## Comprehensive Annual Financial Report

For the Fiscal Year Ended June 30, 1999

" $\mathcal{A}$ teacher affects eternity, he can never tell where fis influence stops." Henry B. Addams, 1906

## Teachers Retirement Association

LB2842.2
T44c
1999

## A Pension Trust Fund of the State of Minnesota

# Comprehensive Annual Financial Report 

For the Fiscal Year Ended June 30, 1999

"You teach best what you most need to Cearn."
Richard Bach

# Teachers Retirement Association <br> A Pension Trust Fund of the State of Minnesota <br> Gary Austin <br> Executive Director 

17 West Exchange Street, Suite 500
Saint Paul, MN 55102
(800) 657-3669
(651) 296-2409
www.tra.state.mn.us

## Table of Contents

Introductory Section
GFOA Certificate of Achievement Award .....  2
Letter of Transmittal ..... 3
Board of Trustees and Administrative Staff ..... 8
Administrative Organization ..... 9
Mission Statement and Values ..... 10
Financial Section
Auditor's Report ..... 12
Statement of Plan Net Assets ..... 14
Statement of Changes in Plan Net Assets ..... 15
Notes to the Financial Statements (An integral part of the financial statements.) ..... 16
Required Supplemental Schedule: Employer Contributions ..... 24
Required Supplemental Schedule: Funding Progress ..... 24
Notes to Required Supplemental Schedule ..... 25
Administrative Expenses ..... 27
Schedule of Changes in Plan Net Assets ..... 28
Consultant Expenditures ..... 30
Investments Section
Investment Summary . ..... 32
Basic Retirement Funds (Active Members) ..... 33
Minnesota Post Retirement Investment Fund (Post Fund) ..... 35
Portfolio Distribution and Investment Returns ..... 38
List of Largest Assets Held ..... 39
Summary of Investments (Basic Funds for active members) ..... 40
Actuarial Section
Actuary's Letter ..... 42
Summary of Actuarial Assumptions and Methods ..... 44
Valuation Report Highlights ..... 46
Actuary's Commentary ..... 47
Selected Tables from Actuarial Valuation ..... 49
Summary of Actuarial and Unfunded Actuarial Liabilities ..... 54
Solvency Test ..... 55
Schedule of Active Member Valuation Data ..... 56
Schedule of Retirees and Beneficiaries ..... 56
Statistical Section
Plan Summary ..... 58
Ten-Year Summary of Revenue and Expenditures ..... 62
Summary of Changes in Membership ..... 63
Distribution of Active Members ..... 66
Average Annual Earnings of Active Members ..... 66
Ten-Year Summary of Membership ..... 67
Schedule of Participating Employers ..... 68


## Letter of Transmittal



Gary Austin
Executive Director

## Teachers Retirement Association



Suite 500, Gallery Building 17 West Exchange Street Saint Paul, MN 55102 (651) 296-2409 (800) 657-3669

Fax (651) 297-5999

December 31, 1999

Members of the Board of Trustees
Teachers Retirement Association
17 West Exchange Street
Saint Paul, MN 55102
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, 1999, our 68th year of service. This report includes the following five sections:

- Introductory Section describing our organizational structure and nature of operations,
- Financial Section containing the general purpose financial statements, notes to the financial statements, actuarial disclosures and the opinion of our independent auditor,
- Investment Section highlighting our asset management and investment performance,
- Actuarial Section containing the certification and results of the actuarial valuation performed by Milliman \& Robertson as of July 1, 1999, and
- Statistical Section summarizing TRA plan benefits and illustrating both current and historical data of interest.
We are solely responsible for the content of this report, including its financial statements, that 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 Controll

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 market value. We also maintain a system of internal controls designed to assure responsible safeguarding of assets and reliable financial records.

## Fimancial Highlights

The TRA Statement of Plan Net Assets stands at over $\$ 16$ billion. The continued exceptional performance in the investment markets over the past decade is the primary reason for the continued growth in the asset base. In the past five years, the value of TRA assets has more than doubled.

For the first time, TRA's $\$ 8.6$ billion in assets in the Minnesota Post Retirement Investment Fund (Post Fund) for retired members exceeds TRA's $\$ 8.1$ billion in assets in the active member fund. 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 revenues for fiscal year 1999 were $\$ 2$ billion, a decrease of 31 percent from the previous year's total of $\$ 2.9$ billion. Smaller but still strong investment returns accounted for much of the decrease. A decrease in employer contributions on April 1, 1998 also contributed to the reduction in revenue.

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 1999 were $\$ 621$ million, an increase of over 16 percent from the previous fiscal year. Eligible members may also choose to withdraw their contributions from the fund upon leaving employment. For fiscal year 1999, refunds to members were over $\$ 6$ million. In total, benefit payments account for over 98 percent of our operating
expenses. Administrative expenses for the year were about $\$ 8$ million.

As of June 30, 1999, TRA had 458 reporting employer units, 68,613 active members and a total of 29,749 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. Our total net assets on an actuarial basis increased during the fiscal year from $\$ 12.7$ billion to $\$ 14$ billion. The total required reserves necessary to fund current and future retirees of the fund also increased from $\$ 12.0$ billion to $\$ 13.3$ billion. The comparison of net assets to required reserves shows that the funding ratio for fiscal year 1999 was 105.67 percent, essentially the same as the comparable 105.66 percent for fiscal year 1998 and the third consecutive year in which the TRA fund is considered fully funded from an actuarial standpoint. Accordingly, TRA has eliminated its unfunded actuarial liability. As recently as five years ago, the TRA unfunded liability stood at approximately $\$ 1.5$ billion. Significant actuarial gains resulting from a favorable investment market and lower than expected increases in members' salaries over this period accounted for the amortization of the unfunded liability.

## 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.

Fiscal year 1999 was another strong year for most financial assets. Amid continued low inflation and positive corporate earnings reports, the U.S. stock
market produced exceptionally strong returns for the fifth consecutive year. The Wilshire 5000 increased 19.6 percent which is significantly more than its historical average. With rising long-term interest rates and poor performance in the corporate sector for the 12month period, the U.S. bond market, as measured by the Lehman Brothers Aggregate Bond Index, provided a gain of 3.1 percent, which is less than its historical average.

The performance of international stock markets was mixed during the year. Developed markets lagged the U.S. market and were below historical averages. The Morgan Stanley Capital International index of Europe, Australia and the Far East (EAFE) gained 7.6 percent for the twelve months ended June 30, 1999. The markets of developing countries, often referred to as "emerging markets," performed well, returning 28.7 percent over the fiscal year.

## Investment Results

Within this investment environment, the retirement assets under the SBI's control performed well:

- The Basic Retirement Funds (Basic Fund) for active members gained 11.3 percent during fiscal year 1999. The Basic Fund benefited from its high U.S. stock exposure as well as strong returns from international equities.
- The Post Fund for retired members gained 12.1 percent for the fiscal year. This gain, combined with strong returns in prior years, will provide a lifetime post retirement benefit increase of 11.14 percent for eligible retirees.


## Economic Conditions and Outlook

Minnesota's economy continued its superb performance during the 1999 fiscal year. Personal income grew by 5.9 percent, 0.3 percent greater than the U.S. average of 5.6 percent, despite extremely low agricultural commodity prices. The state's unemployment rate continued to be among the lowest in the nation, reaching an all time low of 2.1 percent in April. For fiscal 1999, unemployment in Minnesota averaged 2.4 percent on a seasonally adjusted basis, down from fiscal

1998's average of 2.8 percent. Nationally, seasonally adjusted unemployment rates averaged 4.4 percent during fiscal 1999. Even with these low unemployment rates and historically high labor force participation rates, job growth was strong. During fiscal 1999, payroll employment grew by a healthy 1.8 percent, with more than 45,000 new jobs being added. Nationally, payroll employment grew by 2.1 percent.

Minnesota's economy is projected to grow at the same rate as its U.S. counterpart during fiscal 2000. The strengthening of Asian economies will be important, since Minnesota is among the leaders in the proportion of manufacturing output exported to Asia. While continuing tight labor markets are expected to hold job growth to levels slightly below the U.S. averages, wage growth is expected to match the U.S. average as labor shortages lead to use of the existing work force in more productive and higher paying positions. Federal farm disaster assistance will keep farm incomes in fiscal 2000 near the average of the nineties, but that assistance does nothing to remedy the longer term problems facing American agriculture.

## 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 1999 was mailed to each active member in October 1999.

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. A plan summary with financial and actuarial data for the year ended June 30, 1999 will be distributed to each active and retired member in the Winter 2000 edition of the $T R I B$, our quarterly newsletter.

We also have initiated a new effort to serve our members who are no longer actively teaching, but have chosen to leave their member contributions with TRA. In November 1999, inactive TRA members received their first Annual Statement of Account balance with contribution and service data.

A comprehensive Benefit Handbook containing financial and plan information is nearly finished and will be mailed to all active members early in 2000.

## Customer Services

Meeting the demands of today while planning to improve the quality of service in the future is a daily two-pronged challenge at TRA. Both goals were met through strong efforts by TRA employees during the past fiscal year. 1999 saw a record number of teachers retiring, mainly due to the applicability of a little-known benefit clause in TRA law for certain teachers first hired prior to July 1, 1969. In mid-1998, increasing numbers of retiring TRA members were eligible for an optional higher benefit called the Improved Money Purchase (IMP) savings clause. This savings clause, inserted into law by the 1973 Legislature, allows members who did not formally elect one of the defined benefit options by June 30, 1972 to retain eligibility for the defined contribution IMP program which had been in place at the time they were first employed. The savings clause allows for benefits to be calculated under the High-Five Formula or IMP, whichever is larger. Since 1973, the savings clause has been there for eligible retiring members, but was seldom used.

Strong investment returns have produced higher than anticipated IMP interest rates. The higher rates, compounded onto large account balances, have resulted in larger monthly benefit payments under IMP than under the High-Five Formula for some members. Over 3,000 teachers retired during the fiscal year, nearly half of whom had their benefits calculated under the IMP
provision. Demand for counseling services was unprecedented as eligible members needed to reassess their retirement planning. Nearly 2,000 IMP eligible members remain active after July 1, 1999 and we are targeting mailings and other services specifically to their needs.

