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STATEMENT TO EMPLOYEES
JUNE 30, 1978

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MINNESOTA STATE
RETIREMENT SYSTEM

MINNESOTA STATE RETIREMENT SYSTEM

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MINNESOTA STATE RETIREMENT SYSTEM

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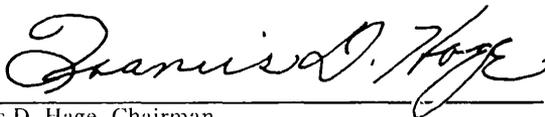
FOREWORD

The Board of Directors of the Minnesota State Retirement System herewith submits a financial report for the fiscal year ending June 30, 1978 in accordance with the provisions of Minnesota Statutes, Section 356.20. A two year comparative statement of income and balance sheet accounts is included.

This report includes financial and statistical data on the General State Employee Retirement Plan, the Correctional Employee Retirement Plan, the Unclassified Employee Retirement Plan and the Deferred Compensation Plan. Separate reports were issued for the Highway Patrolmens Retirement Plan and the statewide Judicial Retirement Plan, both of which are administered by the Minnesota State Retirement System.

An actuarial valuation of the System was made as required by Minnesota Statutes, Chapter 356, by the firm of Towers, Perrin, Forster & Crosby, Inc., Los Angeles, California, Harry M. Church, actuary. Exhibits in this report are presented as prescribed in Chapter 356.

Respectfully submitted,



Francis D. Hage, Chairman



Paul L. Groschen, Executive Director

EQUAL OPPORTUNITY

It is the policy of the Minnesota State Retirement System to provide equal employment opportunity to all employees and job applicants without regard to age, color, creed, national origin, physical health, political affiliation, race, religion or sex.

1978 LAW CHANGES

MANDATORY RETIREMENT AGE

The 1978 State Legislature raised the mandatory retirement age to age 70 from age 65 effective in 1980. However, subsequent to such legislation, Congress amended the Age Discrimination in Employment Act of 1967 by raising the mandatory retirement age to 70 for most employees covered by the act. The Federal law supercedes State law and prohibits mandatory retirement prior to age 70 effective January 1, 1979. There are certain exemptions from coverage in both the federal and state laws such as employees covered by collective bargaining agreements and specified professional and executive employees. However, because of the many differences and conflicts between the two laws, there are many uncertainties at this time.

MAXIMUM SERVICE CREDIT

A 40 year maximum on service credit for retirement purposes was made effective as of April 6, 1978. Any employee with more than 40 years service credit on the effective date was entitled to credit for all such service but was not entitled to accumulate additional service credit. The 40 year limit applies to the total service earned under any combination of Minnesota public pension plans. Salary on which a benefit is based can extend beyond the 40 year period and retirement contributions are required on such salary.

FEDERAL COMPREHENSIVE EMPLOYMENT AND TRAINING ACT (CETA)

All CETA employees were excluded from public pension coverage and given refunds upon request. An exception was provided for CETA employees who desired coverage and agreed to pay both the employee and employer retirement contributions or whose employer agreed to pay the required employer contributions from non-CETA funds. Also, the CETA employee who attains non-subsidized employment, may later purchase credit for the excluded time by payment of the total employee-employer contribution or the employer may agree to pay the employer share.

DISABILITY AND SURVIVOR BENEFIT INCREASES

Disability and survivor benefit recipients who are not eligible to participate in the Minnesota Adjustable Fixed Benefit Fund but who are paid from a public pension fund which does participate in the MAFB Fund received a four percent increase on July 1, 1978, if they were receiving benefits for at least two years. They will also participate in all future MAFB Fund increases.

LIMITATION OF FIVE HIGH YEAR SALARY

A law which was to go into effect on July 1, 1978 limiting the salary used in calculation of the highest five successive years average salary to no more than 15% of the previous years salary was repealed. A study by the State Personnel Department of possible overtime and extra-ordinary salary payment abuses is to be completed and presented to the legislature by November 15, 1978.

STATE INCOME TAX ON PENSIONS

Both public and private pensions will be subject to state income taxes beginning in 1978; previously, public pensions were excluded from state income tax. After the recovery of the employee contributions, if any, public and private pension amounts are excluded from taxation up to a maximum of \$7,200.00. The \$7,200.00 exclusion is reduced however by any amounts receivable from Social Security or from Railroad Retirement, and the amount by which federal adjusted gross income exceeds \$13,000.00. Neither Social Security nor Railroad Retirement pensions are subject to income tax.

EARLY RETIREMENT

The reduction for early retirement will be replaced by an actuarially equivalent reduction, effective April 1, 1979. The current reduction rate is six percent per year from age 65 with less than 30 years of service and from age 62 with 30 or more years of service.

AUGMENTATION RATE

The increase in the amount of a deferred benefit from the date of termination of service to the date the former employee begins receiving is called "augmentation". The rate of augmentation applied to deferred annuities will be reduced to three percent per year from the present five percent per year effective January 1, 1981. The decrease in rate is applicable to all who may now be on deferred status as well as future deferreds.

PROPORTIONATE ANNUITIES

An employee who is mandatorily retired because of age before acquiring the minimum ten years of service is entitled to a proportionate annuity based on service of less than ten years. Due to the changes in the law providing for proportionate annuities and the changes in mandatory retirement laws, a proportionate annuity will be payable to anyone mandatorily retired at any age between July 1, 1978 and July 1, 1980 and thereafter to anyone mandatorily retired at age 65 and under or terminated for any reason after age 65.

OTHER LAW CHANGES

Metropolitan Transit Commission, Transit Operating Division (MTC/TOD) employees retirement coverage was transferred to the State Employee Retirement Plan effective July 1, 1978. Assets of the MTC/TOD sufficient to fully fund the annuities in force on June 30, 1978 were transferred to the Minnesota Adjusted Fixed Benefit Fund and the balance of assets were transferred to the State Employees Retirement Fund. The MTC/TOD is required to pay three and eight-tenths percent of payroll for a period of 20 years to amortize the extra deficit caused by the transfer of coverage. Such contribution rate is in addition to the six percent employer payroll contribution applicable to other state employees. Pensions are no longer a bargainable item between the Metropolitan Transit Commission and the MTC/TOD Union. An MTC/TOD Union appointed representative is added to the MSRS Board of Directors in January, 1979.

Certain tradesmen employed by the University of Minnesota, who were previously excluded from coverage, are now eligible to purchase credit for such service. Also, grain weighers in the State Agriculture Department were again provided coverage with the option of repaying refundments.

The definition of "Special Teacher," covered under the Correctional Employees Plan, was expanded to include the employment classifications of Educational Administrator and Supervisor.

Tax Court Judges previously covered under the Judges Retirement Plan were transferred to the General State Employee Plan, with an option to purchase credit for service prior to the transfer date of July 1, 1977.

MINNESOTA ADJUSTABLE FIXED BENEFIT FUND.

