
Comprehensive Annual Financial Report

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



Photo taken Saturday, November 10, 2001 and provided courtesy of Ryan Construction.

New Location: September 2001

Retirement Systems of Minnesota

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Gary Austin
Executive Director

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Certificate of Achievement for Excellence in Financial Reporting

Presented to

Teachers Retirement Association, Minnesota

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
June 30, 2000

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



Imelda Orave
President

Jeffrey L. Esler
Executive Director

Letter of Transmittal



Gary Austin
Executive Director



Teachers Retirement Association

60 Empire Drive • Suite 400 • St. Paul, MN 55103-1855
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December 31, 2001

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

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, 2001, our 70th year of service. This report includes the following five sections:

- **Introductory** describes our organizational structure and nature of operations,
- **Financial** contains the general-purpose financial statements, notes to the financial statements, actuarial disclosures and the opinion of our independent auditor,
- **Investment** highlights our asset management and investment performance,
- **Actuarial** contains the certification and results of the actuarial valuation performed by Milliman USA, Inc. as of July 1, 2001, and
- **Statistical** summarizes TRA plan benefits and illustrates both current and historical data of interest.

We are solely responsible for the content of this report, including its financial statements, which should be helpful in understanding information about the pension fund and comparing our operating results with those of other teacher retirement systems.

Reporting Entity

Although you, as members of the Board of Trustees, have a broad scope of authority in the operations and management of TRA, the pension fund is governed by federal laws and state statutes. For financial reporting purposes, TRA is considered a pension trust fund of the State of Minnesota.

Accounting Basis and Internal Control

TRA follows the provisions of statements promulgated by the Governmental Accounting Standards Board (GASB). The financial statements are prepared using the accrual basis of accounting; revenues are recorded when earned and expenditures recorded when the underlying obligation is incurred. Investments are presented at fair value. We also maintain a system of internal controls designed to assure responsible safeguarding of assets and reliable financial records.

Financial Highlights

The TRA Statement of Plan Net Assets at June 30, 2001 stands at about \$15.9 billion. The total represents over a 10 percent decrease from the end of the previous fiscal year. Negative investment markets that persisted throughout the fiscal year were responsible for the decline.

For the third consecutive year, TRA's assets in the Minnesota Post Retirement Investment Fund (Post Fund) for retired members — \$8.84 billion — exceeds TRA's assets in the active member fund — \$7.06 billion. This phenomenon is reflective of TRA's growing base of retirees and other benefit recipients while the number of active members has remained relatively stable for the past decade.

The major sources of revenue for TRA are employee contributions, employer contributions, and investment earnings. Total contributions from employees and employers totaled about \$285 million. For the first time in many years, TRA experienced a net investment income loss of about \$1.24 billion for the fiscal year. Overall for the fiscal year, the TRA Fund saw a decrease of about \$1.85 billion in its Net Assets Held in Trust for pension benefits.

The expenditures from the fund consist primarily of payments made to members and beneficiaries for retirement, disability, or survivor benefits. In total, benefit payments for fiscal year 2001 were \$861.8 million, an increase of over 14 percent from the previous fiscal year. Eligible members may choose to withdraw their contributions from the fund upon leaving employment. For fiscal year 2001, refunds to members were over \$7 million. Administrative expenses for the

year were slightly over \$13 million, an increase of about \$4 million from the previous year. Costs associated with the business reengineering project called FROST, described later, were responsible for most of the increase.

As of June 30, 2001, TRA had 463 reporting employer units, 71,097 active members and a total of 33,757 retirees, survivors, beneficiaries and disabilitants who were receiving monthly benefits.

Actuarial Funding

The actuary retained by the Legislative Commission on Pensions and Retirement (LCPR) determines the actuarial liabilities and reserves of the pension fund under the Entry Age Normal Cost Method. Despite the investment losses during the year, the TRA total net assets on an actuarial basis actually increased during the fiscal year from \$15.5 billion to \$16.8 billion. The actuarial assumption whereby investment gains and losses are smoothed over a five-year period was responsible for this increase. The total required reserves necessary to fund current and future retirees of the fund also increased from \$14.8 billion to \$15.9 billion. The comparison of net assets to required reserves shows that the funding ratio for fiscal year 2001 was 105.85 percent, a slight increase from the comparable 105.21 percent for fiscal year 2000. This statistic produces the fifth consecutive year in which the TRA fund is considered fully funded from an actuarial standpoint. The TRA funding sufficiency, as measured by a percentage of covered payroll, rose during the year from 2.08 percent to 2.15 percent.

Investment Strategies

All TRA assets are invested under the authority and direction of the State Board of Investment (SBI). The SBI has developed strategic asset allocation and other investment policies to represent the long-term funding needs of our members. The SBI, along with its Investment Advisory Council (IAC), also continually reviews its policies to ensure sufficient assets are available to finance promised benefits. The executive directors of the three statewide retirement systems sit on the IAC and represent their members in its role to advise the SBI on investment-related matters.

This past year was a period of economic transition, marked early on by the Federal Reserve's decision to raise interest rates, and subsequently, lower interest rates six times later in the year. Against this backdrop, financial markets were remarkably volatile. Amid disappointments in revenue and earnings growth by U.S. corporations, the Wilshire 5000 Investable Index declined by 15.1 percent during fiscal year 2001. The significant decline in interest rates during this period improved bond returns. The U.S. bond market, as measured by the Lehman Brothers Aggregate Bond Index, gained 11.8 percent.

The performance of the international stock markets was similarly volatile throughout the year. International markets declined further than U.S. markets and were also below their historical averages. The Morgan Stanley Capital International Index of Europe, Australia, and the Far East (EAFE) lost 23.6 percent for the twelve months ending June 30, 2001. The markets of developing countries, or "emerging markets," decreased by 25.9 percent during the fiscal year.

Investment Results

Within this investment environment, the retirement assets under the SBI's control reflected the economic uncertainty:

- The Basic Retirement Funds (Basic Fund) for active members decreased 7.4 percent during fiscal year 2001. However, over the latest five year period, the fund has experienced an annualized return of 11.2 percent.
- The Post Fund for retired members decreased 6.9 percent for the fiscal year. This loss, counterbalanced by four prior fiscal years each with investment gains, will provide a lifetime post-retirement benefit increase of 4.49 percent for eligible retirees on January 1, 2002.

Economic Conditions and Outlook

Minnesota's economy continued to outperform the U.S. averages in fiscal year 2001. Personal income grew at an annual rate of 7.2 percent during the fiscal year, 0.6 percentage points greater than the U.S. average. At the close of the fiscal year, the state's unemployment rate was 3.4 percent, 1.1 percentage points lower than the U.S. average of 4.5 percent. In calendar 2000, per capita personal income in Minnesota grew by 5.9 percent, slightly above the U.S. average growth rate of 5.7 percent. Per capita personal income in Minnesota is now 8.4 percent more than the national average. Minnesota ranked ninth among all states in personal income per capita in 2000.

Minnesota's labor force participation rates remain among the highest in the nation and the state's unemployment remains low, but the labor markets are no longer as tight as in recent years. Minnesota's unemployment rate crept closer to the national average in 2001. Payroll employment grew by nearly 26,000 during the past fiscal year. On a percentage basis, the statewide employment growth rate of 0.8 percent exceeded the national average of 0.4 percent.

Minnesota's economy is projected to grow more slowly than the U.S. economy during fiscal year 2002. Payroll employment through October has fallen more steeply than the U.S. average, and Minnesota wage growth has also been below the national average. Total wage and salary payments in Minnesota are forecast to grow by just 1.0 percent in fiscal year 2002 due to slower employment growth and fewer hours worked. Bonuses are also expected to be down significantly. Personal income in Minnesota is expected to grow at a rate of 1.0 percent. Wage growth in Minnesota is projected to recover strongly in fiscal year 2003, as the labor market tightens once again.

Professional Services

We purchase actuarial services from the firm Buck Consultants of San Francisco, California. The annual actuarial valuation of the pension fund is prepared by Milliman & Robertson, Inc., the actuary retained by the Legislative Commission on Pensions and Retirement to prepare actuarial reports for all the statewide retirement plans.

The Office of the Attorney General provides legal counsel to our Board of Trustees and the State Office of the Legislative Auditor conducts an annual financial audit of the pension fund and prepares a report (see pages 12-13). All financial transactions, including the disbursements from the pension fund, are processed through the centralized controls of the Minnesota Accounting and Procurement System, under the supervision of the state departments of Finance and Administration.

Financial Communication

An Annual Statement of Account for fiscal year 2001 was mailed to each active member in November 2001. This statement provides current and cumulative information related to salaries, contributions and service credit. Projected and deferred retirement benefit estimates are also provided for eligible members. In December 2001, inactive TRA members (those no longer employed as teachers) received their Annual Statement of Account balance with contribution and service data.

A plan summary with financial and actuarial data for the year ended June 30, 2001, will be distributed to each active and retired member as part of a 2002 edition of the *TRIB*, our quarterly newsletter. The TRA Web site contains the entire text of this Comprehensive Annual Financial Report for members to download a portion or all of the report.

Customer Services

The opening of the new Retirement Systems of Minnesota office building in Saint Paul on September 13, 2001 achieved a long-term goal of TRA management. In co-ownership with the Minnesota State Retirement System (MSRS) and the Public Employees Retirement Association (PERA), TRA has established offices that will serve our members for many decades. The new building was designed specifically with the needs of TRA membership and our business operations in mind.

With the number of new retirements growing annually and expecting to peak in the year 2010, we are addressing the challenges looming on the horizon. During fiscal year 2001, TRA continued work on the four-year, business reengineering project called FROST (Functional Redesign of Strategic Technologies). The project's main goal is to be ready to meet the customer service needs of our "baby boom" generation rapidly approaching retirement. Together with our consulting partner, KPMG, we are designing and developing an integrated package of computer applications to improve the processing and servicing of member pension benefits. Our first emphasis is a redesign of employer reporting of member data and a concerted effort to purify and audit our existing member data. We expect to implement the new employer member payroll reporting functionality in the summer of 2002. From there, TRA will concentrate on benefit processes such as retirement estimates, service credit calculation and on-line, interactive member features. The final phase of the project, scheduled for completion in 2004 will be the implementation of new systems to enhance the processes to pay benefits to our members.

While the future holds exciting promise of new and enhanced features, we continue to provide quality counseling and benefit payment services to our members. Retirement counseling services take place in both our main Saint Paul office and at 15 locations throughout the state. In January 2002, we are planning to open a satellite office in Saint Cloud, Minnesota. This location will be staffed on a permanent basis by one to two TRA pre-retirement benefit counselors who will provide both individual and group counseling sessions to our members closer to their homes or employers.

The TRA Customer Information Center received over 55,000 calls last year, and an estimated 95 percent of them were addressed without a callback or transfer. The *TRIB* is mailed to all active and retired members. Our Web site offers the ability to self-calculate future retirement benefits, and is also updated regularly with the latest news of TRA events and other benefit provision changes.

Legislation and Other Initiatives

Minnesota legislators were in special session until June 30, 2001 before agreeing to a two-year state budget. Prior to adjourning, the legislature did extend the expiration date for the actuarial cost formula for TRA members to purchase prior service credit. The provision, first passed by the 1999 Legislature, has been used by hundreds of TRA members to purchase prior military, maternity leave, out of state teaching service and other types of eligible service.

The Legislature also mandated a report for TRA to study possible aggregation proposals with the three independent teacher retirement associations of Minneapolis, Saint Paul and Duluth. The report is due to the Legislature on February 15, 2002. A benefit proposal to enhance the TRA formula multiplier during the 2001 Legislative session did not advance. We expect various benefit improvements will be proposed to the 2002 Legislature.

Over the past several years, TRA has been involved in legal action with a group of retired and active TRA members who have sought an expanded definition of eligibility for the benefit provision commonly known as the Improved Money Purchase (IMP) clause. In November 2000, the Ramsey County District Court dismissed the lawsuit on the grounds that the statute of limitations had run out on the plaintiffs' claims. Appeals filed subsequently during fiscal year 2001 were not successful with either the Minnesota Court of Appeals or the Minnesota Supreme Court. This group may seek further legislative relief for their cause during 2002.

National 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, 2000. This was the third 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.

Acknowledgments

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. A copy is mailed to each public school in the state.

We would like to thank you, our Board of Trustees, who act as advisors. In addition, we would like to thank our employees and the many people who diligently work to ensure the successful operation and financial soundness of our pension fund.

Respectfully submitted,



Gary Austin
Executive Director



John Wicklund
Assistant Executive Director
Administration

Board of Trustees

As of December 1, 2001

President



Carol F. Ackerson
Elected Member
New Ulm, MN

Vice President



Curtis D. Hutchens
Elected Member
St. Cloud, MN



Vernell R. Jackels
Retiree Representative
Winona, MN



Martha Lee (Marti) Zins
Elected Member
Hopkins, MN



Sandy Schaefer
Elected Member
Fairfax, MN



Bob Lowe
Minnesota School Boards
Association
Representative



Barry Sullivan
Representing
Christine Jax
Commissioner of
Children, Families, and
Learning



Kristin Dybdal
Representing
Pam Wheelock
Commissioner of Finance

Administration



Gary Austin
Executive Director



John Wicklund
Assistant Director
of
Administration



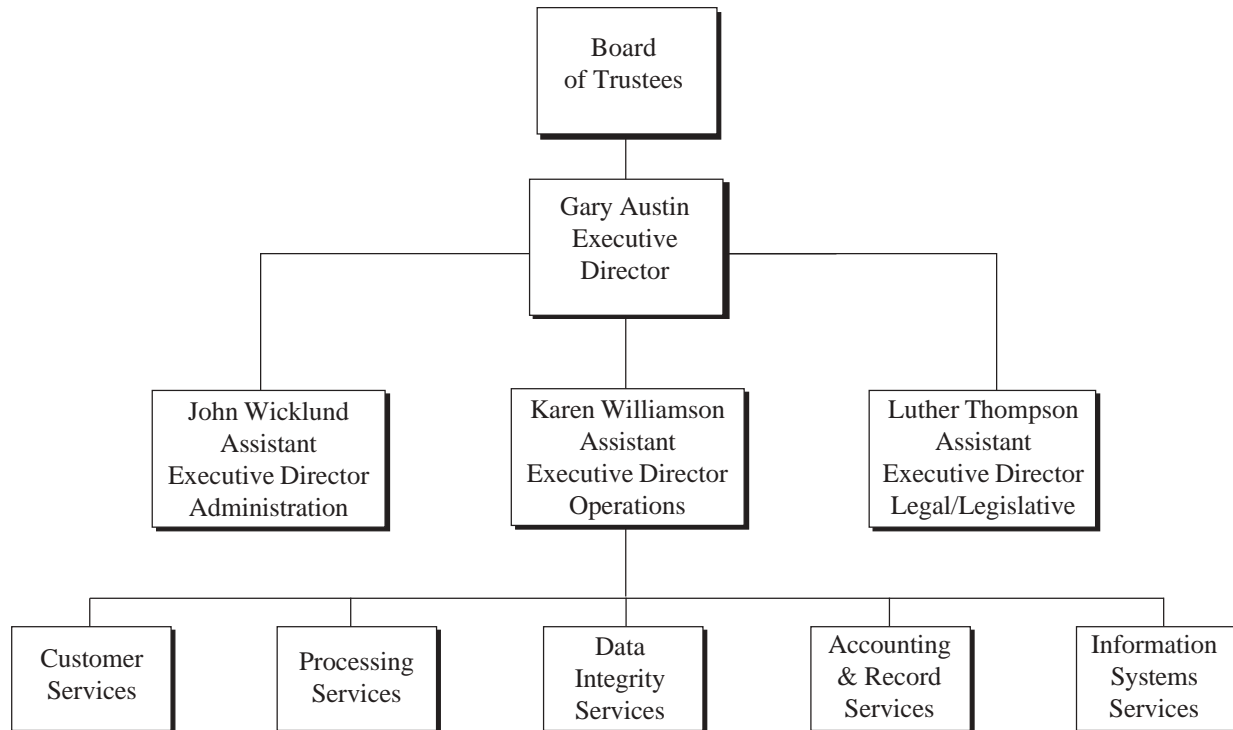
Karen Williamson
Assistant Director
of
Operations



Luther Thompson
Assistant Director
Legal and
Legislative Services

Administrative Organization

As of December 2001



Consulting Services

Actuary

Buck Consultants
San Francisco, California

Auditor

Office of the Legislative Auditor
Saint Paul, Minnesota

Legal Counsel

Office of the Attorney General
Saint Paul, Minnesota

Medical Advisor

Minnesota Department of Health
Minneapolis, Minnesota

Mission Statement

TRA provides retirement, disability and death benefits to Minnesota college faculty, administrators, public school teachers, retirees, their families and beneficiaries.

Our mission is to enhance the quality of life for Minnesota teachers and their beneficiaries and to assist them in planning for an independent and financially secure retirement.

To this end we are committed to offering quality customer services by providing retirement counseling, maintaining member data, administering funds, communicating accurate information and delivering benefits.

Our Values

Accuracy	Ensure that all information received, maintained and provided is clear and accurate.
Quality	Make high-quality services accessible to our customers.
Timeliness	Provide timely receipt and dissemination of information.
Efficiency	Make efficient use of technological and human resources in a team environment.
Employee Excellence	Provide ongoing employee development that encourages cooperation and mutual respect, focuses on common goals and recognizes superior performance.

Teachers Retirement Association of Minnesota



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Auditor's Report



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
and
Mr. Gary Austin, Executive Director
Teachers Retirement Association

We have audited the accompanying statement of plan net assets of the Teachers Retirement Association (TRA) as of June 30, 2001, and the related statement of changes in plan net assets for the year then ended. These financial statements are the responsibility of TRA's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, as issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of TRA at June 30, 2001, and the results of its operations for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The required supplementary information on pages 25 to 26 is presented for purposes of additional analysis and is not a required part of the basic financial statements. We did not audit this information and do not express an opinion on it. The supplementary information is required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted mainly of inquiries of management regarding the methods of measurement and presentation for the Schedule of Funding Progress, Schedule of Employer Contributions, and Notes to Required Supplementary Information.


Our audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying financial information on pages 27 to 30 is presented for


Board of Trustees and
Executive Director
Teachers Retirement Association
Page 2

purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

The Introductory, Investment, Actuarial, and Statistical Sections listed in the Table of Contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such additional information has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on them.

In accordance with *Government Auditing Standards*, we have also issued a report dated December 7, 2001, on our consideration of TRA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, and contracts. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.


