Teachers Retirement Association

A Component Unit of the State of Minnesota

Comprehensive Annual Financial Report

For the Fiscal Year Ended June 30, 1996

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For the Fiscal Year Ended June 30, 1996

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Gary Austin
Executive Director

Teachers Retirement Association

Suite 500, Gallery Building
17 West Exchange Street
Saint Paul, MN 55102
(612) 296-2409
1-800-657-3669
Fax (612) 297-5999

December 31, 1996

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 of the Minnesota Teachers Retirement Association (TRA) for the fiscal year ended June 30, 1996, our 65th year of service. This report includes the following five sections:

- **Introductory Section** describing our organizational structure and summarizing the public pension plan benefits and guidelines;
- **Financial Section** containing the general purpose financial statements, notes to the financial statements, 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, 1996; and
- **Statistical Section** 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. Therefore, for financial reporting purposes, TRA is considered a component unit of the State of Minnesota.

Accounting Basis and Internal Control

All financial statements are prepared in conformity with Minnesota Statutes, section 356.20 and Statement 1 provisions published by the National Council of Governmental Accounting and other generally accepted accounting principles as prescribed 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. Equity investments are presented at the lower of cost or market and fixed income investments are reported at amortized cost.

We also maintain a system of internal controls designed to assure responsible safeguarding of assets and reliable financial records. No material weaknesses in internal control were reported by our independent auditor for the fiscal year 1996 audit period.

Financial Highlights

Our Balance Sheet stands at nearly $9.5 billion using the cost method to value our assets. The tremendous returns in the investment markets over the past decade have contributed to this growth in the asset base. Beginning with the next annual report, TRA and the State of Minnesota will convert their financial statements to follow the provisions of GASB Statement 25. Under GASB 25, investments will be valued for financial statement presentation using the market value approach. If the market value were used this year, TRA assets would exceed $10 billion.

The major sources of revenue for TRA are employee contributions, employer contributions, and investment earnings. Total revenues for fiscal year 1996 were $1.56 billion, a 57 percent increase from the previous year. Strong investment returns in nearly every category of the portfolio contributed to the increase. The amount also represents the first time TRA has exceeded $1 billion in revenue in any one year.

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 1996 were $378 million, an increase of 12 percent over the previous fiscal year. In total, benefit payments account for about 95 percent of our operating expenses. Eligible members may also choose to withdraw their contributions from the fund upon leaving employment. For fiscal year 1996, refunds to members totaled about $5 million. Administrative expenses were $3.84 million, an increase of 4.6 percent over the previous year.

As of June 30, 1996, we had 462 reporting employer units, 68,490 active members and a total of 24,307 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 fiscal year 1996 from $8.35 billion to $9.54 billion. The total required reserves necessary to fund current and future retirees of the fund also increased from $9.72 billion to $10.37 billion. The comparison of net assets to required reserves shows the funding ratio for fiscal year 1996 was 92.04 percent. This is an increase from the comparable 85.91 percent for fiscal year 1995. Significant actuarial gains resulted from a favorable investment market and lower then expected increases in members' salaries.

The unfunded liability decreased during the year by $544 million and is currently $825 million. This amount will be funded over the remaining amortization period that ends July 1, 2020. The current statutory employee and employer contribution rate of 14.66 percent exceeds the 12.78 percent required contribution level as determined by the actuary.

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 1996 proved to be another outstanding year for U.S. stocks. Amid low inflation, strong corporate earnings and an active initial public offering market, the Wilshire 5000 Stock Index advanced 26.2 percent. Due to a general rise in interest rates over the year, the U.S. bond market generated a modest gain of 5.0 percent as measured by the Lehman Brothers Aggregate Bond Index. While international stock markets did not keep pace with the rapid rise in the U.S. stock market, overall returns were in line with historical averages. The Morgan Stanley Capital International Index of Europe, Australia and the Far East (EAFE), provided a return of 13.3 percent measured in U.S. dollar terms.

Within this generally favorable investment environment, the retirement assets under SBI control performed well:

- The Basic Retirement Fund gained 18.8 percent during fiscal year 1996. The fund benefited from its high stock exposure as well as exceptionally strong returns from private equity investment such as venture capital and buyout funds.
- The Post Retirement Fund advanced 17.2 percent for the year. This gain, combined with strong returns in prior years, will provide a lifetime post retirement benefit increase of 8.04 percent for eligible retirees.

The theme of international diversification ran through most of the SBI policy initiatives during the year. The international exposure of the Basic and Post Funds was increased from 10 percent to 15 percent. As part of the increase, SBI allocated up to 2% of the Basic and Post Funds to the stocks of emerging markets. SBI also chose to implement a currency overlay program for the EAFE index fund. The program is designed to protect the index fund from losses during periods when foreign currencies depreciate relative to the U.S. dollar.

Economic Conditions and Outlook

Employment growth in Minnesota continued to outpace the U.S. economy in fiscal year 1996. Payroll employment grew by 2.3 percent, significantly above the U.S. growth of 2 percent. In June, at the close of the fiscal year, the unemployment rate in the state was at 3.6 percent, down 0.2 percent from a year ago and well below the U.S. rate of 5.3 percent. Despite an extremely tight labor market, Minnesota continues to add jobs at a rate faster than the national average.

Personal income in the state, however, grew more slowly than in the rest of the nation. Total wage and salary disbursements in the state, which account for about two thirds of personal income, grew at a 4.9 percent rate in fiscal 1996, noticeably slower than the U.S. wide growth rate of 6.2 percent. Analysts attribute much of the difference to increases in the number of hours worked by part-time employees. During the past year, economic conditions in Minnesota have been such that part-time workers are already working all the hours they desire.

The Minnesota economy is expected to track the national economy during fiscal 1997. Most major economic forecasters predict an inflation rate at around 3 percent. Growth rates for personal income in Minnesota and nationally are projected to be identical. Job growth in Minnesota is forecast to be only slightly stronger than that for the entire U.S., while total wage and salary disbursements are expected to lag slightly, reflecting the belief that part-time workers elsewhere in the nation will continue to add hours at a faster rate than those in Minnesota. The federal farm bill that was enacted in 1996 will add to farm income in the state in both 1996 and 1997.

Professional Services

We purchase actuarial services from the firm Gabriel, Roeder, Smith and Company of Southfield, Michigan. The annual actuarial valuation of the pension fund is prepared by Milliman & Robertson, Inc., an actuary retained by the Legislative Commission on Pensions and Retirement to prepare actuarial reports for all the statewide retirement systems.

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 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 1996 was mailed to each active member in December 1996. 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 and financial and actuarial data for the year ended June 30, 1996, will be distributed to each active and retired member in the Winter 1997 edition of the *TRIB*, our quarterly newsletter.

Operations and Activities

In June 1996, you approved a $6.9 million five-year strategic plan to better meet the increased needs of our members, retirees, and employers for retirement services. The purpose of the strategic plan is to guide our efforts to explore staff productivity, technology and customer service. To facilitate our efforts, you also approved the hiring of the national consulting firm of Raymond T. Clarke and Associates to help us reengineer our current work processes. For instance, workflow improvements are being made to speed up calculation of estimates and monthly pension payments without sacrificing accuracy.

Changing demographics and rising customer expectations are driving much of this reengineering initiative. Over the past decade, the number of members and beneficiaries receiving a monthly benefit has more than doubled. By the end of fiscal year 1996, we were paying monthly benefits to nearly 25,000 individuals. With the first of the "baby boom" generation turning 50 during 1996, the need to improve administrative processes before these members retire has become even more apparent.

Demand for preretirement counseling services also continues to grow. In light of Social Security concerns, members are becoming more aware of the importance of their promised TRA benefits. Also, numerous legislative changes over the years have added to the need for and the complexity of counseling services. During fiscal year 1996, our counseling staff personally advised more than 3,100 members. Many more members were served over the telephone as our office received over 55,000 phone calls.

A highlight during the year was the implementation of a system to permit periodic rather than annual payroll reporting. All employers are scheduled to be providing periodic salary, contribution, and service credit data on individual members by June 30, 1997. Through cooperation with our employer units, we will possess more current data on members to help us improve the quality and scope of our services.

A key provision enacted into law during the 1996 legislative session expanded the period of time from 60 to 120 days during which a member may apply for retirement in advance of the member's date of termination of teaching service. The expansion is expected to facilitate more efficient processing of applications at the end of the school year when most members retire.

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 work diligently to ensure the successful operation and financial soundness of our pension fund.

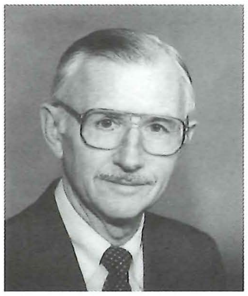
Respectfully submitted,

Gary Austin
Executive Director

John Wicklund
Assistant Director
Accounting and Information Services

Board of Trustees
(As of December 1, 1996)

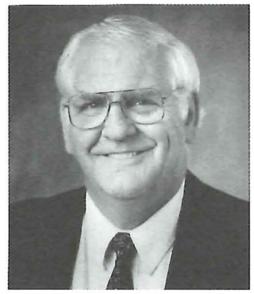
President



Vernell R. Jackels
Elected Member
Winona, MN

Vice President

Carol F. Ackerson
Elected Member
New Ulm, MN



Robert E. Astrup
Elected Member
Columbia Heights, MN

Martha Lee (Marti) Zins
Elected Member
Hopkins, MN

Walter G. Larson
Retiree Representative
Glenwood, MN

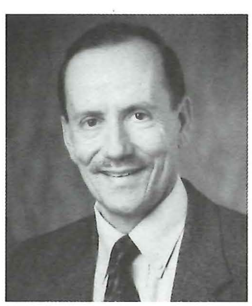
David Lamberger
Minnesota School Boards Association Representative

Robert Wedl
Commissioner of Children, Families, and Learning

Wayne Simoneau
Commissioner of Finance

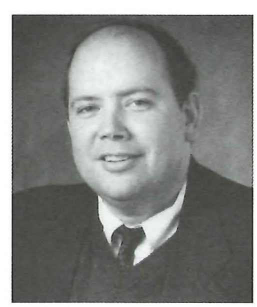
Administration

Gary Austin
Executive Director



John J. Gardner
Assistant Director
Records and Retirement Services

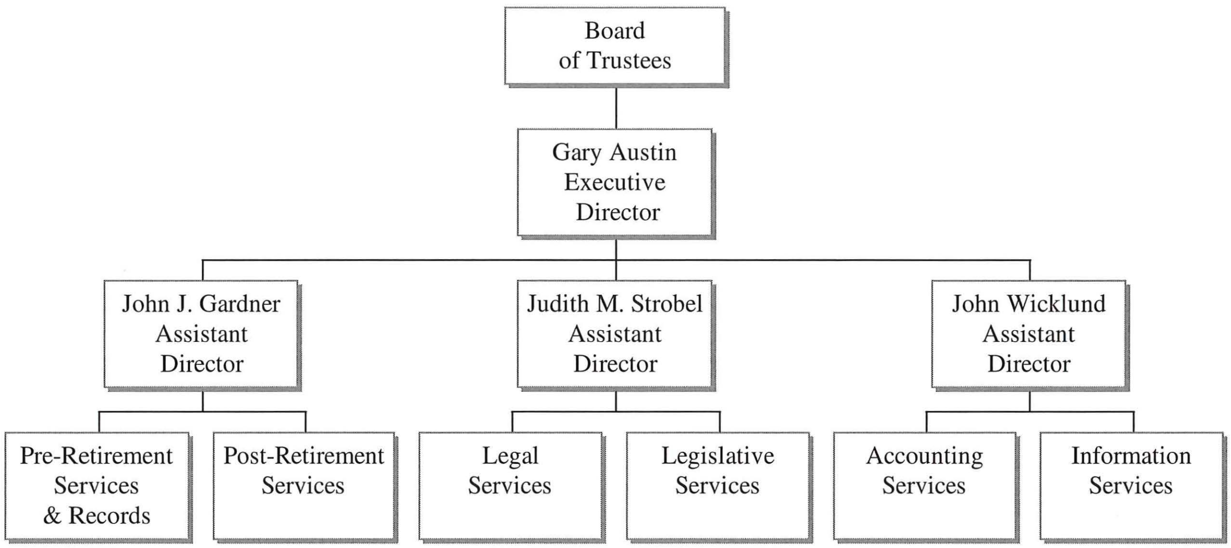
Judith M. Strobel
Assistant Director
Legal and Legislative Services



John Wicklund
Assistant Director
Accounting and Information Services

Administrative Organization

(As of December 1996)



Mission Statement

Purpose	The purpose of the Minnesota Teachers Retirement Association is to administer benefits and provide reliable information.
Customers	Our customers are educators and their employers, as well as others requesting information or services. Improving service to our customers — this is our operating value.
Services	Our services include accumulating funds, maintaining member data, providing counseling, 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 human and technological resources in a team environment.
Employee Excellence	Provide ongoing employee development in a team environment that encourages cooperation and mutual respect, focuses on common goals, and recognizes superior performance.