The passage of the 1999 legislation authorizing the purchase of prior service also generated thousands of inquiries from members interested in their eligibility and estimated cost for past service.

To meet these pre-retirement information demands, we enhanced the features of our World Wide Web site, www.tra.state.mn.us. Members are now able to interactively generate benefit estimates based on salary and service variables they select. In addition, an estimator was provided to calculate the cost for members interested in purchasing various amounts of prior service credit. Even with these options, our individual pre-retirement counseling sessions for members approaching retirement remain as one of our most requested services.

These retirement counseling services take place in both our main Saint Paul office and at 15 locations throughout the state. Large and small group presentations are also now offered for those desiring general information on TRA retirement and benefit issues. The quarterly newsletter, the $T R I B$, is mailed to all active and retired members. Our web site is updated regularly with the latest news of TRA events and happenings.

Beyond the current workload, we also have employees working on improving the services we plan to offer in the future. During fiscal year 1999, we implemented an electronic document imaging system and began converting historical paper records into an imaged format. The electronic flow of documents increases the efficiency of our benefit processing and provides the means to safeguard critical records in the event of a disaster or business interruption.

A team of TRA employees also completed a general systems design of major administrative processes during the fiscal year. The design was key to the issuance of a Request for Proposal (RFP) for a complete rewriting of our systems applications. We are presently evaluating proposals for this major effort and
intend to recommend one vendor to the Board of Trustees early in 2000. Detailed design and programming of TRA's major business functions would proceed in stages over a four-year period.

## Legislation and Initiatives

Two major TRA initiatives were passed by the 1999 Legislature and signed by Governor Ventura. The first permits the purchase of service credit for out-of-state service, certain leaves of absences and service at private or parochial schools. The cost of the service is based on an actuarial formula factoring in the incremental benefit increase of the additional service plus recognizing the member will likely retire sooner than had been previously anticipated. This optional purchase of service provision was used by 22 members before the June $30^{\text {th }}$ fiscal year end.

The second major legislative success was passage of authorization to construct a new office building housing the administrative offices of TRA with the Public Employees Retirement Association (PERA) and the Minnesota State Retirement System (MSRS). Financing of the building will be shared among the three retirement agencies with TRA expected to retain a 40 percent ownership interest. A land site north of the State Capitol in Saint Paul has been purchased. Groundbreaking is expected to begin in the spring of 2000 with occupancy slated for the fall of 2001 . The long-term financial benefits of ownership as opposed to leasing supported the decision to build. In addition, we believe member services will improve through a combined location, adequate parking, and facilities designed to support group retirement counseling.

We expect various benefit improvements will be proposed to the 2000 Legislature. One major concern is management's goal to maintain adequate pre-funding of promised benefits. We will closely scrutinize all benefit improvement proposals, obtain actuarial cost estimates, and provide financial and demographic data to legislators for their consideration.

## 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, 1998. 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 reproduction of this award appears in the Introductory section of this report. Its attainment, our first, represents a significant accomplishment by TRA management and employees who contributed to the contents and production of the publication.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for the 1999 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, our advisors, 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 of Administration

## Board of Trustees

## As of December 1, 1999



Carol F. Ackerson Elected Member New Ulm, MN


Sandy Schaefer
Elected Member Fairfax, MN

Vice President


Curtis D. Hutchens Elected Member St. Cloud, MN


Bob Lowe Minnesota School Boards Association Representative

## Administration



Gary Austin
Executive Director


John Wicklund
Assistant Director of
Administration


Karen Williamson
Assistant Director of
Operations


Martha Lee (Marti) Zins Elected Member Hopkins, MN


Bill Eisele
Representing
Pam Wheelock
Commissioner of Finance


Luther Thompson
Assistant Director Legal and Legislative Services

## Administrative Organization

## As of December 1999



## Consulting Services

## Actuary

Buck Consultants
San Francisco, California

Auditor<br>Office of the Legislative Auditor<br>Saint Paul, Minnesota<br>Legal Counsel<br>Office of the Attorney General<br>Saint Paul, Minnesota<br>Medical Advisor<br>Minnesota Department of Health<br>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 Provide ongoing employee development that encourages cooperation and mutual respect, Excellence focuses on common goals and recognizes superior performance.

## Financial Section


"An understanding heart is everything in a teacher, and cannot be esteemed highty enough." CarlJung

Office of the Legislative Auditor STATE OF MINNESOTA • James Nobles, Legislative Auditor

## Independent Auditor's Report

Board of Trustees and
Executive Director
Teachers Retirement Association

We have audited the accompanying statement of plan net assets of the Teachers Retirement Association as of June 30, 1999, and the related statement of changes in plan net assets for the year then ended. These financial statements are the responsibility of the association's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards and 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, 1999, and the results of its operations for the year then ended in conformity with generally accepted accounting principles.

The required supplementary information on pages 24 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.

We were unable to apply to the year 2000 required supplementary information certain procedures prescribed by professional standards because of the nature of the subject matter underlying the disclosure requirements and because sufficiently specific criteria

Board of Trustees and<br>Executive Director<br>Teachers Retirement Association<br>Page 2

regarding the matter to be disclosed have not been established. In addition, we do not provide assurance that the TRA is or will become year 2000 compliant, that its remediation efforts will be successful in whole or in part, or that parties with which TRA does business are or will become year 2000 compliant.

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 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.

In accordance with Government Auditing Standards, we have issued a report dated December 1, 1999, on our consideration of TRA's internal control structure and compliance with laws and regulations.

Gamir R. Mouls
James R. Nobles
Legislative Auditor


December 1, 1999

## Teachers Retirement Fund Statement of Plan Net Assets <br> As of June 30, 1999

Assets
Cash and short-term investments
Cash ..... \$ 1,079,876
Short-term investments ..... 79,523,229
Total Cash and short-term investments ..... \$ 80,603,105
Receivables
Employer Contributions ..... \$ $22,822,857$
Investment Income ..... 332,185
Total Receivables ..... \$ 23,155,042
Investments (at fair value)
Equity in the Post Fund\$ 8,669,445,089
Fixed Income Pool ..... 1,683,900,692
Venture Capital Pool ..... 400,748,613
Indexed Equity Pool ..... 1,454,379,194
Real Estate Fund Pool ..... 303,322,179
Resource Fund Pool ..... 62,172,585
Domestic Equity Pool ..... 3,015,586,999
Global Equity Pool ..... 1,192,530,779
Total Investments \$ 16,782,086,130
Securities Lending Collateral ..... \$ 1,628,456,784
Fixed Assets Net of Accumulated Depreciation ..... \$ 1,293,376
Total Assets ..... \$ 18,515,594,437
Liabilitities
Current
Accounts Payable ..... \$ 6,842,740
Due to the Post Fund ..... 187,451,062
Accrued Compensated Absences ..... 415,316
Securities Lending Collateral ..... 1,628,456,784
Total Liabilities ..... \$ 1,823,165,902
Net Assets Held in Trust for Pension Benefits ..... \$16,692,428,535
(A Schedule of Funding Progress for the plan is presented on page 24.)
The accompanying notes are an integral part of this statement.

# Teachers Retirement Fund <br> Statement of Changes in Plan Net Assets <br> For the fiscal year ended June 30, 1999 

## Additions

## Contributions

Employee .................................................................................. \$ 132,040,005
Employer ................................................................................... 130,525,591
Total Contributions .......................................................................... \$ 262,565,596

## Net Investment Income

Investment Income..................................................................... \$ 1,778,606,093
Less Investment Expense
$(10,519,342)$
Net Investment Income .................................................................... \$ 1,768,086,751
From Securities Lending Activities
Securities Lending Income ......................................................... \$ 84,092,386
Securities Lending Expenses:
Borrower Rebates
(74,198,269)
Management Fees
$(2,576,801)$
Total Securities Lending Expenses .............................................. (76,775,070)
Net Income from Securities Lending .......................................... $\quad 7,317,316$
Total Net Investment Income ............................................................ \$ 1,775,404,067
Other Income ................................................................................... \$ 1,587,211
Total Additions ................................................................................. \$ 2,039,556,874

## Deductions

Retirement Benefits Paid .................................................................. \$ 620,937,964
Refunds of Contributions to Members .............................................. 6, 6, 271,448
Administrative Expenses .................................................................. 7,976,908
Interest Paid to the Post Fund ............................................................ 1,764,550
Total Deductions .............................................................................. \$ 636,950,870
Net Increase ..................................................................................... \$ 1,402,606,004

## Net Assets Held in Trust for Pension Benefits

Beginning of Year ............................................................................ \$ 15,289,822,531
End of Year .................................................................................... \$ 16,692,428,535
The accompanying notes are an integral part of this statement.

## Notes to the Financial Statements

## For the Fiscal Year Ended June 30, 1999

## I. Plan Description

## A. Organization

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

## B. Participating Members and Employers

Teachers employed in Minnesota's public elementary and secondary schools, 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.

Figure 1

## Employer Units

|  | June $\mathbf{3 0 1 9 9 9}$ |
| :--- | ---: |
| Independent school districts | 344 |
| Joint powers units | 41 |
| Colleges and universities | 39 |
| State agencies | 17 |
| Charter schools | 15 |
| Professional organizations | $\underline{2}$ |
| Total Employer Units | $\underline{\underline{458}}$ |

## Membership

June 301999
Retirees, disabilitants and beneficiaries receiving benefits $\quad 29,749$

Terminated employees with

| deferred vested benefits |  |
| :--- | ---: |
| Total | $\underline{7,020}$ |
| $\underline{\underline{36,769}}$ |  |

Current employees
Vested 51,839
$\begin{array}{ll}\text { Non-vested } & \underline{16,774} \\ \text { Total } & \underline{\underline{68,613}}\end{array}$

Under Tier I, the annuity accrual rate for Basic members is 2.2 percent of average salary for each of the first 10 years of service and 2.7 percent for each remaining year. For a Coordinated member, the annuity accrual rate is 1.2 percent of average salary for each of the first 10 years of service and 1.7 percent for each remaining year. 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.