James R. Nobles
Legislative Auditor


Claudia J. Gudvangen, CPA
Deputy Legislative Auditor

December 7, 2001

Teachers Retirement Fund

Statement of Plan Net Assets

As of June 30, 2001

Assets

Cash and short-term investments	
Cash	\$ 1,163,862
Bond Proceeds	1,863,358
Short-term investments	70,477,835
Total Cash and short-term investments	\$ 73,505,055
Receivables	
Employer Contributions	\$ 8,627,443
Investment Income	272,663
Bond Interest	9,389
Total Receivables	\$ 8,909,497
Investments (at fair value)	
Equity in the Post Fund	\$ 8,844,163,886
Fixed Income Pool	1,700,388,020
Venture Capital Pool	553,499,695
Indexed Equity Pool	1,021,182,358
Real Estate Fund Pool	281,896,559
Resource Fund Pool	112,842,642
Domestic Equity Pool	2,349,088,426
Global Equity Pool	968,795,684
Total Investments	\$ 15,831,857,270
Securities Lending Collateral	\$ 1,382,346,254
Building	
Land	\$ 171,166
Construction in Progress	10,924,562
Deferred Bond Charge	145,857
Total Building	\$ 11,241,585
Fixed Assets Net of Accumulated Depreciation	\$ 912,083
Total Assets	\$ 17,308,771,744

Liabilities

Current	
Accounts Payable	\$ 6,525,468
Due to the Post Fund	4,336,294
Accrued Compensated Absences	524,406
Accrued Expenses - Building	1,076,808
Bonds Payable	169,575
Bonds Interest Payable	55,552
Securities Lending Collateral	1,382,346,254
Total Current Liabilities	\$ 1,395,034,357
Long Term	
Bonds Payable	\$ 11,401,425
Total Liabilities	\$ 1,406,435,782
Net Assets Held in Trust for Pension Benefits	\$ 15,902,335,962

(A Schedule of Funding Progress for the plan is presented on page 25).
The accompanying notes are an integral part of this statement.

Teachers Retirement Fund

Statement of Changes in Plan Net Assets

For the Fiscal Year Ended June 30, 2001

Additions

Contributions

Employee	\$	145,075,285
Employer		139,799,408
Earnings Limitation Savings Account (ELSA)		<u>388,508</u>
Total Contributions	\$	<u>285,263,201</u>

Investment Income

Net Appreciation in Fair Value:		
Investment Pools	\$	(1,088,625,242)
MPRIF Participation		(1,854,422,810)
Interest		181,302,621
Dividends		189,553,537
Net Gain on Sales of Pools		138,795,953
MN Post-Retirement Fund		1,192,289,801
Less Investment Expense		<u>(11,052,656)</u>
Net Investment Income (loss)	\$	<u>(1,252,158,796)</u>

From Securities Lending Activities

Securities Lending Income	\$	95,031,971
Securities Lending Expenses:		
Borrower Rebates		(84,508,378)
Management Fees		<u>(2,705,377)</u>
Total Securities Lending Expenses		<u>(87,213,755)</u>
Net Income from Securities Lending		<u>7,818,216</u>
Total Net Investment Income (loss)	\$	<u>(1,244,340,580)</u>

Other Income	\$	<u>2,767,786</u>
Total Additions (subtractions)	\$	<u>(956,309,593)</u>

Deductions

Retirement Benefits Paid	\$	861,398,968
Earnings Limitation Savings Account (ELSA)		388,508
Refunds of Contributions to Members		7,608,839
Administrative Expenses		13,077,718
Interest Paid to the Post Fund		<u>8,460,780</u>
Total Deductions	\$	<u>890,934,813</u>

Net Increase (decrease)	\$	(1,847,244,406)
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Net Assets Held in Trust for Pension Benefits

Beginning of Year	\$	17,749,580,368
End of Year	\$	<u>15,902,335,962</u>

The accompanying notes are an integral part of this statement.

Notes to the Financial Statements

For the Fiscal Year Ended June 30, 2001

I. Plan Description

A. Organization

The Teachers Retirement Association (TRA) is an administrator of a multi-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, and certain educational institutions maintained by the state (except those teachers employed by the cities of Minneapolis, Duluth and St. Paul, and by the University of Minnesota system) are required to be TRA members.

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

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

C. Benefit Provisions

TRA provides retirement benefits as well as disability benefits to members, and benefits to survivors upon the death of eligible members. All benefits vest after three years of eligible service credit. The defined retirement benefits

are based on a member's highest average salary for any consecutive 60 months of allowable service, age and years of formula service credit at termination of service. TRA members belong to either the Basic or Coordinated Plan. Coordinated members are covered by Social Security while Basic members are not. All new TRA members must participate in the Coordinated Plan. TRA currently has less than 100 members who participate as Basic members.

Two methods, or tiers, are used to compute benefits for Coordinated and Basic members who were first hired prior to July 1, 1989. Under Tier I, the annuity accrual rate for Basic members is 2.2 percent of average salary for

Figure 1

Employer Units	
June 30, 2001	
Independent school districts	340
Joint powers units	40
Colleges and universities	40
State agencies	14
Charter schools	28
Professional organizations	<u>1</u>
Total Employer Units	<u><u>463</u></u>
Membership	
June 30, 2001	
Retirees, disabilitants and beneficiaries receiving benefits	33,757
Terminated employees with deferred vested benefits	<u>7,959</u>
Total	<u><u>41,716</u></u>
Current employees	
Vested	53,331
Non-vested	<u>17,766</u>
Total	<u><u>71,097</u></u>

each of the first 10 years of service and 2.7 percent for each remaining year. For a Coordinated member, the annuity accrual rate is 1.2 percent of average salary for each of the first 10 years of service and 1.7 percent for each remaining year. Under Tier II, the annuity accrual rate is 2.7 percent of average salary for Basic members and 1.7 percent for Coordinated members. Coordinated members first hired after June 30, 1989, are only eligible for Tier II benefits.

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

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.

II. Significant Accounting Policies and Plan Asset Matters

A. Reporting Entity

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

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

B. 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 earned and become measurable. Expenses including benefit payments and refunds are recorded when the liability is incurred.

C. Investment Policies

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, 2001, the TRA Fund's share of the Active Funds administered by SBI at fair value was approximately 37.9 percent. The TRA share of the net assets of the Minnesota Post Retirement Investment Fund (Post Fund) at fair values totaled 45.5 percent. *Figure 2* provides specific totals of TRA investments by category.
2. Minnesota Statutes, section 11A.24, broadly restricts retirement fund investments to obligations and stocks of United States and Canadian governments, their agencies and their registered corporations; short-term obligations of specified high quality; restricted participation as a limited partner in venture

capital, real estate or resource equity investments; restricted participation in registered mutual funds; and some qualified foreign instruments.

- Investments are categorized to give an indication of the level of risk that is assumed. Risk Category 1 includes investments that are insured or registered, or for which the securities are held by the state or its agent in the state's name. Risk Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the state's name. Risk Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty or by its trust department or agent, but not in the state's name. TRA does not own any investments that are considered securities for purposes of assessing credit risk. All

TRA investments are in SBI-administered pools or open-end mutual funds. These investments are not considered for purposes of credit risk classification. Investments in any one organization do not represent 5 percent or more of plan net assets.

- In accordance with Minnesota Statutes, SBI has the authority to enter into, and has entered into, derivative transactions including put and call options and future contracts traded on a contract market regulated by a governmental agency or by a financial institution regulated by a governmental agency. Any agreements for put and call options and futures contracts may only be entered into with a fully offsetting amount of cash or security. As of June 30, 2001, TRA's exposure to market risk is minimal as the derivatives outstanding represent approximately one percent of the total investment balance.
- Information about the primary government's (State of Minnesota) investments, including credit risk classification, can be obtained from the Department of Finance, 400 Centennial Office Building, 658 Cedar Street, Saint Paul, Minnesota 55155. Information on investment activity 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.

Figure 2

TRA Investment Portfolio June 30, 2001		
Basic (Active) Fund	Cost	Fair
Pooled Accounts		
Fixed Income	\$1,736,448,031	\$1,700,388,020
Domestic Equity	2,690,691,522	2,349,088,426
Indexed Equity	898,170,751	1,021,182,358
Global Equity	1,129,256,598	968,795,684
Venture Capital	636,802,431	553,499,695
Real Estate	231,804,691	281,896,559
Resources	110,043,627	112,842,642
Total	<u>\$ 7,433,217,651</u>	<u>\$ 6,987,693,384</u>
Short-Term Pooled Cash	70,477,836	70,477,836
Post Fund Account	9,106,198,000	8,844,163,886
Total Invested	<u>\$16,609,893,487</u>	<u>\$15,902,335,106</u>

D. Method Used to Value Investments

Investments in the pooled accounts are reported at fair value. *Figure 2* provides a summary of the cost and fair values of the investments as of June 30, 2001, as reported on the Statement of Plan Net Assets. Short-term investments are reported at cost which approximates fair value. Securities traded on a national or international exchange are valued using the last reported trade price. The fair value of real estate investments is based on independent yearly appraisals. Investments that do not have an established market are reported at estimated fair value.

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

Net Investment Income is summarized on the Statement of Changes in Net Plan Assets. The summarized amounts show a net investment loss of -\$1,252,158,796 for fiscal year 2001. *Figure 3* shows the various components of these composite amounts, including TRA's share of the Minnesota Post Retirement Investment Fund.

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. TRA's share of these expenses totaled \$11,052,657.

E. Securities Lending

TRA does not own specific securities, but instead owns shares in pooled funds invested by SBI that 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 broker-dealers and banks.

During the fiscal year, State Street lent, on behalf of SBI certain securities held by State Street as custodian, and received cash (both United States and foreign currency) and securities issued or guaranteed by the United States government, sovereign debt of foreign countries, and irrevocable bank letters of credit as collateral. State Street did not have the ability to pledge or sell collateral securities

Figure 3

Net Investment Income	
Investment Income	Fiscal Year 2001
Net Appreciation in Fair Value:	
Investment Pools	\$ (1,088,625,242)
MPRIF Participation	(1,854,422,810)
Interest	181,302,621
Dividends	189,553,537
Net Gain on Sales of Pools	138,795,953
MN Post-Retirement Fund	1,192,289,801
Less Investment Expense	(11,052,656)
Net Investment Income (loss)	<u>\$ (1,252,158,796)</u>

absent a borrower default. Borrowers were required to deliver collateral for each loan in amounts equal to not less than 100 percent of 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. State Street indemnified SBI by agreeing to purchase replacement securities or return the cash collateral in the event a borrower failed to return a loaned security or pay distributions thereon. There were no such failures by any borrower to return loaned securities or pay distributions thereon during the fiscal year. Moreover, there were no losses during the fiscal year resulting from 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, together with the cash collateral of other qualified tax-exempt plan lenders, in a collective investment pool. The relationship between the average maturities of the investment pool and SBI's loans was affected by the maturities of the loans made by other plan entities that invested cash collateral in the collective investment pool, which SBI could not determine. On June 30, 2001, SBI had no credit risk exposure to borrowers. TRA's portion of the collateral held and the market value of securities on loan from SBI as of June 30, 2001, were \$1,382,346,254 and \$1,337,512,198 respectively.

F. 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.

G. Fixed Assets

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

Fixed assets as presented on the June 30, 2001, Statement of Net Assets Available were \$2,704,987 at cost. Accumulated depreciation totaled \$1,792,904 resulting in a net fixed asset value of \$912,083.

H. 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 Minnesota Department of Finance for policy analysis and is included in the Governor's Biennial Budget presentation to the legislature. The legislature adopts appropriation and expenditure limitations resulting in an approved budget for the Association.

TRA administrative costs are not financed through any specific type of contribution or other income of the Fund. Administrative costs are budgeted in the annual determination of the necessary rate for total employee and employer contributions. (See page 56, line B3.)

I. Cash

Cash on deposit consists of year-end receipts not processed as of the investment cutoff on June 30. TRA cash funds are held in the state treasury where they are commingled with other state funds. Minnesota Statutes, section 9.031, requires that deposits be secured by depository insurance and collateral shall be in amounts sufficient to ensure that deposits do not exceed 90 percent of the sum of the insured amount and the market value of the collateral. Throughout fiscal year 2001, the combined depository insurance and collateral was sufficient to meet legal requirements and secure all TRA deposits.

J. Accounts Receivable

Amounts classified as accounts receivable consist primarily of member and employer contributions received after the fiscal year end on salaries earned prior to June 30, 2001. Under Minnesota Statutes, section 354.52, subdivision 4, TRA employers must remit contributions at least monthly.

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

K. Improved Money Purchase (IMP)

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

Beginning with fiscal year 1999, significant numbers of retiring members discovered that their IMP benefit was higher than the High-Five Average Formula benefit. This phenomenon occurred as strong annual investment returns during the 1990s generated high interest rates compounding on large employee contribution balances accumulated after long teaching careers. The effect will become less pronounced in periods of low or negative investment performance.

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

As of June 30, 2001, approximately 1,500 active members are eligible for the IMP provision. Assuming IMP eligibility remains limited to the existing, closed group of members, TRA management believes the actuarial impact of the remaining IMP-eligible members will not adversely harm the overall financial integrity of the fund.

L. Construction of Office Building

The 1999 Legislature enacted authorization permitting TRA, the Public Employees Retirement Association (PERA), and the Minnesota State Retirement System (MSRS) to purchase land and construct a 130,000 square foot office building to house the administrative offices of these three state entities. Ownership of the facility is prorated based on the amount of square footage each retirement system will occupy in the building. TRA's ownership share is 39.9 percent. The building is located at 60 Empire Drive in Saint Paul. Construction of the facility began in May 2000, and TRA occupied the 4th Floor of the building effective September 13, 2001.

In June 2000, the State of Minnesota, under the authority of the Commissioner of Finance, issued revenue bonds totaling \$29 million to pay for the construction of the facility. Each owner (retirement system) is responsible for principal and interest payments based on its ownership percentage. These bonds are backed by the assets of the three retirement systems, excluding equity interest in the Minnesota Post-Retirement Investment Fund (MPRIF). At fiscal year end, TRA's share of long-term bonds payable is \$11,401,425. Interest expected to be paid over the term of the bonds is \$13,197,524. In *Figure 4*, TRA's share of the long-term bonds payable plus interest is summarized.

Figure 4

Long Term Debt Repayment Schedule	
June 30	
Fiscal Year	Principal and Interest
2002	\$ 664,956
2003	829,974
2004	830,566
2005	830,622
2006	830,142
Thereafter	<u>20,612,689</u>
Interest	<u>(13,197,524)</u>
Long-Term Bonds Payable	<u>\$ 11,401,425</u>

Total costs for construction in progress during the fiscal year were \$27,311,405. TRA's share of these costs is \$10,924,562, as shown on the Statement of Plan Net Assets. The building is located on 4.3 acres of land in Saint Paul purchased in 1999 for \$428,988, of which TRA's share is \$171,166.

Once the building is constructed, TRA will depreciate its share of the facility over 40 years. TRA's share of bond issuance costs are shown on the Statement of Plan Net Assets as Deferred Bond Charges and will be amortized over the 30-year life of the bonds.

M. Earnings Limitation Savings Account (ELSA)

Teachers under age 65 who resume teaching service for a TRA-covered employer after retirement are subject to an annual earnings limitation based on the cost-of-living index used by Social Security. If a member earns more than the limitation, which changes each January 1, the annuity payable during the following calendar year will be offset one dollar for each two dollars earned in excess of the limitation. The calendar year 2000 limit was \$10,080.

The 2000 Legislature modified the way in which the earning limits are handled. Previously, any pension benefits withheld due to excess earnings reverted back to the TRA Fund. Under the new law, the pension offset amounts are redirected to a separate savings account, called the Earnings Limitation Savings Account (ELSA), and later distributed to the retiree. At age 65 or one year after termination of teaching, whichever is later, the retiree receives a lump-sum payment of the total offset amount in their ELSA account. Six percent interest compounded annually accrues on ELSA accounts.

As of June 30, 2001, TRA had 236 retirees who exceeded the earnings limitation and had an ELSA account established. The total dollar amount of the combined ELSA accounts is \$388,508. ELSA assets are invested in the TRA Active Fund until distribution. Due to the newness of the program, no distributions of ELSA accounts had occurred as of June 30, 2001.

III. Contributions Required and Made

Minnesota Statutes, Chapter 354 sets the rates for employee and employer contributions. These rates, expressed as level percentages of annual covered payroll, are determined to accumulate sufficient assets for paying benefits. Level percentage of payroll contribution rates are calculated using the entry age normal actuarial funding method. TRA also uses the level percentage of payroll method to amortize any unfunded liability over a closed period ending June 30, 2020. Currently, no unfunded liability exists.

Contributions totaling \$284,874,693 (\$145,075,285 employee and \$139,799,408 employer) were made in accordance with the actuarially determined contribution requirements. On page 56, contributions are projected as sufficient to meet the required normal costs.

The sufficiency as a percent of covered payroll is 2.15 percent. This translates into a contribution sufficiency of about \$63.1 million projected for fiscal year 2002. The Legislative Commission on Pensions and Retirement annually reviews the adequacy of TRA's statutory contributions.

IV. Reserve Accounts

A. Minnesota Post Retirement Investment Fund (Post Fund)

For all retiring members, the reserves required to pay the cost of retirement benefits are transferred from the TRA Fund to the Post Fund which is managed by SBI. Participation in the Post Fund is shown at the actuarially determined required reserves level in accordance with Minnesota Statutes, section 11A.18, subdivision 7.

It includes a 6 percent assumed income distribution and any mortality gains or losses as determined by an independent actuary hired by the state legislature. As of June 30, 2001, TRA's share of the net assets of the Post Fund is \$9.11 billion at cost and \$8.84 billion at market value.

The Post Fund income available for distribution is determined using a post-retirement benefit increase formula based on total investment return rather than realized earnings.

This formula contains both an inflation adjustment and an investment component. Annuitants and other individuals receiving benefits as of July 1, 2000, are eligible to receive the full January 1, 2002, benefit increase shown in *Figure 5*.

Figure 5

January 1, 2002 Benefit Increase	
Inflation-Based Benefit Increase	2.5000%
Investment-Based Benefit Increase	1.9935%
Total Benefit Increase	<u>4.4935%</u>

Benefit recipients whose effective date of retirement is after July 1, 2000, but before June 2, 2001, receive a prorated amount of the January 1, 2002 benefit increase.

B. Member Reserves

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

C. Benefit Reserves

Employer contributions and investment income are recorded in the Benefit Designation. Administrative expenses, survivor and disability benefits, investment management fees, and interest paid to the Post Fund for late reserve transfers are paid from the benefit reserve.