Plan Summary

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 a board of eight trustees – three are statutory 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 elects coverage by the Defined Contribution Retirement Plan administered by the MnSCU Board.

Retirement Service Credit

Service credit for benefits is earned from teaching service performed on a full-time, part-time or substitute basis up to a maximum of 170 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 Contributions

TRA members pay a percentage of their gross annual salary as determined by their membership plan. Basic Plan members (without Social Security coverage) contribute 10.5% of their annual salary while Coordinated Plan members (coordinated with Social Security coverage) contribute 6.5% of their annual salary.

Employer Contributions

Local school districts and other TRA covered employer units provide contributions of 8.5% of total salary for members in the Basic Plan and 4.5% of total salary for members in the Coordinated Plan. In addition, the employer unit contributes an amount equal to 3.64% of total salary for amortizing the unfunded liability. For Coordinated Plan members the employer unit also makes the required matching contribution to the Social Security Administration.

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:**

1.13% of average salary for the first 10 years of allowable service and 1.63% of average salary for each subsequent year of allowable service with a reduction of 0.25% 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

1.63% of average salary for each year of allowable service with augmented actuarial reduction (approximately 4%-5% 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 2.13% and/or 2.63% rather than the 1.13% and/or 1.63% 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:

1.63% of average salary for each year of allowable service with augmented actuarial reduction (approximately 4%-5% per year) for each month the member is under the full Social Security retirement benefit eligible age. 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 or later, Social Security gradually increases the retirement age for full Social Security benefits until it reaches age 67 for those persons born in 1960 or later.

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

Annuity Plan Options

Six different annuity plan options are available to TRA members providing monthly benefit payments for as long as the annuitant lives. Plan A-1 provides the highest possible monthly benefit, but terminates upon the member's death. A member may choose to provide survivor benefits to a designated beneficiary(ies) by selecting one of the five plans which have survivorship features.

1. Life Plan A-1, For Life of Member
2. Life Plan B-1, Guaranteed Refund
3. Life Plan C-3, 15-Year Certain
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 Retirement Increases

The required reserves needed to pay retirement benefits are transferred from the fund's regular assets to the Minnesota Post Retirement Investment Fund (MPRIF) at the time of retirement. Benefits are increased annually based on the post-retirement adjustment calculation described in Minnesota Statutes, section 11A.18, subdivision 9. 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 member who has combined total years of allowable service which meet the minimum vesting requirements with any two or more of the 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 of the covered funds in which allowable service was established.

Refunds

Upon termination of teaching service and application, TRA will issue a refund of a member's accumulated contributions plus 5% interest compounded annually if termination occurred before May 16, 1989, and 6% 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 8½%, compounded annually from the date of the refund.

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% 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% 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% interest compounded annually is paid to the designated beneficiary.

Joint and Survivor Annuity

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

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

Financial Section

STATE OF MINNESOTA
OFFICE OF THE LEGISLATIVE AUDITOR
CENTENNIAL BUILDING, 658 CEDAR STREET • ST. PAUL, MN 55155 • 612/296-4708 • TDD RELAY 612/297-5353
JAMES R. NOBLES, LEGISLATIVE AUDITOR

Independent Auditor's Report

Board of Trustees
and
Executive Director
Teachers Retirement Association

We have audited the accompanying financial statements of the Teachers Retirement Association as of and for the year ended June 30, 1996, as listed in the financial section of the table of contents. These financial statements are the responsibility of the Teachers Retirement Association's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

As explained in Note 2(d), investments in marketable equity securities are valued at the lower of cost or market and other investments are valued at cost as required by generally accepted accounting principles. Minnesota Statutes require valuation of all securities at cost plus one-third of the unrealized capital gains or losses. Since the statutory provision deviates from generally accepted accounting principles, the basic statements are not in compliance with the statute. Note 1(e) contains the disclosures which must be considered together with the basic financial statements to achieve statutory reporting requirements.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Teachers Retirement Association as of June 30, 1996, and the results of its operations and the changes in financial position for the year then ended in conformity with generally accepted accounting principles. In addition, except for the valuation of securities, as discussed in the preceding paragraph, the aforementioned financial statements are in compliance with the reporting requirements of Minnesota Statute Section 356.20.

Board of Trustees
and
Executive Director
Teachers Retirement Association
Page 2

Our audit was made for the purpose of forming an opinion on the individual fund financial statements. The schedule of administrative expenses included in the financial section is presented for purposes of additional analysis and is not a required part of the financial statements of the Teachers Retirement Association. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

In accordance with *Government Auditing Standards*, we will also issue a report, expected to be released in January 1997 on our consideration of TRA's internal control structure and on its compliance with laws and regulations.

James R. Nobles
Legislative Auditor

John Asmussen, CPA
Deputy Legislative Auditor

November 20, 1996

Teachers Retirement Fund
Balance Sheet

June 30, 1996 with comparative totals for June 30, 1995

Assets	**1996**	**1995**
Cash (Note 7)	$ **1,793,407**	$ 2,279,426
Accounts Receivable (Note 8)	**40,480,050**	42,292,122
Accrued Investment Income	**212,555**	284,116
Prepaid Expense	**0**	8,980
Investments:		
Outside Managed Pooled Accounts (Note 2d)	**5,093,184,594**	4,355,270,383
Short-term Cash Equivalents (Note 2d)	**45,478,965**	57,634,516
Equity in MPRIF (Note 2e)	**4,225,515,000**	3,790,813,000
Fixed Assets Net of Accumulated Depreciation (Note 2b)	**407,199**	405,322
Total Assets	$ **9,407,071,770**	$ 8,248,987,865

Liabilities and Reserves Required	**1996**	**1995**
Current Liabilities:		
Accounts Payable	$ **3,545,400**	$ 3,334,495
Due to MPRIF (Note 2e)	**17,493,297**	19,279,005
Accrued Compensated Absences (Note 2c)	**286,784**	294,233
Total Liabilities	$ **21,325,481**	$ 22,907,733
Fund Balance:		
Member Reserves (Note 6a)	$ **1,164,651,185**	$ 1,070,347,308
MPRIF Reserves (Notes 2e, 6c)	**4,225,515,000**	3,790,813,000
Benefit Reserves (Note 6b)	**4,976,001,815**	4,856,462,692
Total Reserves (Note 1e)	$ **10,366,168,000**	$ 9,717,623,000
Unreserved Fund Balance:		
Unfunded Actuarial Accrued Liability (Note 1e)	$ **(980,421,711)**	$ (1,491,542,868)
Total Unreserved Fund Balance (Note 1e)	$ **(980,421,711)**	$ (1,491,542,868)
Total Fund Balance	$ **9,385,746,289**	$ 8,226,080,132
Total Liabilities and Fund Balance	$ **9,407,071,770**	$ 8,248,987,865

The accompanying notes (pages 18-23) are an integral part of the financial statements.

Teachers Retirement Fund
Statement of Revenues, Expenses, and Changes in Fund Balance
For Fiscal Years Ended June 30, 1996 and June 30, 1995

	1996	1995
Operating Revenues:		
Member Contributions (Notes 1d, 4)	**$ 148,051,326**	$ 143,535,906
Employer Contributions (Notes 1d, 4)	**184,495,447**	179,671,657
Investment Income (Note 2d)	**809,188,847**	368,946,783
Distributed Income from MPRIF (Note 2e)	**412,603,614**	297,153,025
Other	**713,733**	553,171
Total Operating Revenues	**$ 1,555,052,967**	$ 989,860,542
Operating Expenses:		
Benefits Paid (Notes 1c, 5, 6c)	**$ 378,072,148**	$ 338,857,152
Refunds (Note 6a)	**5,039,811**	4,619,063
Administrative Expenses (Note 6b)	**3,835,501**	3,665,748
Interest Paid MPRIF (Notes 2e, 6b)	**620,477**	2,008,430
Investment Management Fees (Note 2d)	**7,818,873**	6,846,505
Total Operating Expenses	**$ 395,386,810**	$ 355,996,898
Net Fund Balance Additions	**$ 1,159,666,157**	$ 633,863,644
Fund Balance, Beginning of Year	**8,226,080,132**	7,592,216,488
Fund Balance End of Year	**$ 9,385,746,289**	$ 8,226,080,132

The accompanying notes (pages 18-23) are an integral part of the financial statements.

Teachers Retirement Fund
Statement of Revenues, Expenses, and Change in Fund Balances
For Fiscal Years Ended June 30, 1996 and June 30, 1995

	Reserves	
	Member	**MPRIF**
Operating Revenues:		
Member Contributions (Notes 1d, 4)	$ 147,809,948	$ 0
Employer Contributions (Notes 1d, 4)	0	0
Investment Income (Note 2d)	0	0
Distributed Income from MPRIF (Note 2e)	0	412,603,614
Other	0	0
Total Operating Revenues	$ 147,809,948	$ 412,603,614
Operating Expenses:		
Benefits Paid (Notes 1c, 5, 6c)	$ 0	$ 369,107,916
Refunds (Note 6a)	4,846,737	0
Administrative Expenses (Note 6b)	0	0
Interest Paid MPRIF (Note 2e, 6b)	0	0
Investment Management Fees (Note 2d)	0	0
Total Operating Expenses	$ 4,846,737	$ 369,107,916
Other Changes in Reserves:		
Annuities Awarded (Note 6c)	(50,230,412)	392,200,591
Other Transfers	1,571,078	0
Mortality (Note 6c)	0	(994,289)
Total Other Changes	$ (48,659,334)	$ 391,206,302
Net Fund Balance Additions	$ 94,303,877	$ 434,702,000
Change in Unfunded Accrued Liability	0	0
Fund Balance, Beginning of Year	1,070,347,308	3,790,813,000
Fund Balance, End of Year	$1,164,651,185	$ 4,225,515,000

The accompanying notes (pages 18-23) are an integral part of the financial statements.