The Minnesota Adjustable Fixed Benefit Fund (MAFB Fund) is the investment medium for the reserves set aside to pay benefits to retired public employees. An amount of money determined necessary to fully fund the retirement annuity based on an actuarially estimated life expectancy and an assumption that the monies will earn at a rate of 5%, is transferred to the MAFB Fund at time of retirement by the participating retirement plan. The public retirement plans participating in the Minnesota Adjustable Fixed Benefit Fund are the following:

- State Employees Retirement Fund (including correctional employees)
- Highway Patrolmens Retirement Fund
- Judges Retirement Fund
- Legislators Retirement Plan
- State Teachers Retirement Fund
- Public Employees Retirement Fund (including police and fire)
- Minneapolis Municipal Employees Retirement Fund

OWNERSHIP OF MAFB FUND

The organizations authorized to participate in the Minnesota Adjustable Fixed Benefit Fund own an undivided participation in all the assets of the fund. The extent of annual participation is determined by the ratio of each organization's contribution to total contributions of all participating organizations.

MORTALITY ADJUSTMENT

The actuarial tables used to determine amounts of money transferred to the Minnesota Adjustable Fixed Benefit Fund for a retired employee are based on a five percent interest assumption and average life expectancy. If a retired employee lives longer than expected, there is an actuarial loss; if death occurs sooner than anticipated in the tables, there is an actuarial gain.

Since the assets of the Minnesota Adjustable Fixed Benefit Fund are owned by several retirement funds, the actuarially determined reserves are adjusted annually to the actual mortality experienced during the year by each participating fund.

MAFB FUND INCOME

Up to 50 percent of the Minnesota Adjustable Fixed Benefit Fund may be invested in common stock and an additional ten percent in convertible debentures. The balance is invested in fixed income debt securities. Corporate stocks accounted for 46.21% of the MAFBF investment portfolio at June 30, 1978 compared to 47.63% at June 30, 1977. Convertible debentures accounted for less than one percent of total invested assets in both years.

Income on stocks includes cash dividends and partial recognition of appreciation (or depreciation) in the market value of stocks. Normally, market value changes are "unrealized" until a stock is sold unless a method is developed to recognize such changes in investment income. The method used in the MAFB Fund is to include in income an average of the market-to-cost relationships of stock taken bi-monthly over a two year period.

CHANGES IN MAFB FUND PARTICIPATION

The participation in the Minnesota Adjustable Fixed Benefit Fund by the State Employees Retirement Fund changed as follows in the last two fiscal years:

	<u>1978</u>	<u>1977</u>
Beginning balances	\$130,188,933	\$105,497,750
Prior year adjustments		4,687,151
	<u>\$130,188,933</u>	<u>\$110,184,901</u>
MAFB Fund income	7,923,505	13,162,689
Reserve requirement—1978 retirees	19,772,351	20,351,607
Reserve requirement — 1976 annuity increases		2,173,837
Benefits and refunds paid	(16,686,265)	(15,184,512)
Mortality (gain) or loss	488,895	(499,589)
Ending balances	<u>\$141,687,419</u>	<u>\$130,188,933</u>

MAFB Fund income includes realized income (interest on debt securities, dividends on corporate stock, etc.) and also includes recognized unrealized income on corporate stock. Recognized unrealized income may be either positive or negative, depending on whether market value of stocks is more than cost or less than cost.

In the MAFB Fund an average of the market-to-cost relationship of stock at two month intervals over a two year period is calculated. If the average market value exceeds cost, the appreciation in stock values is "recognized" and is added to realized income; if the average market value is less than cost the depreciation in stock values is subtracted from realized income.

Although MAFB Fund assets and realized income increased in fiscal 1978 compared to fiscal 1977, total income including recognized unrealized depreciation decreased because of a decline in average stock values over the two year period ending June 30, 1978. Conversely, average stock values were higher in the two year period ending June 30, 1977 and total income, including recognized unrealized appreciation, increased.

BENEFIT ADJUSTMENTS

An increase in benefit payments is possible if the value of the assets in the MAFB Fund exceeds the reserve requirement by two percent or more ("reserve requirement" is the actuarially determined liability for the benefits payable).

A decrease in benefit payments is possible, but never below the originally authorized amount, if the fund value is less than the reserve requirement.

An annuity stabilization reserve was established in the MAFB Fund for the purpose of eliminating any surplus or deficiency so that assets of the fund would equal the liability. The annuity stabilization reserve represents the amount by which the recognized value of the assets in the MAFB Fund are short of or exceed the required reserves.

The actuarially determined reserve requirement (the liability) for annuities in force as of June 30, 1978 was \$151,273,385 or \$9,585,966 more than the fund's share of the MAFB Fund assets.

Benefit increases can be paid only when the annuity stabilization reserve is at a positive level. There will be no increase in benefits in 1979 because the annuity stabilization reserve was negative as of June 30, 1978.

INVESTMENTS OTHER THAN MAFB FUND

DISTRIBUTION OF INVESTMENTS

The law provides that the aggregate of common and preferred stock investments may not exceed 50 percent of the total assets of a fund at any time. Corporate stocks constituted 47.24 percent of invested assets in the State Employees Retirement Fund at the end of fiscal year 1978 compared to 49.02 percent the previous year.

INVESTMENT INCOME

Income on investments is accounted for on an accrual basis and includes interest on debt securities (adjusted for amortization of premiums and accumulation of discounts), interest on short term investments, dividends on corporate stock, premiums on bonds called and the sum of these adjusted for amortization of the deferred yield adjustment account and for recognized unrealized appreciation or depreciation in stock. The deferred yield adjustment account represents the capitalized losses on bond sales to be written off against income over the remaining life of the bonds sold. Profit on sales of stock is excluded from net investment income in order to provide stability in comparative rates of return.

RETURN ON INVESTMENTS

In Minnesota, insurance companies calculate rate of return using the following formula:

$$\frac{2I}{A+B-I}$$

where, I = Net Investment Income

A = Sum of Invested Assets, Cash, Accrued Interest and Dividends at the beginning of the year

B = Same as A except sum is as of the end of year

Rates of return in the last three years, calculated according to the above formula, modified to include the deferred yield adjustment account and the recognized unrealized appreciation account in beginning and ending assets, were as follows.

Fiscal year: 1978	6.01%
1977	5.40%
1976	4.86%

RECOGNIZED UNREALIZED APPRECIATION IN STOCKS

The corporate stock portfolio may be valued at a total amount other than original book cost at the discretion of the Retirement Board if procedures set forth in Minnesota Statutes, Section 11.16, Subdivision 13 are used. The MSRS Board authorized use of such procedure in May, 1973.

The procedure provides for bi-monthly valuations of the corporate stock portfolio in February, April, June, August, October and December. Whenever the portfolio had shown a total market valuation exceeding original book cost by 15 percent for six consecutive, bi-monthly valuation dates, the book value of the portfolio would be increased by three percent for accounting and actuarial purposes; whenever the new adjusted values had been exceeded by 15 percent for six consecutive bi-monthly valuation dates, another three percent increase could be recognized, etc. Conversely, if

market values were 15 percent below cost or adjusted basis for six consecutive bi-monthly valuation dates, the valuation of the stock portfolio would be reduced by three percent. Any increase or decrease was to be applied as an adjustment to income in the appropriate year. "Six consecutive bi-monthly valuation dates" was interpreted to mean that bi-monthly ratios could be used more than once by adding the next bi-monthly ratio to the last five ratios from the previous six ratios to arrive at a new series of consecutive bi-monthly valuation dates.

Later law amendments provided for recognition of increases or decreases whenever market value and original book cost or adjusted basis differed by 10 percent instead of 15 percent for six consecutive valuation dates and adjustments to income were spread out over a five year period. The statute is silent on treatment of realized gains or losses on sales of stock.