Required Supplemental Schedules

Schedule of Employer Contributions (Unaudited)

Dollar Amounts in Thousands

Year Ended June 30	Actuarially Required Contrib. Rate (A)	Actual Covered Payroll (B)	Actual Employee Contributions (C)	Annual Required Contribution [(A) x (B)] - (C)	Actual Employer Contribution*	Percentage Contributed
1992	13.04%	\$1,989,624	\$ 91,506	\$167,941	\$162,370	96.68%
1993	13.13%	2,065,881	94,709	176,541	168,071	95.20%
1994	12.75%	2,150,300	100,803	173,360	171,855	99.13%
1995	14.73%	2,204,693	143,536	181,215	179,672	99.15%
1996	14.30%	2,268,390	148,051	176,329	184,495	104.63%
1997	12.78%	2,359,011	154,161	147,321	191,670	130.10%
1998	9.55%**	2,422,957	124,096	107,296	151,323	141.03%
1999	8.39%**	2,625,254	132,040	88,219	130,526	147.96%
2000	8.36%**	2,704,575	138,696	87,406	134,419	153.79%
2001	7.92%**	2,812,000	145,075	77,635	139,799	180.07%

* Includes contributions from other sources (if applicable).

** Actuarially Received Contribution Rate calculated according to the parameters of GASB 25 using a 30-year amortization of the negative unfunded accrued liability.

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)
07/01/92	\$ 6,324,733	\$ 7,662,522	\$1,337,789	82.54%	\$1,989,624	67.24%
07/01/93	7,045,937	8,266,059	1,220,122	85.24%	2,065,881	59.06%
07/01/94	7,611,936	9,115,266	1,503,330	83.51%	2,150,300	69.91%
07/01/95	8,348,124	9,717,623	1,369,499	85.91%	2,204,693	62.12%
07/01/96	9,541,221	10,366,168	824,947	92.04%	2,268,390	36.37%
07/01/97	11,103,759	10,963,637	(140,122)	101.28%	2,359,011	-5.94%
07/01/98	12,727,546	12,046,312	(681,234)	105.66%	2,422,957	-28.12%
07/01/99	14,011,247	13,259,569	(751,678)	105.67%	2,625,254	-28.63%
07/01/00	15,573,151	14,802,441	(770,710)	105.21%	2,704,575	-28.50%
07/01/01	16,834,024	15,903,984	(930,040)	105.85%	2,812,000	-33.07%

Teachers Retirement Association

Notes to the Required Supplemental Schedules (Unaudited)

June 30, 2001

Schedule of Funding Progress

The actuary for the Legislative Commission on Pensions and Retirement conducts a study every four years to determine the accuracy of the economic and demographic assumptions used for long-term TRA funding objectives. If actual actuarial experiences are less favorable than assumed by the actuary, the difference is added to unfunded accrued liabilities. Each time a new benefit is added that applies to service already rendered, an additional unfunded accrued liability is created. Minnesota Statutes, Chapter 356.215 requires that all unfunded accrued liabilities be financed systematically over a closed period ending June 30, 2020.

To illustrate this feature, the TRA benefit formula multiplier was increased by 0.13 percent per year of service during fiscal year 1994. The benefit was funded solely through an increase in employee contributions effective in fiscal year 1995. Thus, the unfunded actuarial accrued liability rose dramatically for fiscal year 1994.

In an inflationary economy, the value of the dollar is decreasing. In this environment, employee contributions result in a dollar increase in unfunded actuarial accrued liabilities. This occurs at a time when the actual substance of these items may be decreasing. Looking at just the dollar amounts of unfunded liabilities can be misleading. Unfunded actuarial accrued liabilities divided by active employee payroll provide an index which clarifies understanding. The smaller the ratio of unfunded liabilities to covered payroll, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the retirement association is becoming financially stronger or weaker.

As of June 30, 2001, TRA is fully funded from an actuarial standpoint and reports a sufficiency. Any unfunded accrued liability resulting from benefit improvements and/or unfavorable actuarial experience would be combined with the outstanding balance and amortized over a closed period ending June 30, 2020.

Actuarial Assumptions and Method

1. Funding Method

The Entry Age Normal actuarial cost method of valuation is used in determining benefit liabilities and normal cost. As of June 30, 2001, the actuarial value of the plan assets exceeds the actuarially accrued liability (see page 54, line B3). The actuarial funding method reflects a 30-year amortization credit of this surplus.

2. Asset Valuation Method

For actuarial purposes, Minnesota Statutes, Chapter 356.215 requires valuation of all investment securities using a market-based smoothing method over five years.

3. Actuarial Assumptions

Significant actuarial assumptions employed by the actuary for funding purposes as of July 1, 2001, the date of the most recent actuarial valuation, include:

- Investment return — 8.5 percent.
- Inflation rate — 5 percent.
- Salary increases - An inflation factor of 5 percent, plus a merit factor ranging from .25 percent to 2.25 percent, declining as the member ages.
- Benefit increases after retirement — Payment of earnings on retired reserves in excess of 6 percent and an inflation guarantee up to 2.5 percent of the Consumer Price Index (CPI).

Administrative Expenses

For the Fiscal Year Ended June 30, 2001

Salaries	\$ 3,646,853
Employer Contributions to Teachers Retirement Association	189,137
Employer Contributions to Social Security	267,987
Insurance Contributions	517,754
Actuarial Services	147,789
Audit Fees	38,661
Computer Support Services	1,021,402
Department Head Expenses	1,482
Depreciation of Office Furniture and Equipment	477,699
Dues and Subscriptions	8,169
Duplicating and Printing Expenses	111,700
Employee Training	42,632
Insurance Expense	3,223
Lease of Office and Storage Space	417,636
Legal Fees	62,872
Management Consultant Services	320,090
Medical Services	40,475
Miscellaneous Administrative Expenses	22,453
Postage	360,525
Rental of Office Machines/Furnishings	54,151
Repairs and Maintenance	81,366
State Indirect Costs	77,706
Stationery and Office Supplies	156,129
Systems Development (FROST)	4,214,755
Telephone	65,772
Travel - Director and Staff	37,611
Travel - Trustees	15,308
Workers' Compensation	5,313
Board Substitute Teachers	2,822
Loss on Disposal of Equipment	1,304
Bond Interest Expense	666,942
Total Administrative Expenses	<u>\$ 13,077,718</u>

Teachers Retirement Fund

Schedule of Changes in Plan Net Assets

For Fiscal Year Ended June 30, 2001

	Member
Additions	
Contributions:	
Member Contributions	\$ 144,530,399
Employer Contributions	0
Earnings Limitation Savings Account (ELSA)	388,508
Total Contributions	<u>144,918,907</u>
Investment Income:	
Net Appreciation in FMV	0
Interest	0
Dividends	0
Net Gain on Sales of Pools	0
Distributed Income from MPRI Fund	0
Investment Management Fees	<u>0</u>
Net Investment Income (loss)	0
From Securities Lending Activities:	
Securities Lending Income	0
Securities Lending Borrower Rebates	0
Securities Lending Management Fees	<u>0</u>
Net Income from Securities Lending	0
Other Income	<u>0</u>
Total Additions (subtractions)	<u>\$ 144,918,907</u>
Deductions	
Benefits Paid	\$ 0
Earnings Limitation Savings Account (ELSA)	0
Refunds of Member Contributions	7,328,034
Administrative Expenses	0
Interest Paid Post Fund	<u>0</u>
Total Expenses	<u>\$ 7,328,034</u>
Net Increase (decrease)	\$ 137,590,873
Other Changes in Reserves	
Annuities Awarded	\$ (91,503,012)
Other Transfers	2,984,188
Change in Assumptions	0
Mortality Loss	<u>0</u>
Total Other Changes	<u>\$ (88,518,824)</u>
Net Assets Held in Trust for Pension Benefits	
Beginning of Year	1,354,682,583
End of Year	<u>\$1,403,754,632</u>

The accompanying notes are an integral part of this statement.

Reserves for 2001

Post Fund	Benefit	Total June 30, 2001
\$ 0	\$ 544,886	\$ 145,075,285
0	139,799,408	139,799,408
<u>0</u>	<u>0</u>	<u>388,508</u>
0	140,344,294	285,263,201
(1,854,422,810)	(1,088,625,242)	(2,943,048,052)
0	181,302,621	181,302,621
0	189,553,537	189,553,537
0	138,795,953	138,795,953
1,192,289,801	0	1,192,289,801
<u>0</u>	<u>(11,052,656)</u>	<u>(11,052,656)</u>
(662,133,009)	(590,025,787)	(1,252,158,796)
55,538,208	39,493,763	95,031,971
(49,312,704)	(35,195,674)	(84,508,378)
<u>(1,599,165)</u>	<u>(1,106,212)</u>	<u>(2,705,377)</u>
4,626,339	3,191,877	7,818,216
<u>0</u>	<u>2,767,786</u>	<u>2,767,786</u>
<u>\$ (657,506,670)</u>	<u>\$ (443,721,830)</u>	<u>\$ (956,309,593)</u>
\$ 847,876,730	\$ 13,522,238	\$ 861,398,968
388,508	0	388,508
0	280,805	7,608,839
0	13,077,718	13,077,718
<u>0</u>	<u>8,460,780</u>	<u>8,460,780</u>
<u>\$ 848,265,238</u>	<u>\$ 35,341,541</u>	<u>\$ 890,934,813</u>
\$(1,505,771,908)	\$ (479,063,371)	\$ (1,847,244,406)
\$ 709,059,904	\$ (617,556,892)	\$ 0
0	(2,984,188)	0
0	0	0
<u>(7,134,806)</u>	<u>7,134,806</u>	<u>0</u>
<u>\$ 701,925,098</u>	<u>\$ (613,406,274)</u>	<u>\$ 0</u>
<u>9,648,010,695</u>	<u>6,746,887,090</u>	<u>17,749,580,368</u>
<u>\$ 8,844,163,885</u>	<u>\$ 5,654,417,445</u>	<u>\$ 15,902,335,962</u>

Consultant Expenditures

For the Fiscal Year Ended June 30, 2001

Investment Pool Managers

Investment Board	\$ 360,564
Financial Control Systems	48,079
Pension Consulting	11,543
Richards & Tierney	48,097
Equity Pool Managers	8,775,863
Bond Pool Managers	1,808,510
Total Investment Pool Managers Expenditures	<u>\$ 11,052,656</u>

MIS Programmers/Analysts

Computer Horizons	\$ 181,665
Compuware	529,319
IBM	4,846
Keystone	174,095
KPMG	3,821,445
Syscom	43,535
Total MIS Programmers/Analysts Expenditures	<u>\$ 4,754,905</u>

Management

MN Department of Administration	\$ 2,280
Marcia Doty - St. Scholastica College	4,985
Maximus	280,441
Ray Clarke and Associates	1,080
Total Management Expenditures	<u>\$ 288,786</u>

Actuarial

Buck Consultants	\$ 94,183
Milliman USA	53,606
Total Actuarial Expenditures	<u>\$ 147,789</u>

Legal

Attorney General	\$ 61,606
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Audit

Legislative Auditor	\$ 31,830
Pension Benefit Information	6,831
Total Audit Expenditures	<u>\$ 38,661</u>

Medical

MN Department of Health	\$ 40,970
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Total Consultant Expenditures	<u><u>\$ 16,385,373</u></u>
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Teachers Retirement Association of Minnesota



Investments

Investments

Investments

Investments

Investments

Investments

Investment Summary

Prepared by TRA management with data obtained from the State Board of Investment's Fiscal Year 2001 Annual Report

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 for the active members of TRA has a fair value of approximately \$7.06 billion. In addition, TRA's share of the assets of the Minnesota Post Retirement Investment Fund (Post Fund), from which retiree benefits are paid, is approximately \$8.84 billion, at fair value.

The five-member SBI Board consists of Governor Jesse Ventura (Chair), Secretary of State Mary Kiffmeyer, State Treasurer Carol Johnson, Attorney General Michael Hatch, and State Auditor, Judith Dutcher. Howard Bicker serves as SBI's Executive Director.

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

- 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 Finance 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.

Investment Advisory Council

As of December 2001

Gary Austin

Executive Director
Teachers Retirement Association

David Bergstrom

Executive Director
MN State Retirement System

John E. Bohan, Retired

Vice Pres., Pension Investments
Grand Metropolitan-Pillsbury

Douglas Gorence

Chief Investment Officer
U of M Foundation Investment
Advisors

Kenneth F. Gudorf

Chief Executive Officer
Agio Capital Management, LLC

P. Jay Kiedrowski

Executive Vice President
Wells Fargo & Co.

Han Chin Liu

Governor's Appointee
Active Employee Representative

Judith W. Mares

Financial Consultant
Mares Financial Consulting, Inc.

Malcolm W. McDonald**

Director and Senior Vice President
Space Center, Inc.

Gary R. Norstrom, Retired

Treasurer
City of Saint Paul

Daralyn Peifer

Managing Director
Private Investments
General Mills, Inc.

Mary Stanton

Governor's Appointee
Active Employee Representative

Michael Troutman

Vice President
Finance and Investments
Evangelical Lutheran Church
in America

Mary Vanek

Executive Director
Public Employees Retirement Assn

Elaine Voss

Governor's Appointee
Retiree Representative

Pamela Wheelock

Commissioner
MN Department of Finance

Jan Yeomans*

Treasurer
3M Co.

* Chair

** Vice-Chair

Richards & Tierney, Inc. of Chicago are general consultants to 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 Association for Investment Management and Research (AIMR). All investments made by SBI are governed by the prudent person rule and other standards codified in Minnesota Statutes, Chapters 11A and 356A.

The Council has formed three committees organized around broad investment subjects relevant to SBI's decision-making: Asset Allocation, Stock and Bond Managers and Alternative Investments.

All proposed investment policies are reviewed by the appropriate Committee and the full Council before they are presented to SBI for action.

Basic Retirement Funds

Investment Objectives

The pension contributions of active TRA members are invested through the Basic Retirement Funds (Basic Funds) administered by SBI. SBI has one overriding responsibility with respect to its management of the Basic Funds: to ensure that sufficient funds are available to finance promised benefits at the time of retirement. All assets in the Basic Retirement Funds, including TRA, are managed externally by outside money management firms retained by contract.

The Basic Funds invest the pension contributions of most Minnesota public employees, including TRA members, during their working years. Employee and employer contribution rates are specified in state law as a percentage of an employee's salary. The rates are set so that contributions plus expected investment earnings will cover the projected cost of promised pension benefits. In order to meet these projected pension costs, the Basic Funds must generate investment returns of at least 8.5 percent on an annualized basis over time.

Normally, pension assets will accumulate in the Basic Funds for thirty to forty years during an employee's years of active service. This provides the Basic Funds with a long investment time horizon and permits SBI to take advantage of long run return opportunities offered by common stocks and other equity investments in order to meet its actuarial return target.

SBI measures the performance of the Basic Funds relative to a composite of market indices that is weighted in a manner that reflects their long-term asset allocation policy. The Basic Funds are expected to exceed the composite index over a five-year period. Performance is measured net of all fees and costs to assure that SBI's focus is on its true net return.

Asset Allocation

The allocation of assets among stocks, bonds, and alternative investments can have a dramatic impact on investment results. In fact, asset allocation decisions overwhelm the impact of individual security selection within a total portfolio. Consequently, SBI has focused considerable attention on the selection of an appropriate long-term asset allocation policy for the Basic Funds. The following table shows the actual asset mix of the Basic Funds at the end of fiscal year 2001.

Basic Funds Asset Mix		
June 30, 2001		
	Actual Mix	Policy Mix
Domestic Stocks	47.9%	45.0%
International Stocks	13.9%	15.0%
Bonds	24.2%	24.0%
Alternative Assets	13.1%	15.0%
Unallocated Cash	0.9%	1.0%
Total	<u>100.0%</u>	<u>100.0%</u>

Total Return Vehicles

SBI invests the majority of the Basic Funds' assets in *common stocks* (both domestic and international). A large allocation is consistent with the investment time horizon of the Basic Funds and the advantageous long-term risk-return characteristics of common stocks. Including international stocks in the asset mix allows SBI to diversify its holdings across world markets and offers the opportunity to enhance returns and reduce the risk/volatility of the total portfolio. The rationale underlying the inclusion of *private equity* (e.g., venture capital) is similar. However, the relatively small size of the private equity market presents a practical limit to the amount that may be invested in this asset class.

SBI recognizes that this sizable policy allocation to common stock and private equity likely will produce 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 Basic Funds both to provide some insulation against highly inflationary or deflationary environments and to diversify the portfolio sufficiently to avoid excessive return volatility.

Real estate and resource (oil and gas) investments provide an inflation hedge that other financial assets cannot offer. In periods of rapidly rising prices, these "hard" assets have appreciated in value at a rate at least equal to the inflation rate. Further, even under more normal financial conditions, such as low to moderate inflation, the returns on these assets are not highly correlated with common stocks. As a result, their inclusion in the Basic Funds serves to dampen return volatility.

The allocation to *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 to diversify the Basic Funds and thereby control return volatility.

Rate of Return Results

The Basic Funds produced a total rate of return for fiscal year 2001 of -7.4 percent. Over the last five years, the Basic Funds have generated an annualized return of 11.2 percent. The current fair value of the total Basic Funds is about \$18.6 billion. TRA's share of the fund is approximately 38 percent or \$7.06 billion.

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

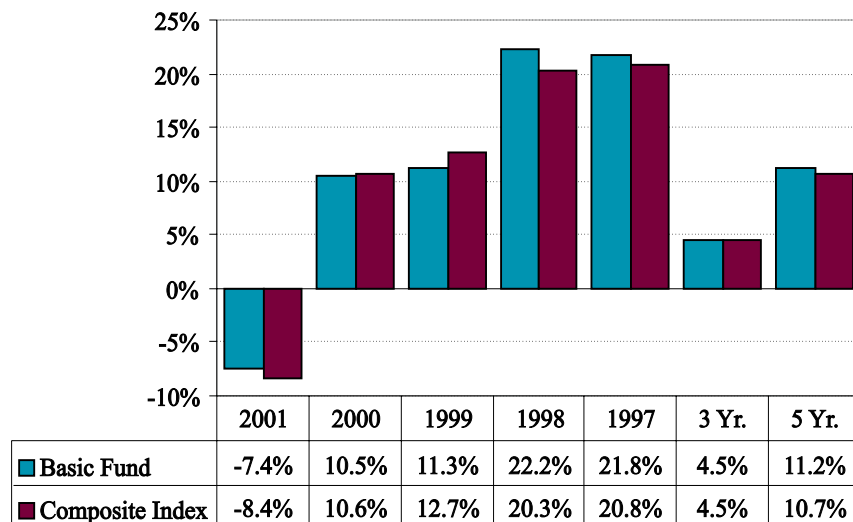
- The ability of the managers selected by SBI, in aggregate, to add value to the returns available from the broad capital markets.
- The impact of SBI's rebalancing activity. (SBI rebalances the total fund when market movements take the stock or bond segments above or below their long-term asset allocation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

For the five-year period ending June 30, 2001, the Basic Funds out-performed the composite index by 0.5 percentage points annualized. The Basic Fund matched the composite index over the last three years and exceeded the composite index by 1.0 percentage point for fiscal year 2001. Actual returns relative to the total fund composite index over the last five years are shown in the graph on this page.