Benefit	Unreserved Fund Balance	Total June 30, 1996	Total June 30, 1995
$ 241,378	$ 0	**$ 148,051,326**	$ 143,535,906
184,495,447	0	**184,495,447**	179,671,657
809,188,847	0	**809,188,847**	368,946,783
0	0	**412,603,614**	297,153,025
713,733	0	**713,733**	553,171
$ 994,639,405	$ 0	**$ 1,555,052,967**	$ 989,860,542
$ 8,964,233	$ 0	**$ 378,072,149**	$ 338,857,153
193,073	0	**5,039,810**	4,619,063
3,835,501	0	**3,835,501**	3,665,748
620,477	0	**620,477**	2,008,430
7,818,873	0	**7,818,873**	6,846,504
$ 21,432,157	$ 0	**$ 395,386,810**	$ 355,996,898
$ (341,970,179)	$ 0	**$ 0**	$ 0
(1,571,078)	0	**0**	0
994,289	0	**0**	0
$ (342,546,968)	$ 0	**$ 0**	$ 0
$ 630,660,280	$ 0	**$ 1,159,666,157**	$ 633,863,644
(511,121,157)	511,121,157	**0**	0
4,856,462,692	(1,491,542,868)	**8,226,080,132**	$ 7,592,216,488
$ 4,976,001,815	$ (980,421,711)	**$ 9,385,746,289**	$ 8,226,080,132

Notes to the Financial Statements

1. Plan Description

a. Organization

The Minnesota Teachers Retirement Association (TRA) is the administrator of a multi-employer, cost-sharing retirement fund. TRA administers a Basic Plan (without Social Security coverage) and a Coordinated Plan (coordinated with Social Security coverage) in accordance with Minnesota Statutes, chapters 354 and 356. The Board of Trustees has significant independence in overseeing the operations and management of TRA that has abeen construed as an agency of the state. Since TRA is subject to laws enacted by the state legislature, for reporting purposes, it is considered a component unit of the State of Minnesota and is included in the state's Comprehensive Annual Financial Report as a pension trust fund.

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, St. Paul and Duluth 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 Colleges 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. Teachers first employed by MnSCU prior to July 1, 1995 have participated in an election to retain TRA coverage or change coverage to the DCR plan. A teacher employed by MnSCU and electing coverage by the DCR is not a member of TRA, except for purposes of Social Security coverage.

c. Benefits

TRA provides retirement benefits as well as death and disability benefits. All benefits vest after three years of credited service. For Coordinated members first hired before July 1, 1989, retirement benefits are the greater of: (a) 1.13% of average salary for each year in first ten years and 1.63% of average salary for each subsequent year with 0.25% reduction for each month retiree is under age 65 (age 62 if 30 or more years of service) and no reduction if age plus service totals 90 or more; or (b) 1.63% of average salary for each year of service with augmented actuarial reduction for each month retiree is under 65.

For members first hired after June 30, 1989, retirement benefits are 1.63% of the average salary for each year of service with augmented actuarial reduction for each month the retiree is under the full Social Security benefit eligible

Participating Employer Units

	At June 30 1996	1995
Independent school districts	356	356
Joint powers units	41	39
Colleges and Universities	43	18
State agencies	10	49
Charter Schools	9	---
Professional organizations	3	3
Total Employer Units	462	465

Membership

	At June 30 1996	1995
Retirees, disabilitants and beneficiaries receiving benefits	24,307	23,168
Terminated employees with deferred vested benefits	5,767	5,103
Total	30,074	28,271
Current employees:		
Vested	51,116	50,211
Non-vested	17,374	17,347
Total	68,490	67,558

age. Average salary is the average of highest five successive annual salaries. For Basic members, the formula percentages are 2.13% and 2.63% rather than the 1.13% and 1.63% of Coordinated members. Benefits are payable for life with the amount of the benefit determined by the selection of one of six available annuity payment plans. Post-retirement increases are described in note 2e. The benefit provisions stated in this section are current provisions and apply to active plan participants. Vested, terminated employees who are entitled to benefits but are not receiving them yet, are bound by the provisions in effect at the time they terminate their public service.

d. Funding of Pension Costs

Pension costs of the TRA are funded from contributions made to the association by members and their employers. Members of the fund contribute an amount equal to 6.5 percent of their salary if they are in the Coordinated Plan and 10.5 percent of their salary if they are in the Basic Plan. Coordinated members of the fund are mandatorily covered by Social Security. Employer contributions to the fund are 4.5 percent and 8.5 percent of the salaries of Coordinated and Basic members, respectively. Minnesota Statutes, section 354.43, subdivision 5, currently requires an additional employer contribution of 3.64 percent of the members' salaries for the purpose of amortizing the unfunded liability of the fund.

e. Actuarial Valuation of Plan Benefits

Minnesota Statutes, section 356.215, subdivision 4, provides that annual actuarial valuations of plan benefits be computed in accordance with the entry age normal cost method. Under this method, the total actuarial liability of the fund was $10,366,168,000 and net assets were $9,385,745,000 based on equity investments at the lower of cost or market value. On this basis, required reserves were 90.5% funded and the unfunded liability was $980,421,711. The actuary also is required to provide this information based upon cost value of assets plus 1/3 of the amount of any unrealized gains or losses in investments. Under this method, the value of net assets is $9,541,221,000 and the total liabilities remain at $10,366,168,000. This data results in a funding ratio of 92% and total accrued unfunded liabilities of $824,947,000. This amount differs from the unfunded accrued liabilities reported on the balance sheet, because the actuarial calculation of net assets includes cost plus one third of unrealized capital gains or losses.

This funding information was determined as part of an actuarial valuation at June 30, 1996. Significant actuarial assumptions used include: (a) a rate of return on the investment of present and future active member assets of 8.5 percent per year, compounded annually; (b) projected salary increases based on a salary inflation component of 5 percent plus an age-related merit scale factor; and (c) post retirement increases as described in note 2e; (d) payroll growth at 5 percent per year for inflation; and (e) mortality rates based on the 1983 Group Annuity Mortality tables as described on page 41.

2. Significant Accounting Policies

a. Basis of Accounting

The accompanying financial statements for the fund are on the accrual basis of accounting. Employee and employer contributions are recognized as revenue in the period in which they are earned and become measurable. Expenses are recorded when the liability is incurred.

This financial report is presented in conformity with the provisions of the National Council of Governmental Accounting Statement 1. The State of Minnesota and the Teachers Retirement Association will implement the provisions of the Governmental Standard Accounting Board (GASB) 25 effective for the fiscal year ending June 30, 1997.

b. Fixed Assets and Depreciation

Fixed assets are capitalized at cost at the time of acquisition. Expenditures for maintenance and repairs are charged to expense as incurred. Costs of assets and the related accumulated depreciation are eliminated from the accounts in the year of sale or retirement. Depreciation is computed on the straight-line method over the estimated useful lives of the assets. The estimated useful lives are from three to twenty years for equipment. At June 30, 1996, total fixed assets were $938,050 at cost. Accumulated depreciation totaled $530,851 resulting in a net fixed asset value of $407,199.

c. Accrued Compensated Absences

Employees of TRA accrue vacation leave, sick leave and compensatory leave at various rates within limits specified in collective bargaining agreements. Accumulated amounts for compensated absences are accrued when incurred. Such leave is liquidated in cash, primarily at the time of termination of employment.

d. Investment Policies and Valuation Methods

Pursuant to Minnesota Statutes, section 11A.04, TRA's assets are commingled with the retirement assets of other statewide retirement funds and placed in various pooled investment accounts administered by the State Board of Investment (SBI).

Investments in the pooled accounts are valued at cost for early securities and amortized cost for fixed income securities, subject to market adjustments judged to be other than temporary. Investment income is recognized as earned. Accrued investment income of the pooled investment accounts is included in participation in the accounts. Gains and losses on sales or exchanges are recognized on the transaction date. Investment income for fiscal year 1996 for the Basic (Active) Fund was $809,188,847. The cost of security transactions is included in the transaction price. Administrative expenses of the 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 $7,818,873 for fiscal year 1996.

e. Post Retirement Investment Fund

For all retiring members, the reserves required to pay the cost of retirement benefits are transferred

TRA Investment Portfolio
June 30, 1996

Basic (Active) Fund	Cost	Market
Pooled Accounts:		
Passive Equity	$ 777,073,691	$ 790,828,796
Semi-passive Equity	648,694,078	783,389,781
Active Equity	1,109,825,170	1,305,870,809
Fixed Income	1,324,182,452	1,296,138,911
Int'l Passive	323,481,096	391,828,498
Int'l Country	107,846,253	119,190,270
Int'l Active	196,377,267	228,111,363
Int'l Emerging Mkts.	67,815,404	68,437,275
Real Estate	227,356,833	219,116,138
Venture Capital	267,779,219	309,781,291
Resources Pool	42,753,130	46,918,350
Total	$5,093,184,593	$ 5,559,611,482
Short-Term Pooled Cash	45,478,965	45,478,965
MPRIF Account	4,225,515,000	5,095,775,524
Total Invested	$9,364,178,558	$10,700,865,971

from TRA's regular assets to the Minnesota Post Retirement Investment Fund (MPRIF) which is managed by SBI. Participation in MPRIF is shown at the level of actuarially determined required reserves in accordance with Minnesota Statutes, section 11A.18, and any mortality gains or losses as determined by an independent actuary hired by the state legislature. The invested assets of MPRIF are assumed to earn a rate of return of 5 percent, compounded annually. TRA's pension assets in MPRIF as of June 30, 1996, were $4,225,515,000. Interest on late reserve transfers is a normal transfer with interest at the 8.5% rate required by statute and is offset by earnings of the regular fund. These costs totalled $620,477 for fiscal year 1996. Investment income from MPRIF for fiscal year 1996 was $412,603,614.

In accordance with Minnesota Statutes section 11A.18, subdivision 9, benefits may be increased periodically. Each year, retirees will receive an inflation-based adjustment equal to 100% of inflation, up to a maximum of 3.5%. If investment returns are above the 5.0% actuarial and 3.5% inflation assumptions, retirees will also receive an earnings-based adjustment. The formula provided for a benefit increase of 8.0395% for eligible retirees, effective January 1, 1997. The increase is divided into a 2.8% inflation component and a 5.2395% excess earnings component.

f. Authorized Investments

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 restricted participation in foreign securities.

g. Risk Categories

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's or dealer's trust department or agent in the State's name. Risk category 3 includes uninsured and unregistered investments for which the securities are held by the broker or 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 risk. All TRA investments are in SBI-administered pools or open-end mutual funds. These investments are not considered securities for purposes of credit risk classification.

h. Investment Information

Information about the primary government's (State of Minnesota) investments, including credit risk classification, may be obtained from the Minnesota Department of Finance, 400 Centennial Building, 658 Cedar Street, St. Paul, Minnesota 55155. Information on Investment activity and a listing of specific investments owned by the pooled accounts may be obtained from the Minnesota State Board of Investment at Suite 105, MEA Building, 55 Sherburne Avenue, St. Paul, Minnesota 55155.

3. Funding Status and Progress

a. Pension Benefit Obligation Disclosure

The amount shown in the table on the following page as *pension benefit obligation* is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess TRA's funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among public retirement systems. The measure is independent of the actuarial funding method used to determine contributions to the TRA, discussed in Note 1e. The pension benefit obligation was determined as part of an actuarial valuation of the plan as of July 1, 1996. Significant actuarial assumptions used in determining the pension benefit obligation include (a) a rate of return of 8.5% per year preretirement and 5.0% per year post-retirement, compounded annually, (b) projected salary increases of 5.0% per year compounded annually attributable to inflation, and additional projected salary increases ranging from 0.25% to 2.25%, depending on age, attributable to seniority/merit. At June 30, 1996, the unfunded pension benefit obligation was $310,794,000 as shown in the table to the right:

Pension Benefit Obligation

Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	$ 4,557,152,000
Current Employees	
• Accumulated employee contributions including allocated investment income	$ 2,751,671,000
• Employer-financed vested	2,130,684,000
• Employer-financed nonvested	257,032,000
Total pension benefit obligation	$ 9,696,539,000
Net assets available for benefits at cost (Market value is $9,852,172,000)	($ 9,385,745,000)
Unfunded benefit obligations	$ 310,794,000

4. Contributions Required and Contributions Made

TRA's funding policy provides for periodic contributions at actuarially determined rates. 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 by using the entry age normal cost actuarial funding method described in Note 1e. TRA also uses the level percentage of payroll method to amortize the unfunded liability over a closed period ending June 30, 2020. The current payroll contribution rates are stated in Note 1d.