## III. 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 11 A , the state's retirement fund assets are commingled in various pooled investment accounts, administered by the State Board of Investment (SBI). As of June 30, 1999, the participation shares in the pooled accounts at market value for the TRA Active Fund was approximately 42 percent. The TRA share of the net assets of the Minnesota Post Retirement Investment Fund (Post Fund) at market values totaled 44.9 percent. Figure 2 provides specific totals.
2. Minnesota Statutes, section 11A. 24 broadly restricts retirement fund investments to obligations and stocks of United States and Canadian governments, their agencies and their registered corporations; short-term obligations of specified high quality;
restricted participation as a limited partner in venture capital, real estate or resource equity investments; restricted participation in registered mutual funds; and some qualified foreign instruments.
3. 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 broker, dealer, or counterpart's trust or agent in the state's name. Risk Category 3 includes uninsured or unregistered investments for which the securities held by the broker, dealer, 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

Figure 2

| TRA Investment Portfolio June 30, 1999 |  |  |
| :---: | :---: | :---: |
| Basic (Active) Fund | Cost | Market |
| Pooled Accounts |  |  |
| Fixed Income | \$1,740,571,312 | \$1,683,900,692 |
| Domestic Equity | 2,557,963,306 | 3,015,586,999 |
| Indexed Equity | 870,970,792 | 1,454,379,194 |
| Global Equity | 1,056,886,984 | 1,192,530,779 |
| Venture Capital | 415,550,589 | 400,748,613 |
| Real Estate | 242,204,589 | 303,322,179 |
| Resources Pool | 83,365,858 | 62,172,585 |
| Total | \$6,967,513,430 | \$8,112,641,041 |
| Short-Term Pooled Cash | 79,523,229 | 79,523,229 |
| Post Fund Account | 6,751,681,999 | 8,669,445,089 |
| Total Invested | \$13,798,718,658 | \$16,861,609,359 |

risk. All TRA investments are in SBIadministered 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.
4. 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 200, 590 Park Street, Saint Paul, Minnesota 55103.

## D. Method Used to Vallue Investments

Investments in the pooled accounts are reported at fair value. Figure 2 provides a summary of the cost and market values of the investments as of June 30, 1999 as reported on the Statement of Plan Net Assets. Shortterm 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 were $\$ 1,768,086,751$ for fiscal year 1999. 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 $\$ 10,519,342$.

## 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 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

Figure 3

| Net Investment Income |  |  |
| :---: | :---: | :---: |
| Investment Income |  | 1999 |
| Net Appreciation in Fair Value: |  |  |
| Investment Pools ...................................... | \$ | 72,875,288 |
| Post-Retirement Participation ...................... |  | 70,322,097 |
| Interest ........................................................ |  | 118,752,053 |
| Dividends ........................................................ |  | 527,279,991 |
| Net Gain on Sales of Pools ................................ |  | 156,898,146 |
| Post Fund ......................................................... |  | 832,478,518 |
| Less: Investment Expense ................................. |  | $(10,519,342)$ |
| Net Investment Income ............................................ | \$ | 1,768,086,751 |

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, 1999, 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, 1999 were $\$ 1,628,456,784$ and $\$ 1,580,983,295$ respectively.

## F. Accrued Compensated Albsences

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 are three to ten years.

Fixed assets as presented on the June 30, 1999 Statement of Net Assets Available were $\$ 2,458,404$ at cost. Accumulated depreciation totaled $\$ 1,165,029$ resulting in a net fixed asset value of $\$ 1,293,375$.

## H. Operating Leases

TRA is committed under lease agreements for rental of office space through April 30, 2001. For accounting purposes, these leases are considered operating leases. Lease
expenditures for fiscal year 1999 totaled $\$ 288,325$. Minimum rental payments required as of June 30, 1999 are shown in Figure 4.

Figure 4

## Minimum Rental Payments

Fiscal Year
Ending June 30

| Amount |
| ---: |
| 378,184 |
| 345,161 |
| $\$ 723,345$ |

## II. 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 financed through investment earnings and turnover gains from employer contributions of members obtaining a refund of their employee contributions.

## J. 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 1999, the combined depository insurance and collateral was sufficient to meet legal requirements and secure all TRA deposits.

## K. 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, 1999. 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.

## L. Improved Money Purchase (IMIP)

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-5 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-5 Average Formula benefit. This phenomenon occurred as strong annual investment returns generated high interest rates compounding on
large employee contribution balances accumulated after long teaching careers.

Approximately 1,400 members retired during fiscal year 1999 whose benefit was higher under the IMP provision. As of June 30, 1999, TRA estimates that approximately 1,900 IMP-eligible members are still actively teaching.

Actuarially, projected benefits for all TRA members are budgeted at their estimated High-5 Average Formula amount at retirement, not their estimated IMP benefit amount. On page 52, line D5, the actuarial loss of over \$207 million during fiscal year 1999 is largely due to unexpected, higher initial benefits paid to retiring IMP-eligible members.

Due to the fact that IMP eligibility is limited to a closed group of members, TRA management believes that the actuarial impact of remaining IMP-eligible members will not adversely harm the overall financial integrity of the fund. Another mitigating factor is that an actuarial loss associated with IMP is likely to be at least partially offset by an actuarial gain with investment returns. (See page 52, line D2 in comparison to line D5.)

## M. Construction of Office Building

The 1999 Legislature authorized the construction of a new building to house the administrative offices of TRA, the Public Employees Retirement Association and the Minnesota State Retirement System. The three statewide retirement agencies will finance the construction costs of the building by backing revenue bonds issued by the Department of Finance. The cost of the project is estimated at $\$ 32$ million with TRA projected as a 40 percent owner. Ownership of the building will be in the name of the State of Minnesota, held in trust for each of the three statewide retirement agencies.

No costs related to the project were incurred by June 30, 1999. Substantial activity has occurred since then including purchase of land, space planning, and solicitation of contractors. It is anticipated that the new building, located on Pennsylvania Avenue in Saint Paul, will be ready for occupancy in October, 2001.

## IIIII. Contriibutions 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 \$262,565,596
(\$132,040,005 employee and \$130,525,591 employer) were made in accordance with the actuarially determined contribution requirements. On page 53, contributions are projected as sufficient to meet the required normal costs, amortization of the unfunded liability and administrative costs.

The sufficiency, as a percent of covered payroll is 0.14 percent. This translates into a contribution sufficiency of about $\$ 3.66$ million projected for fiscal year 2000. 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, 1999, TRA's share of the net assets of the Post Fund is $\$ 6,751,682,000$ at cost and $\$ 8,669,445,089$ at market value.

Beginning in fiscal year 1993, 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, 1998 are eligible to receive the full January 1, 2000 benefit increase shown in Figure 5.

Benefit recipients whose effective date of retirement is after July 1, 1998 but before June 2, 1999 receive a prorated amount of the January 1, 2000 benefit increase.

## B. Member Reserves

Accumulated member contributions, without interest, less the amounts refunded are recorded in the member reserve. Accumulated member

Figure 5
January 1, 2000 Benefit Increase

| Inflation-Based Benefit Increase | $1.9 \%$ |
| :--- | :--- |
| Investment-Based Benefit Increase | $\underline{9.2436 \%}$ |
| Total Benefit Increase | $\underline{\underline{11.1436 \%}}$ |

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)

## (Dollars in Thousands)

| Year Ended June 30 | Actuarially Required Contribution Rate <br> (A) | Actual Covered Payroll (B) | Actual <br> Employee Contributions (C) | Annual <br> Required Contribution $[(\mathrm{A}) \times(\mathrm{B})]-(\mathrm{C})$ | 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\% |

* 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)

## (Dollars in Thousands)

| Actuarial <br> Valuation Date | Actuarial Value of Assets <br> (A) | Actuarial <br> Accrued <br> Liability <br> (AAL) <br> (B) | $\begin{gathered} \text { Unfunded } \\ \text { AAL } \\ \text { (UAAL) } \\ \text { (B - A) } \\ \hline \end{gathered}$ | Funded Ratio (A / B) | Actual <br> Covered <br> Payroll <br> (Previous FY) <br> (C) | UAAL <br> 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\% |

# Teachers Retirement Association <br> Notes to the Required Supplemental Schedules (Unaudited) 

## June 30, 1999

## 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 .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, 1999, TRA is fully funded from an actuarial standpoint.

## 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, 1999, no unfunded actuarial accrued liability exists. (See page 52.) Any increases to the unfunded accrued liability resulting from benefit improvements or unfavorable actuarial experience are combined with the outstanding balance and amortized over a closed period ending June 30, 2020.

## 2. Asset Valuation Method

For actuarial purposes, Minnesota Statutes, section 356.215 requires valuation of all investment securities at cost plus one-third of the unrealized capital gains or losses.

## 3. Actuarial Assumptions

Significant actuarial assumptions employed by the actuary for funding purposes as of July 1, 1999, 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).


## 4. Year 2000 Disclosure

For many years, TRA has been aware of the Year 2000 (Y2K) deadline looming on December 31, 1999. TRA has had the need to account for birth dates in the 1800 s and retirement estimates and payment streams extending into the next millennium. Most of our computer applications were Y 2 K compliant before the term was coined.

As part of the State of Minnesota's Y2K planning, TRA has actively participated with state officials in identifying and coordinating the work necessary to become Y2K compliant. In November 1998, the State Department of Finance tested and confirmed that the state warrant interface used to generate TRA annuity and refund payments is Y 2 K compliant.

In 1999, TRA implemented a revised employee refund system that finalized our readiness for our mainframe systems applications. During the fall of 1999, we performed on-going tests of key network hardware and software to verify compliance with Y2K requirements.

In addition, all critical external vendor applications are being monitored and they are expected to be delivered in time to meet the immovable deadline. We are especially following the progress of the hundreds of financial institutions to whom TRA directly deposits benefit checks electronically on behalf of approximately 20,000 of our benefit recipients. TRA is monitoring the compliance efforts of the Minnesota Department of Finance, Minnesota Department of Commerce and the State Treasurer's Office to ensure that members' financial institutions will be able to correctly receive January 1,2000 benefit payments.

