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A Pension Trust Fund of the State of Minnesota

2014

Comprehensive Annual Financial Report

Teachers Retirement Association

for fiscal year ended June 30, 2014

Teachers Retirement Association of Minnesota
A Pension Trust Fund of the State of Minnesota

Comprehensive Annual Financial Report

for the fiscal year ended June 30, 2014

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Laurie Fiori Hacking
Executive Director

Report Prepared by the TRA Administration Division

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Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Minnesota Teachers Retirement Association

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2013

Executive Director/CEO

Public Pension Coordinating Council

Recognition Award for Administration
2014

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

Alan H. Winkle
Program Administrator

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

Letter of Transmittal

Laurie Fiori Hacking
Executive Director

December 29, 2014

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, 2014, our 83rd year of service.

TRA management has implemented a system of internal controls to 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 independent Office of the Legislative Auditor has issued an unqualified (clean) opinion on TRA's financial statements for the year ended June 30, 2014. The independent auditor's report is located at the front of the Financial section of this report. Management believes that the accompanying statements, schedules, and tables are fairly presented. We are solely responsible for the content of the report, including its financial statements, which should be useful 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 15-19 for an overview of additions to and deductions from the TRA Fund and additional financial reporting detail for the fiscal year.

TRA Profile

As of June 30, 2014, TRA had 590 reporting units, 77,243 active members and a total of 58,809 retirees, survivors, beneficiaries, and disabilitants who were receiving monthly benefits.

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.

TRA follows the provisions of statements promulgated by the Governmental Accounting Standards Board (GASB) including the implementation with this report of GASB Statement No. 67, Financial Reporting for Pension 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 with the firm Cavanaugh Macdonald Consulting of Bellevue, Nebraska to prepare two annual actuarial valuation reports. One report is performed in accordance with the accounting and financial reporting requirements of GASB Statement 67. The second report is performed in accordance with actuarial assumptions and methods contained in Minnesota Statutes Sec. 356.215 and to provide results that assist board members and legislators in funding determinations. These statutes specify key funding policy elements including amortization period, actuarial cost method, COLA valuation method, asset smoothing and economic assumptions such as investment earnings and inflation rates. The Minnesota Office of the Attorney General provides legal counsel to the Board of Trustees. Most financial transactions, including disbursements from the pension fund, are processed through the centralized controls of the Statewide Integrated Financial Tools (SWIFT) system, under the statutory authority of the Department of Minnesota Management and Budget and the Department of Administration.

Economic Condition

All TRA assets are invested under the authority and direction of the State Board of Investment (SBI). A listing of the pooled investments in the TRA Fund can be found on page 56. The SBI has developed strategic asset allocation and other investment policies based on the long-term investment horizon profile of our members and benefit recipients. The SBI, with advice from its Investment Advisory Council (IAC), continually reviews policies to ensure sufficient assets are available to finance benefits determined under statute. 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.

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

Minnesota’s expansion continues to make steady progress. The Bureau of Economic Analysis (BEA) reports the state’s real GDP rose 2.8 percent in calendar 2013, a full percentage point faster than the nation, and most indicators suggest the labor market has tightened up considerably in 2014. Minnesota’s unemployment rate dropped to 3.9 percent in October 2014, the fifth lowest among states and matching the low point of the previous 2002-2007 economic expansion. Unemployment has fallen across age, gender, and racial cohorts. The number of long-term unemployed and the rate of involuntary part-time employment have fallen sharply as well. However, despite a tightening labor market, expected wage pressures have yet to emerge.

The latest employment news remains positive. Minnesota added almost 50,000 net new jobs in the past year, including 46,000 jobs added by the private sector. Those employment gains continue to be broad based, particularly in the goods-producing sector. Strength in Minnesota factories has been led by fabricated metal products and transportation equipment. Employment is forecast to grow 1.7 percent in fiscal year 2015 and decelerate slightly to 1.6 percent in fiscal year 2016, followed by 1.2 percent growth in fiscal year 2017.

Information from the BEA, Quarterly Census of Employment and Wages (QCEW) and income tax withholding collections suggests Minnesota’s nominal wage and salary disbursements grew 3.0 percent in fiscal year 2014. Wage income is now expected to accelerate to 4.3 percent growth in fiscal year 2015, followed by 4.4 percent and 4.6 percent growth in 2016 and 2017, respectively. Minnesota personal income is forecast to grow 4.2 percent in fiscal year 2015 and 4.5 percent in fiscal year 2016, followed by an acceleration to 5.3 percent in fiscal year 2017.

Investment Results

The U.S. stock market, as measured by the Russell 3000 index, returned 25.2 percent for the fiscal year ended June 30, 2014. Within the Russell 3000 index, larger companies outpaced small companies.

International markets returned 21.7 percent for the fiscal year as measured by the Morgan Stanley Capital International (MSCI) All Country World Index excluding the United States net taxes on dividends (ACWI ex U.S.), which represents the developed and emerging markets outside the United States. The returns in developed markets were stronger than in the emerging markets.

The U.S. fixed income (bond) market, as measured by the Barclays Capital Aggregate Bond Index, returned 4.4 percent for the fiscal year ended June 30, 2014. Within the bond market, commercial mortgage-backed securities and corporate bonds were the best performing sectors.

Within this investment environment, TRA retirement assets under SBI investment management as part of the Combined Funds (see page 51), produced an investment return of 18.6 percent for the fiscal year ended June 30, 2014, net of fees and using the time-weighted performance method. This was well ahead of the assumed rate of 8.0 percent. Over the latest ten, twenty and thirty-year periods, the funds have experienced an annualized investment return of 8.4 %, 9.0% and 10.3% respectively. For all time periods, the performance of the Combined Funds exceeded the performance of the composite benchmark.

Since the benefit payments are not all immediately payable, SBI can maintain a long-term strategy. This approach, along with a well-diversified investment portfolio, helps weather periods of short-term volatility in the investment markets. The SBI also utilizes a disciplined rebalancing policy to keep asset class allocations within policy guidelines.

Legislation

Pension legislation enacted in 2014 will merge the Duluth Teachers Retirement Fund Association (DTRFA) with TRA on June 30, 2015. Under the merger, approximately 3,000 DTRFA members will become TRA members with the same benefit provisions as other members. As of June 30, 2013, the DTRFA unfunded liability was approximately $150 million or about 2.4 percent of TRA's unfunded liability of $6.35 billion unfunded liability. Merger legislation requires the State of Minnesota to pay $14 million per year to the pay for the DTRFA unfunded liability. The annual payment will continue until TRA's total unfunded liability is eliminated.

Legislation passed in 2013 requires the implementation of revised early retirement reduction factors for TRA benefits calculated under the level formula. Beginning on July 1, 2015, the factors would primarily affect members who were first hired July 1, 1989 or later. The changes would not affect those members who retire under the "Rule of 90" step formula method. Under the Level Formula, members who retire prior to Normal Retirement Age (age 66 for members hired July 1, 1989 or later) are assessed a reduction in their monthly pension amounts upon retirement. The younger the retiring member, the greater the reduction amount.

The revised factors provide for lower reduction factors for those members who reach age 62 with 30 years of service. A phased implementation of these factors will occur over a 5-year period ending June 30, 2020.

Statutory Funding Status

The actuarial value of TRA assets increased as of June 30, 2014 compared to the previous year-end. For actuarial purposes, investments gains and losses are recognized over a period. On June 30, 2014, the actuarial value of TRA assets was $18.2 billion, an increase from $16.8 billion on June 30, 2013. The five-year smoothing of investment gains and losses resulted in a substantial deferred investment gain of $2.1 billion as of June 30, 2014. The deferred gain will be recognized in future years, and used to absorb any declines due to a future market slump.

TRA's unfunded actuarial accrued liability – the amount for which the actuarial value of assets are not available to pay benefits earned to date – decreased from $6.64 billion on June 30, 2013 to $6.35 billion on June 30, 2014. Strong investment performance during fiscal year 2014 accounted for much of this improvement. Under statute, the unfunded liability must be paid by June 30, 2037.

Another key measure to assess TRA funding health is the adequacy of employee and employer contributions. As of July 1, 2014, the TRA contribution rate deficiency was 3.47 percent of active member covered payroll. Beginning July 1, 2014, the employee and employer contribution rates were increased to 7.50 percent each. If investment markets produce returns below the investment earnings assumption or if the current investment assumption (8.0 percent annually for fiscal year 2014, but increased to 8.50 percent annually beginning in fiscal year 2018) is lowered, the Board may be required to recommend additional contribution and/or plan changes for legislative consideration. The TRA Board of Trustees and its management will continue to remain vigilant and monitor all key actuarial measures and report funding and plan sustainability issues to the membership, employers and the legislature.

Major Initiatives

TRA employees, in a team environment, continually work on strategic initiatives to administer and process customer service demands for retirement planning and benefit payment services. The primary project currently underway is called the ".NET Project," a comprehensive assessment of current business processes and the rewriting of existing applications in a more powerful and structured computer language. Phase 1.0 of the project was implemented on July 1, 2014 with enhanced functionality for employer unit reporting. Subsequent phases include major benefit calculation, payment processes, and enhanced member online account features.

For 2015, several additional major initiatives are underway. One is planning for the merger of DTRFA membership into TRA on June 30, 2015. Dozens of tasks have been identified including converting the DTRFA data base into TRA's systems, counseling members who have retirement plans during the merger transition, assisting Duluth Public Schools with TRA employer unit reporting, and establishing a satellite office in Duluth to serve members throughout northeastern Minnesota.

Another major project will be assisting TRA employer units with their requirements to implement GASB Statement 68 for their financial reporting for the fiscal year ending June 30, 2015. The results of the TRA's GASB Statement 67 accounting actuarial valuation for fiscal year 2014 serves as the foundation for the amounts and disclosures which TRA's employers will report later in 2015. We regularly add more resources on this topic to the TRA website, including videos and other educational tools. We are planning to provide employer units with their required information in the spring of 2015.

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, 2013. This was the sixteenth 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 in 2014. 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 members, employer unit officials and other interested persons about the availability of the report on the TRA website. A summary that highlights key aspects of the report will be provided to all members in the TRIB, TRA's periodic newsletter.

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

J. Michael Stoffel
Deputy Executive Director

Board of Trustees

As of December 31, 2014

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Retiree Representative
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Vice President

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Elected Member
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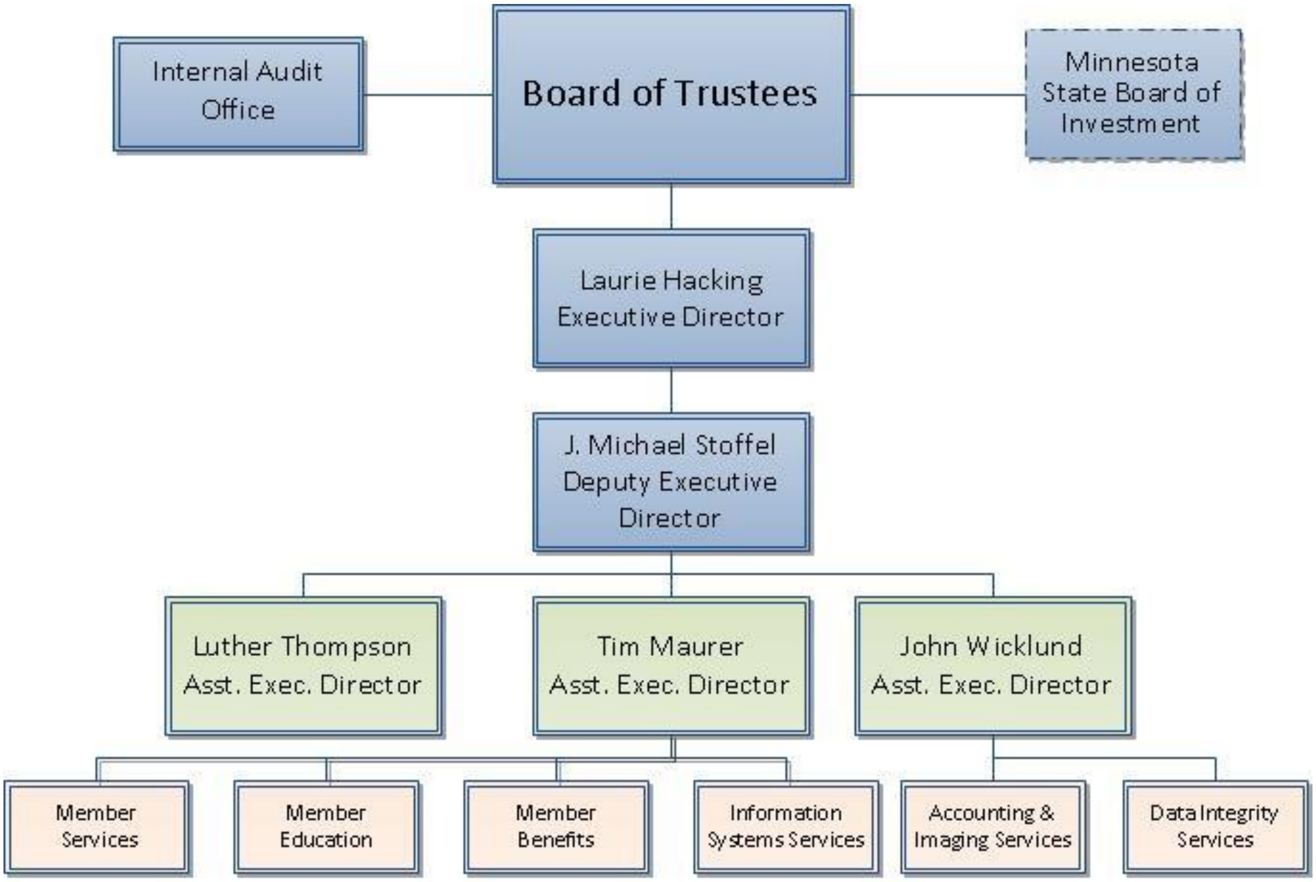
Tim Maurer
Assistant
Executive Director
of Operations

Luther Thompson
Assistant
Executive Director
of Legal and
Legislative Services

John Wicklund
Assistant
Executive Director
of Administration

Administrative Organization

As of December 2014



Consulting Services

Actuary
Cavanaugh Macdonald Consulting, LLC
Bellevue, Nebraska

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
St. Paul, 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.

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OFFICE OF THE LEGISLATIVE AUDITOR
STATE OF MINNESOTA • James Nobles, Legislative Auditor

Independent Auditor's Report

Members of the Board of Trustees
Teachers Retirement Association

Ms. Laurie Fiori Hacking, Executive Director
Teachers Retirement Association

Report on the Financial Statements

We have audited the accompanying basic financial statements of the Teachers Retirement Association (TRA) as of and for the fiscal year ended June 30, 2014, and the related notes to the financial statements, as listed in the Table of Contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal controls relevant to TRA's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of TRA's internal controls. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Teachers Retirement Association as of June 30, 2014, and the changes in financial position for the period then ended in conformity with accounting principles generally accepted in the United States of America.

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E-mail: legislative.auditor@state.mn.us • Website: www.auditor.leg.state.mn.us • Minnesota Relay: 1-800-627-3529 or 7-1-1

Emphasis about a Matter – GASB and Statutory Financial Reporting Requirements

In its fiscal year 2014 financial statements, TRA implemented a new accounting standard issued by the Governmental Accounting Standards Board (GASB). This new standard, Statement Number 67, *Financial Reporting for Pension Plans*, requires TRA to determine its net pension liability using assumptions that conform to actuarial standards of practice issued by the Actuarial Standards Board. The net pension liability is the difference between the present value of pension benefits earned by employees through the end of the fiscal year and the market value of investments at the end of the fiscal year. See Note 6 in the Notes to the Financial Statements for further information about TRA's net pension liability.

Minnesota Statutes 2014, 356.20, require TRA to also include in its annual financial report information using funding-focused statutory assumptions and methodologies. Following are the main reasons for the differences between TRA's statutory funding-focused information and its GASB-based information:

(1) The discount rate required by statute for funding purposes was different from the discount rate used for financial reporting purposes. The discount rate is the rate used to bring the projected pension benefits to the present value of those benefits. The statutory discount rate used for funding purposes was 8.0 percent through 2017 and 8.5 percent thereafter. The discount rate used for GASB financial reporting purposes was 8.25 percent. This rate was determined by TRA's actuary as a reasonable discount rate in accordance with actuarial standards of practice. Because professional judgment varies among actuaries, different actuaries may arrive at different reasonable discount rates.

(2) The statutory asset valuation method required for funding purposes was different from the GASB asset valuation method required for financial reporting purposes. For funding purposes, statutes require investment gains and losses be recognized over a five-year period to "smooth" the volatility that can occur from year to year. For GASB financial reporting purposes, assets are valued at market value as of the end of the fiscal year.

It may be confusing to some users of the financial report that TRA included information determined using assumptions and methodologies required by statute and using assumptions and methodologies required by GASB. However, including this information was necessary for TRA to both comply with state law and GASB requirements. This dual reporting had no effect on our audit opinion.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis and the other required supplementary information, as listed in the Table of Contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information Included with the Financial Statements

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise TRA's basic financial statements. The supporting schedules in the Financial Section and 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 are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. The supporting schedules have been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supporting schedules are fairly stated, in all material respects, in relation to the basic financial statements 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 do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we will issue our report on our consideration of the Teacher's Retirement Association's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on 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.

James R. Nobles
Legislative Auditor

Cecile M. Ferkul, CPA, CISA
Deputy Legislative Auditor

December 22, 2014
Saint Paul, Minnesota

Management Discussion and Analysis

June 30, 2014

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, 2014. 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

Financial highlights of fiscal year 2014 include:

- The Net Position Restricted for Pension Benefits increased in value by $2.27 billion during fiscal year 2014 for a total of $20.29 billion. Plan contributions and investment income totaled $3.87 billion during the fiscal year. Plan benefits and other expenses totaled $1.60 billion during the fiscal year.
- Investment returns for the 2014 fiscal year were 18.6 percent using the time-weighted value method, resulting in investment income of $3.3 billion.
- Contributions paid by employees and employers during fiscal year 2014 totaled $614.93 million, an increase of $58.46 million from the fiscal year 2013 total of $556.47 million.
- Pension benefits paid to retirees and beneficiaries during fiscal year 2014 was $1.58 billion. The fiscal year 2013 total was $1.52 billion, representing an increase of $58.50 million during the year.
- Refunds of member contributions plus interest during fiscal year 2014 were $12.57 million. The fiscal year 2013 total was $10.46 million.
- Administrative expenses of the fund during fiscal year 2014 were $9.43 million. The fiscal year 2013 total was $9.13 million, representing an increase of $300,000 during the fiscal year.

Actuarial Highlights

The Association'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 paying retirement costs is shared equitably by present and future generations of members and taxpayers.

By state law, TRA and its actuarial consultant are required to prepare an actuarial valuation to assist decision-makers in assessing the funding strength and position of the TRA Fund. The results of this actuarial valuation report will be used to describe key funding measures such as the funding ratio, the unfunded actuarial accrued liability and the contribution rate deficiency.

With the first year implementation of GASB Statement 67, TRA's actuary has prepared a separate actuarial valuation report under the requirements of GASB Statements 67 for presentations and disclosures within the Financial Section of this report. The GASB 67 valuation report will also be the foundation of a report TRA will issue in the first half of 2015 to assist employer units in their implementation of GASB 68 financial reporting later in 2015.

As of June 30, 2014, the accrued liability funding ratio for TRA was 74.13 percent, an increase from the comparable funding ratio of 71.63 percent as of June 30, 2013. TRA's unfunded actuarial accrued liability on June 30, 2013, was $6.64 billion. The June 30, 2014, unfunded actuarial liability was $6.35 billion, a decrease of $0.29 billion from the previous year. Strong investment experience during the five-year smoothing formula resulted in more than a $1 billion gain in determining the unfunded actuarial liability. Those gains were partly offset by an assumption change to recognize a higher post-retirement increase in the future, which increased TRA's actuarial liabilities by $513 million. TRA's unfunded liability, by state law, must be fully paid by June 30, 2037. Key actuarial funding ratios are presented on page 65.

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 Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position;
- the notes to the basic financial statements; and
- required supplementary information, and
- other supplementary information.

The Statement of Fiduciary Net Position (page 20) presents information on the assets and liabilities of TRA, with the difference between the two reported as net position. The net position of the Association reflects the resources available to pay benefits to members when due. Over time, increases and decreases in net position 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 Fiduciary Net Position (page 21) presents information detailing the changes in net position 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.

The notes to the financial statements (pages 22-36) 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. The required supplementary information (pages 37-40) will be built prospectively and in time, will form a ten-year historical trend. The Schedule of Changes in the Employers' Net Pension Liability includes a reconciliation of the fiscal year 2014 net pension liability for GASB 67 reporting purposes.

The Schedule of Employer and Non-Employer Contributions presents information about the annual required contributions and resulting contributions in relation to this requirement, covered employee payroll, and contributions as a percentage of covered payroll.

The Schedule of Investment Returns using the money-weighted method is presented. It will be built prospectively over the next 10 years.

Two other supporting schedules are also presented. The Schedule of TRA Administrative Expenses (page 43) presents the overall cost of administering the Association. The Schedule of Professional Consultant Expenses (page 44) 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, 2014, were $22.51 billion and were mostly comprised of cash, investments and contributions due from employers. Total plan assets increased $2.72 billion (13.74 percent) from the June 30, 2013, total of $19.79 billion. The primary reason for the increase was the higher investment returns in fiscal year 2014.

Plan Liabilities

Total liabilities as of June 30, 2014, were $2.21 billion, an increase of 24.86 percent from the June 30, 2013, liability amount of $1.77 billion. The primary reason for the increase was the higher value of liabilities within the securities lending program. In both years, the liability amounts were mostly comprised of obligations under security lending arrangements, accounts payable and long-term bonds payable for the building co-owned by the Association.

Net Position

Association assets exceeded liabilities on June 30, 2014, by $20.29 billion. The amount is greater than the June 30, 2013, amount of $18.02 billion by $2.27 billion. The increase in the fair value of investments is primarily attributable to favorable market conditions experienced during fiscal year 2014, as evidenced by the overall fund investment return of 18.6 percent. TRA relies heavily on investment earnings to help pay benefits and expenses over the long term, since annual employee and employer contributions are less than one-third of the amount needed to fund cash outflows. As a result, the TRA Fund requires strong investment performance each year to experience an increase in the net position.

Revenues — Additions to Fiduciary Net Position

Total additions to the TRA Fund during fiscal year 2014 were $3.88 billion, a $1.01 billion increase from $2.87 billion in fiscal year 2013. The increase is due to stronger investment earnings in fiscal year 2014 than in the prior fiscal year.

Total employee and employer contributions for fiscal year 2014 increased $58.46 million from the previous fiscal year for a combined fiscal year total of about $614.93 million. The increase is attributable to higher contribution rates for active members and employers beginning in fiscal year 2014. Contributions during fiscal year 2014 were calculated at 7.0 percent employee and 7.0 percent employer for Coordinated members of TRA.

Net investment income of $3.26 billion was recorded for fiscal year 2014. This amount increased by $947.4 million from the fiscal year 2013 amount of $2.31 billion.

Fiduciary Net Position

Dollar Amounts in Thousands

	2014	2013	Change
Cash and Investments	$ 22,464,446	$ 19,759,782	$ 2,704,664
Receivables	25,605	18,908	6,697
Other	16,317	13,844	2,473
Total Assets	22,506,368	19,792,534	2,713,834
Total Liabilities	2,212,683	1,773,215	(439,468)
Fiduciary Net Position	$ 20,293,685	$ 18,019,319	$ 2,274,366

Changes in Fiduciary Net Position

Dollar Amounts in Thousands

Additions	2014	2013	Change
Employee Contributions	$ 294,632	$ 265,809	$ 28,823
Employer Contributions	320,301	290,662	29,639
Net Investment Income/(Loss)	3,257,693	2,310,295	947,398
Other	5,502	5,475	27
Total Additions	$ 3,878,128	$ 2,872,241	$ 1,005,887
Deductions	**2014**	**2013**	**Change**
Monthly Benefits	$ 1,581,766	$ 1,523,269	$ 58,497
Refunds of Contributions	12,566	10,463	2,103
Administrative Expenses	9,430	9,131	299
Total Deductions	$ 1,603,762	$ 1,542,863	$ 60,899
Change in Fiduciary Net Position	$ 2,274,366	$ 1,329,378	$ 944,988

Expenses — Deductions From Fiduciary Net Position

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 benefit expense increased by $58.50 million due to an increase in the number of benefit recipients and a 2.0 percent benefit adjustment paid to eligible benefit recipients on January 1, 2014.

