; and
■ $\quad 1.90$ percent of average salary for each year of allowable service beginning July 1, 2006.
- Actuarial reduction (averaging 4.0 percent to 5.5 percent per year) applies if the member is under full Social Security benefit retirement age, but not to exceed age 65.
or
c. For certain eligible members first hired prior to July 1, 1969, a money purchase annuity equal to the actuarial equivalent of 220.00 percent of the member's accumulated deductions plus interest thereon.


## Coordinated Members First Hired After June 30, 1989

For members first hired after June 30, 1989, the retirement benefits (with average salary defined as the average of the highest five successive annual salaries) are the sum of:

- $\quad 1.70$ percent of average salary for each year of allowable service prior to July 1, 2006; and
- 1.90 percent of average salary for each year of allowable service beginning July 1, 2006.
Actuarial reduction (averaging 4.0 percent to 5.5 percent per year) applies if the member is under full Social Security benefit retirement age, but not to exceed age 66.


## Basic Members (Former MTRFA)

TRA has approximately 50 active Basic members from the former Minneapolis Teachers Retirement Fund Association (MTRFA) who were transferred to TRA effective June 30, 2006. Under the merger legislation, this group of former MTRFA members retains eligibility for the benefit provisions as provided by the MTRFA Articles of Incorporation and by-laws as they existed on June 30, 2006.
The retirement benefits for these members (with average salary defined as the average of the highest five successive annual salaries) are:

- 2.50 percent of average salary for each year of teaching service.
- No actuarial reduction applies if the retiring member is age 60 or any age with 30 years of teaching service.
If the member is age 55 with less than 30 years of teaching service, the retirement benefit is the greater of:
a. 2.25 percent of average salary for each year of teaching service with reduction of 0.25 percent for each month the member is under the age first eligible for a normal retirement benefit.
b. 2.50 percent of average salary for each year of teaching service assuming augmentation to the age first eligible for a normal retirement benefit at 3.00 percent per year, and actuarial reduction for each month the member is under the age first eligible for a normal retirement benefit.
An alternative benefit is available to members who are at least age 50 and have seven years of teaching service. The benefit is based on the accumulation of the 6.50 percent "city deposits" to the Retirement Fund. Other benefits are also provided under this alternative benefit, depending on the member's age and teaching service.


## Basic Members (Non-MTRFA)

As of June 30, 2009, TRA had fewer than ten inactive members who retain eligibility for the Basic Plan and who do not have eligibility for the provisions for former MTRFA Basic members. The retirement benefits (with average salary defined as the average of the highest five successive annual salaries) are the greater of:
a. $\quad 2.20$ percent of average salary for each of the first ten years of allowable service and 2.70 percent of average salary for each subsequent year with reduction of 0.25 percent for each month the member is under age 65 at time of retirement, or under age 62 if 30 years of allowable service. No reduction if age plus years of allowable service totals 90.
b. 2.70 percent of average salary for each year of allowable service assuming augmentation to age 65 at 3.00 percent per year, and actuarial reduction for each month the member is under age 65.
or
c. For eligible members, a money purchase annuity equal to the actuarial equivalent of 220.00 percent of the member's accumulated deductions plus interest thereon
All members in this group have reached normal retirement age and are no longer subject to early retirement penalties.

## Deferred Retirement

Members with three or more years of allowable service (ten or more years of allowable service if termination of teaching service occurs before July 1, 1987, and five or more years of allowable service if termination of teaching service occurs after June 30, 1987, but before May 16, 1989) who terminate teaching service in schools covered by the association may have their retirement benefit deferred until they attain age 55 or older.
For members first hired prior to July 1, 2006, the deferred benefit is augmented by 3 percent interest compounded annually until January 1 of the year following attainment of age 55 , and 5 percent thereafter until the retirement benefit begins.
All vested TRA members first hired after June 30, 2006, receive deferred annuity benefit increases of 2.5 percent per year between the date of termination and the effective date of retirement.

## Annuity Plan Options

Six different annuity plan options are available to TRA members that provide monthly benefit payments for as long as the annuitant lives. The No Refund Plan provides the highest possible monthly benefit, but terminates upon the member's death. A member may choose to provide survivor benefits to a designated beneficiary(ies) by selecting one of the five plans that have survivorship features. A married member must choose one of the three survivorship plans (plans 4 through 6) listed below at retirement, unless the member's spouse waives the right to this type of annuity.

1. No Refund, For Life of Member
2. Guaranteed Refund
3. 15-Years Guaranteed
4. $100 \%$ Survivorship with Bounceback
5. $50 \%$ Survivorship with Bounceback
6. 75\% Survivorship with Bounceback

## Benefit Increase Method: Fiscal Year 2009 - Payable January 1, 2010

Prior to June 30, 2009, the assets and liabilities of TRA benefit recipients were accounted for as part of the Minnesota Post Retirement Investment Fund (Post Fund). Based on legislation passed in 2008, Post Fund would be abolished if its composite funded ratio would decline under 80 percent. As of June 30, 2008, the funded ratio was 79.7 percent. Under provisions in the law, the assets and liabilities pertaining to retired TRA members in the Post Fund were transferred to the TRA Fund on June 30, 2009.
The 2008 law that produced the merger of the Post Fund with the TRA Fund, also specified a revised method to determine future post-retirement increases. Beginning January 1, 2010, members retired at least 12 months will receive a fixed 2.5 percent increase annually. Prorated increases will be paid to members retired less than 12 months. The increases will be paid regardless of investment performance or inflation experienced.

There is a guarantee that benefits will never be decreased below the original amount established at retirement as adjusted by the annual increases.