Post Retirement Fund

When a member retires, TRA transfers assets on behalf of the member to the Minnesota Post Retirement Investment Fund (Post Fund). The Post Fund includes the assets of retired public employees covered by nine statewide retirement plans: the eight plans which participate in the Basic Funds as well as the Legislative and Survivors Retirement Fund.

Basic Funds Performance vs. Composite Index



The assets of the Post Fund finance monthly annuity payments paid to retirees. On June 30, 2001, the Post Fund had a market value of \$19.40 billion. TRA retirees' portion of this value is approximately \$8.84 billion or 45.6 percent. The Post Fund generated an investment return of -6.9 percent for fiscal year 2001.

All assets in the Post Retirement Fund are managed externally by outside money management firms retained by contract.

Investment Objectives

The investment time horizon of the Post Fund is 15-20 years and corresponds to the length of time a typical retiree can be expected to draw benefits. While this is shorter than the time horizon of the Basic Funds, it is still sufficiently long to allow SBI to take advantage of the long-run return opportunities offered by common stock in order to meet its actuarial return target as well as to finance retirement benefit increases.

SBI measures the performance of the Post Fund relative to a composite of market indices that is weighted in a manner that reflects its long-term asset allocation policy. The Post Fund is expected to exceed the composite index over a five-year period. Performance is measured net of all fees and costs to assure that SBI's focus is on true net return.

Asset Allocation

Throughout the 1980s, the Post Fund was invested primarily in bonds. SBI significantly revised its asset allocation strategy for the Post Fund in fiscal year 1993 in order to reflect the goals associated with the new post-retirement benefit increase formula (described later). The current long-term asset allocation policy and actual asset mix of the Post Fund at the end of fiscal year 2001 is presented in the following table.

The majority of the Post Fund's assets are invested in *common stocks* (both domestic and international). A large allocation is consistent with the moderately long time horizon of the Post Fund and the advantageous long-term, risk-return characteristics of common stocks. Including international stocks in the asset mix allows SBI to diversify its holdings across world markets and offers the opportunity to enhance returns and reduce the risk/volatility of the total portfolio.

Post Fund Asset Mix

June 30, 2001

	Actual Mix	Policy Mix
Domestic Stocks	52.6%	50.0%
Int'l Stocks	14.2	15.0
Bonds	28.8	27.0
Alternative Assets	3.4	5.0
Unallocated Cash	1.0	3.0
Total	<u>100.0%</u>	<u>100.0%</u>

SBI recognizes that this sizable allocation will be likely to produce 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.

Other asset classes are included in the Post Fund both to provide some insulation against highly deflationary environments and to diversify the portfolio sufficiently to avoid excessive return volatility.

The *bonds* in the Post Fund act 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 gains. And, under more normal financial conditions, bonds diversify the Post Fund, thereby controlling return volatility on a year-to-year basis.

Yield oriented alternative investments provide the opportunity for higher long term returns than those typically available from bonds yet still generate sufficient current income to be compatible with the objectives of the Post Fund. Typically, these investments (e.g., business loan participations, mortgage loan participations and income producing private placements) 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

will help reduce the volatility of the total portfolio but also should generate higher returns relative to more traditional bond investments.

While the Board made several commitments to yield oriented alternative investments during the year, the market value of the alternative segment was only 3.4 percent of the total fund on June 30, 2001. The Board expects this percentage to increase gradually over the next three to five years. Until appropriate vehicles are identified, the uninvested portion of the alternative asset allocation is held in bonds. As a result, the actual amount invested in bonds was above its long-term target.

Investment Management and Performance

In order to gain greater operating efficiency, the Post Fund shares with the Basic Funds the same domestic stock, bond and international stock managers. The Post Fund is expected to exceed the return of a composite of market indices over a five-year period. The Post Fund's performance exceeded its composite market index by 0.6 percentage points for the five-year period since July 1, 1996. The fund matched the composite index over the last three years and exceeded the composite index by 1.1 percentage points for fiscal year 2001.

Actual returns relative to the total fund composite index over the last five years are shown in the graph below.

Benefit Increase Formula

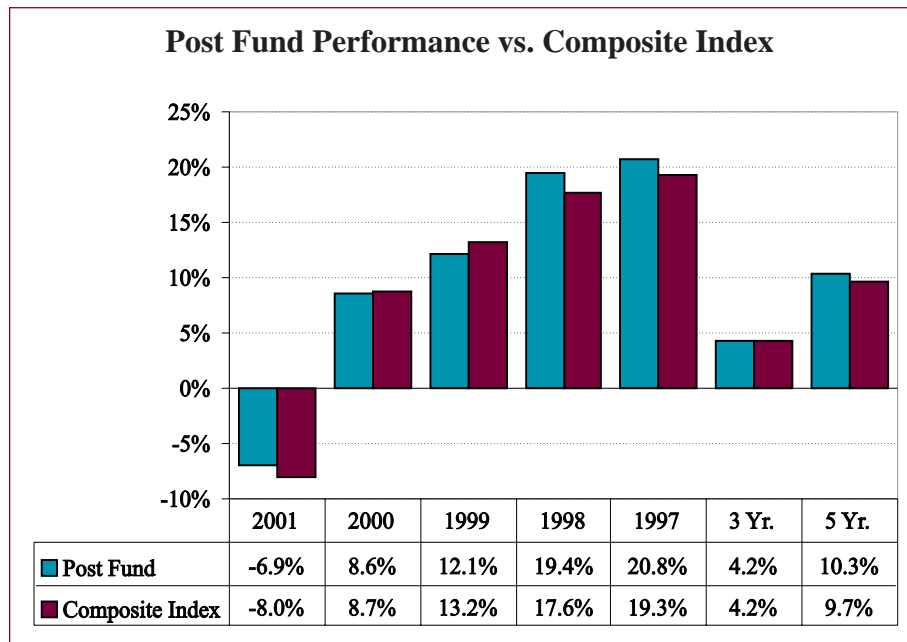
The retirement benefit increase formula of the Post Fund is based on a combination of two components:

- Inflation Component.** Each year, retirees receive an inflation-based adjustment equal to 100 percent of inflation, up to a maximum specified in statute. The inflation component is granted regardless of investment performance. The cap is necessary to maintain the actuarial soundness of the entire plan. It is the difference between the return assumption for the Basic funds, and the return assumption for the Post Fund.

The return assumption in the Basic Funds is 8.5 percent. The return assumption for the Post Fund was 5.0 percent through fiscal year 1997. In fiscal year 1998, the return assumption for the Post Fund was changed to 6.0 percent. This means the cap on the inflation adjustment was 3.5 percent for fiscal years 1993-1997. From fiscal year 1998 forward, the inflation cap will be 2.5 percent. Retirees were given a one-time permanent adjustment in their pension to compensate them for the reduction in the inflation adjustment cap.

- Investment Component.** Each year, retirees also receive an investment-based adjustment, *provided* net investment gains are above the amount needed to finance the Post Fund's actuarial assumption and the inflation adjustment. Investment gains and losses will be spread over five years to smooth out the volatility of returns. In addition, all accumulated investment losses must be recovered before an investment-based adjustment is granted.

Post Fund Performance vs. Composite Index



The current formula has two primary advantages:

- It provides benefit increases that are more sensitive to inflation than those granted under the old formula.
- It allows the Post Fund to maximize the long-term earning power of its assets. Without the need to generate the higher levels of current income required under the old formula, the Post Fund can increase its stock exposure and thereby enhance its prospects for higher total rates of return over the long run.

The Post Fund will provide a benefit increase of 4.4935 percent for fiscal year 2001 payable January 1, 2002. As noted earlier, this increase is comprised of two components:

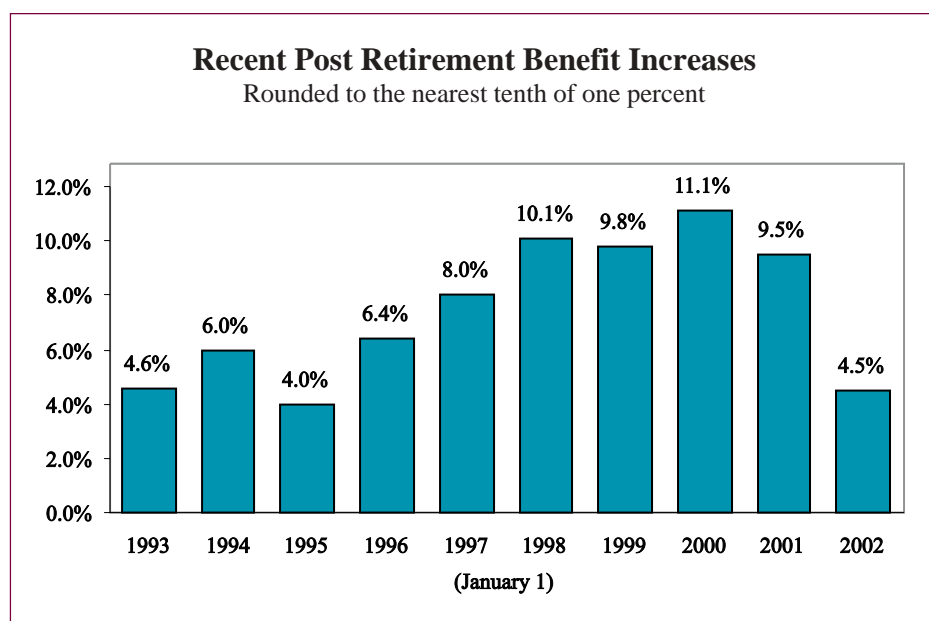
- *Inflation component* of 2.5 percent which is the maximum increase allowed by law. The increase in the Consumer Price Index for wage earners (CPI-W) for the twelve months ending June 30, 2001, exceeded 2.5 percent. (This is the same inflation index used to calculate increases in Social Security payments.)
- *Investment component* of 1.9935 percent. This represents a portion of the market value increase that exceeds the amount needed to cover the actuarial assumed rate of return and the inflation adjustment.

Benefit increases granted for the past ten years are shown in the graph below.

Prior to fiscal year 1993, the benefit increase formula was dependent on the level of excess realized income generated by the Post Fund. The 4.4935 percent increase granted for fiscal year 2001 represents the ninth post-retirement adjustment provided under the new benefit increase formula previously described.

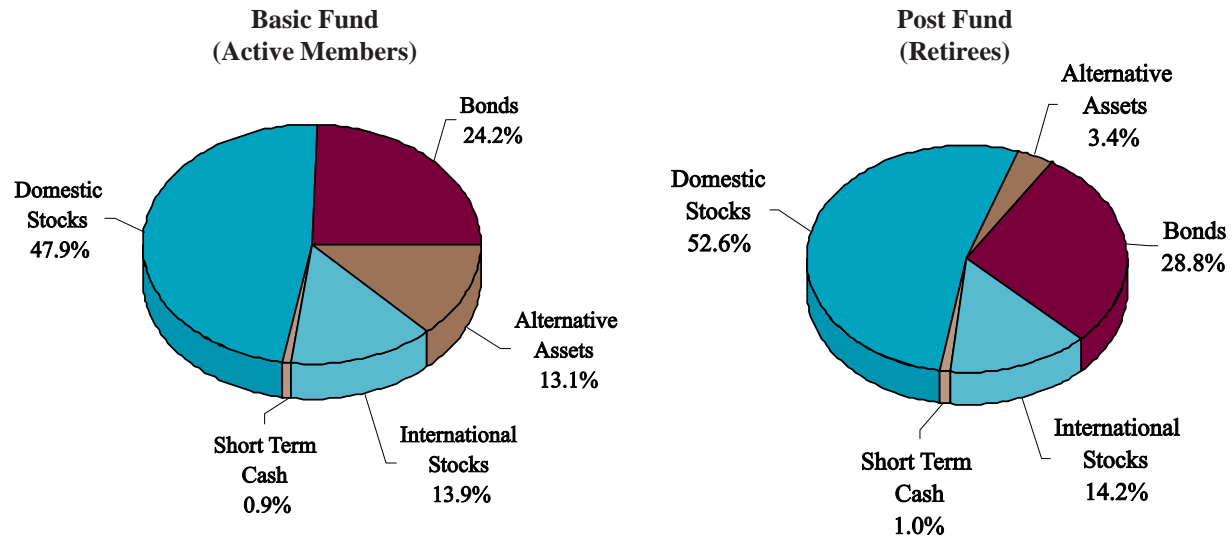
The Basic Funds and the Post Fund share many of the same stock and bond managers. This is accomplished by grouping managers together, by asset class, into several investment pools. The individual funds participate in the investment pools by purchasing units which function much like shares of a mutual fund.

This investment management structure allows SBI to gain greater operating efficiency within asset classes and to keep money management costs as low as possible for all participants. Further information on investment activity and a listing of specific investments owned by the pooled accounts can be obtained from the Minnesota State Board of Investment, Suite 355, 60 Empire Drive, Saint Paul, MN 55103.



Teachers Retirement Fund Portfolio Distribution

June 30, 2001



Teachers Retirement Fund Performance of Asset Pools (Net of Fees)

June 30, 2001

	Rates of Return (Annualized)		
	FY 2001	3-Year	5-Year
Domestic Stock Pool	-15.2%	2.7%	12.9%
Wilshire 5000	-15.8%	3.0%	12.7%
Bond Pool	11.8%	6.3%	7.9%
Lehman Aggregate	11.2%	6.3%	7.5 %
International Stock Pool	-22.1%	-0.2%	3.5%
Composite Index	-23.9%	-0.7%	1.9%
Real Estate Pool (Basic Funds Only)	15.8%	10.5%	15.4%
Private Equity Pool (Basic Funds Only)	- 7.0%	10.0%	20.5%
Resource Pool (Basic Funds Only)	35.8%	7.1%	16.6%
Yield Oriented Pool (Post Fund Only)	17.3%	15.5%	13.2%

Teachers Retirement Fund List of Largest Assets Held

June 30, 2001

Composite Holdings of Top Ten Equities

By Fair Value

Security	% of Portfolio
General Electric Co.	1.87%
Microsoft Corp	1.46
Citigroup Inc.	1.34
ExxonMobil Corp	1.15
Pfizer Inc.	1.11
AOL Time Warner Inc.	1.09
Intel Corp	0.81
Wal-Mart Stores, Inc.	0.79
American Intl Group Inc.	0.78
Cisco Systems Inc.	0.76

Composite Holdings of Top Ten Bond Holdings

By Fair Value

Security	Coupon	Maturity Date	Rating	% of Portfolio
GNMA TBA Jul 30 Single Fam	6.50%	12/15/2029	AAA	0.57%
FNMA TBA Jul 30 Single Fam	7.50	12/31/2029	AAA	0.40
FNMA TBA Jul 30 Single Fam	6.00	12/31/2029	AAA	0.38
GNMA TBA Jul 30 Single Fam	7.00	12/31/2029	AAA	0.36
FNMA TBA Jul 30 Single Fam	6.50	12/01/2029	AAA	0.31
FHLMC TBA Jul 30 Gold Single	6.50	12/31/2029	AAA	0.27
United States Treasury Bonds	3.63	04/15/2028	AAA	0.26
United States Treasury Bonds	8.50	02/15/2020	AAA	0.26
FNMA TBA Jul 30 Single Fam	7.00	12/31/2029	AAA	0.22
FNMA Pool 570543	8.50	01/01/2031	AAA	0.21

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 shown are those of the total pooled accounts. 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.

Summary of Investments*

As of June 30, 2001

	Book		Fair	
	Book Value	Total Book Value	Fair Value	Total Fair Value
Fixed Income Investments				
Fixed Income Pool	\$1,736,448,030.85		\$1,700,388,020.00	
Total Fixed Income Investments		\$ 1,736,448,030.85		\$ 1,700,388,020.00
Equity Investments:				
External Indexed Equity Pool	\$ 898,170,751.25		\$1,021,182,358.00	
Global Equity Pool	1,129,256,598.18		968,795,684.00	
External Domestic Equity Pool	2,690,691,521.69		2,349,088,426.00	
Total Equity Investments		\$ 4,718,118,871.12		\$ 4,339,066,468.00
Alternative Investments:				
Internal Venture Capital Pool	\$ 636,802,430.87		\$ 553,499,695.00	
Internal Real Estate Fund Pool	231,804,690.91		281,896,559.00	
Internal Resource Fund Pool	110,043,626.82		112,842,642.00	
Total Alternative Investments		\$ 978,650,748.60		\$ 948,238,896.00
Short Term Investment:				
Short Term Cash Equivalents	\$ 70,477,835.67		\$ 70,477,835.15	
Total Short Term Investment		\$ 70,477,835.67		\$ 70,477,835.15
Total Investments		\$ 7,503,695,486.24		\$ 7,058,171,219.15

*Regular TRA Fund, does not include investments in the Minnesota Post Retirement Investment Fund.

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 Basic Funds and the Post Fund. First Trust National Association, St. Paul, Minnesota, is the current custodian of short term investments of TRA. Examination and verification of securities held by the custodians is performed periodically by the Minnesota Office of the Legislative Auditor.

Teachers Retirement Association of Minnesota



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Actuary's Letter



A MILLIMAN GLOBAL FIRM

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December 7, 2001

Board of Trustees
Teachers Retirement Association Fund
Suite 300
60 Empire Drive
St. Paul, Minnesota 55103-1855

Members of the Board:

We have completed our annual actuarial valuation of the Teachers Retirement Association Fund (TRA) to test how well the fundamental financing objectives are being achieved and to determine the actuarial status of the TRA as of July 1, 2001.

The fundamental financing objectives of the fund are to establish contribution rates which, when expressed as a percentage of active member payroll, will remain approximately level from generation to generation and meet the required deadlines for full funding.

The results of the valuation indicate that the TRA is already at the level of full funding. On an ongoing basis, the sufficiency is 2.15% of payroll, which is the result of the statutory contributions of Chapter 354 of 10.00% exceeding required contributions of Chapter 356 of 7.85%.

The actuarial valuation was based upon applicable statutory provisions and the Standards of Actuarial Work in effect on July 1, 2001. In the aggregate, the basic financial membership data provided to us by the Association office appears reasonable in comparison to last year. We have relied upon the data as submitted in performing the actuarial valuation. It is our understanding that the data has subsequently been audited with no significant changes made.

The valuation was performed by using the actuarial cost methods and actuarial assumptions that are described in a separate table of this report. The actuarial cost method and the assumptions related to asset valuation, investment return, earnings progression and active member payroll growth are specified by state statute. All other assumptions are based on actual experience with changes recommended by the actuary, adopted by TRA Board, and

Board of Trustees
December 7, 2001
Page Two

approved by the Legislative Commission on Pensions and Retirement. All assumptions and methods used for funding purposes meet the parameters for the disclosures presented in the financial section of the TRA comprehensive annual financial report, set by GASB Statement No. 25. Under Statement 25, the actuarial required contribution is 7.85%.