Because of law changes and ambiguity in application of existing statutes, the Board discontinued valuing stocks at other than cost in 1978.

ACTUARIAL VALUATIONS

An actuarial valuation of the State Employees Retirement Fund is conducted annually to determine if the contribution rates of the fund will adequately finance the benefits provided. The actuarial valuations are carried out on the basis of a 5% interest rate assumption, a 3-1/2% salary scale and other assumptions deemed appropriate by the System's actuary based upon the experience of the System. The assumptions necessary to a valuation include the rates of separation from active service because of termination with refund, retirement and death and mortality rates before and after retirement. An experience study is conducted every four years to determine if the assumptions being used in valuations are still valid. The last such experience study was performed as of June 30, 1975.

FUNDING RATIO

The usual funding ratio is determined by dividing the assets on hand by the total reserve requirement. A ratio of 100 percent indicates full funding. The funding ratios of the State Employees Retirement Fund for 1975-1978 were as follows:

Fiscal:	1975	59.2%
	1976	62.3%
	1977	68.6%
	1978	68.6%

In the above ratios, assets on hand include MAFB Fund assets as adjusted to reflect 100 percent funding of MAFB annuities and the total reserve requirement includes the actuarial present value of MAFB Fund annuities in force.

Another recognized funding ratio measures the degree of funding of the benefits *earned to date*. The MSRS actuary estimates the present value of benefits earned to June 30, 1978 by presently active and retired persons in the State Employees Fund to be \$465,817,822. Applicable assets on hand, including the \$9,585,966 due from the MAFB Fund, amount to \$408,755,610. Thus as of June 30, 1978, 87.8 percent of the liability for the benefits earned to date have been funded.

UNFUNDED ACCRUED LIABILITY

The unfunded accrued liability is the total liability of a fund for benefits earned in the past as well as those earnable in the future, less the assets on hand, less the present value of future employee contributions and less the present value of future state entry age normal cost contributions. The unfunded liability of the State Employees Retirement Fund is calculated separately for the General Plan and the Correctional Plan. Comparative figures for 1975-78 are shown as follows (in thousands):

State Employees Retirement Fund

<u>Fiscal Year</u>	<u>General Plan</u>	<u>Correctional Plan</u>	<u>Combined</u>
1975	\$173,868	\$9,091	\$182,959
1976	168,759	8,664	177,423
1977	156,063	7,540	163,603
1978	178,518	8,253	186,771

NORMAL COST

The entry age normal cost method of funding is required by statute. Under this method, a level contribution rate is determined, which, if contributed on behalf of all employees from date of entry into service to date of separation, will be adequate to provide the full funding of prospective benefits. Factors of great importance in such determination are the projected rate of earnings of the fund, the rates of separation from active service, salary progression scales and mortality rates.

Comparative normal cost figures, including administrative expense, and support rates in 1975-1978 are as follows:

State Emp. Retirement Fund			
	<u>Year</u>	<u>General Plan</u>	<u>Correctional Plan</u>
Normal Cost	1975	7.05%	10.93%
	1976	7.44%	10.92%
	1977	7.23%	11.18%
	1978	7.20%	11.16%
	Current Support		
Employee contribution		4.00%	6.00%
Employer N. cost contribution		<u>4.00%</u>	<u>9.00%</u>
		8.00%	15.00%
Employer contribution for amortizing actuarial deficit		2.00%	5.00%

REVENUES

Employee and employer contributions for the State Employees Retirement Fund were \$53,944,014 in fiscal 1978 compared to \$48,305,245 in fiscal 1977. The increased contributions are primarily due to increased salaries because contribution rates were unchanged and there was little change in total membership. Employee and employer contributions are based on total payroll.

Investment income on the investment portfolio of the State Employees Retirement Fund was \$14,211,903 in fiscal year 1978 compared to \$10,339,714 in fiscal year 1977, including \$537,109 profit on sale of stock in 1978 and \$107,591 profit in 1977.

EXPENDITURES

Benefit payments and refundments were as follows in 1977 and 1978:

	1978	1977
Service retirement annuities	\$15,908,385	\$14,493,689
Disability benefits	746,625	642,792
Survivor benefits	34,061	29,380
Refundments	4,407,153	4,149,466

Supplemental benefits amounting to \$86,618 in fiscal 1978 and \$94,560 in fiscal 1977 were paid to certain SER Fund retirees from the State General Fund. Also, employees who had retired before the "5-high year" law received a one-time lump sum payment totaling \$992,613 payable from the MAFB Fund. Such payments were in addition to the amounts shown above.

Total operating expenses of the Minnesota State Retirement System amounted to \$1,099,528 in fiscal 1978 compared to \$864,603 in fiscal 1977. The net amount attributed to the State Employees Retirement Fund in each year was \$910,926 and \$721,493, respectively. Almost three-fourths of the increased costs are due to increased charges for interdepartmental tabulating services. Establishment of a comprehensive Participant Accounts System (Data Base) which has been underway for some time resulted in sharply increased programming and analyst costs as well as increased computer costs in the past year and will continue until completion of the project.

STATISTICAL DATA

"Average" as used in this report is defined as the arithmetic mean. "Median" is the mid-point, that is, one-half of the values are below and one-half are above the median point.

GENERAL EMPLOYEES RETIREMENT PLAN

YEAR END TOTALS	June 30, 1978	June 30, 1977
Active Employees	42,713	40,462
Inactive Employees	3,425	3,664
New Employees and Former Employees Returned	9,808	8,326
Refunds	5,940	6,411
Deaths	84	97
Service Retirements	562	621
Disabilities	65	87
Net Increase in Active Employees	2,251	276

ACTIVE EMPLOYEES

The average and median ages of the new employees hired during the fiscal years ending as of the dates shown were:

<u>Date</u>	<u>MALE</u>		<u>FEMALE</u>	
	<u>Median</u>	<u>Average</u>	<u>Median</u>	<u>Average</u>
6/30/76	27 yrs.	30.1 yrs.	25 yrs.	28.5 yrs.
6/30/77	28 yrs.	29.7 yrs.	26 yrs.	28.7 yrs.
6/30/78	28 yrs.	30.8 yrs.	26 yrs.	29.1 yrs.

The following averages compare all active employees as of the dates shown:

	<u>Date</u>	<u>Average Age</u>	<u>Median Age</u>	<u>Credited Service</u>	<u>Accumulated Contributions</u>
Male Employees	6/30/76	40.0 yrs.	39 yrs.	8.6 yrs.	\$2,442.95
	6/30/77	40.1 yrs.	38 yrs.	8.9 yrs.	\$2,773.65
	6/30/78	40.2 yrs.	38 yrs.	8.9 yrs.	\$3,028.51
Female Employees	6/30/76	35.4 yrs.	30 yrs.	5.3 yrs.	\$1,171.60
	6/30/77	35.6 yrs.	30 yrs.	5.6 yrs.	\$1,350.43
	6/30/78	36.2 yrs.	30 yrs.	5.5 yrs.	\$1,488.36

35.8% of the male active employees and 17.5 % of the females, for a total of 11,151 of the active employees, had at least 10 years of credited service at June 30, 1978, compared to 8,155 in 1977 and 9,813 in 1976.