Member refunds of $12.56 million increased by $2.10 million during fiscal year 2014 from the fiscal year 2013 total of $10.46 million.

Administrative expenses increased by 3.28 percent during the fiscal year – from $9.13 million in fiscal year 2013 to $9.43 million in fiscal year 2014. Overall, fund deductions increased $60.90 million during fiscal year 2014.

Actuarial Highlights

The financial health of a public pension plan is not exclusively assessed by analyzing the basic financial statements. To assist funding analysis, TRA's actuary prepared an actuarial valuation in accordance with Minnesota Statute 356. 215. These financial statements should also be reviewed in conjunction with the Actuarial Section of this CAFR.

Due to strong investment returns over the preceding five years, the actuarial value of assets increased from $16.77 billion on June 30, 2013, to $18.18 billion as of June 30, 2014. The actuarial value of assets smoothes investment gains and losses over a five-year period to minimize the volatility associated with any one year of investment performance. On fair value basis, TRA assets were about $20.29 billion on June 30, 2014. The difference between the actuarial value and the fair value of assets is $2.11 billion and represents deferred gains which will either be recognized in future years or will help mitigate investment losses should the markets decline.

TRA's actuarial liabilities increased during the year from $23.42 billion on June 30, 2013 to $24.53 billion as of June 30, 2014. About $0.51 billion of the increase is attributable to an assumption change. The assumption change clarified the provision in Minnesota Statute which provides for an increase in the post-retirement annual adjustment calculation. Once the TRA Fund has achieved a market value funded ratio of 90 percent for two consecutive years, the post-retirement annual adjustment increases from 2.0 percent to 2.5 percent. Under current law, adjustments are paid annually on January 1. Under the statutory actuarial funding valuation report, our actuary has calculated that the higher post-retirement adjustment is estimated to increase with the July 1, 2031 valuation report.

TRA's unfunded actuarial liability on June 30, 2013 was $6.64 billion. The June 30, 2014, unfunded actuarial liability decreased to $6.35 billion, representing a decrease of about $0.29 billion. By law, the unfunded liability must be recovered in full by June 30, 2037.

TRA's funding objective is to meet long-term benefit obligations through the accumulation of contributions and investment income. This funding goal 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, 2014, the actuarial accrued liability funding ratio for TRA was 74.13 percent, an increase from the comparable funding ratio of 71.63 percent as of June 30, 2013. The funding increase was driven primarily through strong investment returns of the past five years. The assumption change to the post-retirement adjustment described in the paragraph above also served to lower the actuarial accrued liability funded ratio by an estimated 1.60 percent.

TRA's statutory contribution rate of 15.68 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 19.15 percent. The resulting contribution deficiency is 3.47 percent of employee covered payroll.

Employee and employer contribution rates are reviewed and set into law by the Minnesota legislature. TRA's actuary will be conducting an experience study reviewing all the economic and demographic assumptions underlying the actuarial valuation report results. The report is expected to be completed by May 1, 2015.

GASB 67-68 actuarial valuation results

New for this year, TRA authorized a separate actuarial valuation report designed to comply with the provisions of GASB Statement 67. The Required Supplementary Information (RSI), beginning on page 37, detail the results of this valuation report. The focus of this valuation is primarily for financial statement presentations rather than funding analysis. Under the assumptions used in this valuation, TRA had a net pension liability of $4.6 billion on June 30, 2014 and a contribution deficiency of $172.4 million for fiscal year 2014. The GASB 67 investment return for fiscal year 2014, using the money-weighted method, was 18.7 percent.

TRA will use the results of the GASB 67 accounting valuation and prepare to allocate the results to each employer unit. We plan to provide employer units with this information in the first quarter of calendar 2015 to facilitate their compliance with the financial reporting requirements of GASB Statement 68 for their fiscal year 2015 financial reporting cycle. The complete GASB 67 accounting valuation report is available at: www.minnesotatra.org/FORMSPUB/eepubs.html

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 any one point in time. The funding ratio of the TRA Fund increased from 71.6 percent to 74.1 percent for fiscal year 2014.

The long-term financial health of TRA, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions. Changes were made by the 2010 legislature to strengthen the funding of TRA and enhance its long-term sustainability. Contributions were increased by a total of 4 percent, to be phased in over four years beginning July 1, 2011, and benefit reductions were implemented. These changes, along with strong investment performance in four of the last five fiscal years, have significantly improved the projected long-term funding of TRA. However, a contribution deficiency still exists based on the results of the 2014 valuation. Clearly, the actual market returns over the coming years will be a significant factor in whether or not TRA's goal of amortizing the unfunded actuarial accrued liability by June 30, 2037 will be reached.

In addition to the market returns, the forthcoming June 30, 2015 merger with the Duluth Teachers Retirement Fund Association will also change the dynamics of the funded status of TRA. Prior to enactment of the legislation, a great deal of effort was spent to analyze the potential impact of the merger on TRA. We note that this analysis appropriately focused on the long-term impact of the merger, reflecting the additional state aid payments that are scheduled to be made annually to assure that TRA's funding is not negatively impacted by the merger. However, because the DTRFA liabilities will be included in the annual valuation of TRA for fiscal year 2015, but the state aid payments intended to fund the actuarial accrued liability will be contributed over a time, it is possible that certain measures of the financial health of TRA may be temporarily skewed in the short term.

Request for Information

The financial report is designed to provide the Board of Trustees, members and other users of this financial report a general overview of the Association's finances and to demonstrate its accountability with the money it holds in trust. Questions about this report, or requests for additional financial or actuarial information should be directed to:

Teachers Retirement Association
60 Empire Drive, Suite 400
Saint Paul, Minnesota 55103

Telephone toll-free, 800-657-3669

Email: info@MinnesotaTRA.org

Teachers Retirement Fund
Statement of Fiduciary Net Position

As of June 30, 2014

Assets		
Cash and Short-term Investments		
Cash	$	3,390,835
Building Account Cash		34,140
Short-term Investments		536,124,035
Total Cash and short-term investments		539,549,010
Accounts Receivable		25,605,156
Investments (at fair value)		
Fixed Income Pool		4,732,983,853
Alternative Investments Pool		2,558,421,827
Indexed Equity Pool		3,149,569,074
Domestic Equity Pool		6,119,589,906
Global Equity Pool		3,170,210,775
Total Investments		19,730,775,435
Securities Lending Collateral		2,194,121,559
Building		
Land		171,166
Building & Equipment Net of Depreciation		7,282,815
Total Building		7,453,981
Capital Assets Net of Depreciation		8,862,770
Total Assets	$	22,506,367,911
Liabilities		
Current		
Accounts Payable	$	10,466,957
Accrued Compensated Absences		76,995
Accrued Expenses - Building		31,746
Bonds Payable		590,870
Bond Interest Payable		14,322
Securities Lending Collateral		2,194,121,559
Total Current Liabilities		2,205,302,449
Long Term		
Accrued Compensated Absences		648,604
Bonds Payable		6,732,379
Total Long Term Liabilities		7,380,983
Total Liabilities		2,212,683,432
Net Position Restricted For Pensions	$	20,293,684,479

The accompanying notes are an integral part of this statement.

Teachers Retirement Fund
Statement of Changes in Fiduciary Net Position

For the Fiscal Year Ended June 30, 2014

Additions		
Contributions		
Employee	$	294,632,331
Employer		299,299,837
Direct Aid (State/City/District)		21,001,009
Earnings Limitation Savings Account (ELSA)		1,646,815
Total Contributions		616,579,992
Investment Income		
Net Appreciation in Fair Value of Investments		3,277,719,394
Less Investment Expense		(28,205,607)
Net Investment Income		3,249,513,787
Securities Lending Activities		
Securities Lending Income		12,182,343
Securities Lending Expenses:		
Borrower Rebates		(107,097)
Management Fees		(3,896,404)
Total Securities Lending Expenses		(4,003,501)
Net Income from Securities Lending		8,178,842
Total Net Investment Income		3,257,692,629
Other Income		3,855,566
Total Additions	$	3,878,128,187
Deductions		
Retirement Benefits Paid	$	1,580,119,828
Earnings Limitation Savings Account		1,646,815
Refunds of Contributions to Members		12,566,217
Administrative Expenses		9,429,749
Total Deductions		1,603,762,609
Net Increase (decrease)		2,274,365,578
Net Position Restricted for Pensions		
Beginning of Year		18,019,318,901
End of Year	$	20,293,684,479

The accompanying notes are an integral part of this statement.

1. Description of TRA

A. Organization

The Teachers Retirement Association (TRA) is an administrator of a multiple employer, cost-sharing 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 one year of eligible 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, Employer Units and Membership*.

Figure 1. Employer Units and Membership

Employer Units June 30, 2014	
Independent school districts	341
Joint Power Units	37
Colleges and universities	39
State agencies	5
Charter schools	163
Professional organizations	5
Total Employer Units	590

Membership June 30, 2014	
Retirees, disabilitants and beneficiaries receiving benefits	58,809
Terminated employees with deferred vested benefits	12,907
Total	71,716
Current employees	
Vested	61,552
Non-vested	15,691
Total	77,243

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.

Two methods are used to compute benefits for TRA's Coordinated and Basic Plan members. Members first employed **before July 1, 1989**, receive the greater of the Tier I or Tier II benefits as described:

Tier I	Step Rate Formula	Percentage
Basic	1st ten years of service	2.2 percent per year
	All years after	2.7 percent per year
Coordinated	1st ten years if service years are prior to July 1, 2006	1.2 percent per year
	1st ten years if service years are July 1, 2006 or after	1.4 percent per year
	All other years of service if service years are prior to July 1, 2006	1.7 percent per year
	All other years of service if service years are July 1, 2006 or after	1.9 percent per year

With these provisions:

(a) Normal retirement age is 65 with less than 30 years of allowable service and age 62 with 30 or more years of allowable service.

(b) 3 percent per year early retirement reduction for all years under normal retirement age.

(c) Unreduced benefits for early retirement under a Rule-of-90 (age plus allowable service equals 90 or more).

Or

Tier II Benefits

For years of service prior to July 1, 2006, a level formula of 1.7 percent per year for coordinated members and 2.7 percent per year for basic members. For years of service July 1, 2006 and after, a level formula of 1.9 percent per year for Coordinated members and 2.7 for Basic members applies. Actuarially equivalent early retirement reduction factors with augmentation are used for early retirement before the normal age of 65. These reduction factors average approximately 4.0 to 5.5 percent per year.

Members first employed **after June 30, 1989**, receive only the Tier II benefit calculation with a normal retirement age that is their retirement age for full Social Security retirement benefits, but not to exceed age 66.

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 on June 30, 2006. Thirty-six former MTRFA active and inactive members retain Basic Program coverage.

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 eight member Board of Trustees is defined by Minnesota Statute, section 354.06, and consists of four active member representatives, one retired member representative, and three statutory officials. The Board has significant independence in the operations and management of the Association, though the State Legislature actually determines the contribution rates for members and employers and sets benefits levels. The Board of Trustees is responsible for TRA's administration, but the State Board of Investment (SBI) is responsible for investing plan assets.

2. Summary of Significant Accounting Policies

A. 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.

The Governmental Accounting Standards Board (GASB) is the independent organization that establishes accounting and financial reporting standards for governmental entities.

The GASB issued ***Statement No. 65, Items Previously Reported as Assets and Liabilities***, in March 2012. This Statement establishes accounting and financial reporting standards that reclassify certain items previously reported as assets and liabilities as deferred outflows of resources or deferred inflows of resources. The Statement also improves financial reporting by clarifying the appropriate use of deferred outflows of resources and deferred inflows of resources to ensure consistency in financial reporting. TRA implemented this Statement for the fiscal year ending June 30, 2014.

For the fiscal year ended June 30, 2014, TRA implemented GASB ***Statement No. 67, Financial Reporting for Pension Plans***. GASB 67 requires changes in the presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures.

B. Accounts Receivable

Amounts classified as accounts receivable consist primarily of employee contributions, employer contributions, and direct statutory payments from employers received after the fiscal year end on salaries earned prior to June 30, 2014. Under Minnesota Statutes, section 354.52, subdivision 4, TRA employers must remit contributions within 14 days after the member is paid.

A Schedule of Accounts Receivable as of June 30, 2014, is presented in *Figure 2, Schedule of Accounts Receivable*.

Figure 2. Schedule of Accounts Receivable

As of June 30, 2014	
Description	**Amount**
Employer Contributions	$ 11,119,015
Employee Contributions	10,769,293
Direct Aid (State/City/School)	3,375,000
Management Fees	200,895
Interest on Investments	86,812
Shared staff reimbursement	41,181
Shared projector	6,219
Shared lease	4,281
Shared salary study	1,334
Building fund	1,126
Total Receivables	$ 25,605,156

C. Investment Policies and Valuation Methodology

1. Pursuant to Minnesota Statutes, Chapter 11A, 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, 2014, the TRA Fund's share of the Combined Funds administered by SBI at fair value was approximately 34.06 percent ($20.27 billion – TRA and $59.5 billion – total).
2. Minnesota Statutes, section 11A.24, broadly restricts retirement fund investments to obligations and stocks of the 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. SBI's target allocation

policy is shown in *Figure 3, Investment Allocation*.

Figure 3. Investment Allocation

	Target Allocation	Long-Term Expected Real Rate of Return (geometric)
Domestic Stocks	45%	5.50%
International Stocks	15%	6.00
Bonds	18%	1.45
Alternative Assets	20%	6.40
Unallocated Cash	2%	0.50
Total	**100%**	

3. 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. The pooled accounts have not been rated for credit quality. *Figure 4, TRA Investment Portfolio,* provides a summary of the cost and fair values of the investments as of June 30, 2014, as reported on the Statement of Fiduciary Net Position. 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.

   Included in the short-term investment category is a program managed by the SBI in which it purchases certificates of deposits (CD) in Minnesota financial institutions. The SBI receives a market rate of return on these investments. The CD investments are insured by the Federal Deposit Insurance Corporation.

   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 Fiduciary Net Position. The summarized amounts show net investment income of $3.3 billion for fiscal year 2014.

   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 (page 56). TRA's share of these expenses totaled $28.2 million (pages 54-55).

   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

Rate of Return

For the year ended June 30, 2014, the annual money-weighted rate of return on the assets of the combined retirement fund, net of investment expense, was 18.696%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Figure 4. TRA Investment Portfolio

TRA Investment Portfolio
June 30, 2014

TRA Fund	Cost	Fair Value
Pooled Accounts		
Fixed Income	$ 4,498,074,464	$ 4,732,983,853
Domestic Equity	3,942,281,799	6,119,589,906
Indexed Equity	2,224,923,530	3,149,569,074
Global Equity	2,445,619,576	3,170,210,775
Alternative Investment	2,065,019,203	2,558,421,827
Total	$ 15,175,918,572	$ 19,730,775,435
Short-Term Cash Equivalents		
Money Market	$ 433,744,751	$ 433,812,097
CD Repo Pool	102,295,505	102,311,938
Total	536,040,256	536,124,035
Total Invested	$ 15,711,958,828	$ 20,266,899,470

D. Capital Assets

Capital assets are capitalized at the time of acquisition at cost. Assets with a cost in excess of $2,000 and internally generated software development costs in excess of $1,000,000 are capitalized. In fiscal year 2014, software development costs of $3,057,935 were capitalized. Additional development costs are anticipated over the next three years.

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), modular office furniture (10 years) and internally generated software (10 years).

Capital assets are presented on the June 30, 2014, Statement of Fiduciary Net Position. The year-end balance plus changes during the year are shown in *Figure 5, Schedule of Capital Assets*.

E. 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, 2014, is $725,599. Of this, $76,995 is considered a short-term liability and $648,604 is shown as a long-term liability on the Statement of Fiduciary Net Position. The total increased by $54,430 during fiscal year 2014.

Figure 5. Schedule of Capital Assets

Description	Balance 7/01/2013	Additions	Deletions	Balance 6/30/2014
Furniture and Equipment	$ 2,585,740	$ 143,134	$ (40,662)	$ 2,688,212
Internally Developed Software	5,385,566	3,057,935	0	8,443,501
Reserve for Depreciation	(1,945,147)	(359,571)	35,776	(2,268,942)
Net Capital Assets	$ 6,026,159	$ 2,841,498	$ (4,886)	$ 8,862,771

3. Deposits and Investment Risk Disclosures

A. Investment Risk

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.

B. Custodial credit risk

Custodial credit risk for cash deposits and investments is the risk that, in the event of a bank or custodian failure, TRA will not be able to recover the value of its investments or collateral securities. Cash consists of year-end receipts not processed as of the investment cutoff deadline on June 30. TRA cash funds are held in the state treasury, commingled with other state funds. Minnesota Statute Sec. 9.031, requires that deposits be secured by depository insurance or a combination of depository insurance and collateral securities held in the state's name by an agent of the state. Such insurance and collateral shall be in amounts sufficient to ensure that deposits do not exceed 90% of the sum of the insured amount and the market value of the collateral. Throughout fiscal year 2014, the combined depository insurance and collateral was sufficient to meet legal requirements and secure all TRA deposits, eliminating exposure to custodial credit risk.

C. Credit Risk

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 the lower of S & P's or Moody's Quality Ratings, is shown in *Figure 6, Credit Risk Exposure.*

Figure 6. Credit Risk Exposure

Quality Rating	**Fair Value** *(in thousands)*
AAA	$241,469
AA	78,921
A	347,742
BBB	792,425
BB	302,816
B	66,178
CCC	30,318
CC	17,163
C	576
D	8,202
Agency	1,441,390
Treasury	1,145,804
Unrated	1,230,424
Total	$5,703,428

D. Concentration of Credit Risk

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of an investment in a single issuer. SBI determines concentration of credit risk based on security identification number. TRA's defined benefit plan does not have a concentration of credit risk.

E. Interest Rate Risk

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 controls interest rate risk through guidelines developed for each portfolio. TRA's share of the debt securities are held in external investment pools and have the weighted average maturities as shown in *Figure 7, Interest Rate Risk*.

Figure 7. Interest Rate Risk

Security Type	Weighted Average Maturity (in Years)
Municipal	15.15
Corporate Debt	9.34
Yankee	9.16
U.S. Treasuries	8.42
Foreign Country Bonds	6.83
U. S. Agency	5.89
Information Technology	5.33
Mortgage Pass Through	4.92
Consumer Discretionary	4.83
Collateralized Mortgage Obligation	4.47
Asset Backed	2.94
Financials	2.92
Commercial Mortgage Backed Securities	0.90
Private Placement	0.42
Cash Equivalent	0.39

F. Foreign Currency Risk

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 Investment Advisory Committee (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, 2014, was distributed among the currencies as shown in *Figure 8, Schedule of Foreign Currency Risk*.

G. Derivative Financial Instruments

Governmental Accounting Standards Board (GASB) Statement 53 Disclosures

On behalf of TRA, SBI invests in various types of derivative financial instruments. Derivatives are financial instruments, the value of which are derived, in whole or in part, from the value of any one or more underlying securities or assets, or index of securities or assets.

Minnesota Statutes, section 11A.24, provides that any agreement for put and call options and futures contracts may only be entered into with a fully offsetting amount of cash or securities. This applies to foreign currency forward contracts used to offset the currency risk of a security. All other derivatives are exchange-traded. The purpose of the SBI's derivative activity is to equitize cash in the portfolio, to adjust the duration of the portfolio, or to offset current futures positions.

Explanations of each derivative instrument type are presented below. The fair value balances and notational amounts (or face value) at June 30, 2014, classified by derivative instrument type (e.g., futures, options, currency forwards, and stock warrants and rights), and the changes in fair value for fiscal year 2014 are shown in *Figure 9, Schedule of Derivative Financial Instruments*.

- **Futures** are contract commitments to purchase (asset) or sell (liability) at a future date. The net change in the values of futures contracts is settled on a regular basis and gains and losses are included in investment income.
- **Options** are contracts that give buyers or sellers the right to buy (calls) or sell (puts) a security at a predetermined price on a future date. Gains and losses result from variances in the market value of the security that is the

subject of the contract that occur prior to or on the contract specified date. The gains and losses are included in investment income.

- **Currency Forward Contracts** are used to manage portfolio foreign currency risk. The provisions of the contract vary based on what is negotiated between the two parties.
- **Stock Warrants and Rights**, similar to options, are the right to purchase shares of a stock at a certain price by a certain date. They usually have a longer term before expiration, e.g., five years or more. When exercised, new shares are issued by the company. Rights are the same but are issued to current stock owners to enable them to retain their relative ownership share. Gains and losses from the sale or exercise of stock warrants and rights are included in investment income.

SBI is exposed to credit risk through multiple counterparties in foreign currency forward contracts that are used to offset the currency risk of a security. TRA's proportionate share of the maximum loss that SBI would have recognized as of June 30, 2014, if all counter parties failed to perform as contracted is $990,442. These counter parties have S&P ratings of A or better. There is no collateral held or any liabilities included in netting arrangements with those counterparties that would have reduced SBI's exposure to credit risk.

H. Securities Lending

Governmental Accounting Standards Board (GASB) Statement 28 Disclosures

TRA 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 approved borrowers.

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) or other collateral including securities issued or guaranteed by the United States government. 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 the fiscal year, 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, 2014, such investment pool had an average duration of 12.64 days and an average weighted maturity of 44.22 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, 2014, SBI had no credit risk exposure to borrowers. TRA's portion of the market value of the collateral held and the fair value of securities on loan from SBI as of June 30, 2014, were $3,944,548,283 and $3,774,873,060, respectively. Cash collateral totaling $2,194,121,559 is reported on the Statement of Fiduciary Net Position as an asset. Liabilities resulting from these securities lending transactions are also reported on the Statement of Fiduciary Net Position.