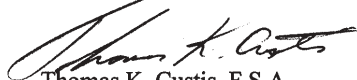
The trend data schedules presented in the financial section, and the supporting schedules in the actuarial section of the Comprehensive Annual Financial Report were prepared by the staff of the TRA based on information contained in our actuarial valuation report.

We certify that to the best of our knowledge and belief, this actuarial valuation was performed in accordance with the requirements of Section 356.215, Minnesota Statutes, and the requirements of the Standards for Actuarial Work.

I, Thomas K. Custis, am an actuary for Milliman USA. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Milliman USA



Thomas K. Custis, F.S.A.
Consulting Actuary

TKC/bh

Summary of Actuarial Assumptions and Methods

1. Interest	Pre-Retirement – 8.5% per annum Post-Retirement – 8.5% per annum	<i>Table A</i>	
2. Salary Increases	Reported salary for prior fiscal year, with new hires annualized, increased according to <i>Table A</i> to current fiscal year and annually for each future year.	Age	Salary Increases
		20	8.00
		25	7.75
3. Mortality	Pre-Retirement	30	7.50
	Male — 1983 Group Annuity Mortality (GAM) Table for males set back ten years.	35	7.00
	Female — 1983 Group Annuity Mortality Table for females set back eight years.	40	6.25
		45	5.50
	Post-Retirement	50	5.25
	Male — Same as above except set back five years.	55	5.00
	Female — Same as above except set back four years.	60	5.00
	Post-Disability		
	Male — 1965 rates through age 54. For ages 55 to 64, graded rates between 1965 RRB (Railroad Retirement Board) rates and the Post-Retirement mortality table. For ages 65 and later, the Post-Retirement mortality table.		
	Female — 1965 RRB rates through age 54. For ages 55 to 64, graded rates between 1965 RRB rates and the Post-Retirement mortality table. For ages 65 and later, the Post-Retirement mortality table.		
4. Retirement Age	Graded rates beginning at age 55 as shown in rate <i>Table B</i> . Members who have attained the highest assumed retirement age will retire in one year.		

Table B

Retirements Expressed as Number of Occurrences Per 10,000					
Age	Rule of 90		Age	Rule of 90	
	Eligible	Other		Eligible	Other
50	0	0	61	4,500	2,300
51	0	0	62	4,500	3,300
52	0	0	63	4,500	3,000
53	0	0	64	4,500	4,500
54	0	0	65	6,000	6,000
55	4,500	500	66	4,000	4,000
56	4,500	500	67	4,000	4,000
57	4,500	600	68	4,000	4,000
58	4,500	700	69	4,000	4,000
59	4,500	1,000	70	4,000	4,000
60	4,500	1,200	71	10,000	10,000

5. Disability	Graduated rates illustrated in table of sample values in <i>Table C</i> .
6. Expenses	Prior year expenses expressed as percentage of prior year payroll.

7. Separation From Service

Select and ultimate rates were based on plan experience as of June 30, 1996. Ultimate rates after the third year are illustrated in the Annual Separation table of sample values in *Table C*. Select rates for the first three years are as follows:

	First Year	Second Year	Third Year
Male	.40	.14	.08
Female	.35	.12	.08

Table C

Annual Separation Rate Per 10,000 Employees						
Sample Values						
Age	Pre-Retirement Death		Withdrawal		Disability	
	Male	Female	Male	Female	Male	Female
20	3	1	300	400	0	0
30	4	2	270	400	0	0
40	6	4	220	240	2	2
50	12	8	120	120	7	3
60	39	19	0	0	15	11

8. Allowance for Combined Service Annuity

Liabilities for active and deferred vested participants are increased by 1.0 percent to account for the effect of some participants having eligibility for a Combined Service Annuity.

9. Return of Contributions

All employees withdrawing after becoming eligible for a deferred benefit were assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit.

10. Family Composition

85% of male members and 65% of female members are assumed to be married. Female is three years younger than male. Assume members have no children.

11. Social Security

N/A

12. Benefit Increases After Retirement

Payment of earnings on retired reserves in excess of 6% accounted for by 6% post-retirement assumptions.

13. Special Consideration

Married members assumed to elect subsidized joint and survivor form of annuity as follows:

Males	—	15% elect	50% J&S option
		15% elect	75% J&S option
		50% elect	100% J&S option
Females	—	20% elect	50% J&S option
		10% elect	75% J&S option
		30% elect	100% J&S option

-
- 14. Actuarial Cost Method** Entry Age Normal Actuarial Cost Method with normal costs expressed as a level percentage of earnings. Under this method, actuarial gains (losses) reduce (increase) the Unfunded Actuarial Accrued Liability.
- 15. Asset Valuation Method** Market Value, adjusted for amortization obligations receivable at the end of the fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during the fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year). Transition rules apply between July 1, 2000, and July 2, 2003, when the method is fully in effect.
- 16. Payment on the Unfunded Actuarial Accrued Liability**
(Currently Not Applicable) A level percentage of payroll each year to the statutory amortization date assuming payroll increases of 5 percent per annum. If there is a negative Unfunded Actuarial Liability, the surplus amount shall be amortized over 30 years as a level percentage of payroll.

Valuation Report Highlights

Dollar Amounts in Thousands

	July 1, 2000 Valuation	July 1, 2001 Valuation
A. Contributions (Table 6)		
1. Statutory Contributions – Chapter 354 (% of Payroll)	10.00%	10.00%
2. Required Contributions – Chapter 356 (% of Payroll)	7.92%	7.85%
3. Sufficiency (Deficiency) (A.1 - A.2)	2.08%	2.15%
B. Funding Ratios		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	\$15,573,151	\$16,834,024
b. Current Benefit Obligations (Table 3)	\$14,009,611	\$15,099,099
c. Funding Ratio (a/b)	111.16%	111.49%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	\$15,573,151	\$16,834,024
b. Actuarial Accrued Liability (Table 4)	\$14,802,441	\$15,903,984
c. Funding Ratio (a/b)	105.21%	105.85%
3. Projected Benefit Funding Ratio (Table 3)		
a. Current and Expected Future Assets	\$18,324,588	\$19,625,868
b. Current and Expected Future Benefit Obligations	\$17,235,087	\$18,450,268
c. Funding Ratio (a/b)	106.32%	106.37%
C. Plan Participants		
1. Active Members		
a. Number	70,508	71,097
b. Projected Annual Earnings	\$ 2,813,696	\$ 2,937,962
c. Average Annual Earnings (Projected \$)	\$ 39,906	\$ 41,323
d. Average Age	42.6	42.6
e. Average Service	11.7	11.5
2. Others		
a. Service Retirements	29,525	31,169
b. Survivors	1,912	2,070
c. Disability Retirements	509	518
d. Deferred Retirements	7,375	7,959
e. Terminated Other Non-vested	17,833	19,344
f. Total	<u>57,154</u>	<u>61,060</u>

Actuary's Commentary

Purpose

The purpose of this valuation is to determine the financial status of the Plan. In order to achieve this purpose, an actuarial valuation is made at the beginning of each fiscal year as required by Section 356.215 of Minnesota Statutes.

Report Highlights

The financial status of the Plan can be measured by three different funding ratios:

- The Accrued Benefit Funding Ratio is a measure of current funding status and, when viewed over a period of years, presents a view of the funding progress. It is based upon benefits that have been earned by service to the valuation date. This year's ratio is 111.49 percent. The corresponding ratio for the prior year was 111.16 percent.
- The Accrued Liability Funding Ratio is also a measure of funding status and funding progress. It is based on the actuarial cost method that has historically been used by the state. For 2001, the ratio is 105.85 percent, which is a slight increase from the 2000 value of 105.21 percent.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 106.37 percent verifies that the current statutory contributions are sufficient.

Asset Information (Tables 1 and 2)

Effective with the July 1, 2000, valuation of the fund, Minnesota Statutes requires that the asset value used for actuarial purposes spread differences between actual return (measured on a market-value basis) and expected return on non-Minnesota Post Retirement Investment Fund (MPRIF) assets over five years, in a manner similar to that already being used within the MPRIF. The previous method required under Minnesota Statutes recognized one-third of the unrealized gains and losses. An Asset Valuation Method requirement exists because market values (which include all unrealized gains and losses) are typically volatile and can produce erratic changes in the contribution requirements from year to year. The intent of the change to the current method is

to employ a more effective asset-smoothing technique that is market-value based and which eliminates artificial bias related to manager style. The effective date of this requirement is July 1, 2000, with full transition to be accomplished as of July 1, 2003.

The calculation of the Actuarial Value of Assets is shown in Table 1 on lines E.1 to E.4. Actuarial Value of Assets is determined as:

- Market Value of Assets at June 30, 2001, *less*
- 80 percent of the current year Unrecognized Asset Return at July 1, 2001 (the difference between actual net return on Market Value of Assets between 06/30/00 and 06/30/01 and the asset return expected during that period based on the assumed interest rate employed in the July 1, 2000 Actuarial Valuation); *less*
- 60 percent of the current year Unrecognized Asset Return at July 1, 2000 (the difference between actual net return on Market Value of Assets between 06/30/99 and 06/30/00 and the asset return expected during that period based on the assumed interest rate employed in July 1, 1999 Actuarial Valuation); *less*
- 30 percent of the Unrecognized Asset Return at July 1, 1999 (the difference between Market Value of Assets on 06/30/99 and the Actuarial Value of Assets used in the July 1, 1999 Actuarial Valuation).

The term "Actuarial Value of Assets" is used to indicate that the value was determined for use in this actuarial valuation. Since Minnesota Statutes refer to this value as "Current Assets," the latter phrase will be used in the remainder of this report.

This Plan participates in the Minnesota Post Retirement Investment Fund (MPRIF). After the MPRIF liability has been calculated for each participating Plan, the State Board of Investment (SBI) will determine each Plan's portion of the excess earnings for the January benefit increase, as well as the Plan's allocated market share of MPRIF.

Actuarial Balance Sheet (Table 3)

An actuarial balance sheet provides a method for evaluating current and future levels of funding.

The Current Benefit Obligation used to measure current funding levels is calculated as follows:

- **For Active Members** — Salary and service are projected to retirement to determine benefits for each member and the ratio of credited service to total service establishes the portion of the projected benefit to be used in calculating the current funding level.
- **For Non-Active Members** — The discounted value of benefits, including augmentation in cases where benefits have not commenced.

GASB Disclosure

Disclosure of the Current Benefit Obligation amounts used to be required by Statement No. 5 of the Governmental Accounting Standards Board (GASB). However, Statement No. 5 has been superseded by Statement No. 25. Page 25 in the Financial section of this report is included to fulfill the requirements of Statement No. 25.

Actuarial Cost Method (Table 4)

The approach used by the state of Minnesota to determine contribution sufficiency is the Entry Age Normal Actuarial Cost Method. The primary characteristic of this method is that it allocates costs as a level percentage of payroll.

A comparison of this actuarial method (Table 4) to the actuarial balance sheet (Table 3) illustrates the two techniques for allocating liabilities of active Members to past and future. As noted in the prior section, the balance sheet allocates benefits and corresponding liabilities on the basis of service. The method used in Table 4 allocates liabilities so that the cost each year will be a constant percentage of payroll. Both approaches, however, calculate the value of all future benefits the same way (see line F of Table 3 and line A6, column 1, of Table 4).

An Unfunded Actuarial Accrued Liability is computed under the Entry Age Normal Actuarial Cost Method by comparing the liabilities allocated to past service (Actuarial Accrued Liability) to the Current Assets. This amount, line B3, is funded over the remaining years to the amortization date by a series of payments that remain a constant percentage of payroll each year.

Source of Actuarial Gains and Losses (Table 5)

The assumptions used in making the calculations using the Entry Age Normal Actuarial Cost Method are based on long-term expectations. Each year the actual experience will deviate from the long-term expectations. For a detailed analysis of the major components, refer to Table 5.

Contribution Sufficiency (Table 6)

This report determines the adequacy of Statutory Contributions by comparing the Statutory Contributions to the Required Contributions.

The Required Contributions, set forth in Chapter 356, consist of:

- Normal costs based on the Entry Age Normal Actuarial Cost Method.
- A Supplemental Contribution for amortizing any Unfunded Actuarial Accrued Liability.
- An Allowance for Expenses.

Table 6 shows the Plan has a contribution sufficiency, since the Statutory Contribution Rate is 10.00 percent compared to the Required Contribution Rate of 7.85 percent.

Changes in Actuarial Assumptions

All actuarial assumptions and methods listed on pages 44-46 are the same as those used in the prior valuation.

Changes in Plan Provisions

Effective with this July 1, 2001, valuation, the following plan provision has been amended:

- Effective January 1, 2002, the additional lump sum benefits that are paid to pre-1973 retirees will be paid as monthly installments to the retirees.

All other plan provisions are the same as those used in the prior actuarial valuation of the Fund.

Schedule of Plan Net Assets

Table 1

July 1, 2001

Dollar Amounts in Thousands

	Fair Value	Cost Value
A. Assets in Trust		
1. Cash, Equivalents, Short-term Securities	\$ 73,387	\$ 73,387
2. Fixed Income	1,700,388	1,736,448
3. Equity	5,005,409	5,464,965
4. Real Estate	281,897	231,805
5. Equity in MPRIF	9,106,198	9,106,198
6. Invested Securities Lending Collateral	1,382,346	1,382,346
7. Other	<u>12,154</u>	<u>12,154</u>
Subtotal	\$ 17,561,779	\$ 18,007,303
B. Assets Receivable	16,044	16,044
C. Liabilities		
1. Invested Securities Lending Collateral	(1,382,346)	(1,382,346)
2. Other	<u>(31,106)</u>	<u>(31,106)</u>
Subtotal	(1,413,452)	(1,413,452)
D. Net Assets Held in Trust for Pension Benefits		
1. MPRIF Reserves	9,106,198	9,106,198
2. Member Reserves	1,403,755	1,403,755
3. Other Non-MPRIF Reserves	<u>5,654,418</u>	<u>6,099,942</u>
4. Total Assets Available for Benefits	<u>\$ 16,164,371</u>	<u>\$ 16,609,895</u>
E. Determination of Actuarial Value of Assets		
1. Fair Value of Assets Available for Benefits (D4)		\$ 16,164,371
2. Unrecognized Asset Returns (UAR)		
a. June 30, 2001 (Table 2, Line F4)	\$ (1,241,462)	
b. June 30, 2000	157,486	
c. June 30, 1999	763,418	
3. UAR Adjustment: .80 x (E2.a) + .60 x (E2.b) + .30 x (E2.c)		<u>(669,653)</u>
4. Actuarial Value of Assets (E1 - E3)		<u>\$ 16,834,024</u>
(Same as "Current Assets")		

Schedule of Changes in Plan Net Assets

Table 2

Year Ending June 30, 2001

<i>(Dollar Amounts in Thousands)</i>	Non-MPRIF Assets	MPRIF Reserves	Fair Value
A. Assets Available at Beginning of Period	\$ 8,101,569	\$ 8,055,622	\$ 16,157,191
B. Additions			
1. Member Contributions	\$ 145,075	\$ 0	\$ 145,075
2. Employer Contributions	139,799	0	139,799
3. Contributions From Other Sources	389	0	389
4. MPRIF Income	0	1,185,972	1,185,972
5. Net Investment Income			
a. Interest and Dividends	378,674	0	378,674
b. Net Realized Gain (Loss)	138,796	0	138,796
c. Net Change in Unrealized Gain (Loss)	(1,082,304)	0	(1,082,304)
d. Investment Expenses	(11,053)	0	(11,053)
e. Net Subtotal	(575,887)	0	(575,887)
6. Other	2,768	0	2,768
7. Total Additions	<u>\$ (287,856)</u>	<u>\$ 1,185,972</u>	<u>\$ 898,116</u>
C. Operating Expenses			
1. Service Requirements	\$ 1,964	\$837,071	\$ 839,035
2. Disability Benefits	10,530	0	10,530
3. Survivor Benefits	1,028	11,195	12,223
4. Refunds	7,609	0	7,609
5. Administrative Expenses	13,078	0	13,078
6. Other	8,461	0	8,461
7. Total Disbursements	<u>\$ 42,670</u>	<u>\$ 848,266</u>	<u>\$ 890,936</u>
D. Other Changes in Reserves			
1. Annuities Awarded	(720,005)	720,005	0
2. Mortality Gain/Loss	7,135	(7,135)	0
3. Change in MPRIF Assumptions	0	0	0
4. Total Other Changes	<u>(712,870)</u>	<u>712,870</u>	<u>0</u>
E. Assets Available at End of Period	<u>\$ 7,058,173</u>	<u>\$ 9,106,198</u>	<u>\$ 16,164,371</u>
F. Determination of Current Year Unrecognized Asset Return			
1. Average Balance			
a. Non-MPRIF Assets Available at Beginning of Period			\$ 8,101,569
b. Non-MPRIF Assets Available at End of Period*			7,051,038
c. Average Balance $\{[F1.a + F1.b - B5.e - B6] / 2\}$			7,862,863
2. Expected Return: $.085 \times F1.c$			668,343
3. Actual Return			(573,119)
4. Current Year Unrecognized Asset Return: $F3 - F2$			\$ (1,241,462)

*Before adjustment for MPRIF mortality gain/loss and new MPRIF assumptions.