## Administrative Expenses

For the Fiscal Year Ended June 30, 1999
Salaries ..... \$3,015,168
Employer Contributions to Retirement ..... 152,556
Employer Contributions to Social Security ..... 221,278
Insurance Contributions ..... 322,313
Actuarial Services ..... 102,415
Audit Fees ..... 39,926
Computer Support Services ..... 1,909,006
Department Head Expenses ..... 1,498
Depreciation of Office Furniture and Equipment ..... 449,593
Dues and Subscriptions ..... 7,226
Duplicating and Printing Expense ..... 206,629
Employee Training ..... 42,866
Insurance Expense ..... 2,549
Lease of Office and Storage Space ..... 288,325
Legal Fees ..... 42,023
Management Consultant Services ..... 215,053
Medical Services ..... 34,736
Miscellaneous Administrative Expenses ..... 34,725
Postage ..... 300,809
Rental of Office Machines/Furnishings ..... 49,145
Repairs and Maintenance ..... 56,982
State Indirect Costs ..... 57,229
Stationery and Office Supplies ..... 289,628
Telephone ..... 78,415
Travel-Director and Staff ..... 36,114
Travel-Trustees ..... 8,941
Worker's Compensation ..... 2,272
Board Substitute Teachers ..... 1,705
Loss on Disposal of Equipment ..... 7,783
Total Administrative Expenses ..... \$7,976,908

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

## For Fiscal Year Ended June 30, 1999

Member
Additions
Contributions:
Member Contributions ..... \$ 131,656,613
Employer Contributions
Employer Contributions ..... 0
$131,656,613$
Total Contributions
Investment Income:
Net Appreciation in FMV ..... 0
Interest ..... 0
Dividends ..... 0
Net Gain on Sales of Pools ..... 0
Distributed Income from Post Fund ..... 0
Investment management Fees ..... 0
Net Investment Income ..... 0
From Securities Lending Activities:
Securities Lending Income ..... 0
Securities Lending Borrower Rebates ..... 0
Securities Lending Management Fees ..... 0
Net Income from Securities Lending ..... 0
Other Income ..... 0
Total Additions
Deductions
Benefits Paid ..... 0
Refunds of Member Contributions ..... 5,967,645
Administrative Expenses ..... 0
Interest Paid MPRIF Fund ..... 0
Total Expenses ..... \$ $5,967,645$
Net Increase ..... \$ $125,688,968$
Other Changes in Reserves
Annuities Awarded ..... (\$ 110,941,237)
Other Transfers ..... 3,825,491
Mortality Loss ..... 0
Total Other Changes (\$107,115,746)
Net Assets Held in Trust for Pension Benefits
Beginning of Year ..... 1,303,005,687
End of Year \$ 1,321,578,909

The accompanying notes are an integral part of this statement.

Reserves for 1999

| Post <br> Fund |  |  | Benefit |  | $\begin{gathered} \text { Total } \\ \text { June 30, } 1999 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 0 | \$ | 383,392 | \$ | 132,040,005 |
|  | 0 |  | 130,525,591 |  | 130,525,591 |
|  | 0 |  | 130,908,983 |  | 262,565,596 |
| 70,322,098 |  |  | 72,875,287 |  | 143,197,385 |
|  | 0 |  | 118,752,053 |  | 118,752,053 |
|  | 0 |  | 527,279,991 |  | 527,279,991 |
|  | 0 |  | 156,898,146 |  | 156,898,146 |
| 832,478,518 |  |  | 0 |  | 832,478,518 |
|  | 0 |  | (10,519,342) |  | (10,519,342) |
| 902,800,616 |  |  | 865,286,135 |  | 1,768,086,751 |
| $\begin{array}{r} 45,435,807 \\ (40,083,698) \\ (1,383,909) \end{array}$ |  |  | 38,656,579 |  | 84,092,386 |
|  |  |  | $(34,114,571)$ |  | (74,198,269) |
|  |  |  | $(1,192,892)$ |  | (2,576,801) |
| 3,968,200 |  |  | 3,349,116 |  | 7,317,316 |
| 0 |  |  | 1,587,211 |  | 1,587,211 |
| \$ | 906,768,816 |  | 1,001,131,445 |  | 2,039,556,874 |
| \$ | 608,744,274 | \$ | 12,193,690 |  | 620,937,964 |
|  | 0 |  | 303,803 |  | 6,271,448 |
|  | 0 |  | 7,976,908 |  | 7,976,908 |
|  | 0 |  | 1,764,550 |  | 1,764,550 |
| \$ | 608,744,274 | \$ | 22,238,951 |  | 636,950,870 |
| \$ | 298,024,542 | \$ | 978,892,494 |  | 1,402,606,004 |
| \$ | \$ 937,430,566 | (\$ | 826,489,329) | (\$ | 0) |
|  | 0 |  | $(3,825,491)$ |  | 0 |
|  | 16,318,990 |  | $(16,318,990)$ |  | 0 |
| \$ | 953,749,556 | (\$ | 846,633,810) | (\$ | 0 |
| 7,417,670,992 |  |  | 6,569,145,852 |  | 15,289,822,531 |
| \$8,669,445,090 |  |  | 6,701,404,536 |  | 16,692,428,535 |

## Consulltant Expenditures

For the Fiscal Year Ended June 30, 1999
Investment Pool Managers:
Investment Board ..... \$ 366,050
Financial Control Systems ..... 53,761
Pension Consulting ..... 12,935
Richards \& Tierney ..... 53,898
Equity Pool Managers ..... 8,337,836
Bond Pool Managers ..... 1,694,862
Total Investment Pool Managers Expenditures ..... \$ 10,519,342
MIIS Programmers/Analysts:
Computer Horizons\$ 191,390
Compuware ..... 908,689
GE Capital ..... 1,012
IBM ..... 34,351
Joe Buus and associates ..... 23,403
Keystone ..... 145,591
Syscom ..... 502,310
Total MIS Programmers/Analysts Expenditures ..... \$ 1,806,746
Management:
Delphi Group ..... \$ 13,326
Ray Clarke and associates ..... 215,053
Total Management Expenditures ..... \$ 228,379
Actuarial:
Buck Consultants ..... \$ 61,452
Milliman \& Robertson (LCPR) ..... 40,963
Total Actuarial Expenditures ..... \$ 102,415
Legal:
Attorney General ..... \$ 40,748
Audit:
Legislative Auditor ..... \$ 33,545
Pension Benefit Information ..... 6,381
Total Audit Expenditures ..... \$ 39,926
Medical:
MN Dept of Health ..... \$ 33,450
Total Consulltant Expenditures ..... \$ 12,771,006

## Investments Section


"The best teacher is the one who suggests rather than dogmatizes, and inspires his listener with the wish to teach himself."

Howard Cros6y

## Investment Summary

## (Prepared by TRA management with data supplied by the State Board of Investment)

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 market value of approximately $\$ 8.1$ 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 $\$ 8.67$ billion.

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 1999)

## Gary Austin <br> Executive Director <br> Teachers Retirement Association <br> David Bergstrom <br> Executive Director <br> MN State Retirement System <br> John E. Bohan, Retired <br> Vice Pres., Pension Investments <br> Grand Metropolitan-Pillsbury <br> Douglas Gorence <br> Chief Investment Officer <br> U of M Foundation Investment Advisors

Kenneth $\mathbf{F}$. Gudorf
Chief Executive Officer
Agio Capital Management, LLC
P. Jay Kiedrowski

Executive Vice President
Norwest Bank/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. Norstrem, 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 Most 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. 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 four committees organized around broad investment subjects relevant to SBI's decision-making: Asset Allocation, Domestic Managers, International 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.

The Basic Funds invest the pension contributions of mo"t 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 1999.

| Basic Funds Asset Mix (June 30, 1999) |  |  |
| :---: | :---: | :---: |
|  | Actual Mix | Policy Mix |
| Domestic Stocks | 54.5\% | 45.0\% |
| International Stocks | 14.7\% | 15.0\% |
| Bonds | 20.8\% | 24.0\% |
| Alternative Assets | 9.0\% | 15.0\% |
| Unallocated Cash | 1.0\% | 1.0\% |
| Total | 100.0\% | 100.0\% |

## 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 longterm 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.

## Fiscal Year 1999 Changes

SBI did not make changes to its long-term asset allocation targets for the Basic Funds during fiscal year 1999. The actual asset mix of the Basic Funds for fiscal year 1999 was in-line with its long-term targets. It should be noted that the unfunded allocation to alternative investments in the Basic Funds is held in domestic stocks until it is needed for investment. As a result, the actual amount invested in domestic stocks was above its long-term target.

## Rate of Return Results

The Basic Funds produced a total rate of return for fiscal year 1999 of 11.3 percent. Over the last five years, the Basic Funds have generated an annualized return of 17.9 percent. The current market value of the total Basic Funds is about $\$ 20.2$ billion. TRA's share of the fund is approximately 40 percent or $\$ 8.0$ 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, 1999, the Basic Funds out performed the composite index by 0.2 percentage points annualized. The primary


## Basic Funds Performance vs. Composite Index


contributors of the value added came from above index performance by the international stock and bond portions of the portfolio, while the domestic stock segment underperformed index performance during the period. Actual returns relative to the total fund composite index over the last five years are shown in the graph on page 34.

## 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.

The assets of the Post Fund finance monthly annuity payments paid to retirees. On June 30, 1999, the Post Fund had a market value of $\$ 19.1$ billion. TRA retirees' portion of this value is approximately $\$ 8.6$ billion or 45 percent. The Post Fund generated an investment return of 12.1 percent for fiscal year 1999.