Contributions totaling $332,546,773 ($184,495,447 employer and $148,051,326 employee) were made in accordance with the actuarially determined contribution requirements. On page 50, these contributions are sufficient to meet the required normal costs, amortization of the unfunded liability and administrative costs. The sufficiency, as a percent of covered payroll, is 1.88%. This translates into a contribution sufficiency of about $44.6 million for fiscal year 1996. The Legislative Commission on Pensions and Retirement annually reviews the adequacy of TRA's statutory contributions.

5. Historical Trend Information

Historical trend information designed to provide information about the TRA's progress made in accumulating sufficient assets to pay benefits when due is presented on pages 24 and 51.

6. Reserve Accounts

a. Member Reserves

Accumulated member contributions, without interest, less the amounts refunded, are recorded in the member reserve. Accumulated member contributions for current retirees are transferred to MPRIF 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 annuity.

b. Benefit Reserves

Employer contributions and investment income are recorded in the Benefit Reserve. Administrative expenses, survivor and disability benefits, investment management fees, and interest paid to MPRIF for late reserve transfers are paid from the Benefit Reserves. Also included in this reserve account is the unfunded accrued liability which is the actuarially determined amount necessary to place the retirement fund on a fully funded basis.

c. MPRIF Reserves

For all retiring members, the reserves required to fully fund the actuarial cost of the member's annuity are transferred to MPRIF at retirement. Income distributed by MPRIF is recorded as a revenue, while benefit payments are recorded as an expense. Reserves transferred for each retiree are designated as an annuity awarded. Any mortality gains or losses as determined by an independent actuary hired by the state legislature are an annual adjustment to the value of the account.

7. Cash

Cash on deposit consists of year-end receipts not processed as of the investment cutoff deadline on June 30. TRA cash funds are held in the state treasury, commingled with other state funds. Minnesota Statutes, section 9.031 requires that deposits be secured by depository insurance or a combination of depository insurance and collateral securities held in the state's name by an agent of the state. Such insurance and collateral shall be in amounts sufficient to ensure that deposits do not exceed 90 percent of the sum of the insured amount and the market value of the collateral. Throughout fiscal year 1996, the combined depository insurance and collateral was sufficient to meet legal requirements and secure all TRA deposits.

8. Accounts Receivable

Amounts classified as accounts receivable consist primarily of member and employer contributions received after fiscal year end for salaries earned prior to June 30, 1996. Under Minnesota Statutes, section 354.52 subdivision 4, TRA employers must remit contributions at least monthly. If contributions are not remitted by the 15th day of the month following withholding, interest at a rate of 8.5%, 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.

9. Operating Lease

TRA is committed under a lease agreement for rental of office and storage space through March 31, 1999. For accounting purposes, this lease is considered an operating lease. Lease expenditures for fiscal year 1996 totaled $209,550. Future minimum rental payments required as of June 30, 1996 are as follows:

Fiscal Year Ending June 30	Amount
1997	$216,703
1998	225,356
1999	174,045
Total	$616,104

Analysis of Funding Progress

(Dollars in Thousands)

Year Ended June 30	(1) Net Assets Available for Benefits*	(2) Pension Benefit Obligation	(3) Percentage Funded (1) ÷ (2)	(4) Unfunded Pension Benefit Obligation (2) – (1)	(5) Annual Covered Payroll	(6) Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4) ÷ (5)
1987	3,525,684	4,464,496	80.0%	939,812	1,503,546	62.5%
1988	3,905,264	4,849,460	80.5%	944,196	1,594,391	59.2%
1989	4,467,274	5,549,423	80.5%	1,082,149	1,749,856	61.8%
1990	5,045,508	6,029,037	83.7%	983,529	1,785,459	55.1%
1991	5,513,281	6,536,973	84.3%	1,023,692	1,874,365	54.6%
1992	6,240,491	6,996,540	89.2%	756,049	1,934,014	39.1%
1993	6,923,414	7,607,562	91.0%	684,148	2,025,000	33.8%
1994	7,592,215	8,463,676	89.7%	871,461	2,104,578	41.4%
1995	8,226,082	9,049,649	90.9%	823,567	2,197,262	37.5%
1996	9,385,745	9,696,539	96.8%	310,794	2,252,383	13.8%

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of TRA's funding status on an ongoing basis. Analysis of this percentage (column 3) over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the retirement fund. Trends in unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll (column 6) approximately adjusts for the effects of inflation and aids analysis of TRA's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the retirement fund.

*At cost (see Note 1e).

Ten Year Summary of Revenue

(By Source)

Year Ended June 30	Member Contributions	Employer Contributions	Net Investment Income	Other	Total
1987	$ 72,867,303	$142,069,970	$ 445,013,195	$ 807,038	$ 660,757,506
1988	75,488,713	148,607,095	314,711,337	600,954	539,408,099
1989	81,728,962	160,288,707	490,671,524	915,744	733,604,937
1990	84,542,414	166,098,804	520,610,905	926,288	772,178,411
1991	89,313,081	159,439,219	430,877,172	1,964,986	681,594,458
1992	91,505,605	162,369,508	712,965,243	1,942,689	968,783,045
1993	94,709,399	168,070,511	688,071,570	2,347,431	953,198,911
1994	100,803,239	171,854,594	710,189,034	8,752,052	991,598,919
1995	143,535,906	179,671,657	666,099,808	553,171	989,860,542
1996	148,051,326	184,495,447	1,221,792,461	713,733	1,555,052,967

Ten Year Summary of Expenditures

(By Type)

Ended June 30	Retirement Benefits	Survivor Benefits	Disability Benefits	Refunds	Administrative Expenses	Other	Total
1987	$121,444,548	$1,894,172	$1,813,239	$6,856,989	$2,073,334	$2,853,548	$136,935,830
1988	144,210,986	2,079,182	1,953,743	5,627,523	2,183,506	2,773,766	158,828,706
1989	156,417,938	2,267,668	2,164,380	5,347,598	2,493,783	2,903,073	171,594,440
1990	174,693,669	2,641,650	2,456,735	6,445,983	2,631,691	5,074,347	193,944,075
1991	194,589,338	2,921,349	2,904,585	5,554,181	2,790,089	5,061,999	213,821,541
1992	220,352,768	3,314,799	3,399,088	5,494,749	2,895,659	6,116,742	241,573,805
1993	249,018,533	3,719,037	3,892,680	4,749,970	3,124,192	5,770,675	270,275,087
1994	300,482,282	4,341,112	4,213,376	3,583,342	3,338,007	6,838,750	322,796,869
1995	328,764,719	5,125,383	4,967,050	4,619,063	3,665,748	8,854,935	355,996,898
1996	366,352,840	6,080,640	5,638,668	5,039,811	3,835,501	8,439,350	395,386,810

Comparative Administrative Expenses

For the Years Ended June 30, 1996 and June 30, 1995

	1996	1995
Personnel Services		
Salaries	**$1,973,197**	$1,882,208
Employer Contributions to Retirement	**166,153**	148,376
Employer Contributions to Social Security	**148,889**	138,596
Insurance Contributions	**197,257**	186,422
Employee Training	**15,035**	18,352
Workers Compensation	**1,438**	1,988
Subtotal	**2,501,969**	2,375,942
Professional Services		
Actuarial	**102,534**	80,421
Audit	**38,572**	26,120
Legal	**2,556**	20,685
Medical	**50,786**	33,534
Computer	**265,845**	76,413
Management Consultant	**45,939**	18,342
Subtotal	**506,232**	255,515
Office Administration		
Copying and Printing	**88,683**	223,366
Department Head Expenses	**1,499**	1,408
Depreciation of Equipment	**78,485**	72,558
Dues and Subscriptions	**5,715**	7,353
Equipment Rental	**11,819**	2,187
Insurance	**2,571**	3,223
Loss on Disposal of Equipment	**15,425**	0
Office Space	**209,550**	223,646
Office Supplies	**69,784**	70,029
Postage	**179,294**	280,429
Repairs and Maintenance	**49,687**	46,024
State Indirect Costs	**34,052**	29,414
Telephone	**37,722**	33,167
Travel - Employee	**26,688**	27,309
Miscellaneous	**4,608**	4,929
Subtotal	**815,582**	1,025,042
Board of Trustees		
Substitute Teachers	**1,471**	1,419
Travel	**10,247**	7,830
Subtotal	**11,718**	9,249
Total Administrative Expenses	**$3,835,501**	$3,665,748

Investments Section

Investment Summary

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 $5.61 billion. In addition, TRA's share of the assets of the Minnesota Post Retirement Investment Fund (MPRIF), from which retiree benefits are paid, is approximately $4.23 billion. The SBI is comprised of Governor Arne H. Carlson (Chair), State Auditor Judith H. Dutcher, State Treasurer Michael A. McGrath, Secretary of State Joan Anderson Growe, and Attorney General Hubert H. Humphrey III. Howard Bicker serves as Executive Director of the Board.

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 St. 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.

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.

Investment Advisory Council
(as of December 1996)

Gary Austin
Executive Director
Teachers Retirement Association

David Bergstrom
Executive Director
Mn State Retirement System

John E. Bohan
Vice Pres., Pension Investments
Grand Metropolitan-Pillsbury

Roger Durbahn
Governor's Appointee
Retiree Representative

Kenneth F. Gudorf
Chief Executive Officer
Agio Capital Management, LLC

Douglas Gorence
Director, Pension Investments
Honeywell, Inc.

P. Jay Kiedrowski
Executive Vice President
Norwest Bank Minnesota

Wayne Simoneau
Commissioner
Mn Department of Finance

Han Chin Liu
Governor's Appointee
Active Employee Representative

Judith W. Mares
Financial Consultant
Mares Financial Consulting, Inc.

Malcolm W. McDonald**
Director and Corporate Secretary
Space Center, Inc.

Gary R. Norstrem
Sr. Vice Pres., Institutional Mktg.
Piper Capital Management

Daralyn Peifer
Manager, Benefits Finance
General Mills, Inc.

Patrick Sexton
Governor's Appointee
Active Employee Representative

Professor Michael Stutzer
Carlson School of Management
University of Minnesota

Mary Most Vanek
Acting Executive Director
Public Employees Retirement Assn.

Jan Yeomans*
Treasurer
3M Co.

*Chair
**Vice-Chair

Richards & Tierney, Inc. of Chicago are general consultants to the SBI. Pension Consulting Alliance, of Studio City, California serves as a consultant for international investments. All investments made by the State Board of Investment (SBI) are governed by the prudent person rule and other standards codified in Minnesota Statutes, sections 11A and 356A.

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

Basic Retirement Fund

Investment Objectives

The pension contributions of TRA members are invested through the Basic Retirement Fund (Basic Fund) administered by SBI. SBI has one overriding responsibility with respect to its management of the Basic Fund: to ensure that sufficient funds are available to finance promised benefits at the time of retirement.

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

Normally, pension assets will accumulate in the Basic Fund for thirty to forty years during an employee's years of active service. This provides the Basic Fund with a long investment time horizon and permits SBI to take advantage of the 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 Fund relative to a composite of market indices that is weighted in a manner that reflects their long-term asset allocation policy. The Basic 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 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 Fund.