Actuarial Balance Sheet**Table 3**

July 1, 2001

(Dollar Amounts in Thousands)

A. Current Assets (Table 1, E4)				\$16,834,024
B. Expected Future Assets				
1. Present Value of Expected Future Statutory Supplemental Contributions (See Table 6)				245,560
2. Present Value of Future Normal Costs				2,546,284
3. Total Expected Future Assets				<u>2,791,844</u>
C. Total Current and Expected Future Assets				<u>\$19,625,868</u>
D. Current Benefit Obligations	Non-Vested	Vested		Total
1. Benefit Recipients				
a. Retirement Annuities		\$ 8,748,747		\$ 8,748,747
b. Disability Benefits		132,121		132,121
c. Surviving Spouse and Child Benefits		379,640		379,640
2. Deferred Retirements with Future Augmentation ...		323,648		323,648
3. Former Members without Vested Rights		64,189		64,189
4. Active Members				
a. Retirement Annuities	25,909	5,056,629		5,082,538
b. Disability Benefits	40,439	0		40,439
c. Survivor Benefits	44,757	0		44,757
d. Deferred Retirements	5,065	146,513		151,578
e. Refund Liability Due to Death or Withdrawal .	0	131,442		131,442
5. Total Current Benefit Obligations	<u>\$116,170</u>	<u>\$14,982,929</u>		<u>\$15,099,099</u>
E. Expected Future Benefit Obligations				<u>\$ 3,351,169</u>
F. Total Current and Expected Future Benefit Obligations				<u>\$18,450,268</u>
G. Current Unfunded Actuarial Liability (D5 – A)				(\$ 1,734,925)
H. Current and Future Unfunded Actuarial Liability (F – C)				(\$ 1,175,600)

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

Table 4

July 1, 2001

(Dollar Amounts in Thousands)

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
	(1)	(2)	(3) = (1) – (2)
A. Determination of Actuarial Accrued Liability (AAL)			
1. Active Members			
a. Retirement Annuities	\$ 8,158,430	\$ 2,144,286	\$ 6,014,144
b. Disability Benefits	70,334	29,882	40,452
c. Survivor Benefits	76,657	31,087	45,570
d. Deferred Retirements	306,996	177,107	129,889
e. Refunds Due to Death or Withdrawal ..	189,506	163,922	25,584
f. Total	<u>\$ 8,801,923</u>	<u>\$ 2,546,284</u>	<u>\$ 6,255,639</u>
2. Deferred Retirements			
with Future Augmentation	323,648		323,648
3. Former Members Without Vested Rights ..			
	64,189		64,189
4. Annuitants in the MPRIF			
	9,106,198		9,106,198
5. Recipients Not in the MPRIF			
	154,310		154,310
6. Total	<u>\$18,450,268</u>	<u>\$ 2,546,284</u>	<u>\$15,903,984</u>
B. Determination of Unfunded Actuarial Accrued Liability (UAAL)			
1. AAL (A6)			\$15,903,984
2. Current Assets (Table 1, E4)			<u>16,834,024</u>
3. UAAL (B1 – B2)			<u>\$ (930,040)</u>
C. Determination of Supplemental Contribution Rate			
1. Present Value of Future Payrolls Through the Amortization Date of July 1, 2031			\$54,568,855
2. Supplemental Contribution Rate (B3 ÷ C1)			-1.70%

Changes in Unfunded Actuarial Accrued Liability (UAAL)

Table 5

Year Ending June 30, 2001

(Dollar Amounts in Thousands)

A. UAAL at Beginning of Year	\$ (770,710)
B. Change Due to Interest Requirements and Current Rate of Funding	
1. Normal Cost and Expenses	\$ 264,187
2. Contribution	(284,875)
3. Interest on A, B1 and B2	<u>(66,390)</u>
4. Total (B1 + B2 + B3)	<u>(87,078)</u>
C. Expected UAAL at End of Year (A + B4)	\$ (857,788)
D. Increase (Decrease) Due to Actuarial Losses (Gains) Because of Experience Deviations from Expected	
1. Salary Increases	\$ 7,300
2. Investment Return	(63,301)
3. MPRIF Mortality	(7,135)
4. Mortality of Other Benefit Recipients	(14,008)
5. Other Items	<u>4,892</u>
6. Total	\$ <u>(72,252)</u>
E. UAAL at End of Year Before Plan Amendments and Changes in Actuarial Assumption (C + D6)	\$ (930,040)
F. Change in Unfunded Actuarial Accrued Liability Due to Change in Actuarial Methods	0
G. Change in Unfunded Actuarial Accrued Liability Due to Changes in Actuarial Assumptions	<u>0</u>
H. UAAL at End of Year (E + F + G)	<u><u>\$ (930,040)</u></u>

Determination of Contribution Sufficiency

Table 6

July 1, 2001

<i>Dollar Amounts in Thousands</i>	Percent of Payroll	Dollar Amount
A. Statutory Contributions - Chapter 354		
1. Employee Contributions	5.00%	\$146,914
2. Employer Contributions	<u>5.00%</u>	<u>146,914</u>
3. Total.....	<u>10.00%</u>	<u>\$293,828</u>
B. Required Contributions - Chapter 356		
1. Normal Cost		
a. Retirement Benefits	7.78%	\$228,668
b. Disability Benefits	0.10%	2,992
c. Survivor Benefits	0.10%	2,966
d. Deferred Retirement Benefits	0.48%	14,143
e. Refunds Due to Death or Withdrawal	<u>0.63%</u>	<u>18,397</u>
f. Total	<u>9.09%</u>	<u>\$267,166</u>
2. Supplemental Contribution Amortization by July 1, 2031 of UAAL	-1.70%	(49,945)
3. Allowance for Expenses	<u>0.46%</u>	<u>13,515</u>
4. Total.....	<u>7.85%</u>	<u>\$230,736</u>
C. Contribution Sufficiency (Deficiency) [A3 – B4]	2.15%	\$ 63,092

Note: Projected Annual Payroll for Fiscal Year Beginning on July 1, 2001 is \$2,937,962.

Summary of Actuarial and Unfunded Actuarial Liabilities

Dollar Amounts in Thousands

Valuation as of June 30	Aggregate Actuarial Liabilities	Valuation Assets	Assets as a % of Actuarial Liabilities	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a % of Annual Active Member Payroll
1992	\$ 7,662,522	\$ 6,324,733	82.5%	\$1,337,789	\$1,934,014	69.2%
1993	8,266,059	7,045,937	85.2%	1,220,122	2,024,000	60.3%
1994	9,115,266	7,611,935	83.5%	1,503,331	2,104,578	71.4%
1995	9,717,623	8,348,124	85.9%	1,369,499	2,197,262	62.3%
1996	10,366,168	9,541,221	92.0%	824,947	2,252,383	36.6%
1997	10,963,637	11,103,759	101.3%	(140,122)	2,359,011	(5.9%)
1998	12,046,312	12,727,546	105.6%	(681,234)	2,422,958	(28.1%)
1999	13,259,569	14,011,247	105.7%	(751,678)	2,625,254	(28.6%)
2000	14,802,441	15,573,151	105.2%	(770,710)	2,704,575	(28.5%)
2001	15,903,984	16,834,024	105.9%	(930,040)	2,812,000	(33.1%)

Solvency Test

Dollar Amounts in Thousands

Valuation as of June 30	Aggregate Accrued Liabilities			Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Reported Assets		
	(1) Member Contributions	(2) Retirees and Beneficiaries	(3) Members (Employer Financed Portion)		(1)	(2)	(3)
1992	\$ 886,618	\$2,662,744	\$4,113,160	\$ 6,324,733	100%	100%	67.5%
1993	921,143	3,120,037	4,224,879	7,045,937	100%	100%	71.1%
1994	970,813	3,559,614	4,584,839	7,611,935	100%	100%	67.2%
1995	1,070,347	3,866,694	4,780,582	8,348,124	100%	100%	71.4%
1996	1,164,651	4,319,329	4,882,188	9,541,221	100%	100%	83.1%
1997	1,252,843	4,808,918	4,901,876	11,103,759	100%	100%	100.0%
1998	1,303,006	5,570,230	5,173,076	12,727,546	100%	100%	100.0%
1999	1,321,579	6,751,682	5,186,308	14,011,247	100%	100%	100.0%
2000	1,354,683	8,055,622	5,392,136	15,573,151	100%	100%	100.0%
2001	1,403,755	9,106,198	5,394,031	16,834,024	100%	100%	100.0%

Schedule of Active Member Valuation Data

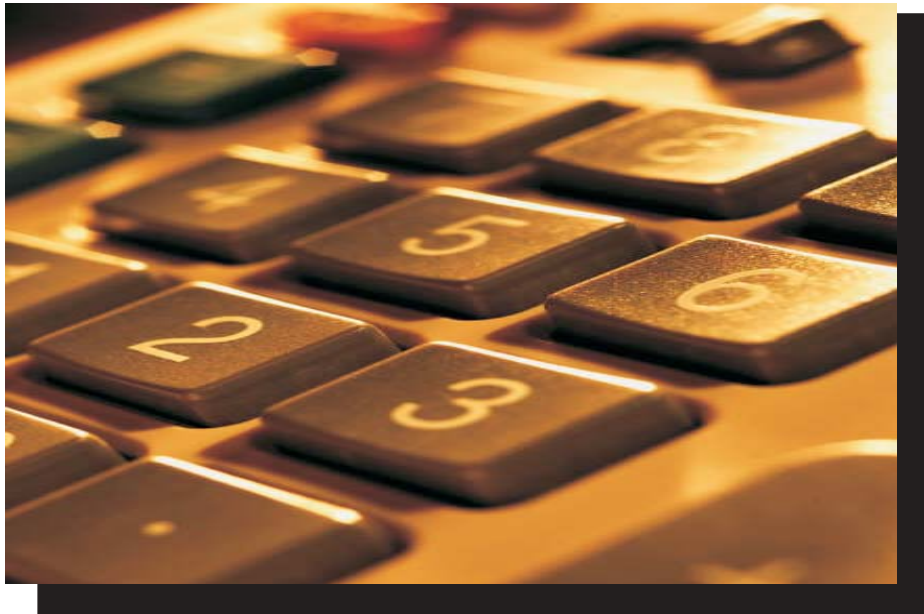
Year Ended June 30	Active Members	Annual Covered Payroll	Annual Average	% Increase in Average Payroll
1992	65,557	\$ 1,934,014,000	\$29,501	2.5%
1993	65,268	2,024,000,000	31,017	5.0%
1994	66,514	2,104,578,000	31,641	2.1%
1995	67,558	2,197,262,000	32,524	2.8%
1996	68,490	2,252,383,000	32,888	1.1%
1997	68,554	2,359,011,000	34,411	4.6%
1998	68,247	2,422,958,000	35,503	3.2%
1999	68,613	2,625,254,000	38,262	7.7%
2000	70,508	2,704,575,000	39,249	2.6%
2001	71,097	2,812,000,000	39,552	0.8%

Schedule of Retirees and Beneficiaries

Year Ended June 30	Added During Year	Removed During Year	Number End of Year	Total Annual Benefits	% Increase in Total Annual Benefits	Average Annual Benefits
1992	1,630	512	19,212	\$ 227,066,655	16.7%	\$11,819
1993	2,166	568	20,810	256,630,249	13.0%	12,332
1994	1,886	559	22,137	309,036,770	20.2%	13,960
1995	1,632	601	23,168	338,857,152	9.6%	14,626
1996	1,806	667	24,307	378,072,148	11.6%	15,554
1997	2,063	689	25,681	427,588,141	13.1%	16,650
1998	2,246	699	27,228	533,851,113	24.9%	19,607
1999	3,234	713	29,749	620,937,964	16.3%	20,872
2000	2,983	786	31,946	755,036,577	21.6%	23,634
2001	2,636	825	33,757	861,787,476	14.1%	25,529

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Teachers Retirement Association of Minnesota



Statistical

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Plan Summary

June 30, 2001

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 Children, Families and Learning, the Commissioner of Finance 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 Minneapolis, 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) have a one-time election to join TRA. No Minnesota state college or university teacher is a member except for purposes of Social Security coverage if that teacher has coverage by the Defined Contribution Retirement Plan administered by the MnSCU Board.

Retirement Service Credit

Service credit for benefits is earned from teaching service performed on a full-time, part-time or substitute basis up to a maximum of 170 full days per fiscal year (July 1 – June 30). Service credit may also be obtained by using paid accumulated sick leave or by purchasing service for a qualified leave of absence. If a teacher

teaches less than 170 full days, fractional service credit is given as the ratio of the number of full days taught to 170. If a teacher teaches only a fractional part of a day, service credit is given for a full day of teaching service for each five hours taught. Even though a teacher may teach more than five hours per day, not more than one day of service credit can be earned on any day. No more than one year of service credit may be earned during any fiscal year.

Financing

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

Employee Contributions

TRA members pay a percentage of their gross annual salary as determined by their membership plan. Basic Plan members (without Social Security coverage) contribute 9 percent of their annual salary while Coordinated Plan members (coordinated with Social Security coverage) contribute 5 percent of their annual salary.

Employer Contributions

Local school districts and other TRA-covered employer units provide contributions of 9 percent of total salary for members in the Basic Plan and 5 percent of total salary for members in the Coordinated Plan. For Coordinated Plan members the employer unit also makes the required matching contribution to the Social Security Administration.

Purchase of Prior Service Credit

Vested members may elect to purchase eligible credit for prior military service, maternity leaves or maternity breaks in service, out-of-state teaching service, Peace Corps or VISTA service, or private/parochial school service.

All or a portion of their eligible prior service may be purchased. The cost of the service is based on an actuarial methodology recognizing both an increased future monthly benefit and the expectation that the

member will retire earlier than had been previously assumed. The present actuarial cost formula to purchase service credit is set to expire on May 16, 2002.

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.

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*:

1.2 percent of average salary for the first 10 years of allowable service and 1.7 percent of average salary for each subsequent year of allowable service with a reduction of 0.25 percent for each month the member is under age 65 at the time of retirement (or under age 62 with 30 or more years of allowable service) and no reduction if age plus years of allowable service totals 90 or more.

OR

1.7 percent of average salary for each year of allowable service with augmented actuarial reduction (approximately 4.0 percent – 5.5 percent per year) for each month the member is under age 65.

Early retirement benefit eligibility is age 55 with 3 or more years of allowable service or any age with at least 30 years of allowable service when using the smaller step percentage factor.

For Basic system members (those without Social Security coverage) the formula percentages are 2.2 percent and 2.7 percent rather than the 1.2 percent and 1.7 percent shown for Coordinated system members (those with Social Security coverage).

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 as follows:

1.7 percent of average salary for each year of allowable service with augmented actuarial reduction (approximately 4.0 percent – 5.5 percent per year) for each month the member is under the full Social Security retirement benefit eligible age but not to exceed age 66. Under current federal law, the retirement age for full Social Security retirement benefits is age 65 for persons born in 1937 or earlier. For persons born in 1938 to 1942, Social Security gradually increases the retirement age for full Social Security benefits until it reaches age 66 for those persons born in 1943 to 1954.

Early retirement benefit eligibility is age 55 with 3 or more years of allowable service.

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.

Their benefit is augmented by 3 percent interest compounded annually until January 1 of the year following attainment of age 55 and 5 percent thereafter until the retirement benefit begins.

July 1, 1997 Increase

Effective July 1, 1997, all benefit recipients received an actuarially equivalent permanent increase based on a change in the post-retirement interest assumption from 5 percent to 6 percent. This increase recognizes that future post-retirement annual adjustments will be 1 percent less. Members who terminate service after June 30, 1997, and whose benefits commence during the period July 2, 1997, through July 1, 2002, receive a percentage of the July 1, 1997, permanent increase as follows:

July 2, 1997 - July 1, 1998	50%
July 2, 1998 - July 1, 1999	40%
July 2, 1999 - July 1, 2000	30%
July 2, 2000 - July 1, 2001	20%
July 2, 2001 - July 1, 2002	10%

Annuity Plan Options

Six different annuity plan options are available to TRA members providing monthly benefit payments for as long as the annuitant lives. Plan A-1 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 which have survivorship features.

1. Life Plan A-1, For Life of Member
2. Life Plan B-1, Guaranteed Refund
3. Life Plan C-3, 15-Year Term Certain and Life Thereafter
4. Life Plan E-1, 100% Survivorship with Bounceback
5. Life Plan E-2, 50% Survivorship with Bounceback
6. Life Plan E-3, 75% Survivorship with Bounceback

Post Fund Increases

The required reserves needed to pay retirement benefits are transferred from TRA's regular assets to the Minnesota Post Retirement Investment Fund (Post Fund) at the time of retirement. Each year, the Post Fund may provide a benefit adjustment that is based on two components: 1) the increases in the cost of living as reflected by the Consumer Price Index (CPI), and 2) the investment performance of the high-quality bonds and stocks in the Post Fund portfolio.

The cost-of-living component is paid up to a maximum of 2.5 percent based on the CPI increase determined at the end of each fiscal year for the preceding 12-month period. The cost-of-living component is paid each year regardless of the amount of investment return.

The potential for a greater increase is provided by the investment component that is based on investment returns in excess of the amount needed to pay the cost-of-living component and to cover the 6 percent earnings assumption that determined the original benefit at retirement.

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

Combined Service Annuity

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

Refunds

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

Repayment of Refunds

Members who return to teaching service after previously withdrawing their contributions may repay these contributions upon completing two years of allowable service. The repayment must include interest of 8.5 percent, compounded annually from the date of the refund. The minimum portion of a refund repayment is $\frac{1}{3}$ 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 which can be expected to be of long continued and indefinite duration. An indefinite duration is a period of at least one year.

Survivor Benefits

If a Coordinated member dies before retirement, the total amount of accumulated contributions plus 6 percent interest compounded annually is paid to the surviving spouse or, if there is none, to the designated beneficiary. Any survivor benefits payable from Social Security are in addition to the TRA survivor benefit. In some cases, a joint and survivor annuity (described in the next section) may be selected instead of this benefit.

If a Basic member dies before retirement, survivor benefits are payable to a dependent spouse and/or dependent children. The minimum benefit is equal to 50 percent of the Basic member's monthly average salary paid in the last full fiscal year preceding death, subject to a family maximum of \$1,000 per month. In some cases, a joint and survivor annuity (described in the next section) may be selected instead of this benefit.

If the member is not married and there are no dependent children, then the total amount of accumulated contributions plus 6 percent interest compounded annually is paid to the designated beneficiary.

Joint and Survivor Annuity

The surviving spouse of a married member with at least three years of allowable service credit may elect to receive the joint and survivor annuity benefit instead of the lump sum benefit. The annuity is payable monthly to the spouse or to a designated beneficiary for as long as the spouse or beneficiary lives; however, payments terminate upon the death of the spouse or beneficiary with no remaining benefits for other beneficiaries. In lieu of a lifetime benefit, only a spouse may elect to receive actuarially equivalent payments for a period certain of 5, 10, 15 or 20 years.

The amount of the annuity is based upon the High-Five Formula and the ages of the member and the spouse or designated beneficiary at the time of the member's death. The member's accumulated deductions and interest plus the employer's contributions are used to provide the benefit. The surviving spouse of an eligible member has a choice of the joint and survivor annuity benefit or the lump sum benefit. If there is no surviving spouse, actuarially equivalent payments may be made for a period certain for any surviving dependent child under the age of 20.