## 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

SBI 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). Throughout fiscal year 1993, the actual asset mix of the Post Fund moved gradually toward a 50 percent allocation to common stocks. During fiscal year 1994, SBI added allocations to international stocks and alternative investments. The current long-term asset allocation policy and actual asset mix of the Post Fund at the end of fiscal year 1999 is presented in the following table.

| Post Fund Asset Mix (June 30, 1999) |  |  |
| :---: | :---: | :---: |
|  | Actual Mix | Policy Mix |
| Domestic Stocks | 54.1\% | 50.0\% |
| Int'l. Stocks | 14.9 | 15.0 |
| Bonds | 27.3 | 27.0 |
| Alternative Assets | 1.3 | 5.0 |
| Unallocated Cash | 2.4 | 3.0 |
| Total | 100.0\% | 100.0\% |

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.

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 are designed to 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 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 should also provide the opportunity to generate higher returns relative to more traditional bond investments.

## Investment Management and Performance

In order to gain greater operating efficiency, the Post Fund shares 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 0.5 percentage points for the five-year period since July 1, 1994.

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

## Benefit Increase Formulla

The retirement benefit increase formula of the Post Fund was changed by the 1992 Legislature. The revised formula was effective beginning in fiscal year 1993 and 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 is 6.0 percent. This means the cap on the inflation adjustment is 2.5 percent for fiscal year 1999.

- 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.

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 11.1436 percent for fiscal year 1999 payable January 1, 2000. As noted earlier, this increase is comprised of two components:
- Inflation component of 1.9 percent which is equal to 100 percent of the reported Consumer Price Index for wage earners (CPI-W) increase for the twelve months ending June 30 , 1999. (This is the same inflation index used to calculate increases in Social Security payments.)
- Investment component of 9.2436 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 11.1436 percent increase granted for fiscal year 1999 represents the seventh post retirement adjustment provided under the new benefit increase formula described above.

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 200, 590 Park Street, Saint Paul, MN 55103.


## Teachers Retirement Fund Portfolio Distribution

June 30, 1999


## Teachers Retirement Fund <br> Performance of Asset Pools (Net of Fees)

June 30, 1999

|  | Rates of Return (Annualized) |  |  |
| :---: | :---: | :---: | :---: |
|  | FY 1999 | 3-Year | 5-Year |
| Domestic Stock Pool | 18.1\% | 26.0\% | 25.4\% |
| Wilshire 5000 | 19.6 | 25.8 | 25.7 |
| Bond Pool ............................................................................ | 2.7\% | 7.6\% | 8.1\% |
| Lehman Agg. ................................................................. | 3.1\% | 7.2 | 7.8 |
| International Stock Pool | 9.3\% | 9.3\% | 9.5\% |
| Composite Index ............................................................ | 10.6\% | 7.4 | 7.4 |
| Reallestate Pool (Basic Funds Only) ....................................... | 6.7\% | 17.5\% | 12.3\% |
| Private Equity Pool (Basic Funds Only) ................................. | (0.1\%) | 24.1\% | 23.3\% |
| Resource Pool (Basic Funds Only) ......................................... | (29.2\%) | 7.5\% | 9.8\% |
| Yield Oriented Pool (Post Fund Only) .................................... | 15.5\% | 11.7\% | 11.8\% |

## Teachers Retirement Fund <br> List of Largest Assets Held

June 30, 1999

## Composite Holdings of Top Ten Equities (by Market Value)

$\%$ of
Company Portfolio1.72\%
General Electric Co. ..... 1.39
Cisco Systems Inc. ..... 1.07
Intel Corp ..... 1.01
Wal Mart Stores Inc ..... 0.88
Merck \& Co. Inc ..... 0.86
Citigroup Inc. ..... 0.80
International Business Machine ..... 0.79
Lucent Technologies Inc. ..... 0.77
Exxon Corp ..... 0.76

## Composite Holdings of Top Ten Bond Holdings (by Market Value)

| Company | Coupon | Maturity Date | Rating | $\%$ of Portfolio |
| :---: | :---: | :---: | :---: | :---: |
| FNMA (30 Year) ..................................... | 6.00\% | 07/01/2029 | AAA | 0.83\% |
| FNMA ................................................... | 7.00 | 07/01/2029 | AAA | 0.44 |
| FNMA. | 6.50 | 07/01/2029 | AAA | 0.42 |
| FHLMC | 6.00 | 07/01/2029 | AAA | 0.28 |
| FHLMC ........................................... | 7.50 | 07/01/2029 | AAA | 0.27 |
| United States Treasury Notes ................... | 3.38 | 01/15/2007 | AAA | 0.25 |
| United States Treasury Notes ................... | 6.50 | 05/31/2001 | AAA | 0.23 |
| FHLMC ................................................ | 6.50 | 07/01/2029 | AAA | 0.23 |
| United States Treasury Bonds .................. | 8.50 | 02/15/2020 | AAA | 0.23 |
| United States Treasury Bonds ................... | 3.63 | 04/15/2028 | AAA | 0.20 |

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, 1999


*TRA's share of the Basic Funds does not include investments in the Post 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.

## Actuarial Section


"The whole art of teaching is only the art of awakening the natural curiousity of a young mind for the purpose of satisfying it afterwards."

Vernon Sanders

Milliman \& ROBERTSON, INC.
Actuaries \& Consultants
Internationally WOODROW MILLIMAN
Suite 400, 15800 Bluemound Road, Brookfield, Wisconsin 53005-6069
Telephone: 414/784-2250
Fax: 414/784-7287
December 1, 1999

## Board of Trustees

Teachers Retirement Association Fund
Suite 500
17 West Exchange
St. Paul, MN 55102
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, 1999.

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 $0.14 \%$ of payroll, which is the result of the statutory contributions of Chapter 354 of $10.00 \%$ exceeding required contributions of Chapter 356 of 9.86\%.

The actuarial valuation was based upon applicable statutory provisions and the Standards of Actuarial Work in effect on July 1, 1999. 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 1, 1999
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, with one exception: Current Statutes under Chapter 354 do not recognize any amortization credit for existing surplus. Using the maximum amortization period acceptable under Statement 25, the actuarial required contribution would be $8.28 \%$ once surplus recognition is incorporated.

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.

Respectfully submitted,
MILLIMAN \& ROBERTSON, INC.


Consulting Actuary
TKC/bh

## Summary of Actuarial Assumptions and Methods

\author{

1. Interest <br> 2. Salary Increases
}
2. Mortality
3. Retirement Age
4. Separation From Service

Annual Separation Rate Per 10,000 Employees
(Sample Values)

| Age | $\underline{\text { Pre-Retirement Death }}$ |  | Withdrawal |  | Disability |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female |
| 20 | 3 | 1 | 600 | 600 | 4 | 4 |
| 30 | 4 | 3 | 565 | 565 | 6 | 6 |
| 40 | 7 | 5 | 210 | 210 | 8 | 8 |
| 50 | 15 | 11 | 70 | 70 | 17 | 17 |
| 60 | 48 | 28 | 0 | 0 | 63 | 63 |


| 6. Disability | Graduated rates illustrated in table of sample values on previous page. |
| :---: | :---: |
| 7. Expenses | Prior year expenses expressed as percentage of prior year payroll. |
| 8. 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. |
| 9. 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. |
| 10. Social Security | N/A |
| 11. Benefit Increases After Retirement | Payment of earnings on retired reserves in excess of 6\% accounted for by $6 \%$ post-retirement assumptions. |
| 12. Special Consideration | Married members assumed to elect subsidized joint and survivor form of annuity as follows: |
|  | $\begin{array}{rrr} \text { Males } & --15 \% \text { elect } 50 \% \text { J\&S option } \\ & 50 \% \text { elect } 100 \% \text { J\&S option } \end{array}$ |
|  | Females -- $10 \%$ elect $50 \%$ J\&S option $10 \%$ elect $100 \%$ J\&S option |
| 13. 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. |
| 14. Asset Valuation Method | Cost value plus one-third unrealized gains or losses. |
| 15. 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\% per annum. |

## Valuation Report Highlights

## (Dollars in Thousands)

| A. Contributions | $\begin{gathered} \text { June } 30 \\ 1998 \end{gathered}$ | $\begin{gathered} \text { June } 30 \\ 1999 \end{gathered}$ |
| :---: | :---: | :---: |
| 1. Statutory Contributions - Chapter 354 (\% of Payroll) ....... | 10.00\% | 10.00\% |
| 2. Required Contributions - Chapter 356 (\% of Payroll) ....... | 9.82\% | 9.86\% |
| 3. Sufficiency (Deficiency) (A.1-A.2) ............................... | 0.18\% | 0.14\% |
| B. Funding Ratios |  |  |
| 1. Accrued Benefit Funding Ratio |  |  |
| a. Current Assets (Table 1)......................................... | \$12,727,546 | \$14,011,247 |
| b. Current Benefit Obligations (Table 2) ....................... | \$11,332,467 | \$12,533,786 |
| c. Funding Ratio (a/b) ................................................ | 112.31\% | 111.79\% |
| 2. Accrued Liability Funding Ratio |  |  |
| a. Current Assets (Table 1). | \$12,727,546 | \$14,011,247 |
| b. Actuarial Accrued Liability (Table 3) | \$12,046,312 | \$13,259,569 |
| c. Funding Ratio (a/b) | 105.66\% | 105.67\% |
| 3. Projected Benefit Funding Ratio (Table 2) |  |  |
| a. Current and Expected Future Assets .......................... | \$15,134,315 | \$16,526,750 |
| b. Current and Expected Future Benefit Obligations ........ | \$14,382,569 | \$15,719,403 |
| c. Funding Ratio (a/b) ................................................ | 105.23\% | 105.14\% |
| C. Plan Participants |  |  |
| 1. Active Members |  |  |
| a. Number ............................................................... | 68,247 | 68,613 |
| b. Projected Annual Earnings | \$ 2,569,368 | \$ 2,692,960 |
| c. Average Annual Earnings (Actual \$) ......................... | \$ 37,648 | \$ 39,249 |
| d. Average Age ......................................................... | 43.1 | 42.9 |
| c. Average Service ..................................................... | 12.5 | 12.1 |
| 2. Others |  |  |
| a. Service Retirements ................................................ | 25,088 | 27,457 |
| b. Disability Retirements ............................................ | 1,686 | 1,816 |
| c. Survivors .............................................................. | 454 | 476 |
| d. Deferred Retirements ............................................. | 6,924 | 7,020 |
| e. Terminated Other Non-vested .................................. | 16,827 | 18,317 |
| f. Total .................................................................... | 50,979 | 55,086 |

# 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 Minnesota Statutes, section 356.215 .

## 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 which have been earned by service to the valuation date. This year's ratio is 111.79 percent. The corresponding ratio for the prior year was 112.31 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 1999 the ratio is 105.67 percent, which is an increase from the 1998 value of 105.66 percent.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 105.14 percent shows that the current statutory contributions are sufficient.