	<u>1978</u>	<u>1977</u>	<u>1976</u>	<u>1975</u>
Total active employees age 65 or older	394	374	362	706
Number of those eligible to retire with full annuity benefit	157	358	219	418

At 6/30/78 there were 1,876 employees over age 62. Beginning 7/1/73, employees age 62 or older with 30 or more years of service could retire with full benefits. There were 102 such employees less than age 65 at 6/30/78. Reduced benefits are also available at age 62 to employees with at least 10 years of service or at age 58 with at least 20 years service. There were 1,587 active employees eligible to retire with a reduced benefit at 6/30/78.

Laws of Minnesota 1978 Chapter 781 limits the amount of service credit that an individual may accumulate to 40 years or the amount held on April 6, 1978 if greater than 40 years. Eight males and 15 females are over that limit and are no longer accruing service credit.

REFUNDS

The average age and service forfeited by those who took refunds were:

<u>Year Ending</u>	<u>MALE</u>		<u>FEMALE</u>	
	<u>Age</u>	<u>Service</u>	<u>Age</u>	<u>Service</u>
6/30/76	32.4 yrs.	2.2 yrs.	29.6 yrs.	1.7 yrs.
6/30/77	31.7 yrs.	2.0 yrs.	30.7 yrs.	1.8 yrs.
6/30/78	32.0 yrs.	1.6 yrs.	30.0 yrs.	1.6 yrs.

During the 12 month period ending June 30, 1978, 1.3% of the 5,940 employees taking refunds forfeited 10 or more years of service compared to 1.4% in 1977 and 1.0% in 1976. During the fiscal year 159 refunds were repaid.

INACTIVES

Inactive accounts totaled 3,425 at June 30, 1978 compared to 3,664 at June 30, 1977 and 3,802 at June 30, 1976. 580 of the present inactives have sufficient service credit to be entitled to a deferred annuity. Except for those with a vested benefit or on an approved leave, those accounts inactive over five years are not counted.

A comparison of the inactives with vested benefits during the last three years is as follows:

	<u>Year Ending</u>	<u>Number</u>	<u>Avg. Age</u>	<u>Avg. Deferred Annuity</u>
Male	6/30/76	239	52.7 yrs.	\$190.85
	6/30/77	273	52.6 yrs.	\$197.87
	6/30/78	307	53.0 yrs.	\$204.00
Female	6/30/76	221	56.4 yrs.	\$137.45
	6/30/77	246	55.2 yrs.	\$158.51
	6/30/78	273	55.4 yrs.	\$186.46

RETIRED EMPLOYEES

	<u>6/30/78</u>	<u>6/30/77</u>	<u>6/30/76</u>	<u>6/30/75</u>
Age and service annuitants	7,441	7,084	6,690	6,047
Disability benefits	436	401	348	289
Survivor benefits	23	24	24	30
Total	7,900	7,509	7,062	6,366
Benefits authorized during period	723	711	976	743
Deaths during period	307	291	296	279

The average age, salary, service and benefit amounts of the new annuitants who retired during the last three fiscal years are given below:

	<u>Date</u>	<u>Average Age at Retirement</u>	<u>Average Monthly Salary</u>	<u>Average Service</u>	<u>Average Benefit</u>
Service	6/30/76	64.9 yrs.	\$799.44	18.2 yrs.	\$184.32
	6/30/77	64.1 yrs.	\$862.44	18.3 yrs.	\$195.05
	6/30/78	64.0 yrs.	\$899.26	18.3 yrs.	\$203.84
Disability	6/30/76	58.2 yrs.	\$731.28	17.2 yrs.	\$159.84
	6/30/77	57.7 yrs.	\$782.59	15.8 yrs.	\$154.97
	6/30/78	58.9 yrs.	\$839.85	14.8 yrs.	\$153.53

The average age at entry into state service, retirement age and attained age of all the retirees receiving as of June 30, 1978 is:

	<u>Entry Age</u>	<u>Retirement Age</u>	<u>Present Age</u>
Service	40.0 yrs.	65.4 yrs.	72.2 yrs.
Disability	37.4 yrs.	58.0 yrs.	62.9 yrs.

The average and median monthly benefits of all service and disability annuitants as of the dates shown are:

	<u>Date</u>	<u>Average</u>	<u>Median</u>
Service	6/30/76	\$159.11	\$112.92
	6/30/77	\$166.26	\$118.33
	6/30/78	\$175.72	\$124.14
Disability	6/30/76	\$126.09	\$102.95
	6/30/77	\$133.20	\$107.58
	6/30/78	\$138.82	\$113.93

In addition to the annuity from the State Retirement System, employees who have retired since 1957 are entitled to Social Security benefits as a result of State employment. Also, since 1967, certain retired employees have received a supplemental retirement benefit payable from the State General Fund.

The average and median benefit including the employees primary Social Security benefit for those entitled to a Social Security benefit is:

	<u>Average</u>	<u>Median</u>
Service	\$473.47	\$424.31
Disability	\$427.83	\$406.19

The average age at death and the average length of retirement for service and disability annuitants who died during the last three fiscal years were:

	<u>Year Ending</u>	<u>MALE</u>		<u>FEMALE</u>	
		<u>Age</u>	<u>Retirement</u>	<u>Age</u>	<u>Retirement</u>
Service	6/30/76	77.0 yrs.	11.2 yrs.	78.1 yrs.	12.1 yrs.
	6/30/77	76.8 yrs.	10.7 yrs.	77.5 yrs.	11.0 yrs.
	6/30/78	77.3 yrs.	11.3 yrs.	78.6 yrs.	12.2 yrs.
Disability	6/30/76	59.1 yrs.	4.5 yrs.	66.6 yrs.	4.5 yrs.
	6/30/77	63.4 yrs.	4.4 yrs.	60.5 yrs.	3.7 yrs.
	6/30/78	59.8 yrs.	3.2 yrs.	66.1 yrs.	5.4 yrs.

Of the 276 service annuitants who died in fiscal year 1978, 93.5% received annuity payments greater than their accumulated employee contributions. The average service annuitant received in annuity payments 5.0 times the amount contributed.

EARLY RETIREMENT AND OPTIONAL ANNUITIES

Since passage of the "high-5" law in 1973 providing retirement benefits, there has been an increase in the number of employees electing to receive a reduced benefit either by retirement before age 65 and/or by selection of a joint and survivor annuity. Benefits for early retirees are reduced from the full amount to adjust for the longer period the benefit will be paid. The joint and survivor benefit is actuarially reduced to provide continuing payments to a spouse or other beneficiary after death of the retiree. The following figures reflect the trend:

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Early retirement	66	89	314	272	282	323	313
Joint and survivor	31	28	100	83	92	78	94

CORRECTIONAL EMPLOYEE RETIREMENT PLAN

ACTIVE EMPLOYEES

At June 30, 1978 there were 995 active employees covered under the Correctional Employees Retirement Plan compared to 932 at June 30, 1977 and 926 at June 30, 1976. The following data pertains to active employees as of the dates shown:

	<u>Date</u>	<u>Average Entry Age</u>	<u>Average Attained Age</u>	<u>Median Age</u>	<u>Average Service Credit</u>	<u>Average Accumulated Contributions</u>
Male	6/30/76	29.1 yrs.	37.1 yrs.	35 yrs.	6.8 yrs.	\$2,491.03
	6/30/77	28.8 yrs.	36.5 yrs.	33 yrs.	6.7 yrs.	\$2,876.80
	6/30/78	28.3 yrs.	35.8 yrs.	33 yrs.	5.9 yrs.	\$3,244.24
Female	6/30/76	29.2 yrs.	35.4 yrs.	33 yrs.	5.3 yrs.	\$1,867.84
	6/30/77	28.8 yrs.	34.7 yrs.	31 yrs.	5.2 yrs.	\$2,116.99
	6/30/78	29.1 yrs.	36.0 yrs.	34 yrs.	6.0 yrs.	\$2,766.99

23.8% of the male active employees and 19.5 % of the females, for a total of 232 employees had ten or more years of service credit at June 30, 1978, compared to 226 in 1977, and 233 in 1976.