## Combined Service Annuity

Any vested member having combined service credit with any two or more Minnesota public retirement funds that participates in the combined service annuity program, may elect to receive a combined service annuity upon compliance with eligibility requirements for retirement.

## Refunds

Upon termination of teaching service and application, TRA will issue a refund of a member's accumulated contributions plus 5 percent interest compounded annually if termination occurred before May 16, 1989, and 6 percent interest compounded annually if termination occurred on or after May 16, 1989. A refund will be issued only if the member has officially resigned from employment and the official refund application form is submitted no sooner than 30 days after termination of teaching service.

## Repayment of Refunds

Members who return to teaching service after previously withdrawing their contributions may repay these contributions upon completing two years of allowable service. The repayment must include interest of 8.5 percent, compounded annually from the date of the refund. If a member has more than two years of refunded service, they may repay a minimum portion, which is at least $1 / 3$ of the total service credit period for all refunds previously taken.

## Disability Benefits

An active member who becomes disabled after at least three years of allowable service is eligible to apply for a total and permanent disability benefit provided at least two of the required three years of allowable service are performed after last becoming a member. State statute defines total and permanent disability as the inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to be of a long, continued and indefinite duration. An indefinite duration is a period of at least one year.

## Survivor Benefits of Members Prior to Retirement

Certain benefits are available to the survivor(s) of members who die before officially retiring with TRA. Beneficiary designation options vary for single members and married members.

## Single Members

## Non-Vested

- A lump-sum death benefit equal to a member's accumulated deductions plus interest to the date of death is payable to either the designated beneficiary or estate, whichever is applicable. Interest is compounded annually at 6 percent. Contributions made by the employer are not included in this benefit. A member may designate any person(s), trust, or organization(s) as a beneficiary.
Vested
- For a member without a surviving spouse at the time of death, survivor benefits will automatically be paid for a period certain to all dependent children under the age of 20 , unless the member has chosen the lifetime monthly benefit option explained in the next paragraph. These payments are made from the date of death to the date each dependent child attains age 20 if the child is under age 15 on the date of death. If the dependent child is 15 years or older on the date of death, payments will be made for five years. Payments for children under the age of 18 would be made to a custodial parent or court-appointed guardian. A dependent child is a biological or adopted child who is under 20 years of age and who is dependent on the member for more than one-half of his or her financial support.
- A member may designate payment of lifetime monthly benefits for either a former spouse(s), or dependent and non-dependent, biological or adopted child(ren), instead of the above described surviving dependent child(ren) benefits being paid.
- For a member without a former spouse or dependent child(ren) at the time of death, either the designated beneficiary or estate, whichever is applicable, is entitled to a lump-sum death benefit equal to accumulated deductions plus interest to the date of death. Interest is compounded annually
at 6 percent. Contributions made by the employer are not included in this benefit. A member may designate any person(s), trust, or organization(s) as a beneficiary.


## Married Members

A surviving spouse has precedence over any designated beneficiary.

## Non-Vested

- A member's spouse is entitled to a lump-sum death benefit equal to the accumulated deductions plus interest to the date of death. Interest is compounded annually at 6 percent. Contributions made by the employer are not included in this benefit.


## Vested

- A member's surviving spouse may elect to receive a lifetime annuity in lieu of a lump-sum benefit. The lifetime annuity is payable on a monthly basis for the lifetime of the spouse. Payments terminate upon the death of the spouse with no benefits remaining for other beneficiaries.
- Instead of a lifetime annuity, a member's spouse may elect to receive actuarially equivalent payments for a term certain annuity of $5,10,15$ or 20 years. The amount of the annuity is based upon a formula, the member's age at the time of death and the age of the spouse when benefits begin to accrue, although monthly benefit payments cannot exceed 75 percent of the member's average High-5 monthly salary.
- A member and their spouse may jointly make a specification to waive the spouse's benefits so that designated beneficiary(ies) will receive a lifetime survivor annuity benefit. The designated beneficiary may be either the member's former spouse(s) or the member's biological or adopted child(ren). Under a joint specification, a designated beneficiary cannot elect a term certain annuity of 5, 1015 or 20 years. If a joint specification is not on file, the annuity is payable only to the surviving spouse.


## Non-Vested or Vested

- A member and their spouse may jointly make a specification to waive the spouse's benefits so that any person, trust or organization will receive a lump-sum death benefit equal to the accumulated deductions plus interest to the date of death.


[^0]:    Room 140 Centennial Building, 658 Cedar Street, St. Paul, Minnesota 55155-1603 - Tel: 651-296-4708 - Fax: 651-296-4712 E-mail: auditor(0)state.mn.us - Web Site: www.auditor.leg.state.mn.us * Through Minnesota Relay: 1-800-627-3529 or 7-1-1

[^1]:    *Actuarially Required Contributions calculated according to parameters of GASB 25.

[^2]:    * Employer contribution rate is blended to reflect rates of 13.14 percent of pay for Basic members, 5.50 percent for pay for 74,105 Coordinated members not employed by Special School District \#1, and 9.14 percent of pay for 3,005 Coordinated members who are employed by Special School District \#1.
    ** Includes contributions from School District \#1, the City of Minneapolis and matching state contributions.
    *** On a market value of assets basis, the total required contribution is $22.76 \%$ of payroll and the contribution deficiency is (11.07\%) of payroll.

[^3]:    * 2008 data reflects higher additions, removals and FY 2009 data adjustments associated with the conversion of former MTRFA benefit recipient rolls into TRA benefit payment systems.

[^4]:    * Does not include disabled participants.
    ** Active members include 52 Basic and 77,110 Coordinated members.
    *** $A E=$ Average earnings (in dollars)