Figure 8. Schedule of Foreign Currency Risk

Currency	Cash	Debt	Equity	Total
Australian Dollar	$ 2,775,286	-	$ 155,555,487	$ 158,330,773
Brazilian Real	38,376	-	40,071,803	40,110,179
Canadian Dollar	3,666,872	$ 205,350	224,445,920	228,318,142
Chilean Peso	780	-	4,320,930	4,321,710
Colombian Peso	169	-	7,595,680	7,595,849
Czech Koruna	3,733	-	2,541,252	2,544,985
Danish Krone	113,497	-	44,536,728	44,650,225
Egyptian Pound	3,468	-	180,318	183,786
Euro Currency	10,333,753	$50,972,641	766,726,942	828,033,336
Hong Kong Dollar	1,584,035	-	192,745,447	194,329,482
Hungarian Forint	8,775	-	2,188,077	2,196,852
Indian Rupee	172,387	-	62,429,987	62,602,374
Indonesian Rupiah	23,637	-	9,652,845	9,676,482
Israeli Shekel	25,579	-	5,251,920	5,277,499
Japanese Yen	9,601,895	-	476,694,237	486,296,132
Malaysian Ringgit	22,943	-	19,150,698	19,173,641
Mexican Peso	64	-	18,771,197	18,771,261
Moroccan Dirham	14	-	-	14
New Israeli Sheqel	572	-	-	572
New Taiwan Dollar	1,766	-	49,946,017	49,947,783
New Zealand Dollar	11,071	$ 2,266,325	3,932,967	6,210,363
Norwegian Krone	42,211	-	23,136,639	23,178,850
Philippine Peso	2,753	-	13,034,412	13,037,165
Polish Zloty	1,129	-	10,537,468	10,538,597
Pound Sterling	7,790,163	$ 8,401,179	503,238,292	519,429,634
Qatari Rial	2,236	-	1,438,863	1,441,099
Singapore Dollar	489,846	-	28,008,079	28,497,925
South African Rand	91,274	-	28,031,429	28,122,703
South Korean Won	(28,631)	-	84,118,839	84,090,208
Swedish Krona	1,429,128	-	65,798,929	67,228,057
Swiss Franc	89,126	-	198,418,849	198,507,975
Thailand Baht	2,357	-	19,980,742	19,983,099
Turkish Lira	898	-	1,745,113	1,746,011
UAE Dirham	6,990	-	318,992	325,982
Total	**$ 38,308,152**	**$61,845,495**	**$ 3,064,545,098**	**$ 3,164,698,745**

Figure 9. Schedule of Derivative Financial Instruments
(in thousands of dollars)

Derivative Investment Type	Changes in Fair Value During FY 2014	Fair Value at June 30, 2014	Notional Amount
Futures			
Index Futures – Long	$ 20,375	$ 0	$ 698
Index Futures – Short	$ (1,563)	$ 0	$ (107)
Fixed Income Futures – Long	$ 6,025	$ 0	$ 256,572
Fixed Income Futures – Short	$ (4,076)	$ 0	$ (150,690)
Options			
Futures Options Bought	$ (799)	$ 81	$ 1,724
Futures Options Written	$ 1,204	$ (97)	$ (851)
Currency Forwards			
Foreign Currency Forwards	$ (1,890)	$ (354)	$ 261,318
Stock Warrants and Rights			
Stock Warrants	$ 35	$ 78	$ 85
Stock Rights	$ 200	$ 140	$ 267

4. Other Notes

A. 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 79, line B3).

B. Earnings Limitation Savings Account (ELSA)

Teachers under their Social Security normal retirement age who resume teaching service for a TRA-covered employer after retirement are subject to a $46,000 annual earnings limitation. If a retired 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. Effective January 1, 2011, ELSA accounts no longer accrue interest. A member may apply for a lump-sum payment or rollover of their ELSA account balance, as long as it has been at least one year after the last deferred amount was redirected to the ELSA account.

As of June 30, 2014, TRA had 323 retirees with an ELSA account established. The total of all ELSA account balances was $4.1 million. The dollar amount of pension benefits withheld due to excess earnings during fiscal year 2014 was $1,646,815. ELSA assets are invested in the TRA Fund until distribution. Distributions of ELSA accounts for 132 retirees occurred during fiscal year 2014 and totaled $1.68 million and are included as a deduction in the Statement of Changes in Fiduciary Net Position as a component of Refund of Contributions to Members.

C. Participating Pension Plan

All 89 employees of the Teachers Retirement Association are covered by the multiple employer cost sharing defined benefit plan administered by TRA. All TRA employees participate in the Coordinated Plan and 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 2014, Coordinated members were required to contribute 7.0 percent of their annual covered salary. Employers contributed 7.0 percent of their annual covered salary for Coordinated members. The total covered payroll salaries for all TRA employees during fiscal year 2014 was approximately $4.45 million or 0.11 percent of total membership-covered salaries. The total covered payroll salaries for the entire membership of TRA for fiscal year 2014 was approximately $4.06 billion. TRA paid 100 percent of its required employer contributions listed in Figure 10.

Employer pension contributions for TRA employees are shown in *Figure 10, Schedule of TRA Employer Pension Contributions for TRA Employees.*

Figure 10. Schedule of TRA Employer Pension Contributions for TRA Employees

For the Fiscal Year Ended June 30		
2014	**2013**	**2012**
$306,306	$280,541	$285,373

D. 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 140,000 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.

In August, 2012, the bonds were refunded with the proceeds of a new, lower-interest rate bond issue. The 2013 series $21,880,000 Retirement System Revenue Refunding bonds are secured by the value of the total assets of the retirement systems, excluding any fund related to or dedicated to defined contribution plans administered by the retirement systems. The goal of the 2012 refunding bonds was not only to attempt to approximate the debt service payments that had existed under the 2000 revenue bonds, but to also shorten the repayment period by five years.

Through the issuance of the refunding bonds, which received a AAA rating from both Standard & Poor's and Fitch, the bond term was reduced by five years and the present value of the savings to the retirement systems was $9.58 million. The bonds mature on June 1, 2025. TRA's share of the present value savings was approximately $3.51 million.

Effective July 1, 2013, TRA's ownership interest decreased from 37.80 percent to 36.70 percent.

At fiscal year end, TRA's share of the bonds payable is $7,328,111, which includes bond principal of $6,846,385 and bond premium of $481,726. Interest expected to be paid over the remaining term of the bonds is $674,251. TRA's share of the long-term bond repayment schedule including interest is summarized in *Figure 11, Schedule of Building Debt Service Payments,*

TRA is depreciating its share of the facility over 40 years. The depreciation schedule, shown in *Figure 12, Schedule of Office Building and*

Equipment, summarizes the asset valuation of the office building, building equipment and deferred bond charges.

E. 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), a multiple employer cost sharing defined benefit plan 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. As of June 30, 2014, the SEGIP had an unfunded net obligation of $226,171,000 to be funded on a pay-as-you-go basis. TRA's allocated portion of this liability is $47,000.

Required OPEB Contributions and Net OPEB Obligation

(dollars in thousands)

FY Ended June 30	Annual Required Contribution (a)	Employer Contribution (b)	Percent (b)/(a)	Net OPEB Obligation
2012	$60	$72	120%	$45
2013	$43	$49	114%	$39
2014	$44	$36	82%	$47

F. June 30, 2015, Merger with the Duluth Teachers Retirement Fund Association

The Laws of Minnesota (2014) Chapter 296, Article 6, authorized the consolidation of the Duluth Teachers Retirement Fund Association (DTRFA) with TRA effective June 30, 2015.

DTRFA has slightly over 3,000 active, deferred and retired members. On June 30, 2013, DTRFA had $205 million in assets on a fair value basis and actuarial liabilities of $352 million.

The legislation provides TRA with a $14.37 million annual appropriation from the State of Minnesota General Fund to provide funding support for the actuarial liabilities assumed in the merger. The appropriation will continue until TRA's unfunded actuarial liability is paid off.

Figure 11. Schedule of Building Debt Service Payments

(TRA Share @ 36.7%)
Effective: August 9, 2012

Fiscal Year	Principal	Interest	Premium	Total
2015	$ 590,870	$ 113,516	$ 58,350	$ 762,736
2016	603,715	103,719	56,330	763,764
2017	614,725	93,709	54,265	762,699
2018	627,570	83,517	52,163	763,250
2019	645,920	73,112	50,017	769,049
2020	655,095	62,402	47,808	765,305
2021	673,445	51,540	45,568	770,553
2022	688,125	40,374	43,265	771,764
2023	702,805	28,965	40,912	772,682
2024	677,115	17,312	24,453	718,880
2025	367,000	6,085	8,595	381,680
Totals	$6,846,385	$ 674,251	$ 481,726	$8,002,362

Figure 12. Schedule of Office Building and Equipment

(TRA Share @ 36.7%)
June 30, 2014

Description	Balance 7/01/2013	Additions	Deletions	Balance 6/30/2014
Land	$ 171,166	$ -	$ -	$ 171,166
Building	10,843,891	-	-	10,843,891
Reserve for Building Depreciation	(3,341,381)	(267,947)	-	(3,609,328)
Net Building	$ 7,502,510	$ (267,947)	$ -	$ 7,234,563
Building Equipment	$ 110,106	$ -	$ (2,354)	$ 107,752
Reserve for Bld. Equip Deprec.	(49,752)	(12,163)	2,415	(59,500)
Net Building Equipment	$ 60,354	$ (12,163)	$ 61	$ 48,252
Deferred Bond Charge	$ 145,857	$ -	$ (145,857)	$ -
Reserve for Amortization	(62,144)	-	62,144	-
Net Deferred Bond Charge	$ 83,713	$ -	$ (83,713)	$ -

5. Contributions Required and Made

The TRA actuary performs an annual actuarial funding valuation in accordance with Minnesota Statute and the Minnesota Legislative Commission on Pensions and Retirement's (LCPR) *Standards for Actuarial Work*. The report is meant to assist the legislature in determining the funding progress made towards paying off TRA's unfunded liabilities.

Minnesota Statutes, Chapter 354 sets the rates (page 79, Line A4) for employee and employer contributions. 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 $614,933,177 ($294,632,331 employee and $320,300,846 employer and employer direct aid) were received in accordance with the statutory contribution rates and amounts. On page 79, Line C, statutory contributions are projected as insufficient to meet the actuarially determined required contributions. The deficiency is 3.47 percent of covered payroll. This translates into a contribution deficiency of about $150.9 million projected for fiscal year 2015.

6. Net Pension Liability

The TRA actuary performs another actuarial valuation to comply with the requirements of GASB Statement 67.

The components of the net pension liability of the TRA plan as of June 30, 2014, are as follows for participating employers and the State of Minnesota (a nonemployer contributing entity):

Net Pension Liability (in thousands)	
Total Pension Liability	$ 24,901,612
Plan Fiduciary Net Position	$ 20,293,684
Net Pension Liability	$ 4,607,928
Plan net position as a percentage of the total pension liability	81.5%

Key Methods and Assumptions Used in Valuation of Total Pension Liability	
Actuarial Information	
Valuation Date	July 1, 2014
Experience Study	October 30, 2009
Actuarial Cost Method	Entry Age Normal
Actuarial Assumptions:	
Investment Rate of Return	8.25%
Wage Inflation	3.0%
Projected Salary increase	3.5 – 12%
Cost of living adjustment	2.0% until year 2034; 2.5% thereafter
Mortality Assumption	See page 61.

The total pension liability is calculated using a discount rate called the single equivalent interest rate. Our calculations indicate that the fiduciary net position is not projected to be depleted. The discount rate used to measure the total pension liability on both June 30, 2013, and June 30, 2014, was the long-term rate of return 8.25 percent.

The projection of cash flows used to determine the discount rate assumed that plan contributions from members and employers will be made at the current contribution rates as set out in state statute:

- Employer contribution rates: 11.00 percent for Basic members and 7.50 percent for Coordinated members.

- Employer contribution rates: 15.14 percent for Basic members and 7.50 percent for Coordinated members.

The long-term expected rate of return on pension plan investments is reviewed regularly as part of the experience study. A limited scope experience study that addressed only the inflation and long-term rate of return (investment rate of return) assumptions for the GASB 67 valuation was prepared on August 29, 2014. The assumption is intended to be a long-term assumption (30 to 50 years) and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected rate of future years.

Sensitivity of Net Pension Liability (NPL) to Changes in the Discount Rate

	1% Decrease (7.25%)	Current Discount Rate 8.25%	1% Increase (9.25%)
NPL	$7,615,327	$4,607,928	$2,100,797

The complete *2014 Actuarial Valuation Accounting Report* is available at https://www.MinnesotaTRA.org/FORMSPUB/eepubs.html.

Required Supplementary Information

Schedule of Changes in the Employers' Net Pension Liability

As of June 30, 2014
(in thousands)

Total Pension Liability	
Service cost	$ 367,621
Interest	1,895,469
Benefit term changes	0
Differences between expected and actual experience*	475,265
Assumptions changes	0
Benefit payments, including member refunds	(1,592,686)
Net change in Total Pension Liability	$ 1,145,669
Total Pension Liability – beginning	$ 23,755,943
Total Pension Liability – ending (a)	$ 24,901,612
Employer contributions	$ 299,300
Non-employer contributions-Direct Aid (State/City/District)	21,001
Employee contributions	294,632
Net investment income	3,257,693
Benefit payments, including member refunds	(1,592,686)
Administrative expenses	(9,430)
Other	3,855
Net Change in Plan Fiduciary Net Position	$ 2,274,365
Plan Fiduciary Net Position - beginning	$ 18,019,319
Plan Fiduciary Net Position - ending (b)	$ 20,293,684
Net Pension Liability - ending (a)-(b)	$ 4,607,928
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	81.50%
Covered Payroll	$ 4,056,482
Employers' Net Pension Liability as a percentage of covered payroll	113.59%

**Includes impact of date change for expected increase in COLA to 2.5%*

Note: *Schedule is intended to show 10-year trend. Additional years will be reported as they become available.*

Required Supplementary Information *(continued)*

Schedule of Employer and Non-Employer Contributions

For the fiscal year ended June 30

(dollars in thousands)	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Actuarially determined employer contribution	$ 492,731	$ 463,788	$ 401,725	$ 384,943	$ 421,813	$ 355,189	$ 280,327	$ 229,642	$ 133,389	$ 103,103
Actual non-employer contributions	$ 21,001	$ 19,954	$ 21,726	$ 21,510	$ 21,550	$ 20,448	$ 21,845	$ 21,880	$ 21,264	$ 21,191
Actual employer contributions	$ 299,300	$ 270,708	$ 244,935	$ 222,723	$ 220,538	$ 220,270	$ 209,717	$ 187,339	$ 179,022	$ 136,502
Total contributions	$ 320,301	$ 290,662	$ 266,661	$ 244,233	$ 242,088	$ 240,718	$ 231,562	$ 209,219	$ 200,286	$ 157,693
Annual contribution deficiency (excess)	$ 172,430	$ 173,126	$ 135,064	$ 140,710	$ 179,725	$ 114,471	$ 48,765	$ 20,423	$ (66,897)	$ (54,590)
Covered-employee payroll	$4,056,482	$3,917,310	$3,871,809	$3,838,111	$3,787,757	$3,761,484	$3,645,230	$3,532,159	$3,430,645	$3,121,571
Actual contributions as a percent of covered-employee payroll	7.90%	7.42%	6.89%	6.36%	6.39%	6.40%	6.35%	5.92%	5.84%	5.05%

Schedule of Investment Returns

Annual money-weighted rates of return net of investment expense.

This schedule is built prospectively until it contains ten years of data.

Teachers Retirement Association Plan- FY 2014	**18.696%**

Notes to Required Supplementary Information for the Fiscal Year Ended June 30, 2014

Changes of Benefit and Funding Terms

The following changes were made by the Minnesota Legislature and reflected in the valuation performed as of July 1:

2014	The increase in the post-retirement benefit adjustment will be made once the fund is 90% funded for two consecutive years, rather than just one year. Legislation provided for the merger of the Duluth Teachers Retirement Fund Association into TRA. The merger will not occur until June 30, 2015, so it had no impact on the July 1, 2014, valuation results.
2013	The early retirement reduction factors applicable for Level formula benefits to plan members were changed.
2010	The post-retirement benefit increases were suspended for 2011 and 2012, resuming in 2013 at 2.0 percent, and returning to 2.5% once the funding ratio of the plan reaches 90%. Also in 2010, changes were made to the interest rate credited on employee contributions, future increases on deferred vested benefits, and the requirement to receive a full post-retirement benefit adjustment. In addition, employee and employer contribution rates were increased 0.50 percent per year beginning July 1, 2011, through July 1, 2014.

2006	The benefit multiplier for Coordinated members was increased, employee contribution rates were increased, and the deferred benefit increase rate was reduced.

Changes in Actuarial Assumptions

7/1/2014 Valuation	Post-retirement benefit adjustments are now assumed to increase from 2.0 percent annually to 2.5 percent annually once the legally specified criteria are met. This is estimated to occur July 1, 2034 for GASB calculations and July 1, 2031 for funding calculations.
7/1/2012 Valuation	The investment return assumption was changed from 8.5 percent for all years to 8.0 percent for the next five years and 8.5 percent thereafter. This applies to funding calculations only.
7/1/2011 Valuation	The salary increase assumption was changed to a service based assumption. The payroll growth assumption was decreased from 4.00 percent to 3.75 percent. The post-retirement mortality assumption was changed to the RP-2000 Mortality Tables, with white-collar adjustments and male rates set back two years and female rates set back three years. The disabled mortality assumption was changed to the RP-2000 Disabled Retiree Mortality Tables. Assumed disability rates were changed to more closely reflect actual experience. Assumed retirement rates for Coordinated members were changed to more closely reflect actual experience. Assumed form of annuity selection was changed to more closely reflect actual experience. Assumed difference in ages between spouses was changed to more closely reflect actual experience.
7/1/2008 Valuation	Ultimate salary increase rates were lowered. The payroll growth assumption was lowered. Retirement rates were revised.
7/1/2006 Valuation	The amortization date for the unfunded actuarial accrued liability was set at June 30, 2037.

Method and Assumptions Used in Calculations of Actuarially Determined Contributions

TRA is funded with contributions from members and their employers. The actuarially determined contributions in the *Schedule of Employer Contributions* are calculated as of the beginning of the fiscal year in which contributions were reported.

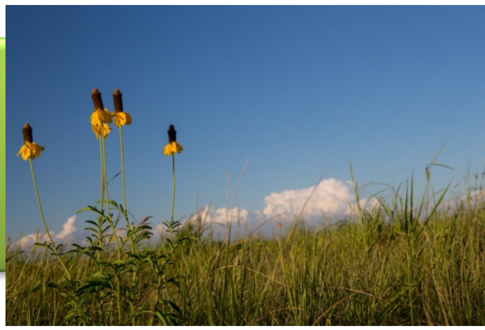
The following methods and assumptions were used to calculate the actuarially determined employer contributions reported for the most recent fiscal year end (July 1, 2013 funding valuation).

Actuarial cost method	Entry Age Normal
Amortization method	Level percentage of payroll, closed
Remaining amortization period	24 years
Asset valuation method	5-year moving average
Inflation	3.00 percent
Salary increase	3.50 to 12.00 percent, including inflation
Investment rate of return	8.38 percent compounded annually to reflect an 8.00 percent assumption for four years and 8.50 percent thereafter
Cost of living adjustment	2.00 percent per year

The long-term rate of return on pension plan investments used to calculate the total pension liability is 8.25%. This rate is reviewed regularly as part of the experience study. The most recent experience analysis for the long-term rate of return and inflation assumptions was performed and results provided on August 29, 2014.

Generally, several factors are considered in evaluating the long-term rate-of-return assumption including long-term historical data, estimates inherent in current market data, and an analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) were developed using assumptions for each major asset class, as well as estimated of variability and correlations, provided by the State Board of Investment.

These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.



Supporting Schedules to Financial Section

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Teachers Retirement Fund
Administrative Expenses

For the Fiscal Year Ended June 30, 2014

Personnel Services		
Salaries	$	4,454,203
Employer Contributions to Teachers Retirement Association		306,306
Employer Contributions to Social Security		323,550
Insurance Contributions		922,291
Employee Training		57,466
Workers' Compensation		4,453
Subtotal	**$**	**6,068,269**
Communication		
Duplicating and Printing Expense	$	54,779
Postage		217,421
Telephone		51,450
Subtotal	**$**	**323,650**
Office Building Maintenance		
Lease of Office and Storage Space	$	36,370
Building Operating Expenses		497,991
Rental of Office Machines/Furnishings		68,177
Repairs and Maintenance		122,599
Building Equipment Depreciation		12,163
Building Depreciation		267,947
Deferred Bond Charge Amortization		83,713
Bond Interest Expense		122,273
Subtotal	**$**	**1,211,233**
Professional Services		
Actuarial Services	$	239,666
Audit Fees		81,690
Computer Support Services		602,452
Legal Fees		26,003
Management Consultant Services		15,318
Medical Services		50,610
Subtotal	**$**	**1,015,739**
Other Operating Expenses		
Department Head Expenses	$	1,500
Depreciation of Office Furniture and Equipment		364,178
Dues and Subscriptions		28,018
Insurance Expense		6,400
Miscellaneous Administrative Expenses		21,947
State Indirect Costs		228,338
Stationery and Office Supplies		82,275
Travel-Director and Staff		49,000
Travel-Trustees		27,150
Board Substitute Teachers		1,774
Loss on Disposal of Equipment		278
Subtotal	**$**	**810,858**
Total Administrative Expenses	**$**	**9,429,749**

Teachers Retirement Fund
Schedule of Professional Consultant Expenses

For the Fiscal Year Ended June 30, 2014

Investment Pool Managers		
Investment Board	$	1,204,958
Callan Investment		154,399
Pension Consultants		12,352
QED		112,884
Domestic Equity Pool Managers		10,005,129
Global Equity Pool Managers		8,755,040
Domestic Bond Pool Managers		4,142,395
Semi-Passive Equity Pool Managers		3,528,191
Passive Equity Pool Managers		290,259
Total Investment Pool Managers	$	28,205,607
Actuarial		
Cavanaugh Macdonald Consulting	$	234,866
Milliman		4,800
Total Actuarial Expenses	$	239,666
Audit		
Berwyn Group	$	10,147
Legislative Auditor		71,335
MN Dept of Health		208
Total Audit Expenses	$	81,690
Computer Support Services		
Fulcrum Consulting	$	1,493,326
International Projects Consultancy		75,794
Total Computer Support Service Expenses	$	1,569,120
Legal		
Attorney General	$	26,003
Total Legal Expenses	$	26,003
Management Consulting		
Aeritae	$	12,800
Rajan Law		2,518
Total Management Consulting Expenses	$	15,318
Medical		
MN Dept of Health	$	45,200
Examworks Inc.		5,410
Total Medical Expenses	$	50,610
Total Consultant Expenditures	$	30,188,014

Investments

Investments

Investments

Investments

Investments

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Investments

State Board of Investment Letter

MINNESOTA STATE BOARD OF INVESTMENT

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State Auditor
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INVESTMENT AUTHORITY

The assets of the Minnesota Teachers Retirement Association (TRA) are invested along with the assets of the Minnesota Public Employees Retirement Association and the Minnesota State Retirement System under the direction and authority of the State Board of Investment (SBI) 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 (IAC) to advise the SBI and its staff on investment related matters. TRA's executive director is a member of the IAC.

INVESTMENT POLICY

Investment policy states that the SBI will operate within standard investment practices of the prudent person. The SBI is to "exercise that degree of judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived therefrom." (See M.S., section 11A.09.) The SBI is authorized to own government obligations, corporate obligations, various short-term obligations, corporate stocks, venture capital interests, resource investments, and real estate interests subject to specific constraints. (See M.S., section 11A.24.) In particular, pension fund assets are to be invested for the exclusive benefit of the members of the fund.

INVESTMENT OBJECTIVES AND PERFORMANCE

TRA's pension contributions from employees and employers are invested in the Combined Funds. The Combined Funds include the assets of active and retired public employees who participate in the defined benefit plans administered by TRA, the Minnesota State Retirement System, and the Public Employees Retirement Association. TRA does not own any underlying assets, but instead owns a participation in the pooled Combined Funds. Because these assets normally accumulate for thirty to forty years, SBI's objective is to take advantage of the long investment time horizon offered by equities and alternative assets in order to meet its actuarial return target and ensure that sufficient funds are available to finance promised benefits at the time of retirement. The 2012 legislature lowered the actuarial return assumption from 8.5 percent to 8.0 percent annually for the period July 1, 2012 through June 30, 2017.

The long term objectives of the Combined Funds are:

- Provide returns that are 3-5 percentage points greater than inflation over the latest 20-year period; and

- 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.

Consistent with these objectives, the SBI maintains a long-term asset allocation for the Combined Funds as follows:

• Domestic Equity	45%
• International Equity	15%
• Alternatives	20%
• Fixed Income	18%
• Cash	2%

Based on values on June 30, 2014, the Combined Funds returned 6.6 percentage points above the CPI over the last 20 years and returned 0.3 percentage point above the composite index over the past 10 years. Investment returns ranked in the 6th percentile over the past five years and in the 14th percentile over the past 10 years, compared to similar funds in the Trust Universe Comparison Service.

INVESTMENT PRESENTATION

Investment returns were prepared using time-weighted rate of return methodology based upon fair market value, net of investment expenses.