	<u>1978</u>	<u>1977</u>	<u>1976</u>	<u>1975</u>
Total number of employees age 55 or older	49	57	80	120
Number of those eligible to retire	42	45	62	87

There were 165 new state employees eligible to the Correctional Plan. 146 male and 19 female. The average age of new entrants was 29.2 years.

The median and average ages of new employees during the past three fiscal years were:

<u>Fiscal Year</u>	MALE		FEMALE	
	<u>Median</u>	<u>Average</u>	<u>Median</u>	<u>Average</u>
1976	27	27.0 yrs.	25	25.5 yrs.
1977	28	29.8 yrs.	26	28.8 yrs.
1978	26	29.1 yrs.	29	30.0 yrs.

REFUNDS

In fiscal year 1978 there were 112 Correctional Plan accounts refunded while in 1977 there were 151 and 142 in 1976. The average age and service forfeited by those taking refunds were:

<u>Year Ending</u>	MALE		FEMALE	
	<u>Age</u>	<u>Service</u>	<u>Age</u>	<u>Service</u>
6/30/76	29.4 yrs.	1.4 yrs.	30.6 yrs.	1.6 yrs.
6/30/77	31.2 yrs.	1.8 yrs.	31.4 yrs.	1.9 yrs.
6/30/78	32.4 yrs.	2.0 yrs.	30.2 yrs.	1.3 yrs.

INACTIVES

As of June 30, 1978 there were 44 inactive accounts in the Correctional Employees Retirement Plan. Only 3 inactives have sufficient service credit to be entitled to deferred annuities.

EMPLOYEE DEATHS

There were 3 male correctional employees who died during the year. Their contributions were refunded to their beneficiaries.

RETIRED EMPLOYEES

During fiscal year 1978, 17 employees retired, 39 correctional employees retired in 1977 and 60 in 1976. Two annuitants died during the current fiscal year. This brings the total number of Correctional Plan annuitants to 213 service annuitants and 3 disabilitants compared to 197 and 3 at June 30, 1977.

The average age, service and monthly benefit of the 17 new service retirees was 56.9 years of age, 19.1 years of service and \$515.68 average monthly benefit.

Averages pertaining to the service annuitants receiving as of the dates shown follows:

<u>Date</u>	<u>Age at Retirement</u>	<u>Years of Service</u>	<u>Attained Age</u>	Average Monthly Benefit	
				<u>Incl. Soc. Sec.</u>	<u>Excl. Soc. Sec.</u>
6/30/76	59.9 yrs.	19.8 yrs.	60.9 yrs.	\$613.34	\$380.47
6/30/77	59.6 yrs.	19.5 yrs.	61.1 yrs.	\$627.09	\$381.78
6/30/78	59.3 yrs.	19.4 yrs.	61.7 yrs.	\$630.93	\$385.15

**MINNESOTA STATE RETIREMENT SYSTEM
UNCLASSIFIED EMPLOYEES RETIREMENT PLAN
FISCAL YEAR 1978**

Certain employees in the unclassified state service who are eligible to coverage under the General Employees Retirement Plan participate in the Unclassified Employees Retirement Plan. Both the employee and employer contributions are used to purchase shares in the Supplemental Retirement Fund. They may elect coverage under the General Plan if they so desire. The following provides information on the activity within this plan during the fiscal year ending June 30, 1978.

CURRENT PARTICIPANTS

On June 30, 1978, there were 1,013 participants in the Unclassified Employees Retirement Plan with shares to their credit. Of the 1,013 participants, 735 were active on June 30, 1978, and 278 were inactive. Following is a breakdown of the shares owned by the participants at June 30, 1978.

	<u>Number</u>	<u>Cost</u>	<u>Value</u>
Income shares	470,663	\$3,678,781.84	\$4,132,421.14
Growth shares	317,677	\$1,647,943.88	\$1,747,223.50
Fixed return		\$ 968,735.27	\$1,025,926.66

The average cost of the income shares and growth shares at June 30, 1978 were \$7.82 and \$5.19 respectively. The market value of the income and growth shares at June 30, 1978 were \$8.78 and \$5.50 respectively compared to \$8.84 and \$5.36 at June 30, 1977.

The distribution of participants selecting the various investment options follows:

100% Income shares	31.0%
75% Income shares, 25% Growth shares	15.7%
50% Income shares, 50% Growth shares	34.0%
100% Fixed return	13.4%
75% Fixed return, 25% Growth shares	5.9%

The average active participant was 36.9 years old and had 4.5 years of service credit at June 30, 1978.

WITHDRAWALS

During fiscal year 1978, there were 189 participants who withdrew employee and employer shares to their credit in the Unclassified Employees Retirement Plan. Following is a breakdown of the shares withdrawn by the participants during the year.

	<u>Number</u>	<u>Cost</u>	<u>Value</u>
Income shares	42,238	\$329,560.69	\$368,411.63
Growth shares	27,013	\$141,863.00	\$141,643.65
Fixed return		\$ 61,918.18	\$ 63,658.30

The average cost of the income and growth shares withdrawn during the year were \$7.80 and \$5.25 respectively. The average market value of the income and growth shares withdrawn were \$8.72 and \$5.24 respectively. The average withdrawal was \$3,019.

ANNUITANTS

Three former participants are receiving monthly benefits from the Unclassified Employees Retirement Plan as of June 30, 1978. One retired in fiscal 1975, one in 1976 and the other in 1978. Their average service credit at retirement was 4 years, 8 months and the average monthly benefit is \$80.45.

**MINNESOTA STATE RETIREMENT SYSTEM
DEFERRED COMPENSATION PLAN
FISCAL YEAR 1978**

All public employees and officials in the State of Minnesota are eligible to participate in a Deferred Compensation Plan administered by the Minnesota State Retirement System. State employees have been eligible since 1972 while political subdivision employees first began participating in 1976. Under this plan, the individual may defer receiving a part of his salary until after retirement and thus also postpone the income tax liability on such deferred salary until after retirement. Another advantage is that investment of deferred salary is made before tax dollars are deducted.

The deferred compensation is invested in the Income Share Account, Growth Share Account, or the Fixed Return Account of the Minnesota Supplemental Retirement Fund, or in various combinations of these accounts.

Investment of the deferred compensation was distributed as follows on June 30, 1978.

	<u>Number</u>	<u>Value</u>
Income Shares	539,948	\$4,740,743.44
Growth Shares	581,677	\$3,199,223.50
Fixed Return		\$4,996,761.58

On June 30, 1978 there were 2,611 participants in the Deferred Compensation Plan compared to 1,708 at June 30, 1977. Approximately 1,200 of those contributing were State employees. A review of these 1,200 indicated that they had an average of \$101 deferred from each check.