## Asset Information (Table 1)

Minnesota Statutes require that the asset value used for actuarial purposes recognize only a third of the unrealized gains and losses. This 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 calculation of the Actuarial Value of Assets is shown in Table 1 on lines F1 to F6. It combines the cost value of the Assets Available for Benefits and one-third of the difference between the market value and cost value of those assets.

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 (Post Fund). After the Post Fund 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 the Post Fund.

## Actuarial Balance Sheet (Table 2)

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.


## Actuarial Cost Method (Table 3)

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 3) to the actuarial balance sheet (Table 2) 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 the corresponding liabilities, on the basis of service. The method used in Table 3 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 2 and line A6, column 1 of Table 3).

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 of July 1, 2020, by a series of payments that remain a constant percentage of payroll each year. As of July 1, 1999, no unfunded liability exists.

## Sources of Actuarial Gains and Losses (Table 4)

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 expectation. For a detailed analysis of the major components, refer to Table 4.

## Contrilbution Sufficiency (Table 5)

This report determines the adequacy of Statutory
Contributions by comparing the Statutory Contributions of 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 5 shows the Plan has a contribution sufficiency of 0.14 percent since the Statutory Contribution Rate is 10 percent compared to the Required Contribution Rate of 9.86 percent.

## Changes in Actuarial Assumptions

There were no changes in actuarial assumptions for the current valuation.

## Changes in Plan Provisions

There were no changes in the plan provisions which affected plan costs for the current valuation.

## Statement of Plan Net Assets <br> July 1, 1999

(Dollars in Thousands)

## A. Assets in Trust

1. Cash, Equivalents, Short-term Securities .

Market Value
2. Fixed Income $\qquad$
3. Equity $\qquad$
4. Real Estate $\qquad$
5. Equity in the Post Fund $\qquad$
6. Invested Securities Lending Collateral $\qquad$
7. Other $\qquad$ 1,293
\$ 16,574,676

23,155

| $\$$ | 80,603 | $\$$ | 80,603 |
| ---: | ---: | ---: | ---: |
| $1,683,901$ |  | $1,740,571$ |  |
| $6,125,418$ |  | $4,984,738$ |  |
| 303,322 |  | 242,205 |  |
| $6,751,682$ |  | $6,751,682$ |  |
| $1,628,457$ |  | $1,628,457$ |  |
|  | 1,293 | 1,293 |  |
|  | $\$ 15,429,549$ |  |  |

B. Assets Receivable $\qquad$
C. Liabilities

1. Invested Security Lending $\qquad$
2. Other $\qquad$
$(194,709)$

$$
\frac{(194,709)}{(\$ 1,823,166)}
$$

3. Total Liabilities $\qquad$

## Cost Value

15,429,549

23,155

$$
(1,628,457)
$$

$$
(1,628,457)
$$

## D. Net Assets Held in Trust for Pension Benefits

1. Post Fund Reserves $\qquad$
2. Member Reserves $\qquad$
3. Other Non-Post Fund Reserves

6,701,404
5,556,277
4. Total Assets Available for Benefits
\$ 14,774,665
\$ 13,629,538

## E. Determination of Actuarial Value of Assets

1. Cost Value of Assets Available for Benefits (D4)
\$ 13,629,538
2. Market Value (D4) $\qquad$ \$ 14,774,665
3. Cost Value (D4) 13,629,538
4. Market Over Cost (E2 - E3) \$ 1,145,127
5. One-third of Market Over Cost (E4) $\div 3$
6. Actuarial Value of Assets (E1 + E5) (Same as Current Assets)

## Actuarial Balance Sheet <br> July 1, 1999 <br> (Dollars in Thousands)

Table 2
A. Current Assets (Table 1, E6) ..... \$ ..... $14,011,247$
B. Expected Future Assets

1. Present Value of Expected Future Statutory Supplemental Contributions (See Table 5) ..... 55,669
2. Present Value of Future Normal Costs ..... 2,459,834
3. Total Expected Future Assets \$ ..... 2,515,503
C. Total Current and Expected Future Assets \$ ..... $16,526,750$
E. Expected Future Benefit Obligations\$ 3,185,617
F. Total Current and Expected Future Benefit Obligations ..... \$ 15,719,403
G. Current Unfunded Actuarial Liability (D5 - A) ..... (\$ 1,477,461)
H. Current and Future Unfunded Actuarial Liability ( $\mathbf{F}$ - $\mathbf{C}$ ) ..... (\$ 807,347)

## Determination of Unfunded Actuarial Accrued Table 3 Liability (UAAL) and Supplemental Contribution Rate July 1, 1999

## (Dollars in Thousands)

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

(1)

| Actuarial <br> Present Value <br> of Future <br> Normal Costs | Actuarial <br> Accrued <br> Liability |
| :---: | :---: |
| $(2)$ |  |

## A. Determination of Actuarial Accrued Liability (AAL)

1. Active Members

| a. | Retirement Annuities ........................ | $\$ 7,748,766$ | $\$ 1,973,102$ | $\$ 5,775,664$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| b. | Disability Benefits ............................ | 310,144 | 127,318 | 182,826 |
| c. | Survivor Benefits ............................. | 97,719 | 37,324 | 60,395 |
| d. | Deferred Retirements ........................ | 155,910 | 80,504 | 75,406 |
| e. | Refunds Due to Death or Withdrawal | $\underline{149,672}$ | $\underline{241,586}$ | $\underline{(91,914)}$ |
| f. | Total .............................................. | $\underline{\$ 8,462,211}$ | $\underline{\$ 2,459,834}$ | $\underline{\$ 6,002,377}$ |

2. Deferred Retirements
with Future Augmentation $\qquad$ 326,385
326,385
3. Former Members without Vested Rights .

56,797
56,797
4. Annuitants in the Post Fund .................... 6,751,682

6,751,682
5. Recipients Not in the Post Fund ............... $\frac{122,328}{\$ 15,719,403}$

B. Determination of Unfunded Actuarial Accrued Liability (UAAL)

1. AAL (A6) ........................................................................................................ \$13,259,569
2. Current Assets (Table 1, E6) ............................................................................ 14,011,247
3. UAAL (B1 - B2) ................................................................................................ (\$751,678)
C. Determination of Supplemental Contribution Rate
4. Present Value of Future Payrolls through the amortization date of July 1, 2020
5. Supplemental Contribution Rate $(\mathrm{B} 3 \div \mathrm{C} 1)$

## Changes in Unfunded Actuarial Accrued

## (Dollars in Thousands)

A. UAAL at Beginning of Year ..... (\$ 681,234)
B. Change Due to Interest Requirements and Current Rate of Funding

1. Normal Cost and Expenses ..... \$ 252,167
2. Contribution ..... $(262,566)$
3. Interest on $\mathrm{A}, \mathrm{B} 1$ and B2 ..... (\$ 58,347)
4. Total $(B 1+B 2+B 3)$ ..... (\$ 68,746)
C. Expected UAAL at End of Year (A + B4) ..... (\$749,980)
D. Increase (Decrease) Due to Actuarial Losses (Gains)
Because of Experience Deviations from Expected
5. Salary Increases ..... \$ 8,630
6. Investment Return ..... $(232,479)$
7. Post Fund Mortality ..... 16,319
8. Mortality of Other Benefit Recipients ..... $(1,652)$
9. Other Items ..... 207,484
10. Total ..... (\$ 1,698)
E. UAAL at End of Year Before Plan Amendments and Changes in Actuarial Assumption (C + D6) ..... (\$751,678)
F. Change in Actuarial Accrued Liability Due to Plan Amendments ..... 0
G. Change in Actuarial Accrued Liability Due to Changes in Actuarial Assumptions ..... 0
H. UAAL at End of Year $(\mathbb{E}+\mathbf{F}+\mathbf{G})$ ..... (\$751,678)

# Determination of Contribution Sufficiency 

July 1, 1999

## (Dollars in Thousands)

| Percent of <br> Payroll | Dollar <br> Amount |
| :---: | :---: |

## A. Statutory Contributions - Chapter 354



## B. Required Contributions - Chapter 356

1. Normal Cost

2. Supplemental Contribution Amortization by July 1, 2020 of UAAL $0.00 \%$
3. Allowance for Expenses $\qquad$ 0.31\%
8,348
4. Total $\qquad$ 9.86\%
$\$ 265,734$
C. Contribution Sufficiency (Deficiency) [A3 - B4] .............................. $\quad 0.14 \% \quad$ 3,662

Note: Projected annual payroll for fiscal year beginning on July 1, 1999 is $\$ 2,692,960$.