Respectfully submitted,

Mansco Perry III
Executive Director
Minnesota State Board of Investment

November 10, 2014

Investment Summary

Prepared by TRA management with data obtained from the State Board of Investment's Fiscal Year 2014 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 $20.27 billion as of June 30, 2014.

The four-member SBI Board consists of Governor Mark Dayton (Chair), Attorney General Lori Swanson, Secretary of State Mark Ritchie, and State Auditor Rebecca Otto.

During fiscal year 2014, Mansco Perry III was appointed as 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.
- 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.

Investment Advisory Council

As of December 2014

Jeffery Bailey, Chair
Director, Financial Benefits & Analysis
Target Corporation

Malcolm W. McDonald, Vice Chair
Director and Corporate Secretary (Retired)
Space Center, Inc.

Denise Anderson
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

Kim Faust
Vice President and Treasurer
Fairview Health Services

Douglas Gorence
President & Chief Investment Officer
U of M Foundation Investment Advisors

Laurie Fiori Hacking
Executive Director
Teachers Retirement Association

P. Jay Kiedrowski
Senior Fellow
Humphrey Institute
University of Minnesota

Gary Martin
Chief Investment Officer
Macalaster College

James D. Schowalter
Commissioner
Minnesota Management & Budget

Mary Vanek
Executive Director
Public Employees Retirement Association

Elaine Voss
Governor's Appointee
Retiree Representative

Two Positions Vacant

Callan Associates, 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 356.

Combined Retirement Funds

Investment Objectives

All TRA assets are accounted for within the Combined Funds managed by the Minnesota State Board of Investment (SBI). The Combined Funds consist not only of the TRA Fund, but also the assets of the Public Employees Retirement Association (PERA) and the Minnesota State Retirement System (MSRS). The SBI has one primary responsibility with respect to its management of the Combined Funds: to ensure that sufficient funds are available to finance pension benefits at the time of retirement. All assets in the Combined Funds, including TRA, are managed externally by outside money management firms retained by contract.

The Combined Funds include 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 cover the projected cost of promised pension benefits. In order to meet these projected pension costs, the Combined Funds need to generate investment returns of at least 8.0 percent for fiscal years 2013 through 2017.

While an active member is working, employee and employer contributions are placed into the TRA Fund. The pre-funding of future pension benefits provides the SBI with a long investment time horizon to take advantage of long run return opportunities offered by equities and other investments, in order to meet its actuarial return target.

SBI measures the performance of the Combined Funds relative to a composite of market indices that is weighted in a manner that reflects their long-term asset allocation policy. The Combined Funds are expected to match or exceed the composite index over a ten-year period. The Combined Funds are also expected to generate returns 3 to 5 percent greater than inflation over the latest 20-year period. Investment returns are prepared using a time-weighted rate of return methodology, based upon fair values, net of investment expenses. Performance is measured net of all fees and costs to assure that SBI's focus is on the Combined Funds' true net return.

Asset Allocation

The allocation of assets among equities, fixed income (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 focuses considerable attention on the selection of an appropriate long-term asset allocation policy for the Combined Funds. The asset allocation policy in place as of June 30, 2014, was:

Combined Funds Asset Mix
June 30, 2014

	Policy Mix	**Actual Mix**
Domestic Equity	45.0%	45.8%
International Equity	15.0%	15.6%
Fixed Income (Bonds)	18.0%	23.4%
Alternative Assets*	20.0%	12.6%
Unallocated Cash	2.0%	2.6%
Total	100.0%	100.0%

**Any uninvested allocation is held in bonds.*

Total Return Vehicles

SBI invested the majority of the Combined Funds' assets in common stocks (both domestic and international equities). A large allocation is consistent with the investment time horizon of the Combined Funds and the advantageous long-term risk-return characteristics of common stocks. Including international equities in the asset mix allowed SBI to diversify its holdings across world markets, offered the opportunity to enhance returns and reduced the risk/volatility of the total portfolio. The rationale underlying the inclusion of private equity alternative assets (e.g., venture capital) is similar.

SBI recognized that this sizable policy allocation to common stock and private equity likely produced more volatile portfolio returns than a more conservative policy focused on fixed income securities. It is understood that this policy may result in quarters or even years of disappointing results. Nevertheless, the long run return benefits of this policy are expected to compensate for the additional volatility.

Diversification Vehicles

Other asset classes are included in the Combined 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 provide an inflation hedge that other financial assets do not offer. 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 Combined 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 generated sufficient current income. Typically, these investments, including subordinated debt, mezzanine or resource income investments such as income-producing properties, are 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 display 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 fixed income (bonds) acts as a hedge against a deflationary economic environment. In the event of a major deflation, high-quality fixed income assets, particularly long-term bonds, are expected to protect principal and generate significant capital gains. And, like real estate and resource funds, under normal financial conditions, bonds help diversify the Combined Funds and thereby control return volatility.

Rate of Return Results

The Combined Funds produced a total rate of return for fiscal year 2014 of 18.6 percent. Over the last five years, the Combined Funds generated an annualized return of 14.5 percent.

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

- The ability of the investment 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 measurably above or below their long-term asset allocation targets. The policy imposes a low risk, buy low sell high discipline among asset classes on a total fund basis.)

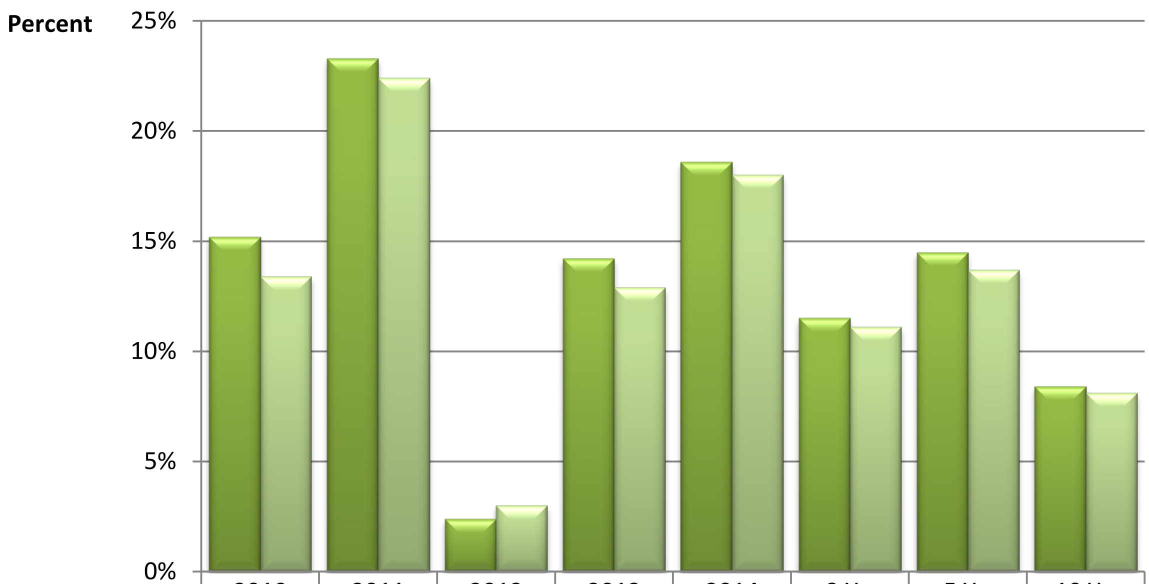
Combined Funds Performance vs. Composite Index

For the ten-year period ending June 30, 2014, the Combined Funds exceeded the composite index investment performance by 0.3 percent annualized. The Funds exceeded the composite index over the last five years by 0.8 percent annualized, and exceeded the index over the most recent fiscal year by 0.6 percentage points. Actual returns relative to the total fund composite index over the last five years are shown in the graph on the following page.

Combined Funds

Investment Performance

Combined Funds Performance vs. Composite Index FY 2010 – 2014



	2010	2011	2012	2013	2014	3 Yr.	5 Yr.	10 Yr.
Combined Funds	15.2%	23.3%	2.4%	14.2%	18.6%	11.5%	14.5%	8.4%
Composite Index	13.4%	22.4%	3.0%	12.9%	18.0%	11.1%	13.7%	8.1%

Time weighted rate of return

Combined Funds
Performance of Asset Pools (Net of Fees)

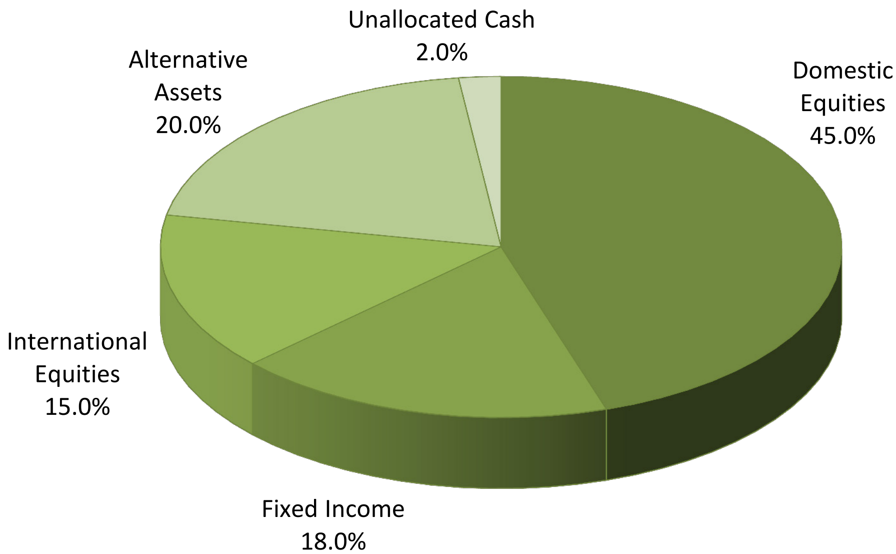
June 30, 2014 — Combined Funds

	Rates of Return (Annualized)			
	FY 2014	**3-Year**	**5-Year**	**10-Year**
Domestic Equity Pool	**25.9%**	**16.5%**	**19.5%**	**8.2%**
Asset Class Target (Russell 3000 – effective 10-1-03)	25.2%	16.5%	19.3%	8.2%
Fixed Income (Bond) Pool	**5.0%**	**4.5%**	**6.6%**	**5.3%**
Asset Class Target (Barclays Capital Aggregate Bond Index)	4.4%	3.7%	4.9%	4.9%
International Equity Pool	**21.4%**	**6.3%**	**11.7%**	**8.0%**
Asset Class Target (Morgan Stanley Capital International All-Country World Index – since 10-1-03)	21.7%	5.7%	11.1%	7.8%
Alternative Assets (Real Estate, Private Equity, Resource Pool and Yield Oriented Pool)	**18.9%**	**13.2%**	**14.7%**	**15.5%**
CPI-U Inflation (No Established Index for Alternative Assets)	2.1%	1.8%	2.0%	2.2%

All investment performance methodology is reported in compliance with the mandatory requirements of the Chartered Financial Analyst (CFA) Institute.

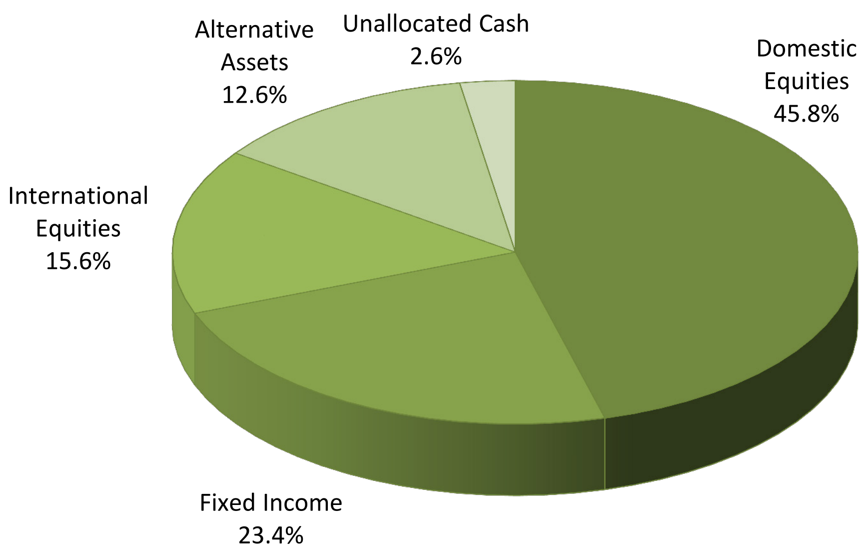
Combined Funds
Portfolio Distribution: Policy Asset Mix

As of June 30, 2014



Combined Funds
Portfolio Distribution: Actual Asset Mix

As of June 30, 2014



TRA Fund fair value of investment assets equals approximately $20.27 billion.

Teachers Retirement Fund
List of Largest Assets Held

June 30, 2014

Composite Holdings of Top Ten Equities
By Fair Value

Security	$ Fair Value (Millions)	% of Portfolio
Apple Inc	$ 188.3	0.93%
Exxon Mobil Corp	$ 138.1	0.68%
Johnson + Johnson	$ 122.2	0.60%
Microsoft Corp	$ 118.5	0.58%
Wells Fargo + Co	$ 107.5	0.53%
Pfizer Inc	$ 90.3	0.45%
ChevronTexaco Corp	$ 88.4	0.44%
JPMorgan Chase + Co	$ 87.2	0.43%
Verizon Communications Inc	$ 85.3	0.42%
General Electric Co	$ 78.5	0.39%

Composite Holdings of Top Ten Bond Holdings
By Fair Value

Security	% Coupon	$ Fair Value (Millions)	% of Portfolio
US Treasury N/B	0.875	$ 89.2	0.44%
FNMA TBA JUL 30YR Single FAM	4.000	$ 69.3	0.34%
FNMA TBA 30YR Single Family JU	3.500	$ 58.5	0.29%
US Treasury N/B	2.000	$ 54.4	0.27%
US Treasury N/B	1.500	$ 51.4	0.25%
US Treasury N/B	0.500	$ 46.5	0.23%
FNMA TBA JUL 15YR Single Family	3.000	$ 40.7	0.20%
US Treasury N/B	0.250	$ 40.2	0.20%
US Treasury N/B	3.375	$ 38.1	0.19%
US Treasury N/B	3.625	$ 36.9	0.18%

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
Schedule of Investment Management Fees

For the Fiscal Year Ended June 30, 2014

Domestic Activity Equity Pool Managers		
Barrow, Hanley	$	465,690
Earnest Partners		330,017
Goldman Equity		644,526
Hotchkis and Wiley		898,797
Intech Investment		523,342
Jacobs Levy Equity		598,338
Knelman Asset Mgmt		64,157
LSV Asset		728,134
Martingale		441,985
Mckinley Cap		707,185
Next Century Growth		941,155
Peregrine Capital		800,117
Sands Capital		942,151
Systematic Fin		524,960
Turner Inv		395,332
Winslow Capital		315,101
Zevenbergen Capital		684,142
Total Domestic Activity Equity Pool Managers	$	10,005,129
Passive Domestic Equity Pool Managers		
Blackrock	$	290,259
Total Passive Domestic Equity Pool Managers	$	290,259
Semi Passive Equity Pool Managers		
Blackrock	$	928,515
Intech		788,639
JP Morgan		1,035,133
Mellon Capital		775,904
Total Semi Passive Equity Pool Managers	$	3,528,191
Domestic Bonds Pool Managers		
Aberdeen Asset Management	$	552,375
Blackrock Financial Mgmt		344,927
Columbia Invest		381,847
Dodge & Cox		503,357
Goldman		560,958
Neuberger		243,482
PIMCO		1,069,916
Western Asset Management		485,533
Total Domestic Bonds Pool Managers	$	4,142,395
Page Subtotal	$	17,965,974

Teachers Retirement Fund
Schedule of Investment Management Fees (cont.)

For the Fiscal Year Ended June 30, 2014

Subtotal from Previous Page	$ 17,965,974
Global Equity Pool Managers	
Acadian Asset	$ 505,803
AQR Capital Mgmt	615,775
Capital Intern	1,832,190
Columbia Investments	379,116
Invesco Global Assets	8,239
JP Morgan Fleming	455,950
Marathon Asset	801,786
Mckinley Capital Management	446,347
Morgan Stanley Dean	2,038,046
Pyramis Global Advisors (Trust)	549,143
Pyramis Global Advisors	331,761
State Street	204,583
State Street Alpha	482,328
State Street Emerging	103,973
Total Global Equity Pool Managers	$ 8,755,040
Other Investment Management Fees	
Callan Associates, Inc.	$ 154,399
Pension Consulting Alliance	12,352
QED	112,884
State Board of Investment	1,204,958
Total Other Investment Management Fees	$ 1,484,593
Total Investment Management Fees	$ 28,205,607

Note: *The investment portfolio of TRA had a fair value of approximately $20.27 billion as of June 30, 2014.*

Teachers Retirement Fund
Summary of Investments

As of June 30, 2014

	Cost Value	Fair Value	% of Investments at Fair Value
Fixed Income Investments			
Fixed Income Pool	$ 4,498,074,464	$ 4,732,983,853	23.4%
Equity Investments			
External Indexed Equity Pool	$ 2,224,923,530	$ 3,149,569,074	15.6%
Global Equity Pool	2,445,619,576	3,170,210,775	15.6%
External Domestic Equity Pool	3,942,281,799	6,119,589,906	30.2%
Total Equity Investments	$ 8,612,824,905	$ 12,439,369,755	61.4%
Alternative Investments			
Alternative Investment Pool	$ 2,065,019,203	$ 2,558,421,827	12.6%
Short Term Investments			
CD Repo Pool	$ 102,295,505	$ 102,311,938	0.5%
TRA Minneapolis Pool	0	0	0.0%
Short Term Cash Equivalents	433,744,751	433,812,097	2.1%
Total Short Term Investments	$ 536,040,256	$ 536,124,035	2.6%
Total Investments	$ 15,711,958,828	$ 20,266,899,470	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 are prepared using a time-weighted rate of return methodology, based upon fair values, net of investment expenses.

Actuarial

Actuarial

Actuarial

Actuarial

Actuarial

Actuarial

Actuarial

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 8, 2014

Board of Trustees
Teachers Retirement Association of Minnesota
60 Empire Drive, Suite 400
St. Paul, MN 55103

Dear Board Members:

At your request, we have prepared an actuarial funding valuation of the Teachers Retirement Association of Minnesota (TRA or System) as of July 1, 2014 for the plan year ending June 30, 2015. Such valuations, which analyze the funding progress of the System, are required to be performed annually under state law. To the best of our knowledge and belief, the funding valuation was performed in accordance with the requirements of Minnesota Statutes, Section 356.215, and the requirements of the Standards for Actuarial Work established by the State of Minnesota Legislative Commission on Pensions and Retirement (LCPR). The valuation results reflect the benefit provisions in place on July 1, 2014. There was no change to the actuarial methods or the plan provisions from the prior valuation. However, there was a change in one of the actuarial assumptions in this valuation. The 2014 Omnibus Pension Bill provided clarification regarding how the actuarial assumptions should reflect the increase in the postretirement adjustment rate when funding stability is attained. The bill also changed the definition of "funding stability" from attainment of a funded ratio of 90% for one year to a funded ratio of 90% for two consecutive years (measured on a fair (market) value basis). Using the new requirement for the current valuation, we estimate TRA will have been 90% funded for two consecutive years in the July 1, 2031 valuation and, thus, the COLA is assumed to increase from 2.0% to 2.5% at that time. In the July 1, 2013 funding valuation, the COLA assumption was 2.0% for all years.

The 2014 Minnesota legislature also provided for the merger of the Duluth Teachers Retirement Fund Association into TRA. Since the merger will not occur until June 30, 2015, the provision had no impact on this valuation since only current TRA members are considered.

As described in the valuation report, the results of the valuation indicate that the System is 74.1% funded and the current statutory contribution rates are deficient by 3.47% of payroll to meet the target of full funding by 2037. The deficiency is determined using the actuarial value of assets which is lower than the market value of assets. If the deferred investment gains are recognized, i.e., the fair value of assets were used, the contribution deficiency drops to 0.07% of payroll. The funding report was prepared exclusively for TRA and the LCPR to determine the annual required contribution rate.

In preparing the valuation, we relied, without audit, on information (some oral and some in writing) supplied by TRA staff. This information includes, but is not limited to, statutory provisions, member data and financial information. We found this information to be reasonable and comparable to information used in last year's valuation. However, we did not audit the data. The valuation results depend on the integrity of

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this information. If any of this information is inaccurate or incomplete, our results may be different and our calculations may need to be revised.

The actuarial contribution rates are developed using the Entry Age Normal (EAN) cost method. An asset smoothing method, defined in statute, is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded actuarial accrued liability and are amortized as a level percentage of payroll over a closed period set in state statutes. Actuarial assumptions, including discount rates, mortality tables and others identified in the valuation report are prescribed by Minnesota Statutes Section 356.215, the Legislative Commission on Pensions and Retirement (LCPR), and the Trustees. These parties are responsible for selecting the plan's funding policy, actuarial valuation methods, asset valuation method, and actuarial assumptions. The policies, methods and assumptions used in this valuation are those that have been so prescribed and are described in Appendix C of the valuation report.

Future actuarial results may differ significantly from the current results presented in this report due to factors such as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal actuarial valuation, an analysis of the range of potential results is not presented herein.

The actuary prepared the following supporting schedules in the Actuarial Section of the Comprehensive Annual Financial Report:

- Reconciliation of Member Data
- Actuarial Asset Value
- Actuarial Valuation Balance Sheet
- Determination of Unfunded Actuarial Accrued Liability and Supplemental Contribution Rate
- Changes in the Unfunded Actuarial Accrued Liability
- Determination of Contribution Sufficiency /(Deficiency) – Total
- Solvency Test
- Schedule of Funding Progress
- Schedule of Active Member Valuation Data

We also provided the following schedules in the Financial Section of the Comprehensive Annual Financial Report:

- Total Pension Liability
- Schedule of Changes in the Employers' Net Pension Liability
- Schedule of the Employers' Net Pension Liability
- Sensitivity Analysis on the Net Pension Liability

In addition, we provided the *Schedule of Contributions from Employers and Non-employer Contributing Entities* found in the Required Supplementary Information. The schedules are presented prospectively and in time, trend analysis will become evident. Actuarial computations presented in the July 1, 2014 actuarial valuation report are for purposes of determining the recommended funding amounts for the System. The calculations have been made on a basis consistent with our understanding of the System's funding requirements and goals, and on a basis consistent with our understanding of the plan provisions described in Appendix B of the valuation report. Determinations for purposes other than meeting these requirements may be significantly different from the results shown in the July 1, 2014 actuarial valuation report. Accordingly, additional determinations may be needed for other purposes.

We also prepared actuarial computations as of June 30, 2014 for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standards Board (GASB) Statement No. 67, the results are presented in a separate report dated December 8, 2014. The assumptions used in the funding valuation report were also used for GASB 67 reporting, except for the use of an 8.25% discount rate for the GASB 67 calculation of the Total Pension Liability. In addition, the entry age normal actuarial cost method, which is required to be used under GASB 67, is also used in the statutory funding valuation report. The actuarial assumptions and methods used in both the funding and the GASB 67 accounting valuation reports meet the parameters set by Actuarial Standard of Practice (ASOPs), as issued by the Actuarial Standards Board, and generally accepted accounting principles (GAAP) applicable in the United State of America as promulgated by the Governmental Accounting Standards Board.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this information is complete and accurate and that the valuation was prepared in accordance with principles of practice which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting Recommendation of the American Academy of Actuaries. In addition, the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement System. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. Also, we meet the requirements of "approved actuary" under Minnesota Statutes, Section 356.215, Subdivision 1, Paragraph (c).

Respectfully submitted,

Patrice Beckham

Brent A. Banister

Patrice A. Beckham, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Brent Banister PhD, FSA, EA, FCA, MAAA
Chief Pension Actuary

Summary of Actuarial Assumptions and Methods

Summary of Actuarial Assumptions

The following assumptions were used in valuing the liabilities and benefits under the plan. A description of plan provisions is provided beginning on page 104.