The following table shows the actual asset mix of the Basic Fund at the end of fiscal year 1996:

Basic Fund Asset Mix
(June 30, 1996)

	Actual Mix	Policy Mix
Domestic Stocks	51.5%	45.0%
International Stocks	14.4%	15.0%
Bonds	23.2%	24.0%
Alternative Assets	10.1%	15.0%
Unallocated Cash	0.8%	1.0%
Total	100.0%	100.0%

Total Return Vehicles

SBI invests the majority of the Basic Fund's assets in *common stocks* (both domestic and international). A large allocation is consistent with the investment time horizon of the Basic 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. 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.

The Board 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

The Board includes other asset classes in the Basic Fund 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 Fund 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 Fund, thereby controlling return volatility.

FY 1996 Changes

In October 1995, the Board increased the long term policy allocation for international equities from 10% to 15% of the total fund and specified that a portion of the international allocation would focus on emerging markets. Over the remainder of the fiscal year, assets were withdrawn from the domestic stock and bond segments to provide funds for this asset allocation change. By the end of the fiscal year, the asset allocation change was nearly completed and the international segment was 14.4% of the total fund.

At the close of fiscal year 1996, 10.1% of the Basic Fund was invested in alternative assets. Until appropriate vehicles are identified, uninvested portions of the alternative asset allocation are held in domestic stocks.

Rate of Return Results

The Basic Fund produced a total rate of return for fiscal year 1996 of 18.8%. Over the last five years, the Basic Fund have generated an annualized return of 13.0%. The current market value of the total Basic Fund is about $13.1 billion. The TRA share of the fund is approximately 43% or $5.61 billion. Performance of specific money managers is presented later in this investment section.

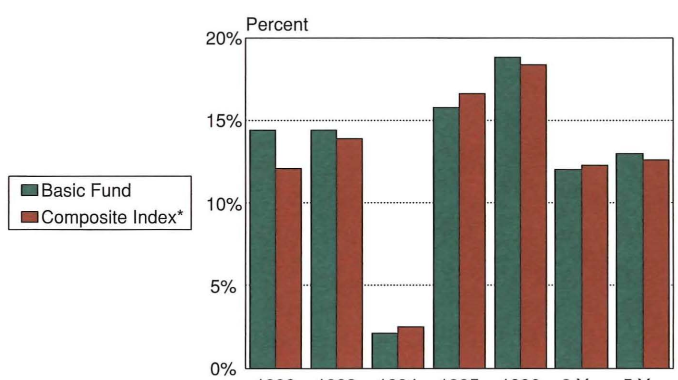
As stated earlier, the Basic Fund is expected to exceed the return of a composite of market indices over a five-year period. Performance relative to this standard will measure two effects:

- The ability of the managers selected by the SBI, in aggregate, to add value to the returns available from the broad capital markets.
- The impact of the SBI's rebalancing activity. (The 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, 1996, the Basic Fund out performed the composite index by 0.4 percentage point annualized. The primary contributors to the value added came from above index performance by the international stock, bond and private equity segments of the portfolio. Value added by these groups of managers was sufficient to counterbalance below index performance by the domestic stock segment during the period. The SBI's policy of periodically rebalancing back to asset allocation targets also contributed importantly to the overall value added during the last five years.

Actual returns relative to the total fund composite index over the last five years are presented in the following graph:

Basic Fund Performance vs. Composite Index



	1992	1993	1994	1995	1996	3 Yr.	5 Yr.
Basic Fund	14.4%	14.4%	2.1%	15.8%	18.8%	12.0%	13.0%
Composite Index*	12.1%	13.9%	2.5%	16.6%	18.4%	12.3%	12.6%

* Adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and American Home Products restriction through 10/31/93.

Minnesota Post Retirement Investment Fund

When a member retires, TRA transfers assets on behalf of the member to the Minnesota Post Retirement Investment Fund. The Post Retirement Fund includes the assets of retired public employees covered by nine statewide retirement plans: the eight plans which participate in the Basic Fund 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, 1996, the Post Fund had a market value of $11.9 billion. TRA retirees' portion of this value is approximately $5.1 billion or 42.9%. The Post Fund generated an investment return of 17.2% for fiscal year 1996.

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 Fund, it is still sufficiently long to allow the State Board of Investment (SBI) to take advantage of the long run return opportunities offered by common stock in order to meet its actuarial return target (5%, compounded annually) as well as to finance retirement benefit increases.

The SBI measures the performance of the Post Retirement 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 the SBI's focus is on true net return.

Asset Allocation

The 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% allocation to common stocks. During fiscal year 1994, the Board 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 1996 is presented in the following table:

Post Fund Asset Mix
(June 30, 1996)

	Actual Mix	Policy Mix
Domestic Stocks	52.1%	50.0%
Int'l. Stocks	14.5	15.0
Bonds	30.7	27.0
Alternative Assets	0.4	5.0
Unallocated Cash	2.3	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.

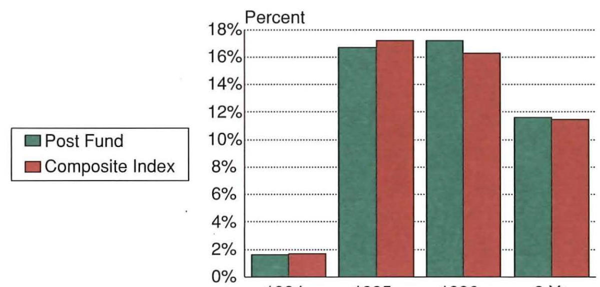
Yield oriented alternative investments are designed to provide the opportunity for higher long-term returns than those typically available from bonds yet still generate sufficient current income to be compatible with the objectives of the Post Fund. Typically, these investments (e.g. business loan participations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

Effective July 1, 1993, assets of the Post Fund were transferred to external managers. 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. Since the asset allocation changed dramatically during fiscal year 1993, performance relative to this standard is available only since fiscal year 1994. The Post Fund's performance exceeded its composite market index by 0.1 percentage point for the three-year period since July 1, 1993.

Actual returns relative to the total fund composite index over the last two years are shown in the graph on the right.

Post Fund's Performance vs. Composite Index



	1994	1995	1996	3 Yr.
Post Fund	1.6%	16.7%	17.2%	11.6%
Composite Index	1.7%	17.2%	16.3%	11.5%

* Adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and American Home Products restriction through 10/31/93.

Benefit Increase Formula

The retirement benefit increase formula of the Post Fund was changed through legislation enacted by the 1992 Legislature. The new formula was effective beginning in fiscal year 1993 and is based on a combination of two components:

- ***Inflation Component.*** Each year, retirees will receive an inflation-based adjustment equal to 100% of inflation, up to a maximum of 3.5% specified in statute. The inflation component will be granted regardless of investment performance. The limit, or cap, will maintain the actuarial soundness of the entire plan and is the difference between the 8.5% return assumption for the Basic Fund, and the 5.0% return assumption for the Post Fund.
- ***Investment Component.*** Each year, retirees will also receive an investment-based adjustment, *provided* net investment gains are above the amount needed to finance the Post Fund's actuarial assumption of 5% 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.

Because the investment-based component of the new formula was not implemented fully during the initial years, a temporary transition adjustment was available during a phase-in period. The transition adjustment provided in law is:

FY 1993	1.00%
FY 1994	0.75%
FY 1995	0.50%
FY 1996	0.25%

By statute, retirees will receive *either* the investment-based component *or* the transition adjustment, whichever is higher, for the respective year.

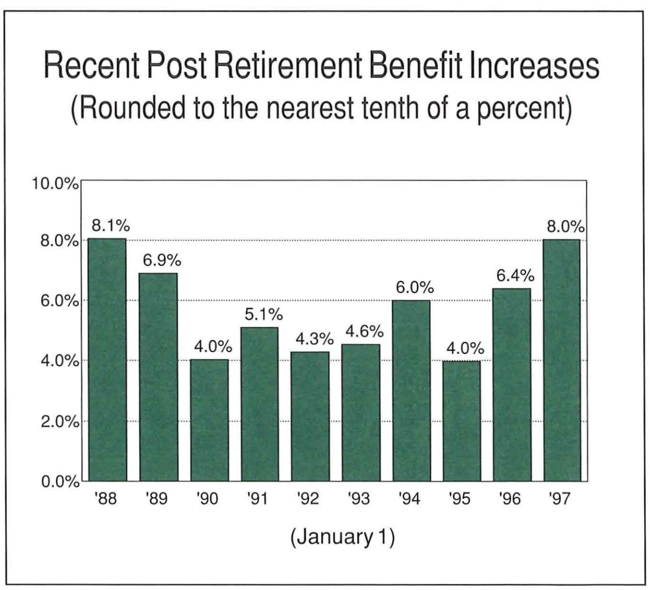
The new formula has two primary advantages:

- 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 8.0395% for fiscal year 1996 payable January 1, 1997. As noted earlier, this increase is comprised of two components:

- *Inflation adjustment* of 2.8% which is equal to 100% of the reported Consumer Price Index for wage earners (CPI-W) increase for the twelve months ending June 30, 1996. (This is the same inflation index used to calculate increases in Social Security payments.)
- *Investment adjustment* of 5.2395%. This represents a portion of the market value increase that exceeds the amount needed to cover the actuarial assumed rate of return (5.0%) 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 8.0395% increase granted for fiscal year 1996 represents the fourth post retirement adjustment provided under the new benefit increase formula described above.

The Basic Fund 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 105, MEA Building, 55 Sherburne Avenue, St. Paul, MN 55155.

Stock and Bond Money Managers Retained by the SBI

Domestic Stock

FY 1996 performance

Active Managers	Total Portfolio Return	Benchmark Return
Alliance Capital	23.0%	24.4%
Brinson Partners	30.8	22.9
Forstmann Leff	32.1	24.3
Franklin Portfolio	23.8	23.1
GeoCapital	26.7	36.7
Investment Advisers	26.3	23.1
IDS Advisory	24.5	25.7
Independence Associates	26.1	26.6
Jundt Associates	22.4	20.5
Lincoln Capital	32.3	28.1
Oppenheimer	28.0	25.2
Waddell & Reed	16.4	20.8
Weiss Peck & Greer	41.9	23.4
Semi-Passive Managers		
Franklin Portfolio	25.2	26.1
J.P. Morgan	26.4	26.1
Barclays Global Investors	28.4	26.1
Passive Manager		
Barclays Global Investors	25.5	25.5
Aggregate Domestic Stock Pool*	**25.9**	**25.7**
Performance Standard		
Wilshire 5000	26.2	—

* includes Emerging Managers Program (see below)

The annualized return for the domestic stock portfolio for the last five years is 15.7%.

The Emerging Managers Program

The Emerging Managers Program is designed to add performance value to the stock portfolio by investing funds with smaller firms which have the potential for strong returns during the initial years of their existence.

	Actual Return	Benchmark Return
CIC Asset Management	27.6%	24.8%
Cohen Klingenstein & Marks	25.0	20.7
Compass Capital	24.2	27.2
Kennedy Capital	35.5	26.3
New Amsterdam	21.4	19.2
Valenzuela Capital	23.7	23.6
Wilke/Thompson	16.3	27.7
Winslow Capital	19.2	22.2
Zevenbergen Capital	23.6	23.6

Stock and Bond Money Managers Retained by the SBI

International Stock

FY 1996 performance

Active Managers	Actual Return	Benchmark Return
Baring International	20.1%	13.3%
Brinson Partners	25.6	13.3
Marathon Asset Mgmt.	20.3	13.3
Rowe Price-Fleming	18.0	13.3
Scudder, Stevens & Clark	21.7	13.3
Templeton Investment Counsel	17.6	13.3
Emerging Markets Managers		
Genesis Asset Managers	1.4*	0.2*
Montgomery Asset Mgmt.	1.6*	0.2*
Passive Manager		
State Street Global Advisors	13.6	13.3
Aggregate International Pool	**16.9**	
Performance Standard		
Composite Index***	13.4	

* Manager retained May 1, 1996. Performance reflects May-June 1996 only.