## Summary of Actuarial and Unfunded Actuarial Liabilities

## (Dollars in Thousands)

| Valuation as of June 30 | Aggregate <br> Actuarial <br> Liabilities | Valuation Assets | Assets as a \% of Actuarial Liabilities | Unfunded Accrued Liabilities (UAL) | Annual <br> Active <br> Member <br> Payroll | UALL as a \% of Annual Active Member Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1990 | \$ 6,611,074 | \$ 5,131,999 | 77.6\% | \$1,479,075 | \$1,785,459 | 82.8\% |
| 1991 | 7,213,720 | 5,614,924 | 77.8\% | 1,598,796 | 1,874,365 | 85.3\% |
| 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\%) |

## Solvency Test

## (Dollars in Thousands)

| $\begin{gathered} \text { Valuation } \\ \text { as of } \\ \text { June } 30 \\ \hline \end{gathered}$ | Aggregate Accrued Liabilities |  |  |  | Portion of Actuarial Accrued Liabilities Covered by Reported Assets |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { (1) } \\ \text { Member } \\ \text { Contributions } \\ \hline \end{gathered}$ | (2) <br> Retirees and <br> Beneficiaries | (3) <br> Members (Employer Financed Portion) | $\begin{gathered} \text { Valuation } \\ \text { Assets } \\ \hline \end{gathered}$ | (1) | (2) | (3) |
| 1990 | \$ 787,514 | \$2,093,209 | \$3,730,351 | \$ 5,131,999 | 100\% | 100\% | 60.4\% |
| 1991 | 838,160 | 2,370,851 | 4,004,709 | 5,614,924 | 100\% | 100\% | 60.1\% |
| 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\% |

## Schedulle of Active Member Valuation Data

| Year <br> Ended <br> June 30 | Active <br> Members | Annual <br> Payroll | Annual <br> Average | \% Increase in <br> Average Pay |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1990 | 64,324 |  | $\$ 1,785,459,190$ | $\$ 27,757$ | $4.4 \%$ |
| 1991 | 65,093 | $1,874,364,682$ |  | 28,795 | $3.7 \%$ |
| 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 | $7.7 \%$ |  |

## Schedule of Retirees and Beneficiaries

## Statistical Section


"Books are the quietest and most constant offriends, the most accessible and wisest of counselors and the most patient of teachers." Charles W. Eliot

# Plan Summary 

(June 30, 1999)

## 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 Credlit

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 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 Contrilbutions

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 Contrilbutions

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 option 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 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. For those born in 1955 through 1959, the retirement age gradually increases up to age 67. For those born in 1960 and later, the retirement age is 67 .

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 | $10 \%$ |

## Annuiity Plam 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 six 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 $1 / 3$ 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 below) 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 below) 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 HighFive 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 <br> Ended <br> June 30 | Member Contributions | Employer Contributions | Net Investment Income | Other | Totall |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1990 | \$ 84,542,414 | \$166,098,804 | \$ 515,536,558 | \$ 926,288 | \$ 767,104,064 |
| 1991 | 89,313,081 | 159,439,219 | 426,529,649 | 1,964,986 | 677,246,935 |
| 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 |

## Ten-Year Summary of Expendiitures <br> (By Type)

| Year Ended June 30 | Retirement Benefits | Survivor <br> Benefits | Disability Benefits | Refunds | Administrative <br> Expenses | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1990 | \$174,693,669 | \$2,641,650 | \$2,456,735 | \$6,445,983 | \$2,631,691 | - 0 - | \$188,869,728 |
| 1991 | 194,589,338 | 2,921,349 | 2,904,585 | 5,554,181 | 2,790,089 | 714,476 | 209,474,018 |
| 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 |

## Summary of Changes in Membership

Fiscall Year Ending June 30, 1999

## Active and Inactive Members

Total July 1, 1998
Additions
New hires
New inactives from active
Returns from inactive
Returns from retired
Returns from terminated
Restored write-offs
Repaid refunds
Transfers from nonstatus

## Deletions

Service retirements
Deaths
Refunds
Writeoffs
Terminated (no refund)
Returns to active
Transfers to IRAP
Data adjustments
Total June 30, 1999

Active

| Inactive | $\begin{array}{l}49 \\ \end{array}$ |
| :--- | ---: |


| Active |  | Inactive |  |
| :---: | :---: | :---: | :---: |
| Basic | Coordinated | Basic | Coordinated |
| 32 | 68,215 | 61 | 23,846 |
| - | 5,159 | - | - |
| - | - | - | 4,250 |
| - | 1,514 | - | - |
| - | 585 | - | - |
| - | - | - | 35 |
| - | 208 | - | 106 |
| - | - | 6 | 669 |
| - | - | - | 81 |
| (7) | $(2,528)$ | (17) | (873) |
| (1) | (41) | - | (51) |
| - | (450) | (1) | (767) |
| - | - | - | - |
| - | $(4,250)$ | - | - |
| - | - | - | $(1,514)$ |
| - | (10) | - | - |
| (1) | 188 | - | (9) |
| 23 | 68,590 | 49 | 25,773 |


|  | Basic <br> System | Coordinated <br> System | Total |
| :--- | :---: | :---: | :---: |
| Active | 23 | 68,590 | 68,613 |
| Inactive | $\boxed{49}$ | $\underline{25,773}$ | $\underline{25,822}$ |
| Total | $\underline{92,363}$ | $\underline{9}$ | $\underline{ }$ |

## Summary of Changes in Membership (continued)

Fiscal Year ending June 30, 1999

## Annuitants

Total annuitants July 1, 1998
Members retired during year Adjustments

| Basic <br> Men <br> Women |  |  | Total |  |  |  | Men | Women | Total |
| :---: | :---: | :---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| 1,985 | 2,887 | 4,872 | 9,521 | 10,683 | 20,204 |  |  |  |  |
| 11 | 11 | 22 | 1,446 | 1,480 | 2,926 |  |  |  |  |
| - | - | - | $(3)$ | 4 | 1 |  |  |  |  |
| - | - | - | $(3)$ | - | $(3)$ |  |  |  |  |
| $\frac{(34)}{1,962}$ | $\frac{(138)}{2,760}$ | $\frac{(172)}{4,722}$ | $\frac{(167)}{10,794}$ | $\frac{(235)}{11,932}$ | $\frac{(402)}{22,726}$ |  |  |  |  |
| $\overline{-}$ | $\frac{-}{2,760}$ | $\underline{\underline{4,722}}$ | $\underline{\underline{10,789}}$ | $\underline{\underline{11,927}}$ | $\underline{\underline{22,716}}$ |  |  |  |  |

## Other Annuitants

Active annuitants July 1, 1998


## Summary of Changes in Membership (continued)

## Fiscal Year ending June 30, 1999

Beneficiaries of Members Deceased Prior to Retirement

July 1, 1998
Added during year
Terminated during year
Cancellation
Total June 30, 1999

| Joint \& Survivor <br> Annuities |  | Survivor <br> Annuities |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Men* | Women* | Total | Men | Women | Total |
| 351 | 154 | 505 | 2 | 63 | 65 |
| 24 | 22 | 46 | 3 | - | 3 |
| $(4)$ | $(6)$ | $(10)$ | - | - | - |
| $(5)$ | $\frac{(4)}{\mathbf{3 6 6}}$ | $\underline{\mathbf{1 6 6}}$ | $\underline{\underline{\mathbf{5 3 2}}}$ | $\underline{-}$ | $\overline{-}$ |
| $\underline{\underline{\mathbf{5}}}$ | $\underline{\underline{\mathbf{6 3}}}$ | $\underline{\underline{\mathbf{6 8}}}$ |  |  |  |

* Gender of member


## Disabilitants

July 1, 1998
Added during year
Died during year
Transferred to retirement
Resumed employment
Total Active Disabilitants
June 30, 1999

| Basic System |  |  | Coordinated System |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Men | Women | Total | Men | Women | Total |
| 10 | 4 | 14 | 195 | 250 | 445 |
| - | - | - | 29 | 42 | 71 |
| - | - | - | $(9)$ | $(10)$ | $(19)$ |
| $(4)$ | $(1)$ | $(5)$ | $(10)$ | $(13)$ | $(23)$ |
| $\overline{-}$ | $\underline{-}$ | - | $(3)$ | $\underline{(3)}$ | $\underline{(6)}$ |
| $\underline{\underline{\mathbf{6}}}$ | $\underline{=}$ | $\underline{\underline{\mathbf{9}}}$ | $\underline{\underline{\mathbf{2 0 2}}}$ | $\underline{\underline{\mathbf{2 6 6}}}$ | $\underline{\underline{\mathbf{4 6 8}}}$ |

Beneficiaries of Retired Members

|  | Basic System |  |  | Coordinated System |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Men* | Women* | Total | Men* | Women* | Total |  |
|  | 217 | 50 | 267 | 665 | 163 | 828 |
| July 1, 1998 | 25 | 5 | 30 | 99 | 37 | 136 |
| Added during year | $(5)$ | $(6)$ | $(11)$ | $(15)$ | $(12)$ | $(27)$ |
| Annuities terminated by law | $\underline{(8)}$ | $\underline{(3)}$ | $\underline{(11)}$ | $\underline{(15)}$ | $\underline{(2)}$ | $\underline{(17)}$ |
| Deaths | $\underline{\mathbf{2 2 9}}$ | $\underline{\mathbf{4 6}}$ | $\underline{\underline{\mathbf{2 7 5}}}$ | $\underline{\underline{\mathbf{7 3 4}}}$ | $\underline{\underline{\mathbf{1 8 6}}}$ | $\underline{\underline{\mathbf{9 2 0}}}$ |
| $\quad$ Total June 30, 1999 |  |  |  |  |  |  |

## Distribution of Active Members

As of June 30, 1999

| Years of Service |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age | $<\mathbf{1}$ | $\mathbf{1 - 4}$ | $\mathbf{5 - 9}$ | $\mathbf{1 0 - 1 4}$ | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 2 4}$ | $\mathbf{2 5 - 2 9}$ | $\mathbf{3 0 +}$ | All |
| $<25$ | 1,750 | 204 | 1 |  |  |  |  |  | 1,955 |
| $25-29$ | 1,875 | 5,390 | 954 | 1 |  |  |  |  | 8,220 |
| $30-34$ | 953 | 2,623 | 4,144 | 429 |  |  |  |  | 8,149 |
| $35-39$ | 916 | 1,523 | 1,971 | 2,806 | 238 |  |  |  | 7,454 |
| $40-44$ | 805 | 1,582 | 1,686 | 1,649 | 2,237 | 549 | 1 |  | 8,509 |
| $45-49$ | 830 | 1,630 | 1,645 | 1,921 | 1,488 | 3,584 | 862 |  | 11,960 |
| $50-54$ | 551 | 1,125 | 1,084 | 1,516 | 1,337 | 1,968 | 4,662 | 852 | 13,095 |
| $55-59$ | 311 | 503 | 502 | 593 | 679 | 801 | 1,797 | 1,809 | 6,995 |
| $60-64$ | 167 | 197 | 160 | 210 | 163 | 270 | 383 | 293 | 1,843 |
| $65+$ | 142 | 106 | 49 | 22 | 15 | 30 | 24 | 45 | 433 |
| All | 8,300 | 14,883 | 12,196 | 9,147 | 6,157 | 7,202 | 7,729 | 2,999 | 68,613 |