The Allowance for Combined Service Annuity was based on the recommendation of a prior actuary. We are unable to judge the reasonableness of this assumption without performing a substantial amount of additional work beyond the scope of this assignment.

All assumptions are prescribed by Statute, the Legislative Commission on Pensions and Retirement (LCPR), or the Board of Trustees. The date of TRA's last experience study was October 30, 2009. The LCPR last enacted changes to TRA's demographic actuarial assumptions on July 8, 2010.

Investment return	Pre-retirement: 8.41% compounded annually to reflect an 8.0% assumption for three (3) years and 8.5% thereafter. Change effective: July 1, 2012
Future post-retirement adjustments	Once the funded ratio reaches 90% on a fair value basis for two consecutive years, the COLA is scheduled by statute to revert from 2.0% back to 2.5%. Future assets and liabilities were projected using the 2014 valuation results as a starting point and assuming all actuarial assumptions are met in future years. These assumptions include a rate of return on the fair value of assets of 8.0% for the next three years and 8.5% thereafter. Further, there is an assumption that the stabilizer provisions will not be utilized by the Board. Based on this methodology, the increased COLA is expected to be implemented with the July 1, 2031, valuation, and coupled with legislation passed in 2014, the calculation in this valuation reflects the increased COLA at that date. For the July 1, 2013, valuation, the COLA was not expected to increase for at least 30 years. This fact, along with a lack of guidance or legislation as to how to reflect the COLA change, resulted in no reflection of an increase in the COLA in that valuation. Change effective: July 1, 2014
Salary increases	Reported salary for prior fiscal year, with new hires annualized, increased according to the salary increase table shown in the rate table to current fiscal year and annually for each future year. See table of sample rates.
Payroll growth	3.75% per year; no growth assumed in the number of active members.
Future service	Members are assumed to earn future service at a full-time rate.
Mortality: Pre-retirement	RP 2000 non-annuitant generational mortality, white collar adjustment, male rates set back 5 years and female rates set back 7 years.
Post-retirement	RP 2000 annuitant generational mortality, white collar adjustment, male rates set back 2 years and female rates set back 3 years.
Post-disability	RP 2000 disabled retiree mortality, without adjustment.
Disability	Age-related rates based on experience; see table of sample rates (page 64).

<table>
<tr><td>Withdrawal</td><td>Select and ultimate rates based on actual plan experience. Ultimate rates after the third year are shown in the rate table. Select rates are as follows:
<table>
<tr><th></th><th>First Year</th><th>Second Year</th><th>Third Year</th></tr>
<tr><td>Male</td><td>45%</td><td>12%</td><td>6%</td></tr>
<tr><td>Female</td><td>40%</td><td>10%</td><td>8%</td></tr>
</table></td></tr>
<tr><td>Expenses</td><td>Prior year administrative expenses expressed as percentage of prior year payroll.</td></tr>
<tr><td>Retirement age</td><td>Graded rates beginning at age 55 as shown in rate table. Members who have attained the highest assumed retirement age will retire in one year.</td></tr>
<tr><td>Percentage married</td><td>85% of male members and 65% of female members are assumed to be married. Members are assumed to have no children.</td></tr>
<tr><td>Age difference – married</td><td>Females 2 years younger than males.</td></tr>
<tr><td>Allowance for Combined Service Annuity</td><td>Liabilities for active members are increased by 1.40% and liabilities for former members are increased by 4.00% to account for the effect of some Participants being eligible for a Combined Service Annuity.</td></tr>
<tr><td>Refund of contributions</td><td>All employees withdrawing after becoming eligible for a deferred benefit are assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit.</td></tr>
<tr><td>Interest on member contributions</td><td>Members and former members who are eligible for the money purchase annuity are assumed to receive interest credits equal to the pre-retirement interest rate. All other members and former members receive the interest crediting rate as specified in statutes.</td></tr>
<tr><td>Commencement of deferred benefits</td><td>Members receiving deferred annuities (including current terminated deferred members) are assumed to begin receiving benefits at unreduced retirement age.</td></tr>
<tr><td>Form of payment</td><td>Married members are assumed to elect subsidized joint and survivor (J&S) form of annuity as follows:
Males: 10% elect 50% J&S option
15% elect 75% J&S option
70% elect 100% J&S option
Females: 20% elect 50% J&S option
10% elect 75% J&S option
50% elect 100% J&S option
Members eligible for deferred annuities (including current terminated deferred members) and future disability benefits are assumed to elect a life annuity.</td></tr>
</table>

Missing data for members	Membership data was supplied by TRA as of the valuation date. This information has not been audited by CMC. We have reviewed the information for internal consistency and we have no reason to doubt its substantial accuracy. In the small number of cases where submitted data was missing or incomplete and could not be recovered from prior years, the following assumptions were applied if needed: Data for active members: Salary, service, and date of birth — Based on current active demographics Gender — Female Data for terminated members: Date of birth — July 1, 1964 Average salary — $29,000 Date of termination — Derived from date of birth, original entry age, and service Data for in-pay members: Beneficiary date of birth — Wife two years younger than husband Gender — Based on first name Form of payment — Life annuity for retirees and beneficiaries, 100% J&S option for disabled retirees.
Changes in actuarial assumptions since the previous valuation	The assumption for future post-retirement adjustments was changed as discussed on page 61.

Summary of Actuarial Assumptions *(continued)*

Sample Rates at Select Ages

	Mortality Rates (%)					
	Pre-Retirement *		Post-Retirement**		Post-Disability	
Age	Male	Female	Male	Female	Male	Female
20	0.0269	0.0155	0.0316	0.0184	2.2571	0.7450
25	0.0345	0.0188	0.0373	0.0194	2.2571	0.7450
30	0.0376	0.0197	0.0393	0.0223	2.2571	0.7450
35	0.0353	0.0235	0.0481	0.0363	2.2571	0.7450
40	0.0591	0.0401	0.0766	0.0527	2.2571	0.7450
45	0.0890	0.0562	0.1124	0.0763	2.2571	0.7450
50	0.1342	0.0837	0.1711	0.1229	2.8975	1.1535
55	0.1978	0.1344	0.5716	0.2681	3.5442	1.6544
60	0.2747	0.2015	0.5688	0.4253	4.2042	2.1839
65	0.4263	0.3107	0.9232	0.6736	5.0174	2.8026
70	0.6725	0.4979	1.5834	1.1211	6.2583	3.7635
75	0.9823	0.7591	2.6710	1.8784	8.2067	5.2230

* *Rates shown are RP 2000 non-annuitant mortality (base), white collar adjustment, set back 5 years for males and 7 years for females.*

** *Rates shown are RP 2000 annuitant mortality (base), white collar adjustment, set back 2 years for males and 3 years for females.*

	Rates (%)			
	Ultimate Withdrawal		Disability	
Age	Male	Female	Male	Female
20	3.70	4.50	0.00	0.00
25	3.20	4.50	0.00	0.00
30	2.70	4.50	0.00	0.00
35	2.50	3.90	0.01	0.01
40	2.35	2.75	0.03	0.03
45	2.10	2.10	0.05	0.05
50	1.85	1.85	0.10	0.10
55	0.00	0.00	0.16	0.16
60	0.00	0.00	0.25	0.25
65	0.00	0.00	0.00	0.00
70	0.00	0.00	0.00	0.00
75	0.00	0.00	0.00	0.00

Coordinated Retirement Rates (%)		
	Rule of 90	Retirement
Age	Eligible	Other
55 and Under	50	7
56	55	7
57	45	7
58	45	8
59	45	10
60	40	12
61	45	16
62	45	20
63	40	18
64	45	20
65	40	40
66	35	35
67	30	30
68	30	30
69	30	30
70	35	35
71 & Over	100	100

Salary Scale	
Service (Yrs)	Salary Increase
1	12.00%
2	9.00%
3	8.00%
5	7.25%
10	6.40%
15	5.25%
20	4.00%
25 or more	3.50%

Valuation Report Highlights

Summary of Key Valuation Results

	Actuarial Valuation as of	
	July 1, 2014	**July 1, 2013**
Participant Data		
Active members		
Number	77,243	76,765
Projected annual earnings for fiscal year *(000s)*	$ 4,353,988	$ 4,205,399
Average projected annual earnings for fiscal year 2014	$ 56,367	$ 54,783
Average age	43.4	43.5
Average service	12.1	12.1
Service retirements	53,774	52,331
Survivors	4,472	4,269
Disability retirements	563	568
Deferred retirements	12,907	12,614
Terminated other non-vested	29,984	28,881
Total	**178,943**	**175,428**
Liabilities and Funding Ratios (dollars in thousands)		
Accrued Benefit Funding Ratio		
Current assets (AVA)	$ 18,181,932	$ 16,774,626
Current benefit obligations	23,427,654	22,390,700
Funding ratio	77.61%	74.92%
Accrued Liability Funding Ratio		
Current assets (AVA)	$ 18,181,932	$ 16,774,626
Fair value of assets (MVA)	20,289,594	18,015,194
Actuarial accrued liability	24,528,506	23,418,629
Unfunded actuarial accrued liability	6,346,574	6,644,003
Funding ratio (AVA)	74.13%	71.63%
Funding ratio (MVA)	82.72%	76.93%
Projected Benefit Funding Ratio		
Current and expected future assets	$ 25,773,148	$ 24,199,106
Current and expected future benefit obligations	27,924,756	26,546,074
Funding ratio	92.29%	91.16%
Contributions (% of payroll)		
Normal Cost Rate	8.70%	8.40%
UAAL Amortization Payment	10.23%	10.78%
Expenses	0.22%	0.23%
Total Required Contribution (Chapter 356)	19.15%	19.41%
Statutory Contribution (Chapter 354)	15.68%	14.67%
Contribution (Deficiency)/Sufficiency	(3.47%)	(4.74%)

Actuary's Selected Commentary

The Teachers Retirement Association of Minnesota (TRA) provides retirement, disability, and death benefits to Minnesota public school teachers, administrators, and college faculty. This report presents the results of the July 1, 2014, actuarial funding valuation. The primary purposes of performing the actuarial valuation are to:

- determine the required contribution rate as set forth in Chapter 356 of the Minnesota statutes;
- determine the sufficiency of the statutory contribution rate as set forth in Chapter 354 of the Minnesota statutes;
- determine the experience of the fund since the last valuation date;
- disclose asset and liability measures as of the valuation date; and
- analyze and report on trends in contributions, assets, and liabilities over the past several years.

There were no changes to the plan provisions or the actuarial methods from the prior valuation, but there was one change to the actuarial assumptions. Previously, based on limited official guidance and the fact that the increase in the post-retirement adjustment (cost of living adjustment or COLA) was not expected to occur for many years, the COLA increase to 2.5 percent as provided in law was not anticipated in the valuation results. The 2014 Omnibus Pension Bill provided clarification in the state statutes regarding how the actuarial assumptions should reflect the increase in the post-retirement adjustment rate by requiring the COLA increase to be assumed when funding stability (the defined trigger point for the increases to occur) is expected to be attained. It also changed the criteria for the measurement of "funding stability" from a funded ratio of 90 percent for one year to a funded ratio of 90 percent, on a fair value basis, for two consecutive years. Using this new requirement for the current valuation and the present funded status, we estimate TRA will have been 90 percent funded for two consecutive years in the July 1, 2031, valuation, if all actuarial assumptions are met in future years, and thus the COLA is assumed to increase to 2.5 percent at that time.

In addition, the 2014 Omnibus Pension Bill provided for the merger of the Duluth Teachers Retirement Fund Association into TRA and provided for additional ongoing state aid to TRA to ensure the long term funding will not be affected. Since the merger will not occur until June 30, 2015, the provision had no impact on this valuation.

The actuarial valuation results provide a "snapshot" view of TRA's financial condition on July 1, 2014. The results reflect net favorable experience for the past plan year as demonstrated by an unfunded actuarial accrued liability (UAAL) that was lower than expected. The UAAL on July 1, 2014, is $6.347 billion as compared to an expected UAAL of $7.425 billion (reflecting the assumption change). The favorable experience was the combination of an experience gain of just over $1 billion on the actuarial value of assets and a net experience loss of about $1 million on liabilities. Due to the application of the asset smoothing method, there is a deferred investment gain of $2.1 billion.

A summary of the key results from the July 1, 2014, actuarial valuation is shown in the following table. Details on the valuation results can be found in later sections of this Commentary.

	Actuarial Valuation as of	
	July 1, 2014	**July 1, 2013**
Total Required Contribution Rate (Chapter 356)	19.15%	19.41%
Statutory Contribution Rate (Chapter 354)	15.68%	14.67%
Sufficiency/(Deficiency)	(3.47%)	(4.74%)
Unfunded Actuarial Accrued Liability ($M)	$6,347	$6,644
Funded Ratio (Actuarial Assets)	74.13%	71.63%

The contribution deficiency decreased from 4.74 percent of payroll in last year's valuation to 3.47 percent in the 2014 valuation. The most significant factors in the decline of the deficiency were the actual investment return of over 18 percent, which served to decrease the required contribution rate and the 0.50 percent scheduled increase in both the member and employer contribution rates, effective July 1, 2014. While these factors reduced the deficiency, the reduction was partially offset by the change in the COLA assumption, which increased the liabilities and the required contribution rate.

Experience for the Last Plan Year

Numerous factors contributed to the change in assets, liabilities and actuarial contribution rate between July 1, 2013, and July 1, 2014. The components are examined in the following discussion.

Assets

As of June 30, 2014, TRA had net assets of $20.3 billion, when measured on a fair value basis. This was an increase of more than $2.3 billion from the prior year.

The fair value of assets is not used directly in the calculation of the unfunded actuarial accrued liability (UAAL) and the required contribution rate (actuarial contribution rate). An asset valuation method that smoothes the effect of market fluctuations is used to determine the value of assets used in the valuation. The resulting amount is called the "actuarial value of assets." In this year's valuation, the actuarial value of assets as of June 30, 2014, was $18.2 billion, an increase of $1.4 billion from the value in the prior year. The components of change in the asset values are shown in the following table.

(dollars in millions)	Fair Value	Actuarial Value
Net Assets, June 30, 2013	**$18,015**	**$16,775**
Employer & Member Contributions	+ $615	+ $615
Benefit Payments and Administrative Expenses	– $1,602	– $1,602
Investment Income	+ $3,262	+ $2,394
Net Assets, June 30, 2014	**$20,290**	**$18,182**

On a fair value basis, the rate of return was 18.6 percent as reported by the State Board of Investment (SBI). Due to the strong return on the fair value of assets and the unrecognized investment experience, the net rate of return, measured on the actuarial value of assets, was 13.9 percent. Because the rate of return was more than the assumed rate of 8.0 percent, there was an actuarial gain of $1.080 billion.

Liabilities

The actuarial liability is that portion of the present value of future benefits that will not be paid by future normal costs. The difference between this liability and the actuarial value of assets on the same date is called the unfunded actuarial accrued liability (UAAL). The dollar amount of unfunded actuarial accrued liability is reduced if the contributions exceed the normal cost for the year plus interest on the prior year's UAAL.

The following table shows the unfunded actuarial accrued liability as of June 30, 2014.

(dollars in millions)	Fair Value of Assets	Actuarial Value of Assets
Actuarial Accrued Liability	$24,529	$24,529
Value of Assets	$20,290	$18,182
Unfunded Actuarial Accrued Liability	$ 4,239	$ 6,347
Funded Ratio	82.72%	74.13%

Changes in the UAAL occur for various reasons. The net reduction in the UAAL from July 1, 2013, to July 1, 2014, was $297 million. The components of this net change are shown in the following table.

(dollars in millions)

Unfunded Actuarial Accrued Liability, July 1, 2013	**$6,644**
Expected increase from amortization method	$60
Expected increase from contributions below required rate	207
Investment experience	(1,080)
Liability experience	1
Other experience	2
Change in early retirement factors	513
Subtotal	(297)
Unfunded Actuarial Accrued Liability, July 1, 2014	**$6,347**

As shown in the previous table, various components impacted the UAAL.

Actuarial gains (losses), which result from actual experience that is more (less) favorable than anticipated based on the actuarial assumptions, are reflected in the UAAL and are measured as the difference between the expected unfunded actuarial accrued liability and the actual unfunded actuarial accrued liability, taking into account any changes due to actuarial assumptions and methods or benefit provision changes. The net actuarial gain of $1.080 billion may be explained by considering the separate experience of assets and liabilities. There was a small net liability loss of $1 million that arose from overall demographic experience in FY 2014 slightly less favorable than anticipated by the actuarial assumptions. The liability experience was the result of various components of actuarial gains and losses, the largest of which was a gain from salary increases that were lower than expected, offset by smaller losses from several sources.

An evaluation of the unfunded actuarial accrued liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the unfunded actuarial accrued liability and the progress made in its funding is to track the funded ratio – the ratio of the actuarial value of assets to the actuarial accrued liability. The funded status information is shown below (dollars in millions).

	7/1/10	7/1/11	7/1/12	7/1/13	7/1/14
Funded Ratio	78.5%	77.3%	73.0%	71.6%	74.1%
Unfunded Actuarial Accrued Liability ($M)	$4,758	$5,039	$6,219	$6,644	$6,347

Contribution Rate

Under the Entry Age Normal cost method, the actuarial contribution rate consists of two components:

- a "normal cost" for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date, and
- an "unfunded actuarial accrued liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

The development of the contribution rate is summarized in the following table.

Contribution Rates	July 1, 2014	July 1, 2013
Statutory Contribution Rate	15.68%	14.67%
Normal Cost Rate	8.70%	8.40%
UAAL Contribution Rate	10.23%	10.78%
Expenses	0.22%	0.23%
Total Required Contribution	19.15%	19.41%
Deficiency	(3.47%)	(4.74%)

As discussed earlier, legislation passed in the 2014 session provided statutory guidance on how the assumption for the post-retirement adjustment (COLA) should be set. Previously, based on limited official guidance and the fact that the increase in the COLA was not expected to occur for many years, the increase in the COLA to 2.5 percent was not anticipated; that is, a 2.0 percent COLA assumption for all future years was used. The 2014 Omnibus Pension Bill provided clarification in the state statutes regarding how the actuarial assumptions should reflect the increase in the post-retirement adjustment rate by requiring the COLA increase to be assumed when funding stability (the defined trigger point for the increases to occur) is expected to be attained. It also changed the criteria for the measurement of "funding stability" from a funded ratio of 90 percent for one year to a funded ratio of 90 percent on a fair value basis for two consecutive years.

In order to determine when the funded ratio would be 90 percent or more for two consecutive years we used the valuation model prepared in conjunction with the prior year's valuation, reflected in the actual fair value investment return for the fiscal year just ended, and then further assumed that all actuarial assumptions would be met in future years. In particular, this means the assumed rate of return is earned on the fair value of assets. Therefore, the current deferred investment gains flow through the asset smoothing method over the next four years and are reflected in future valuation results, including the funded ratio. The projection for the current valuation showed that TRA will have been 90 percent funded for two consecutive years in the July 1, 2031, valuation. As a result, the 2014 valuation reflects a COLA assumption of 2.0 percent until the 2031 valuation at which time the COLA is assumed to increase to 2.5 percent. It is important to note that the assumption that the actuarial rate of return is earned in all future years on the fair value of assets directly impacts the date at which funding stability is reached, which in turn leads to reflecting the COLA increasing to 2.5 percent. This anticipated date is then used in the valuation and it affects both the normal cost rate and the actuarial accrued liability. However, when the required contribution rate is determined, the actuarial value of assets is used and deferred investment experience is ignored. This results in a mismatch in calculation methodology between the liabilities, which are partially determined using the fair value of assets, and the actuarial assets, which are determined using the asset smoothing method. As a result, the key valuation metrics of the funded ratio, unfunded actuarial accrued liability, and the contribution rate deficiency may appear less favorable than they truly are because of the deferred gains.

The impact of the change in the COLA assumption on the 2014 valuation results, using the actuarial value of assets, is summarized in the following table.

	Assumption Changes		
(dollars in billions)	**Before***	**After****	**Impact**
Projected Benefit Funding Ratio	94.8%	92.3%	(2.5%)
Actuarial Accrued Liability Funding Ratio (AVA)	75.7%	74.1%	(1.6%)
Actuarial Value of Assets (AVA)	$18.18	$18.18	$0.00
Unfunded Actuarial Accrued Liability (UAAL)	$ 5.83	$ 6.35	$0.51
Normal Cost Rate (percent of pay)	8.33%	8.70%	0.37%
Amortization of UAAL (percent of pay)	9.40%	10.23%	0.83%
Administrative Expenses (percent of pay)	0.22%	0.22%	0.00%
Total Required Contribution (percent of pay)	**17.95%**	**19.15%**	**1.20%**
Contribution Deficiency (percent of pay)	(2.27%)	(3.47%)	(1.20%)

* *Assumes 2 percent COLA in all future years.*
** *Assumes 2 percent COLA paid until 2031 and then a 2.5 percent COLA is paid thereafter.*

When the statutory contribution rate is less than the required contribution rate, the resulting contribution deficiency creates an increase in the unfunded actuarial accrued liability. For the plan year ending June 30, 2014, the contribution deficiency increased the UAAL by an estimated $207 million.

The actuarial contribution rate (required contribution rate) is determined based on the snapshot taken on the valuation date, July 1, 2014. The actuarial contribution rate in future years will change each year as the deferred actuarial investment experience is recognized and other experience (both investment and demographic) impacts the fund. In addition, changes in the funded status from year to year will impact the date at which the COLA is assumed to increase to 2.5 percent, which will impact liabilities and costs. Significant gains or losses may move the expected date of the COLA increase.

Contribution rates have increased over the past few years, with the final scheduled increase taking effect July 1, 2014. At this point, a contribution deficiency still exists, although as pointed out earlier the liabilities reflect a 2.5 percent increase in the COLA in 2031, which is based on the fair value of assets earning the assumed rate of return. On a fair value basis, the deficiency is almost eliminated. Future investment returns, along with the use of the “stabilizer” provisions of the 2010 law will determine whether or not the fund is fully funded by the end of the amortization period (June 30, 2037).

Summary

The investment return on the fair value of assets for FY 2014 was 18.6 percent as reported by SBI. Due to the deferred investment gains and losses from past years, the return on the actuarial value of assets was 13.9 percent. Since this return was above the assumed 8.0 percent return, the funded ratio increased from 71.63 percent in last year's valuation to 74.13 percent this year.

As mentioned earlier, TRA uses an asset smoothing method in the valuation process. While this is a common procedure for public retirement systems, it is important to identify the potential impact of the deferred investment experience. The asset smoothing method impacts only the timing of when the actual market experience is recognized in the valuation process. The deferred investment experience gain of $2.1 billion represents about 10.0 percent of the fair value of assets, providing some margin to absorb future investment experience that is less than the assumed rate of return.

The following tables shows the key valuation results from the July 1, 2014, actuarial valuation using both actuarial and fair value of assets.

	Fair Value	Actuarial Value
Statutory Rate	15.68%	15.68%
Required Contribution		
Normal Cost	8.70%	8.70%
UAAL Contribution	6.83%	10.23%
Expenses	0.22%	0.22%
Total Required Contribution	15.75%	19.15%
Deficiency	(0.07%)	(3.47%)
UAAL (millions)	$4,239	$6,347
Funded Ratio	82.72%	74.13%

The long-term financial health of TRA, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions. Changes were made by the 2010 Legislature to strengthen the funding of TRA and enhance its long-term sustainability. Contributions were increased by a total of 4.0 percent, to be phased in over four years beginning July 1, 2011, and benefit reductions were implemented. These changes, along with strong investment performance in four of the last five fiscal years, have significantly improved the projected long term funding. However, a contribution deficiency still exists based on the results of the 2014 valuation. If the deferred investment gains are reflected, the deficiency is significantly reduced to 0.07 percent. This indicates that if the assumed returns are realized on a fair value basis, allowing the current deferred gains to be recognized in future years, TRA will be close to the target date for being 100 percent funded on June 30, 2037. Clearly, the actual market returns over the coming years will be a significant factor in whether or not the funding goal will be reached.