** Includes impact of currency overlay program which was initiated in December 1995. For the period December 1995-June 1996, the current overlay program added 0.2% to the EAFE index fund.

***EAFE-Free through 4/31/96. Composite of EAFE-Free and Emerging Markets Free since 5/1/96. At the close of the fiscal year, the composite was weighted 91.8% EAFE-Free and 8.2% Emerging Markets Free.

The annualized return for the international portfolio since its October 1, 1992 inception is 14.2%.

Domestic Fixed Income

FY 1996 bond performance

Active Managers	Actual Return	Benchmark Return
BEA Associates	4.5%	5.0%
Investment Advisors	4.7	5.0
IDS Advisory	4.0*	5.3*
Miller, Anderson & Sherrerd	6.1	5.0
Standish, Ayer & Wood	5.8	5.0
Western Asset Management	5.7	5.0
Semi-Passive Managers		
BlackRock	0.4**	0.6**
Goldman Sachs	5.5	5.0
Lincoln Capital	5.0	5.0
Aggregate Bond Pool	**5.3**	**5.0**
Performance Standards		
Lehman Aggregate	5.0	

* Prior to January 1996, manager had government/corporate mandate only.

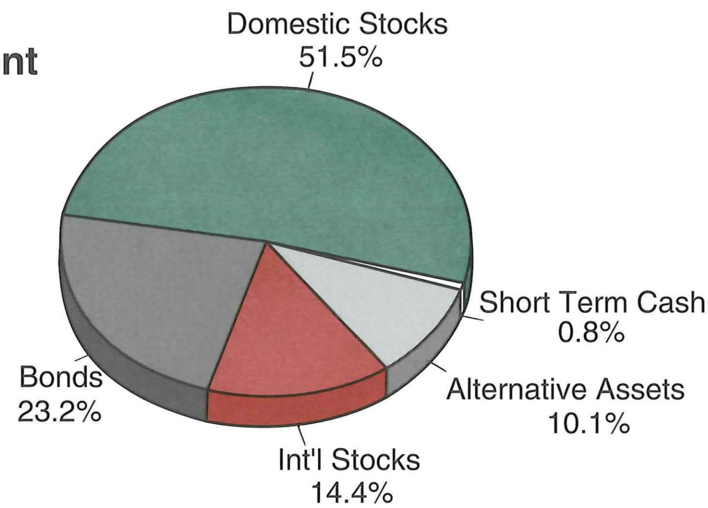
** Manager not retained until April 1, 1996, Performance reflects April-June 1996 only.

The annualized return for the bond portfolio for the last 5 years is 8.8%.

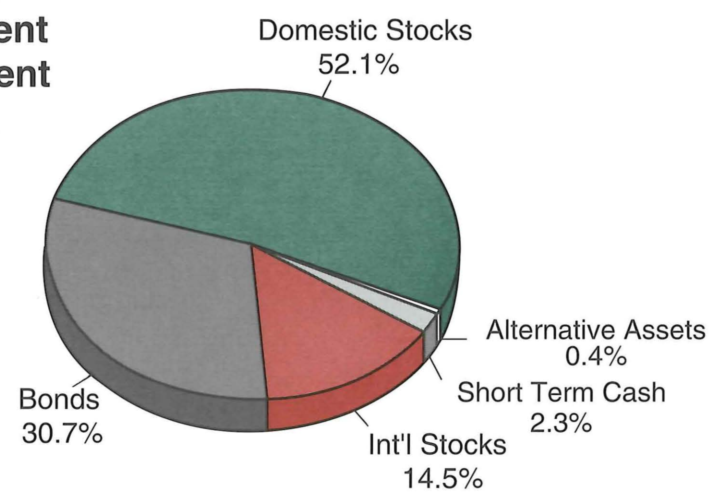
Teachers Retirement Fund
Portfolio Distribution

June 30, 1996

Basic Retirement Fund



Minnesota Post Retirement Investment Fund



Teachers Retirement Fund

Comparative Statement of Earnings*

For Fiscal Years Ended June 30, 1996 and June 30, 1995

Unaudited

Investment Earnings:	1996	1995
Interest on Cash Equivalent Investments	**$ 3,811,757**	$ 3,889,398
Managed Pooled Accounts	**681,074,650**	302,656,920
Net Gain on Sales of Pools	**124,302,440**	62,358,827
Earnings from Investments	**$ 809,188,847**	$368,905,145
Miscellaneous Interest Income:		
Miscellaneous Interest Income	**20,951**	60,789
Total Earnings and Interest Income	**$ 809,209,798**	$368,965,934
Less Investment Management Fees:		
Investment Management Fees	**(7,818,873)**	(6,846,505)
Total Net Investment Income	**$ 801,390,925**	$362,119,429
Less Transfers to MPRIF	**(620,477)**	(2,008,430)
Undistributed Excess Earnings	**5,342,953**	384,489
Total Income Available for Distribution	**$ 806,113,401**	$ 360,495,488
Distribution:		
Teachers' Deposits	**$ 512,702,780**	$226,102,685
Employer Contributions	**281,969,455**	129,019,150
Excess Earnings Reserve	**11,441,166**	5,373,653
Total Distribution	**$ 806,113,401**	$360,495,488

*TRA's share of the Basic Fund held in trust by the State Board of Investment. Does not include earnings of TRA's participation in the Post Fund.

Per Minnesota Statutes, section 354.07, subdivision 5, the annual interest rate for money purchase accounts is 18.0% for 1996 and 8.5% for 1995.

Summary of Investments*

As of June 30, 1996

	Book		Market	
	Book Value	Total Book Value	Market Value	Total Market Value
Fixed Income Investments:				
External Fixed Income Pools	$ 646,913,620		$ 629,119,670	
Bond Index Pool	677,268,833		667,019,241	
Total Fixed Income Investments		$ 1,324,182,453		$ 1,296,138,911
Equity Investments:				
External Indexed Equity Pool	$ 777,073,691		$ 790,828,796	
External Active Managed Equity Pool	1,109,825,170		1,305,870,809	
Internal International Passive Equity Pool	323,481,096		391,828,498	
Internal International Active Country Pool	107,846,253		119,190,270	
Internal International Active Stock Pool	196,377,267		228,111,363	
Internal International Emerging Markets	67,815,404		68,437,275	
Semi-Passive Domestic	648,694,078		783,389,781	
Total Equity Investments		$ 3,231,112,959		$ 3,687,656,792
Alternative Investments:				
Internal Venture Capital Pool	$ 267,779,218		$ 309,781,290	
Internal Real Estate Fund Pool	227,356,833		219,116,138	
Internal Resource Fund Pool	42,753,130		46,918,350	
Total Alternative Investments		$ 537,889,181		$ 575,815,778
Short Term Investment:				
Short Term Cash Equivalents	$ 45,478,965		$ 45,478,965	
Total Short Term Investments		$ 45,478,965		$ 45,478,965
Total Investments		$ 5,138,663,558		$ 5,605,090,446

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

General Information Regarding Investment of Funds

Investments for Minnesota Teachers Retirement Association are made by the State Board of Investment 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 Retirement Fund and the Post Retirement Investment 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 Legislative Auditor.

Actuarial Section

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 13, 1996

Mr. Lawrence A. Martin
Executive Director
Minnesota Legislative Commission
on Pensions and Retirement
55 State Office Building
St. Paul, MN 55155-1201

RE: Teachers Retirement Association July 1, 1996 Actuarial Valuation

Dear Larry:

Enclosed is the final July 1, 1996 Actuarial Valuation Report for the Teachers Retirement Association.

Please give Bill Hogan or me a call if you have any questions.

Sincerely,

Tom Custis

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

TKC/bh

Enclosure

cc: Gary Austin (14)
John Gunyou (2)
Jim Nobles (2)
Legislative Reference Library (2)
Gabriel Roeder Smith (1)

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Summary of Actuarial Assumptions and Methods

Age	Salary Increases
20	7.25
25	7.10
30	7.00
35	7.00
40	6.70
45	6.05
50	5.60
55	5.35
60	5.25

1. Interest:

Pre-Retirement -- 8.5% per annum

Post-Retirement -- 8.5% per annum

2. Salary Increases:

Reported salary for prior fiscal year, with new hires annualized, increased according to the table on the right to current fiscal year and annually for each future year.

3. Mortality:

Pre-Retirement:
Male - 1983 Group Annuity Mortality Table for males set back eight years.
Female - 1983 Group Annuity Mortality Table for females set back four years.

Post-Retirement:
Male - Same as above except set back four years.
Female - Same as above except set back two years.

Post-Disability:
Male - 1977 Railroad Retirement Board Mortality for Disabled Annuitants.
Female - 1977 Railroad Retirement Board Mortality for Disabled Annuitants.

4. Retirement Age:

Age 62, or if over age 62, one year from valuation date. In addition, 45% of Basic Members and 30% of Coordinated Members are assumed to retire each year that they are eligible for the Rule of 90.

5. Separation From Service:

Select and ultimate rates were based on plan experience as of June 30, 1989. Ultimate rates after the third year are illustrated in the Annual Separation table of sample values below. Select rates for the first three years are as follows:

	First Year	Second Year	Third Year
Less than 35	.3	.15	.1
35-44	.25	.125	.08
45-60	.3	.15	.1

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

	Pre-Retirement Death		Withdrawal		Disability	
Age	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 5% accounted for by 5% post-retirement assumptions.
12. Special Consideration:	Married Members assumed to elect subsidized joint and survivor form of annuity as follows: Males -- 15% elect 50% J&S option 50% elect 100% J&S option 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:	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)

	1996	1995
A. Contributions		
1. Statutory Contributions – Chapter 354 % of Payroll	**14.66%**	14.66%
2. Required Contributions – Chapter 356 % of Payroll	**12.78%**	14.30%
3. Sufficiency (Deficiency) (A.1-A.2)	**1.88%**	0.36%
B. Funding Ratios		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	**$ 9,541,221**	$ 8,348,124
b. Current Benefit Obligations (Table 2)	**$ 9,696,539**	$ 9,049,649
c. Funding Ratio (a/b)	**98.40%**	92.25%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	**$ 9,541,221**	$ 8,348,124
b. Actuarial Accrued Liability (Table 3)	**$10,366,168**	$ 9,717,623
c. Funding Ratio (a/b)	**92.04%**	85.91%
3. Projected Benefit Funding Ratio (Table 2)		
a. Current and Expected Future Assets	**$13,494,541**	$12,234,567
b. Current and Expected Future Benefit Obligations	**$12,769,666**	$12,095,200
c. Funding Ratio (a/b)	**105.68%**	101.15%
c. Plan Participants		
1. Active Members		
a. Number	**68,490**	67,558
b. Projected Annual Earnings	**$ 2,391,385**	$ 2,325,059
c. Average Annual Earnings (Actual $)	**$ 34,916**	$ 34,416
d. Average Age	**42.9**	42.9
c. Average Service	**12.4**	12.5
2. Others		
a. Service Retirements	**22,434**	21,458
b. Disability Retirements	**409**	379
c. Survivors	**1,464**	1,331
d. Deferred Retirements	**5,767**	5,103
e. Terminated Other Non-vested	**16,444**	16,411
f. Total	**46,518**	44,682

Actuary's Commentary

Purpose

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

Report Highlights

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

- The Accrued Benefit Funding Ratio is a measure of current funding status, and when viewed over a period of years, presents a view of the funding progress. It is based upon benefits which have been earned by service to the valuation date. This year's ratio is 98.40%. The corresponding ratio for the prior year was 92.25%.
- 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 1996 the ratio is 92.04%, which is an increase from the 1995 value of 85.91%.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 105.68% 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 (MPRIF). After the MPRIF liability has been calculated for each participating Plan, the State Board of Investment (SBI) will determine each Plan's portion of the excess earnings for the January benefit increase, as well as the Plan's allocated market share of MPRIF.