The following table shows the percentage distribution of investment options and the average ages of those selecting each option:

Option	Percentage		Average Age <u>June 30, 1978</u>
	<u>1978</u>	<u>1977</u>	
100% Income Shares	17.7%	18.4%	50 years
100% Growth Shares	8.1%	10.5%	48 years
50% Income Shares, 50% Growth Shares	16.6%	20.3%	50 years
100% Fixed Return	43.4%	35.8%	52 years
75% Fixed Return, 25% Growth Shares	14.2%	15.0%	50 years

A total of 171 former participants had reached their specified age and were receiving payments over a five or ten year period as of June 30, 1978. There were 124 receiving as of June 30, 1977.

TOWERS, PERRIN, FORSTER & CROSBY
ONE CENTURY PLAZA
LOS ANGELES, CALIFORNIA 90057
(213)553-3470

January 22, 1979

Board of Directors
Minnesota State Retirement System
529 Jackson Street
St. Paul, Minnesota 55101

Gentlemen:

We hereby certify that we made an Actuarial Valuation of your Retirement System as of June 30, 1978. As required by Minnesota Statutes, Chapter 356, the Valuation as of June 30, 1978 was made on the following basis:

1. Interest assumption - 5%.
2. Salary scale assumption - 3-1/2% per annum.
3. Other actuarial assumptions as determined during the course of our investigation into the experience of the System for the four year period ending June 30, 1975, and
4. Use of the entry age normal cost method of funding to determine the unfunded accrued liability.

We further certify that the results of the valuation referred to in the foregoing paragraph indicate that the contributions required from the employees and from the State under Minnesota Statutes, Chapter 352, are adequate to provide the benefits that will be paid from the system.

Very truly yours,



Harry M. Church

HMC/msm

MINNESOTA STATE RETIREMENT SYSTEM
EXHIBIT REQUIRED BY MINNESOTA STATUTES CHAPTER 356,
SECTION 356.20, SUBDIVISION 4(1)
AS OF JUNE 30, 1978

ASSETS AND UNFUNDED SUPPLEMENTAL PRESENT VALUE

ASSETS

1. Cash in State Treasury	(\$ 24,116.01)
2. Cash in Bank (Imprest Cash)	200.00
3. Short Term Investments (at Cost)	10,420,140.42
4. Accounts Receivable:	
a) Accrued Employee Contributions	597,028.78
b) Accrued Employer Contributions	921,690.87
c) Employee Buybacks	196,521.06
d) Due from Other Plans	63,254.42
e) Other	2,852.27
f) Due from MAFB Fund	.00
5. Accrued Interest on Investments	2,402,605.80
6. Dividends Declared and Payable, but not yet Received	484,475.59
7. Investment in Debt Securities at Amortized Cost	100,874,950.50
8. Investment in G.N.M.A.'s at Amortized Cost	20,482,100.36
9. Investment in Equities at Cost	117,990,616.22
10. Recognized Unrealized Appreciation in Equities	.00
11. Equipment at Depreciated Cost	14,263.16
12. Deferred Yield Adjustment Account	4,186,098.78
13. Participation in the MAFB Fund	141,687,419.09
14. Total Assets	<u>\$400,300,101.31</u>

UNFUNDED SUPPLEMENTAL PRESENT VALUE

15. Unfunded Supplemental Present Value to be funded by portion of State's "Matching Contribution" in excess of State's share of entry age normal cost contribution and Operating Expenses	\$ 40,954,536.00
16. Unfunded Supplemental Present Value to be funded by State's "Additional" contribution	<u>145,816,962.44</u>
17. Total Unfunded Supplemental Present Value	<u>186,771,498.44</u>
18. Total Assets and Unfunded Supplemental Present Value	<u><u>\$587,071,599.75</u></u>

CURRENT LIABILITIES AND RESERVES REQUIRED

LIABILITIES

19. Accounts Payable:	
a) Security Purchases	\$ 345,018.09
b) Annuities	1,072.92
c) Annuitant Deposits	11,806.23
d) Accrued Expenses	91,196.19
e) Overpaid Dividends	1,785.00
f) Transfer to Unclassified Retirement	181,430.29
g) Due MAFB Fund	491,245.00
20. Suspense Item: Unredeemed 6 year old Warrants	6,904.03
21. MAFBF Annuity Stabilization Account	<u>(9,585,966.00)</u>
22. Total Liabilities	<u>\$ (8,455,508.25)</u>

RESERVES REQUIRED

23. Total Reserves Required per Attached Schedule	\$595,527,108.00
24. Total Current Liabilities and Reserves Required	<u>\$587,071,599.75</u>

NOTE: Accumulated contributions, without interest, of members not yet retired amounted to \$100,278,841.73 as of June 30, 1978.

MINNESOTA STATE RETIREMENT SYSTEM
DETERMINATION OF RESERVES REQUIRED
AS OF JUNE 30, 1978

	(1)	(2)	(3)
	Present Value of Benefits	Present value of Applicable Portion of Normal Cost Contribution	Reserves Required (1) - (2)
Benefits For:			
1. Active Members:			
(a) Retirement Benefits	\$616,355,324	\$218,128,992	\$398,226,332
(b) Disability Benefits	35,510,246	22,272,368	13,237,878
(c) Refundments due to death or withdrawal	113,085,784	93,496,037	19,589,747
(d) Surviving Spouse Benefits	8,137,869	2,759,678	5,378,191
2. Deferred Annuitants	6,962,416	—	6,962,416
3. Former Members Without Vested Rights	613,653	—	613,653
4. Survivors	245,506	—	245,506
5. Benefits Payable from MAFB Fund	151,273,385	—	151,273,385
6. Total	\$932,184,183	\$336,657,075	\$595,527,108

MINNESOTA STATE RETIREMENT SYSTEM

**EXHIBIT REQUIRED BY MINNESOTA STATUTES CHAPTER 356
SECTION 356.20, SUBDIVISION 4(2) AND (3)
FISCAL YEAR ENDING JUNE 30, 1978**

ANALYSIS OF INCOME AND DEDUCTIONS FROM INCOME

INCOME

1. From Employees		
Employee contributions		\$ 20,648,216.89
Employee accrued contributions receivable		597,028.78
Employee contributions, accounts receivable		63,843.28
2. From Employers		
Employers contributions		21,109,903.65
Employer additional contributions		10,603,330.37
Employer accrued contributions receivable		921,690.87
3. From Investments		
Interest on securities		8,849,417.25
Dividends on corporate stock		5,114,785.79
Recognized unrealized appreciation in stock		(289,409.37)
Gain on sale of securities		537,109.35
Interest on back payments by employees		176,940.24
4. From MAFB Fund Participation		
Participation in MAFB Fund income		7,923,505.14
5. Other Revenues		
Miscellaneous		1,402.50
6. TOTAL INCOME		<u>\$ 76,257,764.74</u>