Ten-Year Summary of Revenue

By Source

Year Ended June 30	Member Contributions	Employer Contributions	Net Investment Income	Other	Total
1992	\$ 91,505,605	\$162,369,508	\$ 707,624,183	\$1,942,689	\$ 963,441,985
1993	94,709,399	168,070,511	682,492,365	2,347,431	947,619,706
1994	100,803,239	171,854,594	703,964,661	8,752,052	985,374,546
1995	143,535,906	179,671,657	659,253,303	553,171	983,014,037
1996	148,051,326	184,495,447	1,213,973,588	713,733	1,547,234,094
1997	154,160,516	191,670,080	2,296,019,494	704,736	2,642,554,826
1998	124,095,573	151,322,830	2,637,948,298	1,329,869	2,914,696,570
1999	132,040,005	130,525,591	1,775,404,067	1,587,211	2,039,556,874
2000	138,696,271	134,418,833	1,555,989,313	2,387,928	1,831,492,345
2001	145,075,284	139,799,408	(1,244,340,580)	3,156,295	(956,309,593)

Ten-Year Summary of Expenditures

By Type

Year Ended June 30	Retirement Benefits	Survivor Benefits	Disability Benefits	Refunds	Administrative Expenses	Other	Total
1992	\$220,352,768	\$ 3,314,799	\$ 3,399,088	\$ 5,494,749	\$ 2,895,659	\$ 775,682	\$236,232,745
1993	249,018,533	3,719,037	3,892,680	4,749,970	3,124,192	191,470	264,695,882
1994	300,482,282	4,341,112	4,213,376	3,583,342	3,338,007	614,377	316,572,496
1995	328,764,719	5,125,383	4,967,050	4,619,063	3,665,748	2,008,430	349,150,393
1996	366,352,840	6,080,640	5,638,668	5,039,811	3,835,501	620,477	387,567,937
1997	414,414,893	6,887,894	6,285,354	10,898,914	4,552,372	638,751	443,678,178
1998	517,008,277	9,027,669	7,815,166	5,689,067	5,417,370	1,226,839	546,184,388
1999	602,176,461	9,891,582	8,869,921	6,271,448	7,976,908	1,764,550	636,950,870
2000	734,173,055	11,025,836	9,837,686	7,262,919	8,137,683	3,903,332	774,340,511
2001	839,034,887	12,222,381	10,530,210	7,608,838	13,077,718	8,460,779	890,934,813

Summary of Changes in Membership

Fiscal Year Ending June 30, 2001

Active and Inactive Members

	Active		Inactive	
	Basic	Coordinated	Basic	Coordinated
Total July 1, 2000	11	70,530	36	25,625
Additions				
New hires	—	5,839	—	—
New inactives from active	—	—	—	4,928
Returns from inactive	—	1,433	—	—
Returns from retired	—	547	—	—
Returns from terminated	—	—	—	51
Restored write-offs	—	161	1	105
Repaid refunds	—	—	—	630
Transfers from nonstatus	—	—	1	44
System change to:	—	—		
Deletions				
Service retirements	(4)	(1,832)	(7)	(996)
Deaths —	—	(49)	—	(45)
Refunds —	—	(434)	(4)	(1,256)
Writeoffs	—	—	—	—
Terminated (no refund)	—	(4,928)	—	—
Returns to active	—	—	—	(1,433)
Transfers to IRAP	—	(9)	—	—
System change to:	—	—	—	(1)
Data adjustments	0	(161)	—	122
Total June 30, 2001	7	71,097	27	27,774

	Basic System	Coordinated System	Total
Active	7	71,090	71,097
Inactive	27	27,774	27,801
Total	34	98,864	98,898

Summary of Changes in Membership (continued)

Fiscal Year ending June 30, 2001

Annuitants

	Basic			Coordinated		
	Men	Women	Total	Men	Women	Total
Total annuitants June 30, 2000	1,921	2,640	4,561	11,914	13,019	24,933
Members retired during year	5	6	11	1,069	1,256	2,325
Resumed benefits	0	0	0	0	0	0
Adjustments	0	0	0	0	0	0
Terminated by death	(48)	(117)	(165)	(206)	(295)	(501)
Terminated by law	(1)	0	(1)	0	0	0
Cancelled	0	0	0	(2)	(1)	(3)
Total annuitants June 30, 2001	1,877	2,529	4,406	12,775	13,979	26,754
Annuitants not receiving warrants						
June 30, 2001	0	(1)	(1)	(8)	(10)	(18)
Total active annuitants June 30, 2001	1,877	2,528	4,405	12,767	13,969	26,736

Other Annuitants

	Supplemental Retirement Annuities			Former Variable Annuities		
	Men	Women	Total	Men	Women	Total
Active annuitants June 30, 2000	66	46	112	508	314	822
Members retired during year	0	0	0	0	0	0
Resumed benefits	0	0	0	0	0	0
Terminated by death	(5)	(3)	(8)	(8)	(11)	(19)
Terminated by law	0	0	0	(2)	(1)	(3)
Total annuitants June 30, 2001	61	43	104	498	302	800
Annuitants not receiving warrants						
June 30, 2001	0	0	0	0	0	0
Total other annuitants June 30, 2001	61	43	104	498	302	800

Summary of Changes in Membership (continued)

Fiscal Year ending June 30, 2001

Beneficiaries of Members Deceased Prior to Retirement

	Joint & Survivor Annuities			Other Annuities		
	Men*	Women*	Total	Men	Women	Total
June 30, 2000	388	175	563	3	0	3
Granted during year	22	29	51	0	0	0
Adjustments	(1)	(1)	0	0	0	0
Deaths	(8)	(4)	(12)	0	0	0
Terminated by law	(8)	(12)	(20)	0	0	0
Total June 30, 2001	<u>395</u>	<u>187</u>	<u>582</u>	<u>3</u>	<u>0</u>	<u>3</u>

Disabilitants

	Basic System			Coordinated System		
	Men	Women	Total	Men	Women	Total
June 30, 2000	2	2	4	198	298	496
Granted during year	0	0	0	19	61	80
Adjustments	0	0	0	(1)	(1)	0
Resumed benefits	0	0	0	0	0	0
Terminated by death	0	0	0	(5)	(17)	(22)
Transferred to retirement status	(2)	(1)	(3)	(14)	(10)	(24)
Resumed employment	0	0	0	(1)	(7)	(8)
Cancelled	0	0	0	0	(1)	(1)
Total June 30, 2001	0	1	1	198	323	521
Disabilitants not receiving warrants						
June 30, 2001	0	0	0	0	(1)	(1)
Total Active Disabilitants June 30, 2001	<u>0</u>	<u>1</u>	<u>1</u>	<u>198</u>	<u>322</u>	<u>520</u>

Beneficiaries of Retired Members

	Basic System			Coordinated System		
	Men*	Women*	Total	Men*	Women*	Total
June 30, 2000	239	40	279	807	209	1,016
Granted during year	29	3	32	118	45	163
Adjustments	0	0	0	(2)	(2)	0
Deaths	(3)	(3)	(6)	(24)	(3)	(27)
Terminated by law	(6)	(4)	(10)	(20)	(13)	(33)
Total June 30, 2001	<u>259</u>	<u>36</u>	<u>295</u>	<u>879</u>	<u>240</u>	<u>1,119</u>

*Gender of member

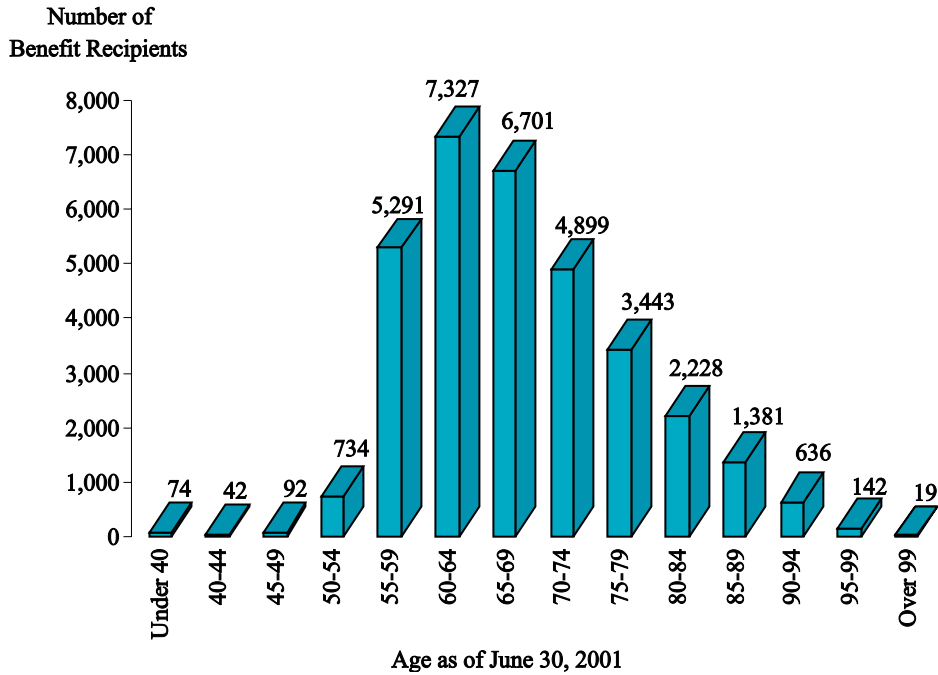
Schedule of Benefits Amount Paid

For Month of June 2001

Monthly Benefit Amount	Number of Recipients	Cumulative Total	Monthly Benefit Amount	Number of Recipients	Cumulative Total
Under \$100	549	549	\$3,000 - 3,099	646	24,348
\$ 100 - 199	851	1,400	\$3,100 - 3,199	615	24,963
\$ 200 - 299	835	2,235	\$3,200 - 3,299	557	25,520
\$ 300 - 399	902	3,137	\$3,300 - 3,399	527	26,047
\$ 400 - 499	837	3,974	\$3,400 - 3,499	498	26,545
\$ 500 - 599	769	4,743	\$3,500 - 3,599	507	27,052
\$ 600 - 699	778	5,521	\$3,600 - 3,699	455	27,507
\$ 700 - 799	766	6,287	\$3,700 - 3,799	441	27,948
\$ 800 - 899	776	7,063	\$3,800 - 3,899	407	28,355
\$ 900 - 999	760	7,823	\$3,900 - 3,999	380	28,735
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\$1,000 - 1,099	734	8,557	\$4,000 - 4,099	334	29,069
\$1,100 - 1,199	740	9,297	\$4,100 - 4,199	319	29,388
\$1,200 - 1,299	736	10,033	\$4,200 - 4,299	280	29,668
\$1,300 - 1,399	758	10,791	\$4,300 - 4,399	312	29,980
\$1,400 - 1,499	816	11,607	\$4,400 - 4,499	290	30,270
\$1,500 - 1,599	843	12,450	\$4,500 - 4,599	226	30,496
\$1,600 - 1,699	798	13,248	\$4,600 - 4,699	264	30,760
\$1,700 - 1,799	867	14,115	\$4,700 - 4,799	230	30,990
\$1,800 - 1,899	857	14,972	\$4,800 - 4,899	194	31,184
\$1,900 - 1,999	987	15,959	\$4,900 - 4,999	176	31,360
<hr/>			<hr/>		
\$2,000 - 2,099	935	16,894	\$5,000 - 5,099	143	31,503
\$2,100 - 2,199	907	17,801	\$5,100 - 5,199	129	31,632
\$2,200 - 2,299	865	18,666	\$5,200 - 5,299	125	31,757
\$2,300 - 2,399	813	19,479	\$5,300 - 5,399	103	31,860
\$2,400 - 2,499	792	20,271	\$5,400 - 5,499	116	31,976
\$2,500 - 2,599	780	21,051	\$5,500 and Over	1,033	33,009
\$2,600 - 2,699	720	21,771			
\$2,700 - 2,799	664	22,435	Total	33,009	
\$2,800 - 2,899	628	23,063			
\$2,900 - 2,999	639	23,702			

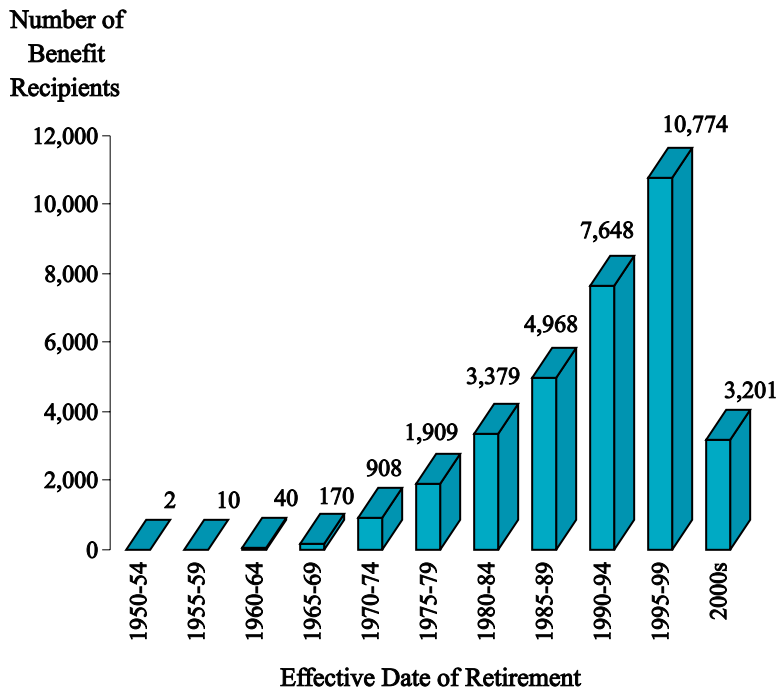
Schedule of Benefit Recipients by Current Age

For Month of June 2001



Benefit Recipients by Effective Date of Retirement

For Month of June 2001



Schedule of New Retirees and Initial Benefit Paid

For the Six Fiscal Years Ending June 30, 2001

Fiscal Year	Years of Formula Service						Total
	<10	10-15	16-20	21-25	26-30	Over 30	
1995							
Avg. Monthly Benefit	\$175.57	\$525.11	\$877.86	\$1,319.90	\$1,699.62	\$2,514.11	\$1,650.63
Number of Retirees	136	113	127	200	227	557	1,360
1996							
Avg. Monthly Benefit	\$197.20	\$487.35	\$1,031.26	\$1,410.58	\$1,808.75	\$2,563.49	\$1,809.16
Number of Retirees	141	102	106	194	272	692	1,507
1997							
Avg. Monthly Benefit	\$190.02	\$620.88	\$943.52	\$1,403.79	\$1,928.56	\$2,633.81	\$1,856.00
Number of Retirees	189	108	145	212	286	843	1,783
1998							
Avg. Monthly Benefit	\$220.86	\$674.83	\$1,058.85	\$1,544.28	\$2,216.02	\$2,959.73	\$2,128.26
Number of Retirees	191	131	144	232	306	983	1,987
1999							
Avg. Monthly Benefit	\$243.40	\$696.37	\$1,217.30	\$1,664.26	\$2,406.11	\$3,204.73	\$2,526.67
Number of Retirees	172	148	191	231	420	1,716	2,878
2000							
Avg. Monthly Benefit	\$233.43	\$668.46	\$1,164.27	\$1,660.98	\$2,343.63	\$3,115.03	\$2,229.47
Number of Retirees	244	234	190	269	432	1,308	2,677
2001							
Avg. Monthly Benefit	\$212.99	\$739.68	\$1,114.17	\$1,743.43	\$2,523.15	\$3,262.12	\$2,312.31
Number of Retirees	236	191	175	245	362	1,125	2,334

Distribution of TRA Benefits Mailing Address of Benefit Recipient

January 2001

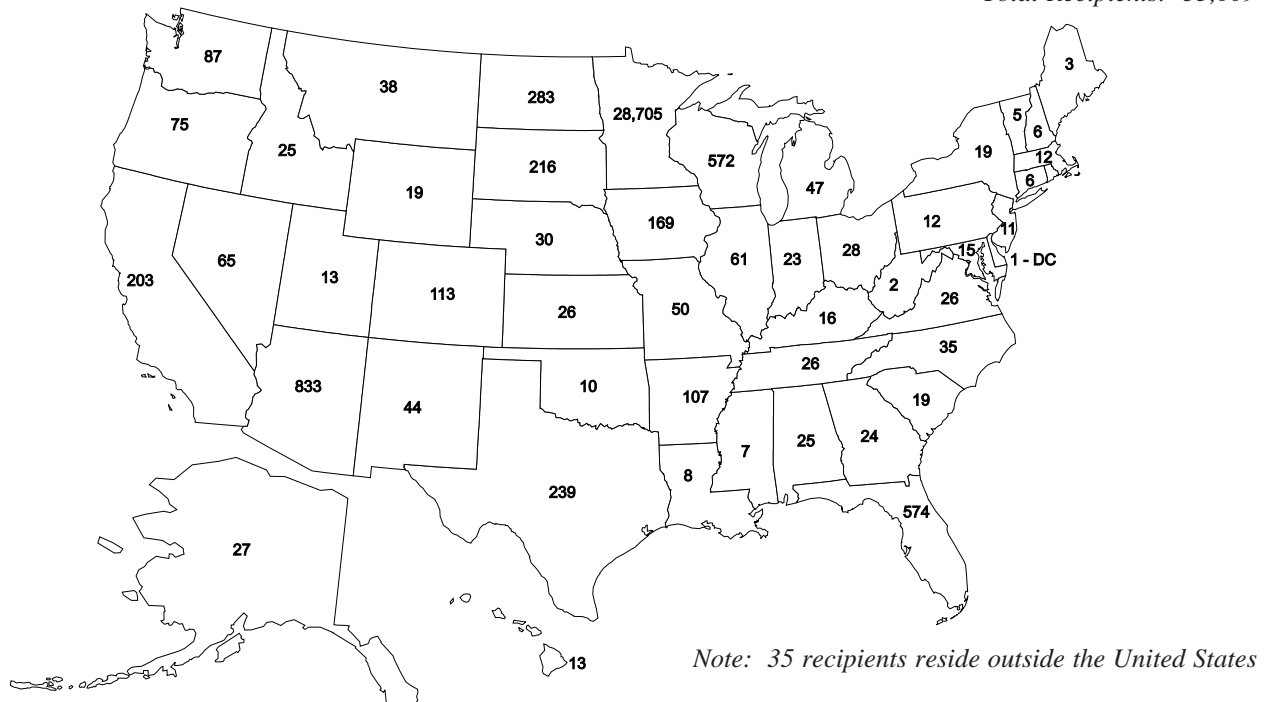
Total Recipients: 32,617



Distribution of TRA Benefits Mailing Address of Benefit Recipient

June 2001

Total Recipients: 33,009



Schedule of Benefit Recipients by Type

For Month of June 2001

Monthly Benefit Amount	Number of Recipients	Type of Retirement		
		Regular	Disability	Beneficiary
\$ 1 - \$ 250	1,805	1,632	23	150
\$ 251 - \$ 500	2,169	1,882	39	248
\$ 501 - \$ 750	1,928	1,696	36	196
\$ 751 - \$1,000	1,921	1,655	49	217
\$1,001 - \$1,250	1,853	1,594	51	208
\$1,251 - \$1,500	1,932	1,657	40	235
\$1,501 - \$1,750	2,078	1,857	41	180
\$1,751 - \$2,000	2,280	2,062	47	171
\$2,001 - \$2,250	2,288	2,064	58	166
\$2,251 - \$2,500	2,033	1,901	32	100
\$2,501 - \$2,750	1,833	1,697	37	99
\$2,751 - \$3,000	1,606	1,516	17	73
\$3,001 - \$3,250	1,535	1,452	18	65
\$3,251 - \$3,500	1,288	1,220	6	62
\$3,501 - \$3,750	1,189	1,140	4	45
\$3,751 - \$4,000	1,004	969	2	33
\$4,001 - \$4,250	791	757	4	30
\$4,251 - \$4,500	737	708	0	29
\$4,501 - \$4,750	604	588	1	15
\$4,751 - \$5,000	487	470	1	16
\$5,001 - \$5,250	335	322	1	12
\$5,251 - \$5,500	280	267	1	12
Over \$5,500	1,033	986	1	46
Total	33,009	= 30,092	+ 509	+ 2,408