## Average Annual Earmings of Active Members

For Fiscal Year Ended June 30, 1999

| Years of Service |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | ---: |
| Age | $<\mathbf{1}$ | $\mathbf{1 - 4}$ | $\mathbf{5 - 9}$ | $\mathbf{1 0 - 1 4}$ | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 2 4}$ | $\mathbf{2 5 - 2 9}$ | $\mathbf{3 0 +}$ | All |
| $<25$ | 19,700 | 26,873 | 33,065 |  |  |  |  |  | 20,440 |
| $25-29$ | 17,812 | 26,742 | 33,160 | 16,493 |  |  |  |  | 25,449 |
| $30-34$ | 16,804 | 26,311 | 34,087 | 39,360 |  |  |  |  | 29,841 |
| $35-39$ | 16,614 | 26,298 | 34,713 | 41,842 | 46,819 |  |  |  | 33,840 |
| $40-44$ | 14,692 | 24,659 | 34,739 | 42,851 | 46,162 | 49,317 | 46,097 |  | 36,485 |
| $45-49$ | 14,644 | 23,317 | 34,461 | 41,063 | 47,377 | 50,014 | 51,449 |  | 40,119 |
| $50-54$ | 13,584 | 22,167 | 33,980 | 42,788 | 47,083 | 50,807 | 52,627 | 54,698 | 44,980 |
| $55-59$ | 10,506 | 20,493 | 29,888 | 40,558 | 46,483 | 51,693 | 55,925 | 56,702 | 46,986 |
| $60-64$ | 10,857 | 12,067 | 23,457 | 38,316 | 45,656 | 51,065 | 57,440 | 59,364 | 41,569 |
| $65+$ | 16,493 | 8,614 | 20,123 | 34,132 | 50,771 | 47,615 | 59,175 | 58,340 | 25,930 |
| All | 16,626 | 25,146 | 33,876 | 41,715 | 46,714 | 50,394 | 53,520 | 56,417 | 37,024 |

## Ten-Year Summary of Membership

| Year Ended <br> June 30 | Active <br> Members |  |
| :---: | :---: | :---: |
| 1990 |  | 64,324 |
| 1991 | 65,093 |  |
| 1992 | 65,557 |  |
| 1993 | 65,268 |  |
| 1994 | 66,514 |  |
| 1995 | 67,558 |  |
| 1996 | 68,490 |  |
| 1997 | 68,554 |  |
| 1998 | 68,247 |  |
| 1999 | 68,613 |  |


| Inactive <br> Members | Benefit <br> Recipients |
| :---: | :---: |
| 17,311 | 17,136 |
| 18,273 | 18,094 |
| 19,242 | 19,212 |
| 20,309 | 20,810 |
| 20,901 | 22,137 |
| 21,514 | 23,168 |
| 22,211 | 24,307 |
| 23,009 | 25,681 |
| 23,907 | 27,228 |
| 25,822 | 29,749 |

## Ten-Year Summary of Membership <br> (In Thousands)



## Schedulle of Participating Employers

As of June 30, 1999

Independent School Districts (344)
Ada-Borup \#2854
Adrian \#511
Aitkin \#1
Albany \#745
Albert Lea \#241
Alden \#242
Alexandria \#206
Annandale \#876
Anoka-Hennepin \#11
Ashby \#261
Atwater-Cosmos-Grove City \#2396
Audubon \#21
Austin \#492
BDRSH \#3001
Badger \#676
Bagley \#162
Balaton \#411
Barnesville \#146
Barnum \#91
Battle Lake \#542
Becker \#726
Belgrade-Brooten-Elrosa \#2364
Belle Plaine \#716
Bellingham \#371
Bemidji \#31
Benson \#777
Bertha-Hewitt \#786
Big Lake \#727
Bird Island-Olivia-Lake Lillian \#2534
Blackduck \#32
Blooming Prairie \#756
Bloomington \#271
Blue Earth \#2860
Braham \#314
Brainerd \#181
Brandon \#207
Breckenridge \#846
Brewster \#513
Brooklyn Center \#286
Browerville \#787
Browns Valley \#801
Buffalo \#877
Buffalo Lake-Hector \#2159
Burnsville \#191
Butterfield \#836
Byron \#531
Caledonia \#299
Cambridge-Isanti \#911
Campbell-Tintah \#852
Canby \#891
Cannon Falls \#252
Carlton \#93
Cass Lake \#115

Cedar Mountain \#2754
Centennial \#12
Chaska \#112
Chatfield \#227
Chisago Lakes \#2144
Chisholm \#695
Chokio-Alberta \#771
Clearbrook-Gonvick \#2311
Cleveland \#391
Climax \#592
Clinton-Graceville-Beardsley \#2888
Cloquet \#94
Columbia Heights \#13
Comfrey \#81
Cook County \#166
Cromwell \#95
Crookston \#593
Crosby-Ironton \#182
Cyrus \#611
Dassel-Cokato \#466
Dawson \#378
Deer River \#317
Delano \#879
Detroit Lakes \#22
Dilworth-Glyndon-Felton \#2164
Dover-Eyota \#533
Duluth \#709
Eagle Valley \#2759
East Central \#2580
East Grand Forks \#595
Eden Prairie \#272
Eden Valley \#463
Edgerton \#581
Edina \#273
Elgin-Millville \#806
Elk River \#728
Ellsworth \#514
Ely \#696
Esko \#99
Evansville \#208
Eveleth-Gilbert \#2154
Fairmont-Ceylon \#2752
Faribault \#656
Farmington \#192
Fergus Falls \#544
Fertile-Beltrami \#599
Fillmore Central \#2198
Fisher \#600
Floodwood \#698
Foley \#51
Forest Lake \#831
Fosston \#601
Frazee \#23
Fridley \#14
Fulda \#505

Gibbon-Fairfax-Winthrop \#2365
Glencoe-Silver Lake \#2859
Glenville-Emmons \#2886
Goodhue \#253
Goodridge \#561
Granada-Huntley-E. Chain \#2536
Grand Meadow \#495
Grand Rapids \#318
Greenbush-Middle River \#2683
Greenway \#316
Grygla \#447
Hancock \#768
Hastings \#200
Hawley \#150
Hayfield \#203
Hendricks \#402
Henning \#545
Herman-Norcross \#264
Hermantown \#700
Heron Lake-Okabena \#330
Hibbing \#701
Hill City \#2
Hills-Beaver Creek \#671
Hinckley-Finlayson \#2165
Holdingford \#738
Hopkins \#270
Houston \#294
Howard Lake-Waverly-Winsted \#2687
Hutchinson \#423
International Falls \#361
Inver Grove Heights \#199
Isle \#473
Ivanhoe \#403
Jackson County Central \#2862
Janesville-Waldorf-Pemberton \#2835
Jordan \#717
Karlstad-Strandquist \#2358
Kasson-Mantorville \#204
Kelliher \#36
Kenyon-Wanamingo \#2172
Kerkhoven-Murdock-Sunburg \#775
Kimball \#739
Kingsland \#2137
Kittson Central \#2171
La Crescent-Hokah \#300
Lake Benton \#404
Lake City \#813
Lake Crystal-Wellcome Memorial
\#2071
Lake of the Woods \#390
Lake Park \#24
Lake Superior \#381
Lakeview \#2167
Lakeville \#194
Lancaster \#356

Lanesboro \#229
Laporte \#306
Le Center \#392
Le Roy \#499
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 Co. W \#2448
McLeod west \#2887
McGregor \#4
Medford \#763
Melrose \#740
Menahga \#821
Mentor \#604
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 \#3333
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
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
Sioux Valley \#328
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 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 (41)

Area Special Ed Coop
Bemidji Regional Interdist. Council
Benton-Stearns Ed. Dist.
Border Region Ed. Dist.
Carver-Scott Ed. Coop.
Central Minnesota ERDC
Central Minnesota ECSU
Fergus Falls Area Special Ed. Coop.
Freshwater Ed. Dist.
Goodhue Co. 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
North Central ECSU \#5
N. Country Vocational Coop. Ctr.

Northeast Ed. Dist.
Northwest MN ECSU
Northwest Reg. Interdist. Council
Pine to Prairie Coop. Center
Riverbend Ed. Dist.
Root River Ed. Dist.
Runestone Area Ed. Dist.
Southwest/West Central ECSU
South Central ECSU

Southeast ECSU
Technology and Information
Educational
(TIES)
West Central Ed. Dist.
West Central Migrant Project
Wright Technical Center
Zumbro Ed. Dist.
MIN State Colleges
and Universities (39)
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 West Community \& Technical College
MnSCU Board Office
Moorhead State University
North Hennepin Community College
Normandale Community College
Northland Community \& Technical College
Minnesota State University-Mankato
Northwest Technical College
Pine Technical College
Rainy River Community College
Red Wing/Winona Technical 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 (15)

Bluffview Montessori \#4001
Central MN Deaf School \#4022
ECHO Charter School \#4026
Eci Nompa Woonspe \#4028
Emily Charter School \#4012
Martin Hughes School \#4040
New Country Charter School \#4007
New Heights Charter School \#4003
Odyssey Charter School \#4030
PACT Charter School \#4008
PEAKS Charter School \#4040
Summit School for the Arts \#4024
Toivola-Meadowlands Charter School \#4002
Village School of Northfield \#4021
World Learner Charter School \#4016

## State Agencies (17)

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 Center for Arts Education
MN Correctional Facility, Red Wing
MN Correctional Facility, Sauk Center
MN Correctional Facility, Thistledew
MN Department of Corrections
Minnesota Extended Treatment Options
Moose Lake Regional Treatment Ctr
St Peter Regional Treatment Ctr
Teachers Retirement Association
Willmar Regional Treatment Ctr
Professional Organizations (2)
Education Minnesota
MN Association of School Administrators