In addition to the market returns, the merger with the Duluth Teachers Retirement Fund Association will also change the dynamics of the funded status. Prior to enactment of the legislation, a great deal of effort was spent to analyze the potential impact of the merger on TRA. We note that this analysis appropriately focused on the long term impact of the merger, reflecting the additional state aid payments that are scheduled to be made to assure that TRA's funding is not negatively impacted by the merger. However, because the liabilities of the Duluth Teachers Retirement Fund Association will be included in the annual valuation of TRA in 2015, but the state aid payments intended to fund the unfunded actuarial accrued liability will be contributed over time, it is possible that certain measures of the financial health of TRA may be temporarily skewed in the short term.

The complete *Actuarial Valuation Funding Report* is available on the TRA website at http://www.commissions.leg.state.mn.us/lcpr/documents/valuations/2014/2014valuation.tra.pdf

Reconciliation of Member Data*

Fiscal Year Ended June 30, 2014

			Benefit Recipients****			
	Active** Members	Former*** Members	Service Retirements	Disability Retirements	Survivors	Total
Members on July 1, 2013	76,765	41,495	52,331	568	4,269	175,428
New hires	4,852	–	–	–	–	4,852
Return from inactive	1,724	(1,724)	–	–	–	0
Return from zero balance	457	–	–	–	–	457
Transfer to inactive	(4,225)	4,225	–	–	–	0
Refunded	(240)	(691)	–	–	–	(931)
Restored writeoff	–	142	–	–	–	142
Repay refunds	–	39	–	–	–	39
Transfer from non-status	–	20	–	–	–	20
Retirements	(1,971)	(589)	2,551	(56)	–	(65)
Benefits began	–	–	–	72	406	478
Benefits ended	–	–	–	(4)	(57)	(61)
Deaths	(53)	(59)	(1,105)	(19)	(146)	(1,382)
Adjustments for disabilitants	1	–	–	–	–	1
Adjustments (other)	(67)	33	(3)	2	–	(35)
Net changes	478	1,396	1,443	(5)	203	3,515
Members on June 30, 2014	**77,243**	**42,891**	**53,774**	**563**	**4,472**	**178,943**

* *All figures in this chart were provided by the Teachers Retirement Association. Recipient counts include all pensions in force, including double counting of multiple benefit types. Service Retirements include Supplemental and Variable optional joint annuitants. We found these results to be reasonable.*

** *Active members include 8 Basic and 77,235 Coordinated members.*

*** *Former members include 28 Basic and 42,863 Coordinated members.*

**** *Benefit recipients include 4,467 Basic members and 54,342 Coordinated members.*

Former Member Statistics	Vested	Non-Vested	Total
Number	12,907	29,984	42,891
Average Age	47.7	49.0	48.6
Average Service (years)	7.6	1.0	2.9
Average annual benefits, with augmentation to Normal Retirement Date and 4 percent Combined Service Annuity load	$10,100	N/A	N/A
Average refund value, with 4 percent Combined Service Annuity load	$30,283	$2,476	$10,844

Statement of Fiduciary Net Position

Fiscal Year Ended June 30, 2014

(dollars in thousands)

Assets	**Fair Value**
Cash and short term investments	
Cash	$ 3,391
Building account cash	34
Short-term investments	536,124
Total cash and short-term investments	$ 539,549
Receivables	25,605
Investments (at fair value)	
Fixed income pool	$ 4,732,983
Alternative investments pool	2,558,422
Indexed equity pool	3,149,569
Domestic equity pool	6,119,590
Global equity pool	3,170,211
Total investments	$ 19,730,775
Securities lending collateral	2,194,122
Building	
Land	$ 171
Building and equipment – net of depreciation	7,283
Deferred bond charge – net of depreciation	0
Total building	$ 7,454
Capital assets net of accumulated depreciation	$ 8,863
Total Assets	**$ 22,506,368**

Statement of Fiduciary Net Position *(continued)*

Fiscal Year Ended June 30, 2014

(dollars in thousands)

Liabilities	Fair Value
Current	
Accounts payable	$ 10,467
Accrued compensated absences	77
Accrued expenses - building	32
Bonds payable	591
Bonds interest payable	14
Securities lending collateral	2,194,122
Total current liabilities	$ 2,205,303
Long term	
Accrued compensated absences	$ 649
Bonds payable	6,732
Total long-term liabilities	$ 7,381
Total Liabilities	**$ 2,212,684**
Net Position Restricted for Pension Benefits	**$ 20,293,684**
Earnings Limitation Savings Account (ELSA) accounts payable*	(4,090)
Net Position Restricted, after adjustment for ELSA accounts	**$ 20,289,594**

** Not calculated by Cavanaugh Macdonald; TRA determined.*

Statement of Changes in Fiduciary Net Position

Fiscal Year Ended June 30, 2014

The following exhibit shows the revenue, expenses and resulting assets of the Fund as reported by the Teachers Retirement Association for the Plan's fiscal year July 1, 2013 to June 30, 2014.

(dollars in thousands)

Change in Assets		**Fair Value**
1. Net position at fair value at July 1, 2013	**$**	**18,015,194**
2. Contributions		
a. Member	$	294,632
b. Employer		299,300
c. Direct aid (state/city/county)		21,001
d. Earnings Limitation Savings Account (ELSA)		1,647
e. Total contributions	$	616,580
3. Investment income		
a. Investment income/(loss)	$	3,277,719
b. Investment expenses		(28,205)
c. Total investment income/(loss)	$	3,249,514
4. Securities lending activities		
a. Securities lending income	$	12,182
b. Securities lending expenses		
Borrowing rebates	$	(107)
Management fees		(3,896)
c. Total securities lending expenses		(4,003)
d. Net income from securities lending		8,179
5. Total net investment income *(3c + 4d)*	$	3,257,693
6. Other		3,855
7. Total additions *(2e + 5 + 6))*	**$**	**3,878,128**
8. Benefits Paid		
a. Annuity benefits	$	(1,580,120)
b. Refunds		(12,566)
c. Total benefits paid	$	(1,592,686)
9. Administrative Expenses		(9,430)
10. Total deductions *(8c + 9)*	**$**	**(1,602,116)**
11. Increase in ELSA account value		(1,612)
12. Net position at fair value at June 30, 2014 *(1 + 7 – 10 – 11)*	**$**	**20,289,594**

Actuarial Value of Assets

Fiscal Year Ended June 30, 2014

(dollars in thousands)

1. Fair value of assets available for benefits				**$**	**20,289,594**
2. Determination of average balance					
a. Assets available at July 1, 2012*				$	18,019,319
b. Assets available at June 30, 2013*					20,293,684
c. Net investment income for fiscal year ending June 30, 2013					3,257,693
d. Average balance *[a. + b. - c.] / 2*				$	17,527,655
3. Expected return *[8.0 percent * 2.d.]*					1,402,212
4. Actual return					3,257,693
5. Current year unrecognized asset return					1,855,481
6. Unrecognized asset returns					
		Original Amount	**% Not Recognized**		
a. Year ended June 30, 2014	$	1,855,481	80%	$	1,484,385
b. Year ended June 30, 2013	$	1,014,336	60%		608,602
c. Year ended June 30, 2012		(1,045,252)	40%		(418,101)
d. Year ended June 30, 2011		2,163,878	20%		432,776
e. Total return not yet recognized				$	2,107,662
7. Actuarial value at June 30, 2014 *(1. - 6.e.)*				**$**	**18,181,932**

* *Before recognition of ELSA accounts payable.*

Actuarial Valuation Balance Sheet

Fiscal Year Ended June 30, 2014

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 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)

	Non-Vested	Vested	Total
A. Actuarial Value of Assets			$ 18,181,932
B. Expected Future Assets			
1. Present value of expected future statutory supplemental contributions*			$ 4,194,966
2. Present value of expected future normal cost contributions			3,396,250
3. Total expected future assets *(1. + 2.)*			$ 7,591,216
C. Total Current and Expected Future Assets**			$ 25,773,148
D. Current Benefit Obligations	Non-Vested	Vested	Total
1. Benefit recipients			
a. Service retirements	$ 0	$ 14,715,304	$ 14,715,304
b. Disability	0	143,924	143,924
c. Survivors	0	939,382	939,382
2. Deferred retirements with augmentation to Normal Retirement Date	0	545,122	545,122
3. Former members without vested rights***	73,152	0	73,152
4. Active members	51,393	6,959,377	7,010,770
5. Total current benefit obligations	$ 124,545	$ 23,303,109	$ 23,427,654
E. Expected Future Benefit Obligations			$ 4,497,102
F. Total Current and Expected Future Benefit Obligations			$ 27,924,756
G. Unfunded Current Benefit Obligations *(D.5 – A)*			$ 5,245,722
H. Unfunded Current and Future Benefit Obligations *(F. – C.)*			$ 2,151,608

* *Under LCPR guidelines, this amount does not include supplemental payments which could occur after the expiration of the remaining 23-year amortization period. Reflects contribution rate increases scheduled in statute.*

** *Does not reflect deferred investment experience in the asset smoothing method. Total expected future assets on a fair value basis are $27,880,810.*

*** *Former members with insufficient service to vest who 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, 2014

(dollars in thousands)	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
A. Determination of Actuarial Accrued Liability (AAL)			
1. Active Members			
a. Retirement annuities	$ 10,403,253	$ (2,566,347)	$ 7,836,906
b. Disability benefits	208,488	(82,265)	126,223
c. Survivor benefits	94,292	(33,689)	60,603
d. Deferred retirements	792,488	(597,728)	194,760
e. Refunds	9,351	(116,221)	(106,870)
f. Total	$ 11,507,872	$ (3,396,250)	$ 8,111,622
2. Deferred retirements with future augmentation to Normal Retirement Age	545,122	0	545,122
3. Former members without vested rights	73,152	0	73,152
4. Benefit recipients	15,798,610	0	15,798,610
5. Total	$ 27,924,756	$ (3,396,250)	$ 24,528,506

B. Determination of Unfunded Actuarial Accrued Liability (UAAL)*	
1. Actuarial accrued liability	$ 24,528,506
2. Actuarial value of assets (page 75, line 7)	18,181,932
3. Unfunded actuarial accrued liability	$ 6,346,574
C. Determination of Supplemental Contribution Rate*	
1. Present value of future payrolls through the amortization date of June 30, 2037	$ 62,055,712
2. Supplemental contribution rate *(A.3/B.1)***	10.23%

* *On a fair value of assets basis, the unfunded actuarial accrued liability is $4,238,912 and the supplemental contribution rate is 6.83 percent of payroll.*

** *The amortization factor as of July 1, 2014 is 14.2526.*

Changes in Unfunded Actuarial Accrued Liability

Fiscal Year Ended June 30, 2014

(dollars in thousands)		**Amount**
A. Unfunded actuarial accrued liability at beginning of year	$	6,644,003
B. Changes due to interest requirements and current rate of funding*		
1. Normal cost and actual administrative expenses	$	362,765
2. Contributions		(616,580)
3. Interest on A., B.1 and B.2.		521,563
4. Total *(B.1. + B.2. + B.3.)*	$	267,748
C. Expected unfunded actuarial accrued liability at end of year *(A. + B.4.)*	$	6,911,751
D. Increase (decrease) due to actuarial losses (gains) because of experience deviations from expected		
1. Salary increases	$	(116,563)
2. Investment return (AVA)		(1,079,735)
3. Mortality of active members		(1,279)
4. Mortality of benefit recipients		10,082
5. Retirement from active service		51,258
6. Other items		57,640
7. Total	$	(1,078,597)
E. Unfunded actuarial accrued liability at end of year before plan amendments and changes in actuarial assumptions *(C. + D.7.)*	$	5,833,154
F. Change in unfunded actuarial accrued liability due to changes in plan provisions**		513,420
G. Unfunded actuarial accrued liability at end of year *(E. + F.)*	$	6,346,574

* *The amortization of the unfunded actuarial accrued liability (UAAL) using the current amortization method results in initial payments less than the "interest only" payment on the UAAL. Payments less than the interest only amount will result in the UAAL increasing in the absence of actuarial gains.*

** *Assumption changed to assume COLA will increase at expected date of satisfying requirements to increase if all actuarial assumptions are met in the future.*

Determination of Contribution Sufficiency/(Deficiency) — Total

July 1, 2014

The annual required contribution (ARC) is the sum of the normal cost, a supplemental contribution to amortize the UAAL, and an allowance for expenses. The statutory contribution rates do not reflect the scheduled increase for July 1, 2014.

(dollars in thousands)	**Percent of Payroll**	**Dollar Amount**
A. Statutory Contributions - Chapter 354		
1. Employee contributions	7.50%	$ 326,573
2. Employer contributions*	7.70%	335,309
3. Supplemental contributions**		
a. 1993 Legislation	0.11%	5,000
b. 1996 Legislation	0.07%	3,047
c. 1997 Legislation	0.30%	12,954
4. Total	15.68%	$ 682,883
B. Required Contributions - Chapter 356		
1. Normal Cost		
a. Retirement benefits	6.74%	$ 293,494
b. Disability benefits	0.20%	8,710
c. Survivor	0.09%	3,921
d. Deferred retirement benefits	1.37%	59,654
e. Refunds	0.30%	13,064
f. Total	8.70%	$ 378,843
2. Supplemental contribution amortization by July 1, 2037 of Unfunded Actuarial Accrued Liability	10.23%	$ 445,413
3. Allowance for expenses	0.22%	9,579
4. Total annual contribution for fiscal year ending June 30, 2014***	19.15%	$ 833,835
C. Contribution Sufficiency/(Deficiency) *(A.4 - B.4)****	(3.47%)	$ (150,952)
Note: Projected annual payroll for fiscal year beginning on the valuation date		$ 4,353,988

* *Employer contribution rate is blended to reflect rates of 15.14 percent of pay for Basic members, 7.50 percent for pay for Coordinated members not employed by Special School District #1, and 11.14 percent of pay for Coordinated members who are employed by Special School District #1.*

** *Includes contributions from Special School District #1, the City of Minneapolis and matching state contributions.*

*** *On a fair value of assets basis, the total required contribution is 15.75 percent of payroll and the contribution deficiency is 0.07 percent of payroll.*

Solvency Test

(dollars in thousands)

Valuation as of June 30	Aggregate Accrued Liabilities (1) Member Contributions	(2) Retirees and Beneficiaries	(3) Members (Employer Financed Portion)	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
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%
2010	$ 2,128,600	$ 13,650,631	$ 6,302,403	$ 17,323,146	100%	100%	24.5%
2011	$ 2,308,427	$ 13,964,552	$ 5,898,514	$ 17,132,383	100%	100%	14.6%
2012	$ 2,407,626	$ 14,664,333	$ 5,952,546	$ 16,805,077	100%	98.2%	0.0%
2013	$ 2,482,123	$ 15,145,239	$ 5,791,267	$ 16,774,626	100%	94.4%	0.0%
2014	$ 2,510,604	$ 15,798,610	$ 6,219,292	$ 18,181,932	100%	99.2%	0.0%

Schedule of Active Member Valuation Data

Year Ended June 30	Active Members	*($ in thousands)* Annual Covered Payroll	% Increase in Covered Payroll	Average Annual Member Salary
2005	74,552	$3,121,571	2.9%	$41,871
2006	79,164	$3,430,645	9.9%	$43,336
2007	77,694	$3,532,159	3.0%	$45,462
2008	76,515	$3,645,230	3.2%	$47,641
2009	77,162	$3,761,484	3.2%	$48,748
2010	77,356	$3,787,757	0.7%	$48,965
2011	76,755	$3,838,111	1.3%	$50,005
2012	76,649	$3,871,809	0.9%	$50,514
2013	76,765	$3,917,310	1.2%	$51,030
2014	77,243	$4,056,482	3.5%	$52,516

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

Through June 1, 2014 – End of Budget Year for Benefit Payments – Prepared by TRA

	Added To Rolls		Removed From Rolls		June 1 Payment		
Fiscal Year	**Number**	**Annual Allowances**	**Number**	**Annual Allowances**	**Number**	**Annual Allowances**	**Avg. Annual Allowances**
2014							
Retirement	2,657	$ 72,823,770	1,082	$ 33,357,350	53,405	$ 1,438,959,431	$ 26,944
Disability	71	$ 1,371,630	76	$ 1,731,701	566	$ 10,884,969	$ 19,231
Beneficiaries	428	$ 11,562,063	217	$ 4,779,599	4,736	$ 123,918,462	$ 26,165
2013							
Retirement	2,719	$ 73,367,192	1,079	$ 33,267,557	51,830	$ 1,393,126,889	$ 26,879
Disability	54	$ 1,049,388	80	$ 1,799,928	571	$ 11,051,118	$ 19,354
Beneficiaries	449	$ 11,519,816	237	$ 6,491,835	4,525	$ 116,204,127	$ 25,680
2012							
Retirement	2,770	$ 77,169,833	1,040	$ 30,234,280	50,193	$ 1,342,791,637	$ 26,753
Disability	72	$ 1,481,314	80	$ 1,816,246	597	$ 11,565,197	$ 19,372
Beneficiaries	402	$ 11,820,962	213	$ 3,969,446	4,310	$ 110,302,448	$ 25,592
2011							
Retirement	2,573	$ 71,896,835	1,012	$ 30,381,621	48,463	$ 1,320,885,728	$ 27,256
Disability	59	$ 1,365,130	72	$ 1,841,934	605	$ 11,896,607	$ 19,664
Beneficiaries	400	$ 9,199,307	224	$ 4,179,950	4,121	$ 104,083,869	$ 25,257
2010							
Retirement	2,034	$ 57,221,454	922	$ 28,024,798	46,902	$ 1,296,882,008	$ 27,651
Disability	51	$ 1,283,512	67	$ 1,578,194	618	$ 12,400,315	$ 20,065
Beneficiaries	391	$ 9,945,588	193	$ 4,237,320	3,945	$ 100,367,532	$ 25,442
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	$267,146,737	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

* *2008 data reflects higher additions, removals and fiscal year 2009 data adjustments associated with the conversion of former MTRFA benefit recipient rolls into TRA benefit payment systems.*

Schedule of Funding Progress (Unaudited)

Dollar Amounts in Thousands

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (AAL) (B)	Unfunded AAL (UAAL) (B–A)	Funded Ratio (A / B)	Actual Covered Payroll (Previous FY) (C)	UAAL as Percentage of Covered Payroll (B–A) / (C)
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%
07/01/10	$17,323,146	$22,081,634	$ 4,758,488	78.45%	$3,787,757	125.63%
07/01/11	$17,132,383	$22,171,493	$ 5,039,110	77.27%	$3,838,111	131.29%
07/01/12	$16,805,077	$23,024,505	$ 6,219,428	72.99%	$3,871,809	160.63%
07/01/13	$16,774,626	$23,418,629	$ 6,644,003	71.63%	$3,917,310	169.61%
07/01/14	$18,181,932	$24,528,506	$ 6,346,574	74.13%	$4,056,482	156.46%

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

Dollar Amounts in Thousands

Year End June 30	Actuarially* Required Contribution Rate (a)	Actual Covered Payroll (b)	Actual Member Contributions (c)	ARC Annual Required Contributions [(a) x (b)] - (c)	Actual Employer Contribution	Percentage Contributed
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%
2010	16.81%	$ 3,787,757	$ 214,909	$ 421,813	$ 242,088	57.39%
2011	15.71%	$ 3,838,111	$ 218,024	$ 384,943	$ 244,233	63.45%
2012	16.57%	$ 3,871,809	$ 239,834	$ 401,725	$ 266,661	66.38%
2013	18.75%	$ 3,917,310	$ 270,708	$ 463,788	$ 290,662	62.67%
2014	19.41%	$ 4,056,482	$ 294,632	$ 492,731	$ 320,301	65.01%
2015	19.15%					

**Actuarially Required Contributions calculated according to parameters of GASB 25.*

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 85 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 Contribution Rate chart on page 85 provides historical information on the total member and employer contribution rates.

The schedule of Pension Assets Compared to Pension Liabilities, found on pages 86-87, 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 schedules on pages 88-93 and 99-101 include detailed information regarding the number and type of benefit recipients, and information as to the benefit amount.

The chart on page 94 provides a profile of TRA active members on June 30, 2014, by age and service credit totals.

The chart on page 95 contains information on the total number of members by type.

The schedules on pages 96-98 detail the largest TRA employer units by covered employees and by types of employer.

All data is derived from TRA internal sources and the actuarial consultant.

The projected benefit payments (page 102) for the next 25 years have been supplied by TRA's actuarial advisor, Cavanaugh Macdonald Consulting.