Distribution of Active Members

As of June 30, 2001

Age	Years of Service								All
	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25	1,267	1,101	1	0	0	0	0	0	2,369
25-29	1,381	6,422	877	2	0	0	0	0	8,682
30-34	728	3,450	4,573	572	0	0	0	0	9,323
35-39	693	1,875	2,290	2,567	496	1	0	0	7,922
40-44	863	1,801	1,602	1,797	1,920	604	0	0	8,587
45-49	758	1,644	1,681	1,558	1,383	2,675	999	0	10,698
50-54	558	1,265	1,357	1,605	1,348	1,938	4,077	1,774	13,922
55-59	394	607	605	726	716	862	1,231	2,094	7,235
60-64	215	251	187	186	236	239	293	285	1,892
65+	160	120	55	27	19	26	16	44	467
All	7,017	18,536	13,228	9,040	6,118	6,345	6,616	4,197	71,097

Average Annual Earnings of Active Members

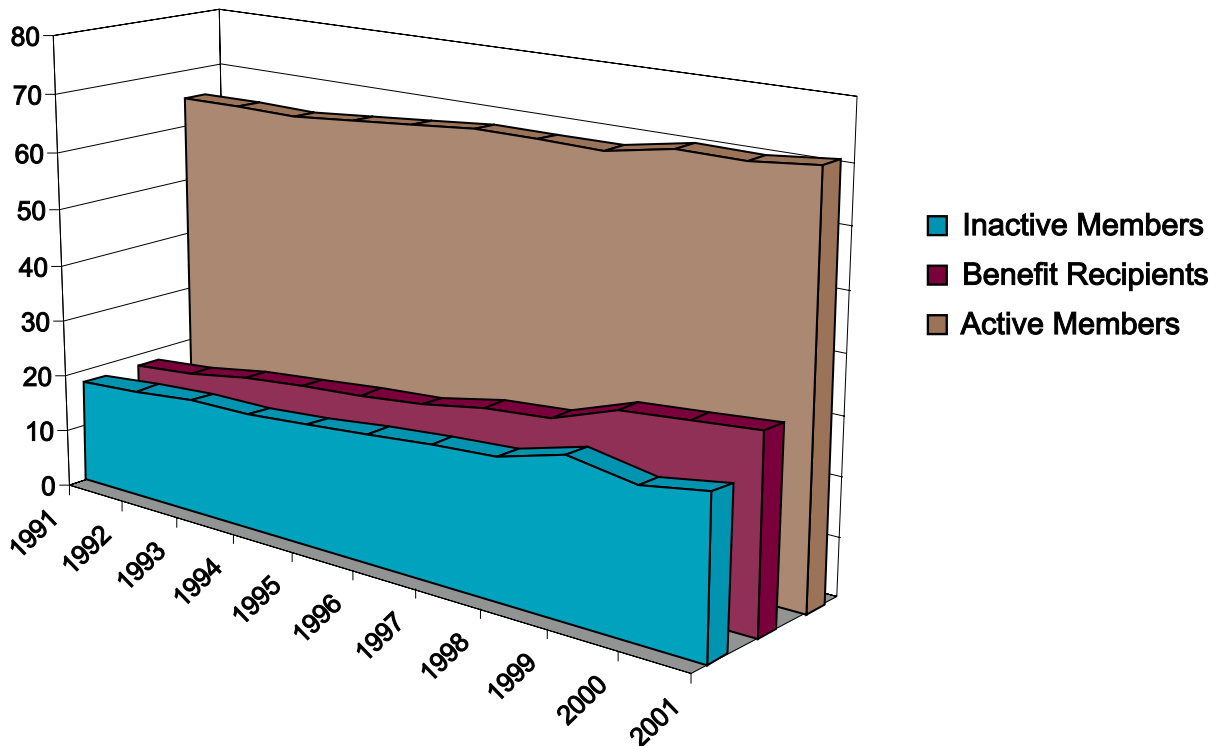
For Fiscal Year Ended June 30, 2001

Age	Years of Service								All
	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25	17,535	27,103	33,086	0	0	0	0	0	21,988
25-29	14,781	27,547	35,726	36,219	0	0	0	0	26,345
30-34	15,353	28,041	35,830	42,993	0	0	0	0	31,788
35-39	14,191	27,570	36,930	44,107	49,750	37,256	0	0	35,854
40-44	13,778	26,115	36,786	44,411	49,720	51,192	0	0	37,737
45-49	12,495	25,675	37,068	45,232	50,222	52,636	54,424	0	41,979
50-54	14,573	24,804	35,296	44,980	50,072	53,556	54,723	56,441	46,985
55-59	10,772	22,920	33,313	42,953	50,540	54,942	58,056	59,912	48,371
60-64	10,959	15,904	29,833	41,339	50,915	55,467	61,146	65,281	43,028
65+	7,657	8,913	19,992	40,710	47,181	61,003	60,932	63,696	23,027
All	14,388	26,693	35,966	44,284	50,048	53,231	55,598	58,849	38,406

Ten-Year Summary of Membership

Year Ended June 30	Active Members	Inactive Members	Benefit Recipients
1991	65,093	18,273	18,094
1992	65,557	19,242	19,212
1993	65,268	20,309	20,810
1994	66,514	20,901	22,137
1995	67,558	21,514	23,168
1996	68,490	22,211	24,307
1997	68,554	23,009	25,681
1998	68,247	23,907	27,228
1999	68,613	25,822	29,749
2000	70,508	25,208	31,946
2001	71,097	27,801	33,757

Ten-Year Summary of Membership



Schedule of Participating Employers

As of June 30, 2001

Independent School Districts (340)

Ada-Borup #2854	Chaska #112	Goodhue #253
Adrian #511	Chatfield #227	Goodridge #561
Aitkin #1	Chisago Lakes #2144	Granada-Huntley-E. Chain #2536
Albany #745	Chisholm #695	Grand Meadow #495
Albert Lea #241	Chokio-Alberta #771	Grand Rapids #318
Alden #242	Clearbrook-Gonvick #2311	Greenbush-Middle River #2683
Alexandria #206	Cleveland #391	Greenway #316
Annandale #876	Climax #592	Grygla #447
Anoka-Hennepin #11	Clinton-Graceville-Beardsley #2888	Hancock #768
Ashby #261	Cloquet #94	Hastings #200
Atwater-Cosmos-Grove City #2396	Columbia Heights #13	Hawley #150
Austin #492	Comfrey #81	Hayfield #203
Badger #676	Cook County #166	Hendricks #402
Bagley #162	Cromwell #95	Henning #545
Balaton #411	Crookston #593	Herman-Norcross #264
Barnesville #146	Crosby-Ironton #182	Hermantown #700
Barnum #91	Cyrus #611	Heron Lake-Okabena #330
Battle Lake #542	Dassel-Cokato #466	Hibbing #701
Becker #726	Dawson #378	Hill City #2
Belgrade-Brooten-Elrosa #2364	Deer River #317	Hills-Beaver Creek #671
Belle Plaine #716	Delano #879	Hinckley-Finlayson #2165
Bellingham #371	Detroit Lakes #22	Holdingford #738
Bemidji #31	Dilworth-Glyndon-Felton #2164	Hopkins #270
Benson #777	Dover-Eyota #533	Houston #294
Bertha-Hewitt #786	Eagle Valley #2759	Howard Lake-Waverly-Winsted #2687
Big Lake #727	East Central #2580	Hutchinson #423
Bird Island-Olivia-Lake Lillian #2534	East Grand Forks #595	International Falls #361
Blackduck #32	Eden Prairie #272	Inver Grove Heights #199
Blooming Prairie #756	Eden Valley #463	Isle #473
Bloomington #271	Edgerton #581	Ivanhoe #403
Blue Earth #2860	Edina #273	Jackson County Central #2895
Braham #314	Elgin-Millville #806	Janesville-Waldorf-Pemberton #2835
Brainerd #181	Elk River #728	Jordan #717
Brandon #207	Ellsworth #514	Kasson-Mantorville #204
Breckenridge #846	Ely #696	Kelliher #36
Brewster #513	Esko #99	Kenyon-Wanamingo #2172
Brooklyn Center #286	Evansville #208	Kerkhoven-Murdock-Sunburg #775
Browerville #787	Eveleth-Gilbert #2154	Kimball #739
Browns Valley #801	Fairmont-Ceylon #2752	Kingsland #2137
Buffalo #877	Faribault #656	Kittson Central #2171
Buffalo Lake-Hector #2159	Farmington #192	La Crescent-Hokah #300
Burnsville #191	Fergus Falls #544	Lake Benton #404
Butterfield #836	Fertile-Beltrami #599	Lake City #813
Byron #531	Fillmore Central #2198	Lake Crystal-Wellcome Memorial #2071
Caledonia #299	Fisher #600	Lake of the Woods #390
Cambridge-Isanti #911	Floodwood #698	Lake Park-Audubon #2889
Campbell-Tintah #852	Foley #51	Lake Superior #381
Canby #891	Forest Lake #831	Lakeview #2167
Cannon Falls #252	Fosston #601	Lakeville #194
Carlton #93	Frazee #23	Lancaster #356
Cass Lake #115	Fridley #14	Lanesboro #229
Cedar Mountain #2754	Fulda #505	Laporte #306
Centennial #12	Gibbon-Fairfax-Winthrop #2365	Le Center #392
	Glencoe-Silver Lake #2859	LeRoy #499
	Glenville-Emmons #2886	Lester Prairie #424

Le Sueur-Henderson #2397
 Lewiston #857
 Litchfield #465
 Little Falls #482
 Littlefork-Big Falls #362
 Long Prairie-Grey Eagle #2753
 Luverne #2184
 Lyle #497
 Lynd #415
 MACCRAY #2180
 Mabel-Canton #238
 Madelia #837
 Mahnomen #432
 Mahtomedi #832
 Mankato #77
 Maple Lake #881
 Maple River #2135
 Marshall #413
 Martin County W #2448
 McLeod West #2887
 McGregor #4
 Medford #763
 Melrose #740
 Menahga #821
 Mesabi East #2711
 Milaca #912
 Milroy # 635
 Minneota #414
 Minnetonka #276
 Minnewaska Area #2149
 Montevideo #129
 Montgomery #394
 Monticello #882
 Moorhead #152
 Moose Lake #97
 Mora #332
 Morris #769
 Mounds View #621
 Mountain Iron-Buhl #712
 Mountain Lake #173
 Murray County Central #2169
 NRHEG #2168
 Nashwauk-Keewatin #319
 Nett Lake #707
 Nevis #308
 New London-Spicer #345
 New Prague #721
 New Ulm #88
 New York Mills #553
 Newfolden #441
 Nicollet #507
 Norman Cty East #2215
 Norman Cty West #2527
 North Branch #138
 North St. Paul-Maplewood #622
 Northfield #659
 Norwood Young America #108
 Ogilvie #333
 Oklee #627
 Onamia #480
 Orono #278
 Ortonville #62
 Osakis #213
 Osseo #279
 Owatonna #761
 Park Rapids #309
 Parkers Prairie #547
 Paynesville #741
 Pelican Rapids #548
 Pequot Lakes #186
 Perham #549
 Pierz #484
 Pillager #116
 Pine City #578
 Pine Island #255
 Pine Point #25
 Pine River-Backus #2174
 Pipestone-Jasper #2689
 Plainview #810
 Plummer #628
 Princeton #477
 Prinsburg #815
 Prior Lake #719
 Proctor #704
 Randolph #195
 Red Lake #38
 Red Lake Falls #630
 Red Rock Central #2884
 Red Wing #256
 Redwood Falls #2758
 Remer #118
 Renville County #2890
 Richfield #280
 Robbinsdale #281
 Rochester #535
 Rockford #883
 Rocori #750
 Roseau #682
 Rosemount-Apple Valley-Eagan #196
 Roseville #623
 Rothsay #850
 Round Lake #516
 Royalton #485
 Rush City #139
 Rushford-Peterson #239
 Russell #418
 Ruthton #584
 St. Anthony-New Brighton #282
 St. Charles #858
 St. Clair #75
 St. Cloud #742
 St. Francis #15
 St. James #840
 St. Louis County #2142
 St. Louis Park #283
 St. Michael-Albertville #885
 St. Peter #508
 Sartell #748
 Sauk Centre #743
 Sauk Rapids #47
 Sebeka #820
 Shakopee #720
 Sibley East #2310
 Sleepy Eye #84
 So. Koochiching #363
 So. St. Paul #6
 So. Washington County #833
 Southland #500
 Spring Grove #297
 Spring Lake Park #16
 Springfield #85
 Staples-Motley #2170
 Stephen-Argyle #2856
 Stewartville #534
 Stillwater #834
 Swanville #486
 Thief River Falls #564
 Tracy #417
 Tri-County #2358
 Tri District #6067
 Triton #2125
 Truman #458
 Tyler #409
 Ulen-Hitterdal #914
 Underwood #550
 United South Central #2134
 Upsala #487
 Verndale #818
 Virginia #706
 Wabasha-Kellogg #811
 Wabasso #640
 Waconia #110
 Wadena-Deer Creek #2155
 Walker-Hackensack-Akeley #113
 Walnut Grove #641
 Warren-Alvarado-Oslo #2176
 Warroad #690
 Waseca #829
 Watertown-Mayer #111
 Waterville-Elysian-Morristown #2143
 Waubun #435
 Wayzata #284
 West Central Area #2342
 W St. Paul-Mendota Heights-Eagan #197
 Westbrook #175
 Westonka #277
 Wheaton #803
 White Bear Lake #624
 Willmar #347
 Willow River #577
 Windom #177
 Win-E-Mac #2609
 Winona #861
 Worthington #518
 Wrenshall #100
 Yellow Medicine East #2190
 Zumbrota-Mazeppa #2805

Joint Powers Units (40)

Area Special Ed Coop.
 Bemidji Regional Interdistrict Council
 Benton-Stearns Ed. Dist.
 Border Region Ed. Dist.
 Carver-Scott Ed. Coop.
 Fergus Falls Area Special Ed. Coop.
 Freshwater Ed. Dist.
 Goodhue Cty. Ed. Dist.
 Hiawatha Valley Ed. Dist.
 Intermediate School Dist. #287
 Intermediate School Dist. #916
 Intermediate School Dist. #917
 Lac qui Parle Valley
 Lake Agassiz Special Ed. Coop.
 Lakes Country Services Coop.
 Meeker & Wright Special Ed. Coop.
 Metro Education Coop. Unit
 Midstate Ed. Dist.
 Midwest Special Ed. Coop.
 MN River Valley Special Ed. Coop.
 MN Valley Ed. Dist.
 MN Valley Cooperative Ctr.
 North Central ECSU #5
 N. Country Vocational Coop. Ctr.
 Northeast Service Coop.
 Northwest Service Coop
 Northwest Reg. Interdistrict Council
 Pine to Prairie Coop. Ctr.
 Resource Training and Solutions
 Riverbend Ed. Dist.
 Root River Ed. Dist.
 Runestone Area Ed. Dist.
 Southwest/West Central ECSU
 South Central ECSU
 Southeast ECSU
 Technology and Information
 Educational Services (TIES)
 West Central Ed. Dist.
 West Central Migrant Project
 Wright Technical Ctr.
 Zumbro Ed. Dist.

**MN State Colleges
and Universities (40)**

Akita Japan State University
 Alexandria Technical College
 Anoka-Hennepin Technical College
 Anoka-Ramsey Community College
 Bemidji State University
 Central Lakes College
 Century Community & Technical
 College
 Dakota County Technical College
 Fergus Falls Community College
 Fond du Lac Community College
 Hennepin Technical College
 Hibbing Community College
 Inver Hills Community College
 Itasca Community College
 Lake Superior College
 Mesabi Range Community & Technical
 College
 Metropolitan State University
 Minneapolis Community & Technical
 College
 Minnesota State College - SE Technical
 Minnesota State University, Mankato
 Minnesota West Community &
 Technical College
 MnSCU Board Office
 Moorhead State University
 Normandale Community College
 Northeast Service Unit
 North Hennepin Community College
 Northland Community & Technical
 College
 Northwest Technical College
 Pine Technical College
 Rainy River Community College
 Ridgewater College
 Riverland Community College
 Rochester Community & Technical
 College
 South Central Technical College
 Southwest State University
 St Cloud State University
 St Cloud Technical College
 St Paul Technical College
 Vermilion Community College
 Winona State University

Charter Schools (28)

Bluffview Montessori #4001
 Coon Rapids Learning Center #4049
 Crosslake Community School #4059
 ECHO Charter School #4026
 Eci Nompaa Woonspe #4028
 Emily Charter School #4012
 Family Academy Charter School #4062
 Hanska Community School #4051
 LaCrescent Montessori Academy #4054
 Lafayette Charter School #4050
 Martin Hughes School #4040
 Math & Science Academy #4043
 Nerstrand Elementary School #4055
 New Country Charter School #4007
 New Heights Charter School #4003
 North Lakes Academy #4053
 Odyssey Charter School #4030
 PACT Charter School #4008
 PEAK'S Charter Schools #4045, #4048
 Riverbend Academy #4066
 Riverway Learning Community #4064
 Rochester Off-Campus Charter HS #4056
 Schoolcraft Learning Community #4058
 Studio Academy #4061
 Village School of Northfield #4021
 World Learner Charter School #4016
 Yankton County School #4072

State Agencies (14)

Anoka Metro Regional Treatment Ctr
 Brainerd Regional Human Services Ctr
 Department of Children, Families &
 Learning
 Department of Economic Security
 Faribault Residential Academies
 Fergus Falls Regional Treatment Ctr
 Higher Education Services Office
 MN Correctional Facility, Red Wing
 MN Correctional Facility, Thistledeew
 MN Department of Corrections
 Minnesota Extended Treatment Options
 Perpich Center for Arts Education
 Teachers Retirement Association
 Willmar Regional Treatment Ctr

Professional Organizations (1)

Education Minnesota