DEDUCTIONS FROM INCOME

7. Increase in MAFBF Annuity Stabilization Account			\$ 956,118.00
8. Benefits			
Service retirement annuities			15,908,384.62
Disability retirement benefits			746,625.16
Survivor benefits (spouses)			34,060.60
9. Refundments (Employee Contributions)			
Left service			3,895,069.82
Employee deaths and annuitant deaths			303,916.11
Erroneous deductions			38,592.22
Interest on Refundments			169,575.23
10. Transfer to Unclassified Employee Retirement			2,095,195.45
11. Operating Expenses			910,925.69
12. Prior Year Adjustments			0.00
13. Increase in Total Reserves Required			
Reserves Required 6-30-77	\$521,158,855.00		
Reserves Required 6-30-78	<u>595,527,108.00</u>		<u>74,368,253.00</u>
14. TOTAL DEDUCTIONS FROM INCOME			<u>\$ 99,426,715.90</u>
15. EXCESS OF INCOME OVER DEDUCTIONS FROM INCOME			\$ (23,168,951.16)
16. REDUCTION IN UNFUNDED SUPPLEMENTAL PRESENT VALUE:			
Unfunded Suppl. Pres. Value 6-30-77	\$163,602,547.28		
Unfunded Suppl. Pres. Value 6-30-78	<u>186,771,498.44</u>		<u>\$ (23,168,951.16)</u>

MINNESOTA STATE RETIREMENT SYSTEM
ACCOUNTING BALANCE SHEET
FISCAL YEARS ENDED JUNE 30, 1978 AND 1977

ASSETS

	1978	1977
Cash in State Treasury	(\$ 24,116.01)	\$ 54,819.39
Cash in Bank (Imprest Cash)	200.00	200.00
Short term investments (at Cost)	10,420,140.42	6,264,295.47
Accounts Receivable:		
(a) Accrued employee contributions	597,028.78	1,025,724.37
(b) Accrued employer contributions	921,690.87	1,571,228.75
(c) Employee buybacks	196,521.06	178,406.71
(d) Due from other plans	63,254.42	54,526.57
(e) Other	2,852.27	5,820.82
(f) Due from MAFB fund	.00	2,128,201.00
Accrued interest on investments	2,402,605.80	2,168,420.37
Dividends declared and payable, but not yet received	484,475.59	354,831.47
Investment in debt securities at amortized cost	100,874,950.50	93,898,046.32
Investment in G.N.M.A.'s at amortized cost	20,482,100.36	4,926,799.64
Investment in equities at cost (1)	117,990,616.22	101,040,866.37
Recognized unrealized appreciation in equities	.00	289,409.37
Equipment at depreciated cost	14,263.16	14,565.03
Deferred yield adjustment account	4,186,098.78	3,258,440.29
Participation in the MAFB Fund	141,687,419.09	130,188,933.96
Total Assets	\$400,300,101.31	\$347,423,535.90

LIABILITIES AND RESERVES

LIABILITIES

Accounts Payable:		
(a) Security purchases	\$ 345,018.09	\$ 188,448.17
(b) Annuities	1,072.92	1,440.46
(c) Annuitant Deposits	11,806.23	11,172.52
(d) Accrued expenses	91,196.19	63,990.42
(e) Overpaid dividends	1,785.00	1,785.00
(f) Transfer to unclassified retirement	181,430.29	135,858.45
(g) Due MAFB Fund	491,245.00	0.00
Suspense Item: Unredeemed 6 year old warrants	6,904.03	6,617.16
Total Liabilities	\$ 1,130,457.75	\$ 409,312.18

RESERVES

Minnesota Adjustable Fixed Benefit Fund		
Actuarial reserve requirement	\$151,273,385.00	\$140,731,018.00
Annuity stabilization reserve	(9,585,965.91)	(10,542,084.04)
Reserve for benefits	\$141,687,419.09	\$130,188,933.96
Survivor benefit reserve	245,506.00	249,795.00
Employee contribution reserve	100,278,841.73	87,098,476.17
State contribution reserve	156,957,876.74	129,477,018.59
Total Reserves	\$399,169,643.56	\$347,014,223.72
Total Liabilities and Reserves	\$400,300,101.31	\$347,423,535.90
(1) Market Values, June 30	\$116,210,538.00	\$104,133,709.00

MINNESOTA STATE RETIREMENT SYSTEM
STATEMENT OF REVENUE AND EXPENDITURES
FISCAL YEARS ENDED JUNE 30, 1978 AND 1977

REVENUES

	<u>1978</u>	<u>1977</u>
From Employees		
Employee contributions	\$20,648,216.89	\$18,027,082.72
Employee accrued contributions receivable	597,028.78	1,025,724.37
Employee contributions, accounts receivable	63,843.28	61,926.59
From Employers		
Employer contributions	21,109,903.65	18,384,886.04
Employer additional contributions	10,603,330.37	9,234,395.92
Employer accrued contributions receivable	921,690.87	1,571,228.75
From Investments		
Interest on short term, mortgages and debt securities	8,849,417.25	7,046,115.36
Dividends on corporate stock	5,114,785.79	4,140,831.96
Recognized unrealized appreciation in stock	(289,409.37)	(954,823.96)
Gain on sale of stock	537,109.35	107,591.08
Interest on back payments by employees	176,940.24	150,733.46
From MAFB Fund Participation		
Participation in MAFB Fund income	7,923,505.14	13,162,689.08
Other Revenues		
General Fund appropriation for benefit increases	0.00	2,216,377.00
Miscellaneous	1,402.50	1,428.83
Total Revenues	<u>\$76,257,764.74</u>	<u>\$74,176,187.20</u>

EXPENDITURES

Benefits		
Service retirement annuities (1) (2)	\$15,908,384.62	\$14,493,689.18
Disability retirement annuities	746,625.16	642,791.68
Survivor benefits (Spouses)	28,560.60	29,380.20
Lump sum annuity payments (Spouses)	5,500.00	0.00
Refundments (Employee Contributions)		
Left service	3,895,069.82	3,654,452.66
Employee deaths	272,039.51	255,559.77
Annuitant Deposits	31,876.60	48,318.14
Erroneous deductions	38,592.22	27,364.40
Interest on refundments	169,575.23	163,771.16
Unclassified Employee Retirement		
Transfer of employee contributions	858,969.58	798,617.08
Transfer of employer contributions	1,208,676.73	1,110,301.99
Transfer of interest	27,549.14	27,334.70
Operating Expenses		
Total operating expenses	910,925.69	721,493.26
Total Expenditures	<u>\$24,102,344.90</u>	<u>\$21,973,074.22</u>
Excess of revenue over expenditures	\$52,155,419.84	\$52,203,112.98
Prior period adjustments	.00	6,314,244.56
NET DISTRIBUTION TO RESERVES	<u>\$52,155,419.84</u>	<u>\$58,517,357.54</u>
(1) Additional benefits paid from General Fund	\$ 86,618.00	\$ 94,560.00
(2) Additional one-time lump sum payment funded by F.Y. 77 MAFB Fund income	\$ 992,612.50	\$ 0.00

MINNESOTA STATE RETIREMENT SYSTEM
CHANGES IN INVESTMENT PORTFOLIO
TWO YEARS ENDED JUNE 30, 1978 AND 1977

STATE EMPLOYEES RETIREMENT FUND

CORPORATE STOCK (At Original Cost)

	<u>1978</u>	<u>1977</u>
Beginning balances	\$101,040,866.37	\$ 80,227,501.82
Add: Purchases	18,772,461.33	22,504,390.38
	<u>\$119,813,327.70</u>	<u>\$102,731,892.20</u>
Deduct: Frac. stock dividends sold	65.28	41.13
Stock sold	1,822,646.20	1,690,984.70
	<u>\$117,990,616.22</u>	<u>\$101,040,866.37</u>
Balances as of June 30,	<u>\$117,990,616.22</u>	<u>\$101,040,866.37</u>
Current Yield	5.0%	4.2%
Market value, June 30,	\$116,210,538.43	\$104,133,708.68