10-Year History of TRA Fiduciary Net Position

June 30 Fiscal Year End	Fiduciary Net Position	% Change From Prior Year
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%
2010	$14,939,539,780	8.0%
2011	$17,303,575,561	15.8%
2012	$16,689,940,629	-3.6%
2013	$18,019,318,901	8.0%
2014	$20,293,684,479	12.6%

10-Year History of TRA Contribution Rates

Fiscal Year	Basic Program Employee Contribution Rate	Basic Program Employer Contribution Rate	Basic Program Total Contribution Rate	Coordinated Employee Contribution Rate	Coordinated Employer Contribution Rate	Coordinated Total Contribution Rate
2005	9.00%	9.00%	18.00%	5.00%	5.00%	10.00%
2006	9.00%	9.00%	18.00%	5.00%	5.00%	10.00%
2007	9.00%	9.00%	18.00%	5.50%	5.00%	10.50%
2008	9.00%	9.50%	18.50%	5.50%	5.50%	11.00%
2009	9.00%	9.50%	18.50%	5.50%	5.50%	11.00%
2010	9.00%	9.50%	18.50%	5.50%	5.50%	11.00%
2011	9.00%	9.50%	18.50%	5.50%	5.50%	11.00%
2012	9.50%	10.00%	19.50%	6.00%	6.00%	12.00%
2013	10.00%	10.50%	20.50%	6.50%	6.50%	13.00%
2014	10.50%	11.00%	21.50%	7.00%	7.00%	14.00%

Teachers Retirement Association
10-Year History of Changes in Fiduciary Net Position

Fiscal Year ended June 30	2005	2006*	2007	2008
Additions				
Member Contributions	$ 160,982,004	$ 177,084,906	$ 199,868,969	$ 209,592,461
Employer Contributions	157,693,090	200,285,886	209,219,130	231,561,322
Net Income (Loss) From Investing Activity	1,575,519,541	1,951,778,366	3,056,492,094	(926,044,140)
Other Income, Net	6,295,759	11,412,062	7,901,279	7,529,753
Total Additions to Fiduciary Net Position	$ 1,900,490,394	$ 2,340,561,220	$ 3,473,481,472	$ (477,360,604)
Deductions				
Pension Benefits	$ 1,048,440,525	$ 1,224,212,024	$ 1,273,093,384	$ 1,330,836,947
Refunds	6,744,116	11,872,504	12,088,193	11,770,086
Administrative Expenses	10,883,151	11,912,701	10,635,365	10,261,139
Other	1,622,386	1,856,275	3,309,099	1,687,335
Total Deductions from Fiduciary Net Position	1,067,690,178	$ 1,249,853,504	$ 1,299,126,041	$ 1,354,555,508
Net Increase (Decrease)	$ 832,800,216	$ 1,090,707,716	$ 2,174,355,431	$ (1,831,916,112)
Net Position Held in Trust, Beginning of Year	$ 15,095,803,651	$ 16,673,818,725	$ 17,764,526,441	$ 19,938,881,872
Net Position Held in Trust, End of Year	$ 15,928,603,867	$ 17,764,526,441	$ 19,938,881,872	$ 18,106,965,760

"Net position 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

Fiscal Year ended June 30	2005	2006	2007	2008
Pension Assets (Actuarial Value)	$ 17,752,917,000	$ 19,035,612,000	$ 18,794,389,076	$ 18,226,985,000
Accrued Liabilities	$ 18,021,410,000	$ 20,679,111,000	$ 21,470,314,497	$ 22,230,841,000
Unfunded Liabilities (Sufficiency)	$ 268,493,000	$ 1,643,499,000	$ 2,675,925,421	$ (4,003,856,000)
Funded Ratio	98.5%	92.0%	87.5%	82.0%

2009	2010	2011	2012	2013	2014
$ 212,042,535	$ 214,908,960	$ 218,023,736	$ 239,833,920	$ 265,808,686	$ 294,632,331
240,718,200	242,087,985	244,232,711	266,661,085	290,662,108	320,300,846
(3,318,368,290)	2,087,639,841	3,390,130,615	383,187,159	2,310,295,407	3,257,692,629
6,526,400	4,850,206	5,562,374	4,929,201	5,474,846	5,502,381
$ (2,859,081,155)	$ 2,549,486,992	$ 3,857,949,436	$ 894,611,365	$ 2,872,241,047	$ 3,878,128,187
$ 1,383,667,466	$ 1,422,578,335	$ 1,460,836,392	$ 1,486,386,832	$ 1,523,269,003	$ 1,581,766,643
14,429,351	11,607,086	23,812,985	11,835,977	10,462,932	12,566,217
10,608,003	9,587,524	9,264,278	10,023,488	9,130,840	9,429,749
5,354,052	0	0	0	0	0
$ 1,414,058,872	$ 1,443,772,945	$ 1,493,913,655	$ 1,508,246,297	$ 1,542,862,775	$ 1,603,762,609
$ (4,273,140,027)	$ 1,105,714,047	$ 2,364,035,781	$ (613,634,932)	$ 1,329,378,272	$ 2,274,365,578
$ 18,106,965,760	$ 13,833,825,733	$ 14,939,539,780	$ 17,303,575,561	$ 16,689,940,629	$ 18,019,318,901
$ 13,833,825,733	$ 14,939,539,780	$ 17,303,575,561	$ 16,689,940,629	$ 18,019,318,901	$ 20,293,684,479

2009	2010	2011	2012	2013	2014
$ 17,882,408,000	$ 17,323,146,000	$ 17,132,383,000	$ 16,805,077,000	$ 16,774,626,000	$ 18,181,932,000
$ 23,114,802,000	$ 22,081,634,000	$ 22,171,493,000	$ 23,024,505,000	$ 23,418,629,000	$ 24,528,506,000
$ (5,232,394,000)	$ (4,758,488,000)	$ (5,039,110,000)	$ (6,219,428,000)	$ (6,644,003,000)	$ (6,346,574,200)
77.4%	78.5%	77.3%	73.0%	71.6%	74.1%

10-Year History of TRA Benefits and Refunds by Type

Fiscal year ended June 30

Pension Benefits	2005	2006	2007	2008
Annuities	$ 1,019,776,085	$ 1,190,295,077	$ 1,241,862,723	$ 1,297,772,858
Disabilities	11,810,137	13,118,722	11,923,494	12,049,579
Survivor Benefits	13,869,225	17,616,002	15,774,162	17,460,466
Total Pension Benefits	$ 1,045,455,447	$ 1,221,029,801	$ 1,269,560,379	$ 1,327,282,903
Annuities Redirected to Earnings Limitation Savings Account (ELSA)	$ 2,985,078	$ 3,182,223	$ 3,533,005	$ 3,554,045
Member Refunds				
Regular	6,159,787	8,452,311	9,574,959	8,567,474
Death	309,132	1,014,163	642,960	995,710
ELSA Refunds	98,867	2,014,275	1,431,902	1,860,826
Employer Refunds	176,330	91,755	438,372	346,076
Total Refunds	$ 6,744,116	$ 11,872,504	$ 12,088,193	$ 11,770,086
Total Benefits and Refunds	$ 1,055,184,641	$ 1,236,084,528	$ 1,285,181,577	$ 1,342,607,034

10-Year History of TRA Benefit Recipients by Category

Fiscal year ended June 30

Year	Annuitants	Disabilitants	Survivors	Total
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
2010	47,556	615	3,682	51,853
2011	49,079	602	3,856	53,537
2012	50,780	591	4,054	55,425
2013	52,331	568	4,269	57,168
2014	53,774	563	4,472	58,809

10-Year History of TRA Benefits and Refunds by Type *(cont'd)*

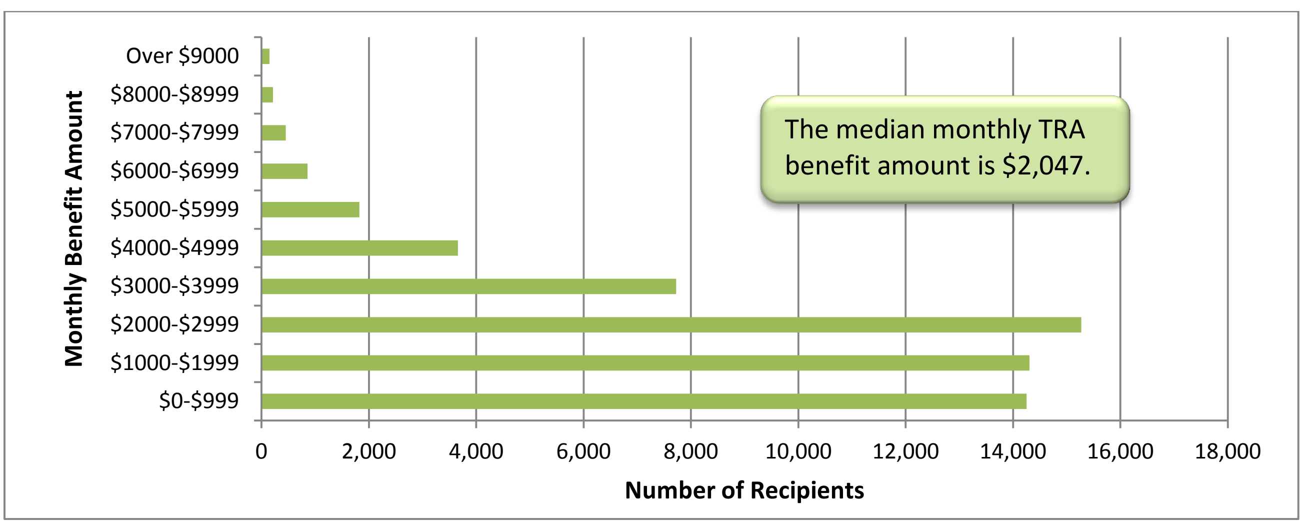
Fiscal year ended June 30

2009	2010	2011	2012	2013	2014
$ 1,352,741,935	$ 1,391,181,476	$ 1,429,842,960	$ 1,456,295,613	$ 1,492,612,137	$ 1,551,120,554
12,076,621	13,075,898	12,468,933	12,302,612	11,774,758	11,681,267
16,547,705	17,124,339	17,237,783	16,929,195	17,089,958	17,318,007
$ 1,381,366,261	$ 1,421,381,713	$ 1,459,549,676	$ 1,485,527,420	$ 1,521,476,853	$ 1,580,119,828
$ 2,301,205	$ 1,196,622	$ 1,286,716	$ 859,412	$ 1,792,150	$ 1,646,815
8,631,754	6,808,991	7,669,337	7,836,244	7,596,530	9,152,348
1,967,544	1,272,971	989,888	928,558	1,192,365	1,609,301
3,550,729	3,341,302	14,947,274	2,864,780	1,366,885	1,579,841
279,324	183,822	206,486	206,395	307,152	224,727
$ 14,429,351	$ 11,607,086	$ 23,812,985	$ 11,835,977	$ 10,462,932	$ 12,566,217
$ 1,398,096,817	$ 1,434,185,421	$ 1,484,649,377	$ 1,498,222,809	$ 1,533,731,935	$ 1,594,332,860

Schedule of TRA Benefit Amounts Paid

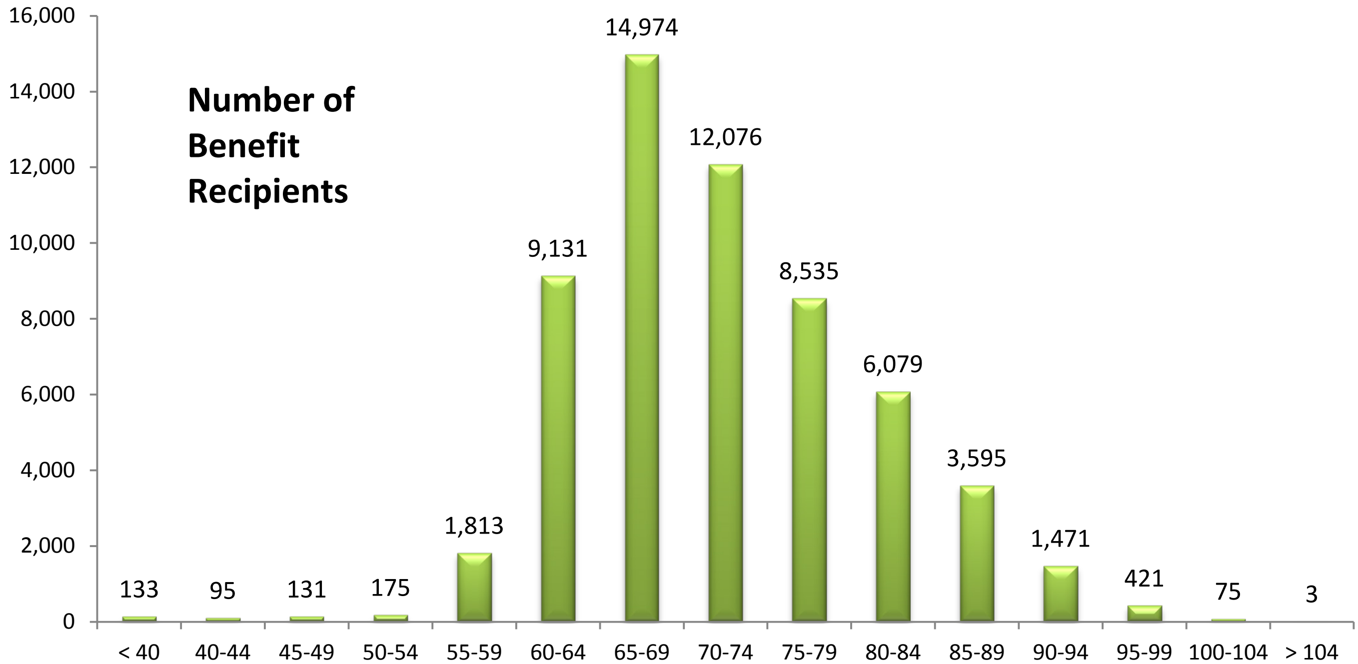
For Month of June 2014 – Payment Made June 1, 2014

Monthly Benefit Amount	Number of Recipients	Cumulative Total	Percent	Cumulative Percent
$ 0 – 499	8,105	8,105	13.81%	13.81%
$ 500 – 999	6,148	14,253	10.47%	24.28%
$ 1,000 – 1,499	6,326	20,579	10.78%	35.06%
$ 1,500 – 1,999	7,982	28,561	13.60%	48.66%
$ 2,000 – 2,499	8,359	36,920	14.24%	62.90%
$ 2,500 – 2,999	6,910	43,830	11.77%	74.67%
$ 3,000 – 3,499	4,680	48,510	7.97%	82.64%
$ 3,500 – 3,999	3,043	51,553	5.18%	87.82%
$ 4,000 – 4,499	2,084	53,637	3.55%	91.37%
$ 4,500 – 4,999	1,576	55,213	2.68%	94.05%
$ 5,000 – 5,499	1,103	56,316	1.88%	95.93%
$ 5,500 – 5,999	721	57,037	1.23%	97.16%
$ 6,000 – 6,499	513	57,550	0.87%	98.03%
$ 6,500 – 6,999	342	57,892	0.58%	98.61%
$ 7,000 – 7,499	275	58,167	0.47%	99.08%
$ 7,500 – 7,999	178	58,345	0.30%	99.38%
$ 8,000 – 8,499	142	58,487	0.24%	99.62%
$ 8,500 – 8,999	72	58,559	0.12%	99.74%
$ 9,000 – 9,499	38	58,597	0.06%	99.80%
$ 9,500 – 9,999	33	58,630	0.06%	99.86%
$ 10,000 – 10,499	31	58,661	0.05%	99.91%
$ 10,500 – 10,999	13	58,674	0.02%	99.93%
$ 11,000 – 11,499	10	58,684	0.02%	99.95%
$ 11,500 – 11,999	10	58,694	0.02%	99.97%
$ 12,000 – 12,499	5	58,699	0.01%	99.98%
$ 12,500 and over	8	58,707	0.01%	100.0%



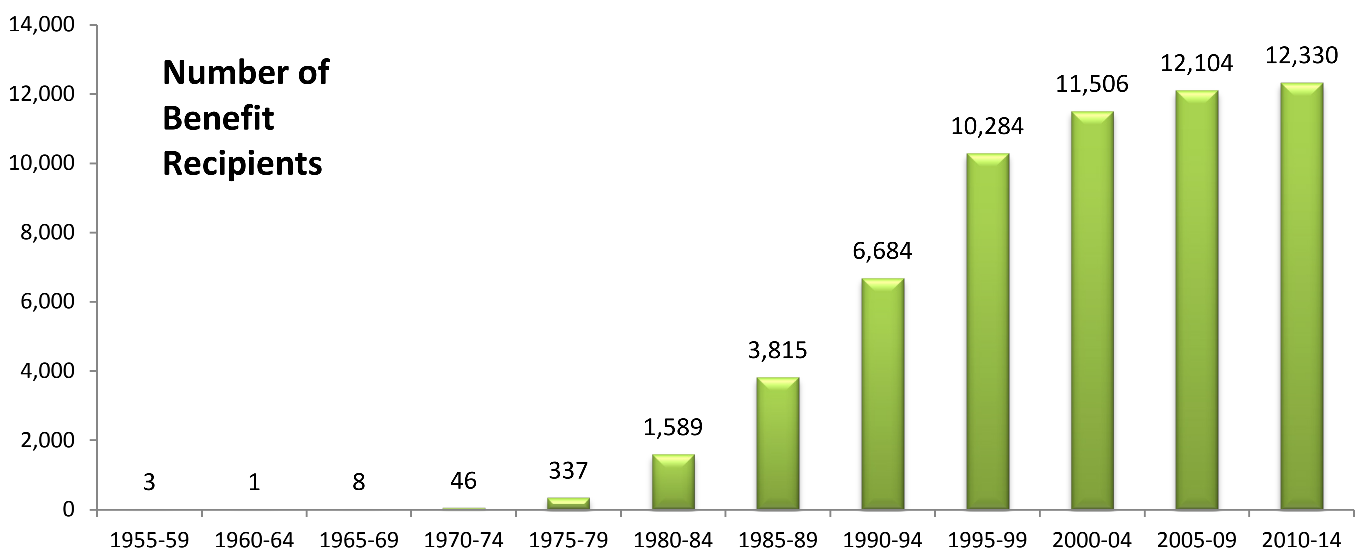
Schedule of TRA Benefit Recipients by Current Age

For Month of June 2014 – Payment Made June 1, 2014 | Total Recipients: 58,707



Benefit Recipients by Effective Date of Retirement

For Month of June 2014 – Payment Made June 1, 2014 | Total Recipients: 58,707



Schedule of New TRA Retirees and Initial Benefit Paid

For the Ten Fiscal Years Ending June 30, 2014

	Years of Formula Service							
						>30 (FY 2000-2008)		
Fiscal Year	<10	10-15	16-20	21-25	26-30	31-35 (FY 2009)	>35	Total
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
2010								
Avg. Monthly Benefit	$299	$919	$1,497	$1,911	$2,636	$3,447	$3,884	$2,441
Final Average Salary	$24,488	$43,105	$54,513	$60,302	$64,611	$67,443	$70,941	$57,729
Number of Retirees	326	162	205	224	276	733	323	2,249
2011								
Avg. Monthly Benefit	$318	$883	$1,458	$2,076	$2,777	$3,576	$3,941	$2,410
Final Average Salary	$24,106	$43,245	$56,574	$63,832	$68,358	$71,541	$73,031	$58,957
Number of Retirees	431	212	240	270	278	685	428	2,544
2012								
Avg. Monthly Benefit	$388	$935	$1,485	$2,011	$2,747	$3,592	$4,004	$2,301
Final Average Salary	$28,337	$44,368	$55,772	$63,085	$68,043	$70,400	$74,259	$58,233
Number of Retirees	518	254	253	337	345	668	371	2,746
2013								
Avg. Monthly Benefit	$349	$921	$1,431	$1,995	$2,772	$3,591	$4,063	$2,318
Final Average Salary	$26,267	$44,588	$55,793	$62,310	$69,357	$70,648	$73,864	$58,305
Number of Retirees	458	231	272	344	338	605	387	2,635
2014								
Avg. Monthly Benefit	$362	$991	$1,468	$2,127	$2,798	$3,578	$4,111	$2,287
Final Average Salary	$26,345	$46,119	$56,872	$67,321	$69,205	$73,092	$76,236	$58,990
Number of Retirees	496	224	264	300	329	589	349	2,551

Schedule of TRA Benefit Recipients by Type

For Month of June 2014 – Payment Made June 1, 2014

Monthly Benefit Amount	Number of Recipients	Regular	Type of Retirement Disability	Beneficiary
$ 0 – 1,000	14,267	12,849	183	1,235
$ 1,001 – 2,000	14,319	12,797	210	1,312
$ 2,001 – 3,000	15,262	14,082	121	1,059
$ 3,001 – 4,000	7,721	7,158	40	523
$ 4,001 – 5,000	3,655	3,358	7	290
$ 5,001 – 6,000	1,816	1,652	2	162
$ 6,001 – 7,000	852	768	3	81
$ 7,001 – 8,000	453	416	0	37
$ 8,001 – 9,000	214	189	0	25
$ 9,001 – 10,000	71	65	0	6
$ 10,001 – 11,000	44	41	0	3
$ 11,001 – 12,000	20	19	0	1
$ 12,001 – 13,000	9	7	0	2
$ 13,001 – 14,000	2	2	0	0
$ 14,001 – 15,000	1	1	0	0
$ 15,001 – 16,000	1	1	0	0
$ 16,001 and over	0	0	0	0
Totals:	58,707	53,405	566	4,736

TRA Membership Data

June 30, 2014

Distribution of Active Members*

Average Earnings in Dollars

	Years of Service as of June 30, 2014**										
Age	**<3****	**3-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 +**	**Total**
<25	2,344	28									**2,372**
Avg. Earnings	$ 25,142	$ 39,498									**$ 25,311**
25-29	4,526	2,566	1,504								**8,596**
Avg. Earnings	$ 29,562	$ 41,713	$ 46,265								**$ 36,112**
30-34	2,270	1,375	5,410	1,393							**10,448**
Avg. Earnings	$ 28,364	$ 40,447	$ 49,514	$ 59,468							**$ 45,053**
35-39	1,507	739	2,549	4,481	1,355						**10,631**
Avg. Earnings	$ 25,124	$ 40,430	$ 50,441	$ 62,026	$ 69,696						**$ 53,494**
40-44	1,349	625	1,583	2,246	4,175	911					**10,889**
Avg. Earnings	$ 23,135	$ 40,411	$ 48,245	$ 60,289	$ 69,298	$ 73,617					**$ 57,363**
45-49	1,133	505	1,221	1,462	2,292	3,135	571				**10,319**
Avg. Earnings	$ 20,758	$ 36,939	$ 46,242	$ 57,984	$ 68,051	$ 73,657	$ 75,345				**$ 59,436**
50-54	890	378	1,001	1,260	1,441	1,811	2,359	480			**9,620**
Avg. Earnings	$ 18,969	$ 33,109	$ 44,167	$57,921	$ 65,847	$ 71,033	$ 74,922	$ 74,182			**$ 60,547**
55-59	679	294	724	927	1,171	1,264	1,417	1,470	362		**8,308**
Avg. Earnings	$ 16,135	$ 31,764	$ 40,691	$55,422	$ 63,609	$ 69,936	$ 73,952	$ 74,860	$ 76,786		**$ 60,983**
60-64	550	154	401	549	667	789	703	347	437	111	**4,708**
Avg. Earnings	$ 10,634	$ 22,594	$ 36,936	$ 53,553	$ 61,084	$ 67,356	$ 73,425	$ 76,716	$ 78,976	$ 77,688	**$ 57,094**
65-69	304	64	103	111	119	124	101	59	36	67	**1,088**
Avg. Earnings	$ 6,341	$ 14,113	$ 26,871	$ 44,847	$ 59,128	$ 66,361	$ 73,541	$ 78,197	$ 89,250	$ 79,304	**$ 42,655**
70 +	139	27	18	12	14	12	8	12	7	15	**264**
Avg. Earnings	$ 4,334	$ 7,286	$ 20,968	$ 42,702	$ 62,263	$ 84,099	$ 71,571	$ 71,731	$ 72,144	$ 82,665	**$ 25,561**
Total	**15,691**	**6,755**	**14,514**	**12,441**	**11,234**	**8,046**	**5,159**	**2,368**	**842**	**193**	**77,243**
Avg. Earnings	**$ 24,595**	**$ 39,079**	**$ 47,574**	**$ 59,498**	**$ 67,452**	**$ 71,763**	**$ 74,466**	**$ 75,062**	**$ 78,417**	**$ 78,636**	**$ 52,547**

* *Active members include 8 Basic and 77,235 Coordinated members.*

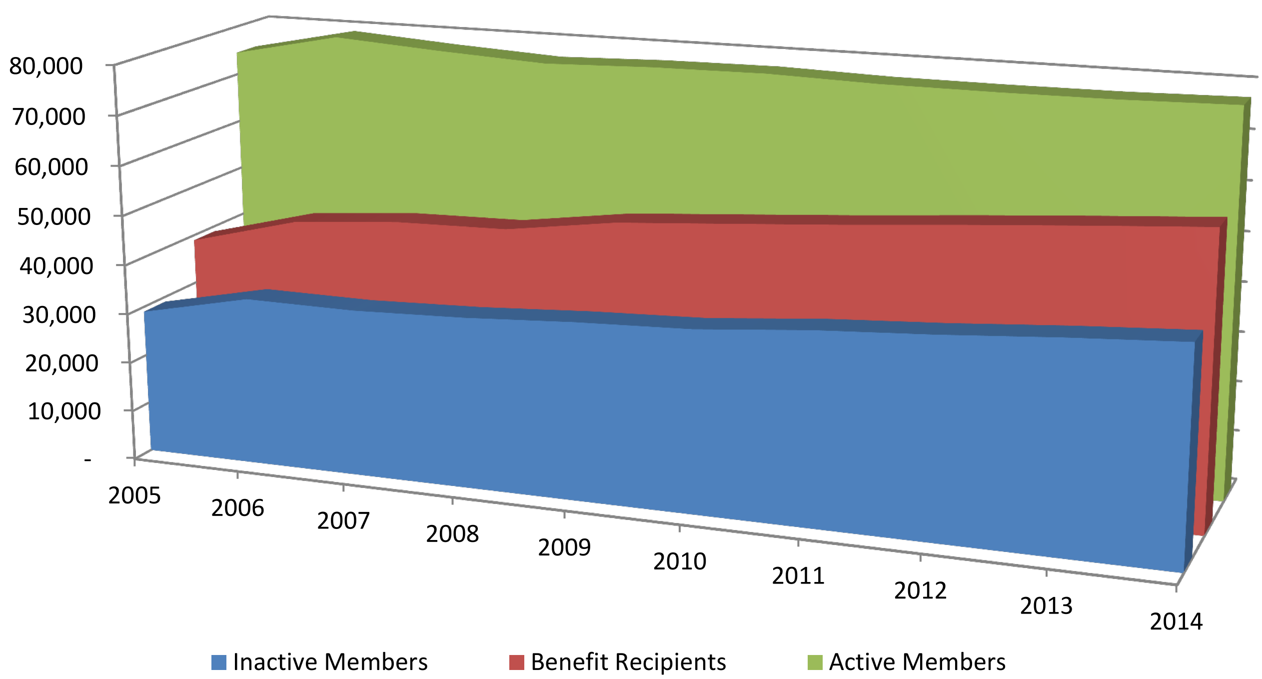
** *This exhibit does not reflect service earned in Combined Service Annuity benefits. It should not be relied upon as an indicator of non-vested status.*

In each cell, the top number is the count of active members 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, 2014, as reported by the Teachers Retirement Association of Minnesota.