Actuarial Balance Sheet (Table 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 in accordance with Statement No. 5 of the Governmental Accounting Standards Board (GASB). Those requirements are:

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

GASB Disclosure

The Current Benefit Obligation amounts in Table 2 are required to be disclosed by Statement No. 5 of the Governmental Accounting Standards Board (GASB). However, Statement No. 5 uses the terms *Actuarial Present Value of Credited Projected Benefits* and *Pension Benefit Obligation* rather than *Current Benefit Obligation*.

The July 1, 1996 Pension Benefit Obligation reported in Table 2 is reformatted for GASB reporting purposes in the table on the next page.

Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	$4,557,152,000
Current Employees	
Accumulated employee contributions including allocated investment income	2,751,671,000
Employer-financed vested	2,130,684,000
Employer-financed nonvested	257,032,000
Total Pension Benefit Obligation	$9,696,539,000
Net Assets Available for Benefits at Cost	$9,385,745,000
Total Benefit Obligation Less Assets	$ 310,794,000
Funded Ratio	96.79%

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.

The payments will increase 5% each year because that is the assumed rate of increase in payroll. Although the payment schedule will be adequate to amortize the existing unfunded, the lower payments in the earlier years will not be sufficient to cover the interest on the unfunded liability. After a few years, the annual payment will cover the interest and also repay a portion of the unfunded.

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.

Contribution 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 since the Statutory Contribution Rate is 14.66% compared to the Required Contribution Rate of 12.78%.

Changes in Actuarial Assumptions

There were no changes in Actuarial Assumptions for the current valuation.

Changes in Plan Provisions

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

Accounting Balance Sheet

Table 1

July 1, 1996

(Dollars in Thousands)

	Market Value	Cost Value
A. Assets		
1. Cash, Equivalents, Short-term Securities	$ 47,272	$ 47,272
2. Investments		
a. Fixed Income	1,296,139	1,324,182
b. Equity	4,044,356	3,541,645
c. Real Estate	219,116	227,357
3. Equity in MPRIF	4,225,515	4,225,515
4. Other	41,100	41,100
B. Total Assets	$9,873,498	$9,407,071
C. Amounts Currently Payable	$ 21,326	$21,326
D. Assets Available for Benefits		
1. Member Reserves	$1,164,651	$1,164,651
2. Employer Reserves	4,462,006	3,995,579
3. MPRIF Reserves	4,225,515	4,225,515
4. Non-MPRIF Reserves	0	0
5. Total Assets Available for Benefits	$9,852,172	$9,385,745
E. Total Amounts Currently Payable and Assets Available for Benefits	$9,873,498	$9,407,071

F. Determination of Actuarial Value of Assets		
1. Cost value of Assets Available for Benefits (D5)		$9,385,745
2. Market Value (D5)	$9,852,172	
3. Cost Value (D5)	9,385,745	
4. Market Over Cost: (F2-F3)	$ 466,427	
5. 1/3 of Market Over Cost: (F4)/3		155,476
6. Actuarial Value of Assets (F1 + F5) (Same as *Current Assets*)		$9,541,221

Actuarial Balance Sheet

Table 2

July 1, 1996

(Dollars in Thousands)

A. Current Assets (Table 1, F6)			$ 9,541,221
B. Expected Future Assets			
1. Present Value of Expected Future Statutory Supplemental Contributions			1,549,822
2. Present Value of Future Normal Costs			2,403,498
3. Total Expected Future Assets			$ 3,953,320
C. Total Current and Expected Future Assets			$13,494,541
D. Current Benefit Obligations	**Non-Vested**	**Vested**	**Total**
1. Benefit Recipients			
a. Retirement Annuities		$4,080,617	$ 4,080,617
b. Disability Benefits		71,124	71,124
c. Surviving Spouse and Child Benefits		167,587	167,587
2. Deferred Retirements with Future Augmentation		222,272	222,272
3. Former Members without Vested Rights		15,552	15,552
4. Active members			
a. Retirement Annuities	12,506	4,707,524	4,720,030
b. Disability Benefits	179,896	0	179,896
c. Survivor's Benefits	63,642	0	63,642
d. Deferred Retirements	988	119,788	120,776
e. Refund Liability Due to Death or Withdrawal	0	55,043	55,043
5. Total Current Benefit Obligations	$257,032	$9,439,507	$ 9,696,539
E. Expected Future Benefit Obligations			$ 3,073,127
F. Total Current and Expected Future Benefit Obligations			$12,769,666
G. Current Unfunded Actuarial Liability (D5-A)			$ 155,318
H. Current and Future Unfunded Actuarial Liability (F-C)			($ 724,875)

Determination of Unfunded Actuarial Accrued Liability (UAAL) and Supplemental Contribution Rate — Table 3

July 1, 1996

(Dollars in Thousands)

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
	(1)	(2)	(3)=(1)-(2)
A. Determination of Actuarial Accrued Liability (AAL)			
1. Active			
a. Retirement Annuities	$ 7,528,366	$1,881,151	$ 5,647,215
b. Disability Benefits	294,720	117,371	177,349
c. Survivor's Benefit	99,021	37,057	61,964
d. Deferred Retirements	187,931	99,834	88,097
e. Refunds Due to Death or Withdrawal	102,475	268,085	(165,610)
f. Total	$ 8,212,513	$2,403,498	$ 5,809,015
2. Deferred Retirements with Future Augmentation	222,272		222,272
3. Former Members without Vested Rights	15,552		15,552
4. Annuitants in MPRIF	4,225,515		4,225,515
5. Recipients Not in MPRIF	93,814		93,814
6. Total	$12,769,666	$2,403,498	$10,366,168

B. Determination of Unfunded Actuarial Accrued Liability (UAAL)

1. AAL (A6)	$10,366,168
2. Current Assets (Table 1, F6)	9,541,221
3. UAAL (B1 - B2)	$824,947

C. Determination of Supplemental Contribution Rate

1. Present Value of Future Payrolls through the amortization date of July 1, 2020	$38,648,937
2. Supplemental Contribution Rate (B3/C1)	2.13%

Changes in Unfunded Actuarial Accrued Liability (UAAL)

Table 4

Year Ending June 30, 1996

(Dollars in Thousands)

A. UAAL at Beginning of Year	$1,369,499
B. Change Due to Interest Requirements and Current Rate of Funding	
1. Normal Cost and Expenses	$ 250,003
2. Contribution	(332,547)
3. Interest on A, B1 and B2	112,899
4. Total (B1 + B2 + B3)	$ 30,355
C. Expected UAAL at End of Year (A + B4)	$1,399,854
D. Increase (Decrease) Due to Actuarial Losses (Gains)	
Because of Experience Deviations from Expected	
1. Salary Increases	($ 143,217)
2. Investment Return	(437,398)
3. MPRIF Mortality	(994)
4. Mortality of Other Benefit Recipients	11,477
5. Other Items	(4,775)
6. Total	($ 574,907)
E. UAAL at End of Year Before Plan Amendments and Changes in Actuarial Assumption (C + D6)	$ 824,947
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 (E + F + G)	$ 824,947

Determination of Contribution Sufficiency — Table 5

July 1, 1996

(Dollars in Thousands)

	Percent of Payroll	Dollar Amount
A. Statutory Contributions - Chapter 354		
1. Employee Contributions	6.51%	$155,599
2. Employer Contributions	8.15%	194,818
3. Total	14.66%	$350,417
B. Required Contributions - Chapter 356		
1. Normal Cost		
a. Retirement Benefits	8.27%	$197,843
b. Disability Benefits	0.50%	11,914
c. Survivors	0.16%	3,933
d. Deferred Retirement Benefits	0.39%	9,286
e. Refunds Due to Death or Withdrawal	1.17%	28,076
f. Total	10.49%	$251,052
2. Supplemental Contribution Amortization by July 1, 2020 of UAAL	2.13%	50,937
3. Allowance for Expenses	0.16%	3,826
4. Total	12.78%	$305,815
C. Contribution Sufficiency (Deficiency) [A3-B4]	1.88%	$ 44,602

Note: Projected annual payroll for fiscal year beginning on July 1, 1996 is $2,391,385.

Summary of Actuarial and Unfunded Actuarial Liabilities

(Dollars in Thousands)

Valuation as of June 30	Aggregate Actuarial Liabilities	Valuation Assets	Assets as a % of Actuarial Liabilities	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a % of Annual Active Member Payroll
1987	$ 5,172,415	$3,638,835	70.4%	$1,533,580	$1,503,546	102.0%
1988	5,586,441	3,978,898	71.2%	1,607,543	1,594,391	100.8%
1989	6,249,413	4,567,997	73.1%	1,681,416	1,723,122	97.6%
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%

Solvency Test

(Dollars in Thousands)

	Aggregate Accrued Liabilities for:				Portion of Actuarial Accrued Liabilities Covered by Reported Assets		
Valuation as of June 30	(1) Member Contributions	(2) Retirees and Beneficiaries	(3) Members (Employer Financed Portion)	Valuation Assets	(1)	(2)	(3)
1987	$ 558,562	$1,534,789	$3,079,055	$3,638,835	100%	100%	50.2%
1988	616,436	1,682,034	3,287,971	3,978,898	100%	100%	51.1%
1989	733,650	1,880,080	3,635,683	4,567,997	100%	100%	53.8%
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%

Schedule of Active Member Valuation Data

Year Ended June 30	Active Members	Annual Payroll	Annual Average	% Increase in Average Pay
1987	61,283	$1,503,701,316	$24,537	4.9%
1988	63,326	1,594,391,290	25,178	2.6%
1989	64,796	1,723,121,553	26,593	5.6%
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%

Schedule of Retirees and Beneficiaries

Year Ended June 30	Added During Year	Removed During Year	Number End of Year	Total Annual Benefits	% Increase in Total Annual Benefits	Average Annual Benefits
1987	1,354	455	15,459	$125,151,959	22.9%	$ 8,096
1988	889	456	15,892	148,243,910	18.5%	9,328
1989	994	501	16,385	160,849,985	8.5%	9,817
1990	1,262	511	17,136	179,792,053	11.8%	10,492
1991	1,499	541	18,094	200,415,271	11.5%	11,076
1992	1,630	512	19,212	227,066,655	16.7%	11,819
1993	2,166	568	20,810	256,630,249	13.0%	12,332
1994	1,886	559	22,137	309,036,770	20.2%	13,960
1995	1,632	601	23,168	338,857,152	9.6%	14,626
1996	1,806	667	24,307	378,072,148	11.6%	15,554

Statistical Section

Summary of Changes in Membership 1995-96

Active and Inactive Members

	Active		Inactive	
	Basic	**Coordinated**	**Basic**	**Coordinated**
Total June 30, 1995	106	67,452	100	21,414
Additions	1	7,175	3	4,504
Deletions				
Service retirement	(23)	(1,291)	(13)	(194)
Death	(1)	(59)	—	(48)
Refunds	—	(655)	(2)	(1,187)
Writeoffs	—	—	—	(1,069)
Terminated (no refund)	(1)	(4,221)	—	—
Returns to active	—	—	(1)	(1,283)
System Change				(2)
Data Adjustments	—	7	(1)	(10)
Total June 30, 1996	**82**	**68,408**	**86**	**22,125**