DEBT SECURITIES (Par Value)

Beginning balances	\$ 99,423,544.30	\$ 80,299,356.39
Add: Purchases	30,921,085.13	24,561,742.03
	<u>\$130,344,629.43</u>	<u>\$104,861,098.42</u>
Deduct: Maturities and calls	1,985,487.53	1,497,554.12
Debt securities sold	5,884,000.00	3,940,000.00
	<u>\$122,475,141.90</u>	<u>\$ 99,423,544.30</u>
Balances as of June 30, *	<u>\$122,475,141.90</u>	<u>\$ 99,423,544.30</u>
Avg. Yield to Maturity	8.31%	8.12%
Book value of debt securities	\$121,357,051.00	\$ 98,824,846.00
Estimated Current Value	112,636,153.00	96,395,163.00

SHORT TERM INVESTMENTS (At Cost)

Beginning balances	\$ 6,264,295.47	\$ 14,998,545.28
Add: Purchases	260,646,041.57	221,847,131.47
	<u>\$266,910,337.04</u>	<u>\$236,845,676.75</u>
Deduct: Redemptions	256,490,196.62	230,581,381.28
Balances as of June 30,	<u>\$ 10,420,140.42</u>	<u>\$ 6,264,295.47</u>

*Distribution of debt securities:

Municipals	\$ 1,833,000.00	\$ 2,119,000.00
U.S. Government Agency and Government		
Guaranteed (GNMA & Merchant Marine)	21,506,373.16	5,483,188.28
Canadian Govt. & Govt. Guaranteed	20,425,000.00	14,925,000.00
Corporate obligations	78,710,768.74	76,896,356.02
	<u>\$122,475,141.90</u>	<u>\$ 99,423,544.30</u>

**MINNESOTA STATE RETIREMENT SYSTEM
UNCLASSIFIED EMPLOYEES RETIREMENT PROGRAM
TRANSACTIONS IN FISCAL YEAR 1978**

RECEIPTS

Employee contributions	\$ 858,969.58	
Employer contributions	1,208,676.73	
Interest on contributions	27,549.14	
Total contributions	\$2,095,195.45	
Less: 2/10% administrative costs	38,187.47	\$2,057,007.98
Add: Cash balance at 06-30-77		2,559.66
Fixed return earnings		72,236.92
Total receipts and cash		\$2,131,804.56

INVESTMENTS AND WITHDRAWALS

Shares purchased in the Minnesota Supplemental Retirement Fund:

	No. Shares	Market Value	
Income shares purchased	141,444	\$1,230,512.69	
Less: Shares withdrawn (cost \$329,560.69)	42,238	368,411.63	
Net purchases	99,206	\$ 862,101.06	\$ 862,101.06
Growth shares purchased	93,049	\$ 485,251.46	
Less: Shares withdrawn (cost \$141,863.00)	27,013	141,643.65	
Net purchases	66,036	\$ 343,607.81	343,607.81
Fixed return account	Earnings	Investments	
Earnings and investments	\$72,236.92	\$ 373,952.80	
Less: Withdrawals	1,740.12	61,918.18	
Net	\$70,496.80	\$ 312,034.62	382,531.42
Cost basis of shares withdrawn		\$ 533,341.87	
Add: Appreciation in share values		38,631.59	
Market Value of shares withdrawn		\$ 571,973.46	
Add: Uninvested balances withdrawn		568.18	
Earnings on fixed return withdrawals		1,740.12	
		\$ 574,281.76	
Less: Transfers to SER Fund		33,454.07	
Total paid in withdrawals		\$ 540,827.69	540,827.69
Total investments and withdrawals			2,129,067.98
Cash balance at June 30, 1978			\$ 2,736.58

MARKET VALUE AND COST OF SHARES HELD

	Income	Growth	Fixed Return
Number of shares at June 30, 1977	371,457	251,641	\$ 713,900.46
Net increase in fiscal 1978	99,206	66,036	382,531.42
Number of shares at June 30, 1978	470,663	317,677	\$1,096,431.88
Share values at June 30, 1978	x 8.78	x 5.50	
Market value at June 30, 1978	\$4,132,421.14	\$1,747,223.50	\$1,096,431.88
Original cost	\$3,678,781.84	\$1,647,943.88	\$ 968,735.27

MINNESOTA STATE RETIREMENT SYSTEM

DEFERRED COMPENSATION PLAN FISCAL YEAR ENDED JUNE 30, 1978

RECEIPTS

Participant deposits	\$4,961,975.00	
Less: Deposits refunded	<u>2,734.00</u>	
	\$4,959,241.00	
Less: 2% Administrative costs	<u>99,184.82</u>	
Total Net Deposits	<u>\$4,860,056.18</u>	\$4,860,056.18
Add: Uninvested balance at June 30, 1977		5,525.29
Fixed return earnings		<u>255,095.16</u>
Total available to invest		<u>\$5,120,676.63</u>

INVESTMENTS AND WITHDRAWALS

Shares purchased in the Minnesota Supplemental Retirement Fund.			
	<u>No. Shares</u>	<u>Market Value</u>	
Income shares purchased	133,239	\$1,160,008.07	
Less: Shares withdrawn	<u>24,549</u>	<u>213,375.95</u>	
Net purchases	<u>108,690</u>	<u>\$ 946,632.12</u>	\$ 946,632.12
Growth shares purchased	157,502	\$ 821,682.00	
Less: Shares withdrawn	<u>16,664</u>	<u>86,332.62</u>	
Net purchases	<u>140,838</u>	<u>\$ 735,349.38</u>	735,349.38
Fixed Return Account	<u>Earnings</u>	<u>Investments</u>	
Earnings and investments	\$255,095.16	\$2,872,155.08	
Less: Withdrawals	<u>1,391.77</u>	<u>57,357.79</u>	
Net purchases	<u>\$253,703.39</u>	<u>\$2,814,797.29</u>	3,068,500.68
Market value of shares withdrawn		\$ 357,066.36	
Add: Uninvested balances withdrawn		218.18	
Earnings on fixed return withdrawals		1,391.77	
Adjustments on withdrawals		<u>2.50</u>	
Less: Cancelled warrants		<u>\$ 358,678.81</u>	
		145.67	
		<u>\$ 358,533.14</u>	<u>358,533.14</u>
Total investments and withdrawals			\$5,109,015.32
Uninvested balance at June 30, 1978			\$ 11,661.31
Undistributed income on short term investments			<u>22,942.70</u>
Total cash balance at June 30, 1978			<u>\$ 34,604.01</u>

MARKET VALUE OF SHARES HELD

	Income	Growth	Fixed Return
Number of shares at June 30, 1977	431,258	440,839	\$1,928,260.90
Net increase during fiscal year	<u>108,690</u>	<u>140,838</u>	<u>3,068,500.68</u>
Number of shares at June 30, 1978	539,948	581,677	\$4,996,761.58
Share values at June 30, 1978	<u>x 8.78</u>	<u>x 5.50</u>	
Market value at June 30, 1978	\$4,740,743.44	\$3,199,233.50	\$4,996,761.58