10-Year Summary of TRA Membership

Year Ended June 30	Active Members	Inactive Members	Benefit Recipients
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
2010	77,356	36,407	51,853
2011	76,755	38,433	53,537
2012	76,649	39,792	55,425
2013	76,765	41,495	57,168
2014	77,243	42,891	58,809

10-Year Summary of Membership



TRA Principal Participating Employers

Fiscal year ended June 30, 2014

	2014		
Employer Unit Name	**Covered Employees**	**Rank**	**Percentage of Active Membership**
Minneapolis - Special School District #1	3,810	1	4.93
Anoka-Hennepin - ISD #11	3,108	2	4.02
MnSCU (MN State Colleges & Universities)	2,662	3	3.45
Rosemount-Apple Valley-Eagan - ISD #196	2,470	4	3.20
Osseo - ISD #279	1,712	5	2.22
South Washington County - ISD #833	1,651	6	2.14
Rochester - ISD #535	1,528	7	1.98
Robbinsdale - ISD #281	1,090	8	1.41
Bloomington - ISD #271	1,073	9	1.39
Mounds View (ISD #621)	1,005	10	1.30
All Other	57,134		73.96
Total	77,243		100.00

TRA Principal Participating Employers

Fiscal year ended June 30, 2006

Employer Unit Name	2006		
	Covered Employees	Rank	Percentage of Active Membership
Minneapolis - Special School District #1	4,381	1	5.53
Anoka-Hennepin - ISD #11	3,497	2	4.42
MnSCU (MN State Colleges & Universities)	3,422	3	4.33
Rosemount-Apple Valley-Eagan - ISD #196	2,668	4	3.37
Osseo - ISD #279	1,903	5	2.40
South Washington County - ISD #833	1,632	6	2.06
Rochester - ISD #535	1,387	7	1.75
Robbinsdale - ISD #281	1,247	8	1.58
St. Cloud - ISD #742	1,082	9	1.37
Bloomington - ISD #271	1,030	10	1.30
All Other	56,915		71.89
Total	79,164		100.00

Note: *Information not available prior to 2006.*

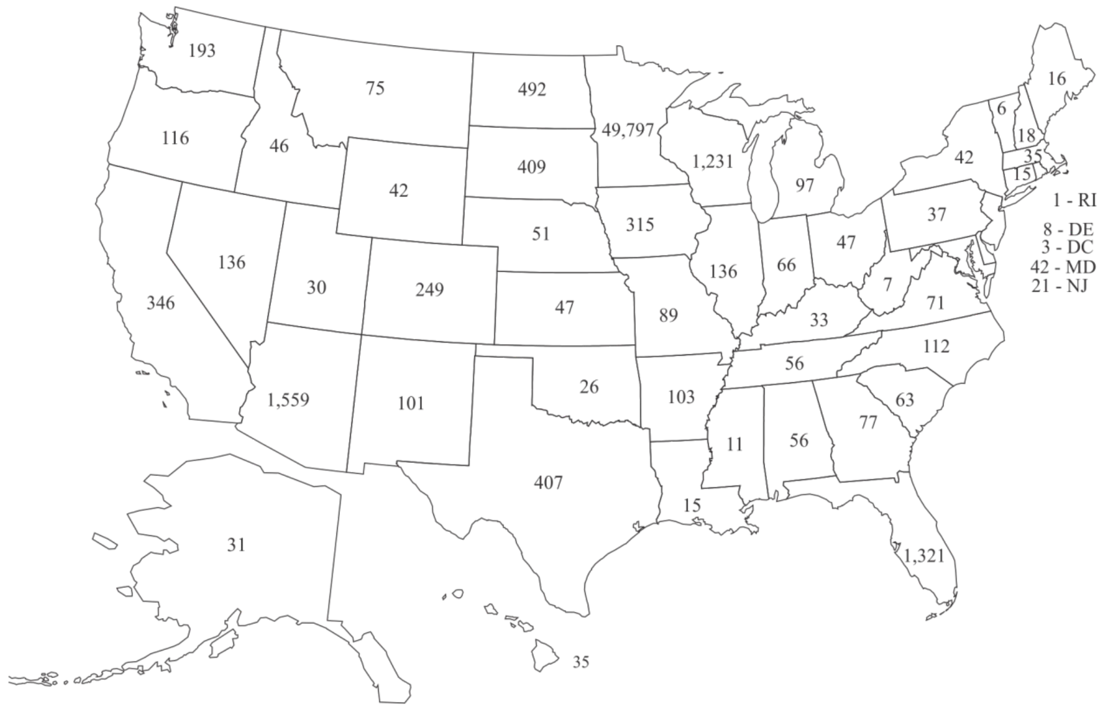
Number of TRA Employer Units

As of June 30, 2014

Year	Independent School Districts	Joint Power Units	MN State Colleges and Universities (MnSCU)	Charter Schools	State Agencies	Others	Total
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
2010	342	37	39	154	4	2	578
2011	342	37	39	155	4	2	579
2012	344	34	39	158	4	6	585
2013	347	35	39	160	4	6	591
2014	341	37	39	163	5	5	590

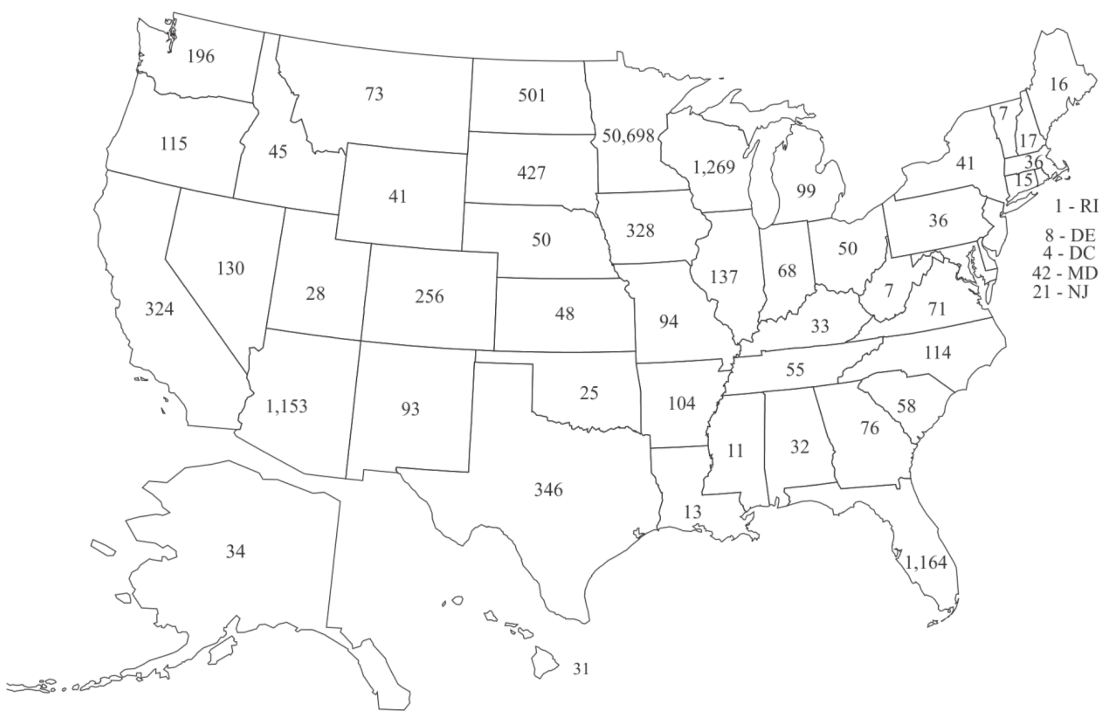
Distribution of TRA Benefits
Mailing Address of Benefit Recipient

February 1, 2014



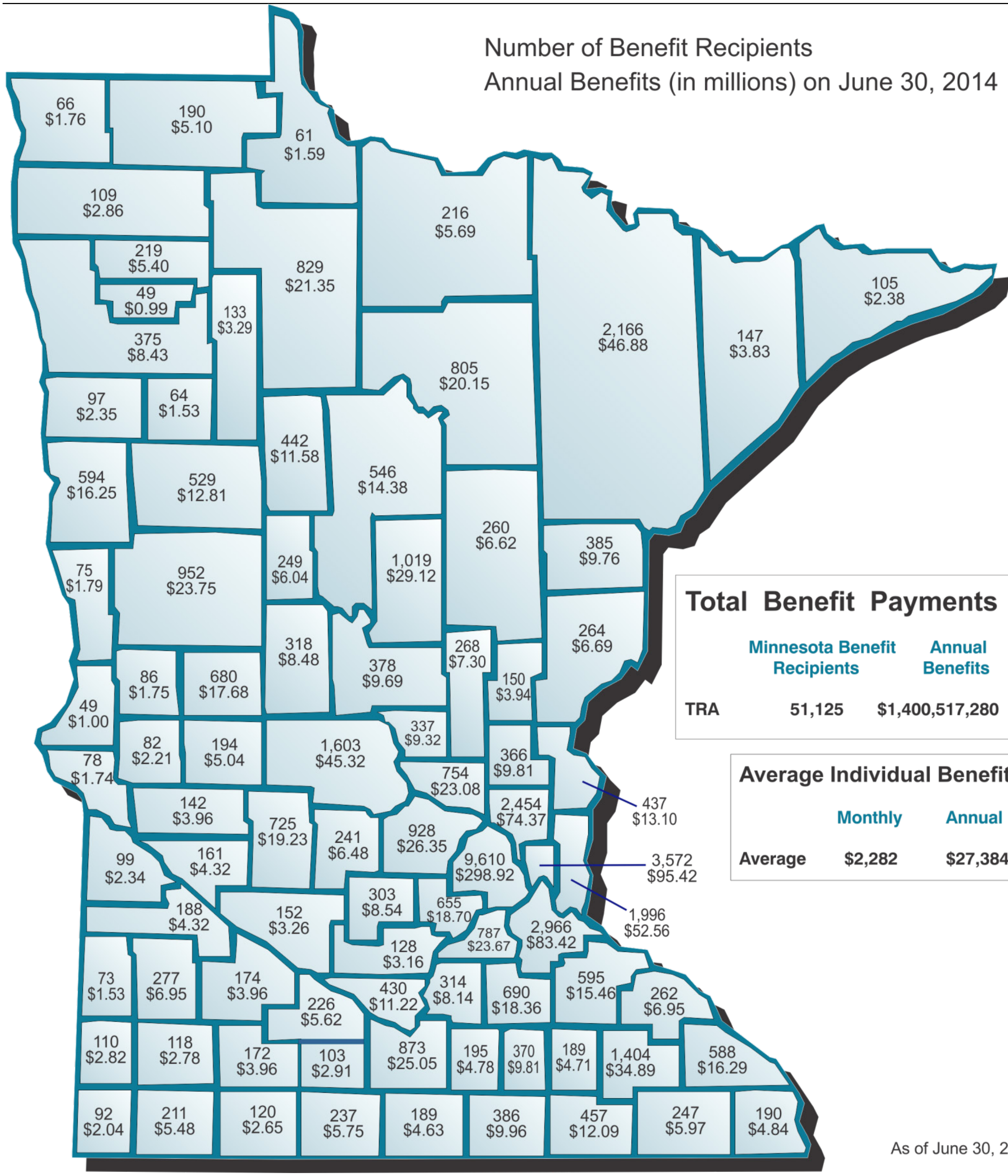
Total Recipients: 58,409
Note: 71 recipients reside outside the United States
Minnesota Recipients = 85.26 percent

June 1, 2014



Total Recipients: 58,707
Note: 66 recipients reside outside the United States
Minnesota Recipients = 86.36 percent

Annual Benefits for Minnesota TRA Benefit Recipients by County



Total Benefit Payments

	Minnesota Benefit Recipients	Annual Benefits
TRA	51,125	$1,400,517,280

Average Individual Benefit

	Monthly	Annual
Average	$2,282	$27,384

As of June 30, 2014

Annual Benefits and Recipients by County for the Teachers Retirement Association (TRA)

As of June 30, 2014

County	Members	Annual Benefit
Aitkin	260	$ 6,619,417
Anoka	2,454	$ 74,369,509
Becker	529	$ 12,814,664
Beltrami	829	$ 21,354,716
Benton	337	$ 9,324,582
Big Stone	78	$ 1,744,816
Blue Earth	873	$ 25,048,630
Brown	226	$ 5,618,122
Carlton	385	$ 9,763,778
Carver	655	$ 18,703,442
Cass	546	$ 14,383,638
Chippewa	161	$ 4,324,580
Chisago	437	$ 13,102,062
Clay	594	$ 16,249,337
Clearwater	133	$ 3,293,148
Cook	105	$ 2,377,961
Cottonwood	172	$ 3,963,526
Crow Wing	1,019	$ 29,123,883
Dakota	2,966	$ 83,420,793
Dodge	189	$ 4,712,372
Douglas	680	$ 17,679,264
Faribault	189	$ 4,630,404
Fillmore	247	$ 5,967,192
Freeborn	386	$ 9,957,398
Goodhue	595	$ 15,463,996
Grant	86	$ 1,747,274
Hennepin	9,610	$ 298,922,211
Houston	190	$ 4,840,108
Hubbard	442	$ 11,582,326
Isanti	366	$ 9,813,650
Itasca	805	$ 20,153,916
Jackson	120	$ 2,653,487
Kanabec	150	$ 3,940,986
Kandiyohi	725	$ 19,231,468
Kittson	66	$ 1,764,015
Koochiching	216	$ 5,690,730
Lac Qui Parle	99	$ 2,339,277
Lake	147	$ 3,834,911
Lake of the Woods	61	$ 1,586,868
Le Sueur	314	$ 8,138,589
Lincoln	73	$ 1,526,327
Lyon	277	$ 6,945,134
Mahnomen	64	$ 1,534,904
Marshall	109	$ 2,859,979

County	Members	Annual Benefit
Martin	237	$ 5,750,603
McLeod	303	$ 8,538,613
Meeker	241	$ 6,483,201
Mille Lacs	268	$ 7,299,891
Morrison	378	$ 9,685,829
Mower	457	$ 12,093,426
Murray	118	$ 2,784,230
Nicollet	430	$ 11,219,042
Nobles	211	$ 5,477,996
Norman	97	$ 2,349,238
Olmsted	1.404	$ 34,891,453
Otter Tail	952	$ 23,748,110
Pennington	219	$ 5,404,093
Pine	264	$ 6,694,993
Pipestone	110	$ 2,820,155
Polk	375	$ 8,426,859
Pope	194	$ 5,037,344
Ramsey	3,572	$ 95,422,208
Red Lake	49	$ 993,056
Redwood	174	$ 3,960,857
Renville	152	$ 3,255,869
Rice	690	$ 18,361,040
Rock	92	$ 2,037,251
Roseau	190	$ 5,099,088
Saint Louis	2,166	$ 46,881,898
Scott	787	$ 23,669,518
Sherburne	754	$ 23,082,026
Sibley	128	$ 3,163,725
Stearns	1,603	$ 45,317,592
Steele	370	$ 9,810,969
Stevens	82	$ 2,212,326
Swift	142	$ 3,956,858
Todd	318	$ 8,484,363
Traverse	49	$ 995,504
Wabasha	262	$ 6,948,108
Wadena	249	$ 6,040,301
Waseca	195	$ 4,781,144
Washington	1,996	$ 52,560,900
Watonwan	103	$ 2,908,822
Wilkin	75	$ 1,792,902
Winona	588	$ 16,293,165
Wright	928	$ 26,347,732
Yellow Medicine	188	$ 4,317,590
Grand Total	**51,125**	**$1,400,517,280**

Projected TRA Benefit Payments

Fiscal Year Ended June 30, 2014

The table below shows estimated benefits expected to be paid over the next 25 years, based on the assumptions used in the valuation. The "Actives" column shows benefits expected to be paid to members currently active on July 1, 2014. The "Retirees" column shows benefits expected to be paid to all other members. This includes those who, as of July 1, 2014, are receiving benefit payments or who terminated employment and are entitled to a deferred benefit.

(dollars in thousands)

Year Ending June 30	Active	Retirees	Total
2015	$ 39,121	$1,600,845	$1,639,965
2016	102,023	1,578,122	1,680,145
2017	161,095	1,564,289	1,725,384
2018	221,184	1,552,507	1,773,691
2019	283,332	1,541,124	1,824,456
2020	347,250	1,529,747	1,876,996
2021	411,718	1,518,218	1,929,935
2022	475,872	1,504,331	1,980,204
2023	538,978	1,488,985	2,027,964
2024	599,709	1,471,263	2,070,972
2025	659,235	1,451,941	2,111,175
2026	720,422	1,429,816	2,150,238
2027	786,042	1,404,921	2,190,962
2028	857,325	1,376,931	2,234,255
2029	935,189	1,346,126	2,281,315
2030	1,020,283	1,312,379	2,332,662
2031	1,112,895	1,276,085	2,388,979
2032	1,213,398	1,236,784	2,450,182
2033	1,327,574	1,200,402	2,527,976
2034	1,449,160	1,161,202	2,610,362
2035	1,577,764	1,120,016	2,697,780
2036	1,713,020	1,075,781	2,788,801
2037	1,854,547	1,028,782	2,883,329
2038	1,998,663	978,701	2,977,364
2039	2,142,659	925,492	3,068,152

Note: *Numbers may not add due to rounding.*

Cash flows are the expected future non-discounted payments to current members. These numbers exclude refund payouts to current nonvested inactives and assume future retirees and future terminated members make benefit elections according to vlauation assumptions.

Plan Statement

TRA Plan Statement

June 30, 2014

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 eligible employment. Newly-tenured MnSCU members also have a one-year period to elect TRA coverage. If electing TRA, 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 earned for benefit determination is based on a teacher's earned salary relative to an annual base salary established for an employer unit. Minnesota statute defines the base salary for each employer as the lowest salary paid to a full-time Bachelor of Arts (BA) base contract in the previous fiscal year. For example, a school district's annual base salary is determined to be $40,000. A teacher with an earned salary of $30,000 for that year will earn 0.75 year of service credit.

Service credit for MnSCU members is based on a full-time equivalence method.

No more than one year of service credit may be earned by any member during a fiscal year, and no more than 0.111 per year may be earned during any one month.

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 employee 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 10.5 percent of their annual salary, while Coordinated Plan members (coordinated with Social Security coverage) contribute 7.0 percent of their annual salary.

On July 1, 2014, the employee contribution rate for Coordinated members will be 7.5 percent.

Percent Contribution Rate on July 1		
Member Type	**2013**	**2014**
Basic (without Social Security coverage)	10.5	11.0
Coordinated (with Social Security coverage)	7.0	7.5

Employer Contributions

Local school districts and other TRA-covered employer units provide contributions of 11.0 percent of total salary for members in the Basic Plan and 7.0 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.

On July 1, 2014, the employer contribution rate for Coordinated members will be 7.5 percent.

Percent Contribution Rate on July 1		
Member Type	**2013**	**2014**
Basic (without Social Security coverage)	11.0	11.5
Coordinated (with Social Security coverage)	7.0	7.5

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 $20.5 million annually in state and local direct aid. The aid payments are designed to offset unfunded liabilities assumed 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, 1989

For 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:

The sum of:

- 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
- 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.

or

The sum of:

- 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 65.

or

- 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.

Effective July 1, 2015, the actuarial reduction factors for retirement before Normal Retirement Age will be modified for members first hired prior to July 1, 1989. The actuarial reductions will be based on a statutory definition rather than actuarial equivalence factors. The factors will be phased-in over a five-year period ending June 30, 2020.

Members who reach age 62 with 30 years of service are eligible for a special group of reduction factors. The following example illustrates how these special reduction factors will be applied to an eligible person of the normal retirement age of 65:

Age 62	10.40%
Age 63	6.64%
Age 64	3.18%
Age 65	0.00%

Members who do not reach age 62 with 30 years of service credit are eligible for a different group of factors. The following example illustrates how these reduction factors will be applied to an eligible person of the normal retirement age of 65:

Age 55	43.56%	Age 61	18.96%
Age 56	39.98%	Age 62	13.68%
Age 57	36.66%	Age 63	8.76%
Age 58	33.59%	Age 64	4.21%
Age 59	30.75%	Age 65	0.00%
Age 60	24.65%		

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:

- 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.

Effective July 1, 2015, the actuarial reduction factors for retirement before Normal Retirement Age will be modified. The actuarial reduction will be based on a statutory definition rather than actuarial equivalence factors. The factors will be phased-in over a five-year period ending June 30, 2020.

Reduction factors for members of the normal retirement age of 66 first hired from July 1, 1989 through June 30, 2006, or who reach age 62 with 30 years of service credit:

Age 62	14.46%
Age 63	10.40%
Age 64	6.64%
Age 65	3.18%
Age 66	0.00%

Reduction factors for members of the normal retirement age of 66 first hired from July 1, 1989 through June 30, 2006, or who do not reach age 62 with 30 years of service credit:

Age 55	51.55%	Age 61	24.65%
Age 56	47.59%	Age 62	18.96%
Age 57	43.90%	Age 63	13.68%
Age 58	40.46%	Age 64	8.76%
Age 59	37.28%	Age 65	4.21%
Age 60	30.75%	Age 66	0.00%

Reduction factors for members of the normal retirement age of 66 first hired on or after July 1, 2006, or who reach age 62 with 30 years of service credit:

Age 62	16.11%
Age 63	11.70%
Age 64	7.55%
Age 65	3.65%
Age 66	0.00%

Reduction factors for members of the normal retirement age of 66 first hired on or after July 1, 2006, or who do not reach age 62 with 30 years of service credit:

Age 55	54.08%	Age 61	26.46%
Age 56	50.08%	Age 62	20.53%
Age 57	46.30%	Age 63	14.93%
Age 58	42.74%	Age 64	9.65%
Age 59	39.38%	Age 65	4.68%
Age 60	32.74%	Age 66	0.00%

Basic Members (Former MTRFA)

TRA has 36 active and inactive 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.

or

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, 2014, TRA had eight 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. 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.

Members who defer their benefits will receive a deferral increase as follows:

Members hired prior to July 1, 2006	Prior to July 1, 2012: 3.0 percent annually through December 31 of the year in which the member would have reached 55 and 5.0 percent annually thereafter each year the benefit is deferred After July 1, 2012: 2.0 percent
Members hired on or after July 1, 2006	Prior to July 1, 2012: 2.5 percent After July 1, 2012: 2.0 percent

The deferral period must be at least three months. If on a leave of absence, the member is not eligible for the deferral increase on a deferred annuity for any portion of time on leave.

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

Annual Post-Retirement Increases

Once retired, each January, if specified by law, a post-retirement increase may be made to a member's monthly benefit.

Under current Minnesota statute, the annual post-retirement increase is 2.0 percent. Once the TRA Fund reaches a market value funding ratio of 90 percent for two consecutive years, the annual post-retirement increase would be increased to 2.5 percent.

When an increase is granted, members who have been receiving a benefit for at least 18 months will receive the full increase. Members who have been receiving a benefit for at least 6 months, but less than 18 months, will receive a prorated increase.

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. Since July 1, 2011, all account balances accrue interest at a rate of 4 percent annually, regardless of date of termination.

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 4 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*** 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 on account balances is compounded annually at 4 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 on account balances is compounded annually at 4 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, 10, 15 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.

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