	Basic System	Coordinated System	Total
Active	82	68,408	68,490
Inactive	86	22,125	22,211
Total	168	90,533	90,701

Summary of Changes in Membership 1995-96 (Continued)

Annuitants - TRA Fund

	Basic			Coordinated		
	Men	Women	Total	Men	Women	Total
Total annuitants June 30, 1995	2,088	3,186	5,274	7,211	8,943	16,154
Members retired during year	16	20	36	828	669	1,497
Adjustments	(3)	—	(3)	3	—	3
Annuities terminated by law	—	(2)	(2)	—	—	—
Annuities cancelled	—	—	—	(1)	—	(1)
Annuitants deceased during year	(36)	(122)	(158)	(149)	(225)	(374)
Total annuitants June 30, 1996	2,065	3,082	5,147	7,892	9,387	17,279
Annuitants not receiving warrants June 30, 1996	(1)	—	(1)	(8)	(4)	(12)
Total active annuitants June 30, 1996	2,064	3,082	5,146	7,884	9,383	17,267

Additional Annuitants - TRA Fund

	Former College Supplemental Retirement Annuities			Former Variable Annuities		
	Men	Women	Total	Men	Women	Total
Active annuitants June 30, 1995	85	61	146	538	335	873
Members retired during year	—	—	—	—	—	—
Resumed Drawing	—	—	—	—	—	—
Members re-employed or terminated by law	(1)	—	(1)	(2)	—	(2)
Annuitants deceased during year	(5)	(5)	(10)	—	(2)	(2)
Total annuitants June 30, 1996	79	56	135	536	333	869
Annuitants not receiving warrants June 30, 1996	—	—	—	—	—	—
Total active annuitants June 30, 1996	79	56	135	536	333	869

Beneficiaries of Members Deceased Prior to Retirement

	Joint & Survivor Annuities			Basic Survivor Annuities		
	Men*	Women*	Total	Men	Women	Total
June 30, 1995	249	82	331	5	74	79
Added during year	34	25	59	—	—	—
Terminated during year	(2)	(3)	(5)	—	(2)	(2)
Cancellation	—	—	—	—	—	—
Total June 30, 1996	**281**	**104**	**385**	**5**	**72**	**77**

* Gender of member

Disabilitants

	Basic System			Coordinated System		
	Men	Women	Total	Men	Women	Total
June 30, 1995	15	6	21	166	192	358
Added during year	—	1	1	38	43	81
Resumed benefits	—	—	—	—	1	1
Died during year	—	—	—	(13)	(13)	(26)
Transferred to retirement	(1)	(1)	(2)	(8)	(7)	(15)
Resumed employment	—	—	—	(3)	(5)	(8)
Disabilitants not receiving warrants on June 30, 1996	—	—	—	(1)	(1)	(2)
Total Active Disabilitants June 30, 1996	**14**	**6**	**20**	**179**	**210**	**389**

Beneficiaries of Retired Members

	Basic System			Coordinated System		
	Men*	Women*	Total	Men*	Women*	Total
June 30, 1995	166	54	220	497	144	641
Added during year	16	9	25	83	27	110
Annuities terminated by law	(8)	(9)	(17)	(18)	(18)	(36)
Deaths	(1)	(1)	(2)	(8)	(2)	(10)
Total June 30, 1996	**173**	**53**	**226**	**554**	**151**	**705**

* Gender of member

Distribution of Active Members
As of June 30, 1996

	Years of Service								
Age	**< 1**	**1-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**	**All**
< 25	1,457	142							1,599
25-29	2,967	4,541	643						8,151
30-34	870	2,751	3,164	436	1				7,222
35-39	1,024	1,831	1,962	2,119	494				7,430
40-44	1,037	1,920	1,779	1,348	3,000	816			9,900
45-49	827	1,734	1,992	1,320	2,323	4,372	1,682		14,250
50-54	461	892	929	987	1,166	1,677	4,187	750	11,049
55-59	234	373	374	499	666	851	1,858	1,716	6,571
60-64	130	161	166	134	204	284	476	386	1,941
65+	90	83	23	24	25	36	47	49	377
All	9,097	14,428	11,032	6,867	7,879	8,036	8,250	2,901	68,490

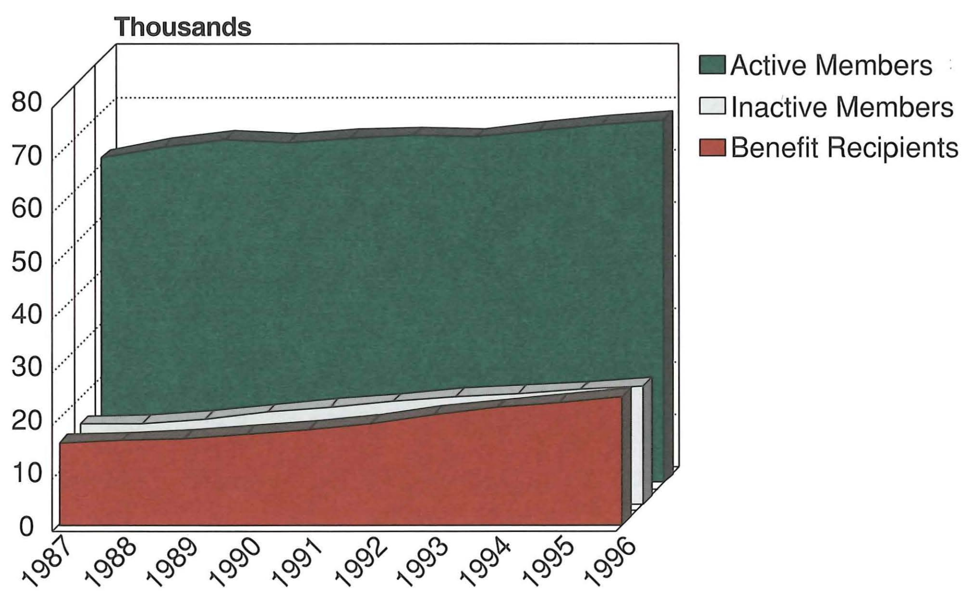
Average Annual Earnings of Active Members
for Fiscal Year Ended June 30, 1996

	Years of Service								
Age	**< 1**	**1-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**	**All**
< 25	15,169	23,745							15,931
25-29	13,607	24,576	29,638						20,983
30-34	13,240	22,782	31,008	34,814	28,257				25,964
35-39	12,457	22,054	31,336	36,873	39,923				28,597
40-44	12,647	21,166	31,759	37,459	41,913	43,893			32,556
45-49	10,240	19,026	31,591	37,009	40,176	45,359	46,637		36,724
50-54	10,043	18,781	29,541	36,010	42,295	45,854	48,230	49,394	40,688
55-59	7,790	15,665	24,618	33,931	40,553	46,298	49,362	50,465	42,387
60-64	7,106	10,102	22,716	29,922	42,652	46,147	50,356	50,431	38,935
65+	9,729	5,921	21,149	27,033	40,937	43,318	54,551	50,325	26,830
All	12,816	21,927	30,727	36,376	41,232	45,432	48,319	50,181	32,937

Ten-Year Summary of Membership

Year Ended June 30	Active Members	Inactive Members	Benefit Recipients
1987	61,283	15,032	15,459
1988	63,326	15,188	15,892
1989	64,796	16,092	16,385
1990	64,324	17,311	17,136
1991	65,093	18,273	18,094
1992	65,557	19,242	19,212
1993	65,268	20,309	20,810
1994	66,514	20,901	22,137
1995	67,558	21,514	23,168
1996	68,490	22,211	24,307

Ten-Year Summary of Membership
(In Thousands)



Schedule of Participating Employers

Independent School Districts

Ada #521
Adrian #511
Aitkin #1
Albany #745
Albert Lea #241
Alden #242
Alexandria #206
Annandale #876
Anoka-Hennepin #11
Argyle #437
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
Beardsley #57
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 #2148
Borup #522
Braham #314
Brainerd #181
Brandon #207
Breckenridge #846
Brewster #513
Brooklyn Center #286
Browerville #787
Browns Valley #801
Brownton #421
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
Ceylon #451
Chaska #112
Chatfield #227
Chisago Lakes #2144
Chisholm #695
Chokio-Alberta #771
Clearbrook-Gonvick #2311
Cleveland #391
Climax #592
Clinton-Graceville #55
Cloquet #94
Cold Spring #750
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
Delavan #218
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
Elmore #219
Ely #696
Emmons #243
Esko #99
Evansville #208
Eveleth-Gilbert #2154
Fairmont #454
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 #422
Glenville #245
Goodhue #253
Goodridge #561
Granada-Huntley-E. Chain #2536
Grand Meadow #495
Grand Rapids #318
Greenbush-Middle River #2683
Greenway #316
Grey Eagle-Long Prairie #2753
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 #880
Hutchinson #423
International Falls #361
Inver Grove Heights #199
Isle #473
Ivanhoe #403
Jackson #324
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
Lakefield #325
Lakeview #2167
Lakeville #194

Lamberton #633
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
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
McGregor #4
Medford #763
Melrose #740
Menahga #821
Mentor #604
Mesabi East #2711
Milaca #912
Milroy # 635
Minneota #414
Minnetonka #276
Minnewaska #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 #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 Wing #256
Redwood Falls #2758
Remer #118
Richfield #280
Robbinsdale #281
Rochester #535
Rockford #883
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
Sanborn #638
Sartell #748
Sauk Centre #743
Sauk Rapids #47
Sebeka #820
Shakopee #720
Sibley East #2310
Silver Lake #425
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 #443
Stewart #426
Stewartville #534
Stillwater #834
Storden-Jeffers #178
Swanville #486
Thief River Falls #564
Tracy #417
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
West 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
Winsted #427
Worthington #518
Wrenshall #100
Yellow Medicine East #2190
Zumbrota-Mazeppa #2805

Joint Powers Units

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
East Range Secondary Tech Ctr.
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 Services (TIES)
West Central Ed. Dist.
West Central Migrant Project
Wright Technical Center

MN State Colleges and Universities

Akita Japan State University
Alexandria Technical College
Anoka Technical College
Anoka-Ramsey Community College
Arrowhead Community College
Bemidji State University
Cambridge Community College
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
Mankato State University
Mesabi Range Community & Technical College
Metropolitan State University
Minneapolis Community &Technical College
MnSCU Board Office
Moorhead State University
North Hennepin Community College
Normandale Community College
Northland Community & Technical College
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
Southwestern Technical College
St Cloud State University
St Cloud Technical College
St Paul Technical College
Vermillion Community College
Willmar Community College
Winona State University
Worthington Community College

Charter Schools

Bluffview Montessori #4001
Dakota Open School #4009
Emily Charter School #4012
New Country Charter School #4007
New Heights Charter School #4003
PACT Charter School #4008
Prairie Island Charter School #4013
Toivola-Meadowlands Charter School #4002
World Learner Charter School #4016

State Agencies

Anoka Metro Regional Treatment Ctr
Brainerd Regional Human Services Center
Cambridge Regional Human Services Center
Department of Children, Families and Learning
Department of Economic Security
Faribault Regional Treatment Ctr
Faribault Residential Academies
Fergus Falls Regional Treatment Ctr
Higher Education Board
MN Center for Arts Education
MN Correctional Facility, Red Wing
MN Correctional Facility, Sauk Center
MN Correctional Facility, Thistledew
MN Department of Corrections
Moose Lake Regional Treatment Ctr
St Peter Regional Treatment Ctr
Teachers Retirement Association
Willmar Regional Treatment Ctr

Professional Organizations

MN Association of School Administrators
MN Education Association
MN Federation of Teachers

Notes