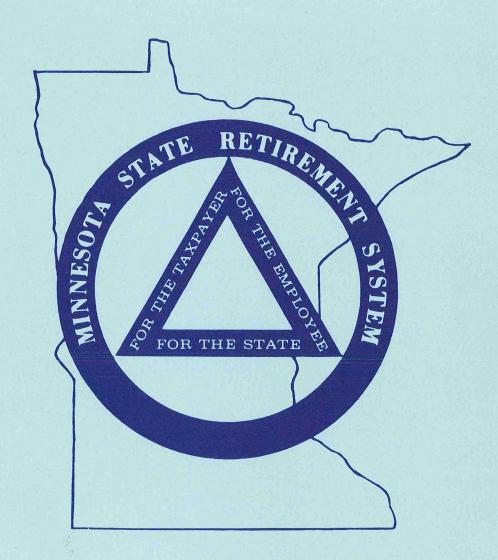
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STATE

RETIREMENT

SYSTEM



COMPREHENSIVE ANNUAL REPORT July 1, 1987 — June 30, 1988

645 State Office Building Spiet Paul, Minnesota 55258

JK 6160 .P4 M66cg 1987/88

Pursuant to MS 356.20

COMPREHENSIVE ANNUAL FINANCIAL REPORT of the MINNESOTA STATE RETIREMENT SYSTEM

July 1, 1987 — June 30, 1988

Paul L. Groschen Executive Director Minnesota State Retirement System 529 Jackson Street at 10th St. Paul, MN 55101

MINNESOTA STATE RETIREMENT SYSTEM **COMPREHENSIVE ANNUAL REPORT FISCAL YEAR ENEDED JUNE 30, 1988**

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MINNESOTA STATE RETIREMENT SYSTEM

529 JACKSON STREET AT 10th ST. PAUL, MINNESOTA 55101 (612) 296-2761

LETTER OF TRANSMITTAL

OFFICERS

Executive Director
Paul L. Groschen
Assistant Directors
Douglas Mewhorter
Arvin Herman

No.

To the Board of Directors

Minnesota State Retirement System

The Minnesota State Retirement System is proud to submit the comprehensive annual report for the fiscal year ended June 30, 1988. This report includes a summary of the System, financial statements, actuarial reports and statistical data. The information should be useful in understanding the System and its current status.

Accounting System and Reports

This report has been prepared in accordance with Generally Accepted Accounting Principles (GAAP) as established by the Governmental Accounting Standards Board (GASB).

Our internal accounting controls are designed to provide reasonable assurance regarding the safekeeping and reliability of all financial records. Transactions are reported on the accrual basis of accounting.

Summary annual reports are sent to all active and retired members of the plans with a notice that they may receive a copy of this report on request.

Revenues

Employee contributions, employer contributions, and investment income provide the funding for the System. Contributions and investment income for fiscal year 1988 were \$277.9 million. This represents a 17.9% decrease from fiscal year 1987 due to reduced investment earnings.

Expenses

The expenses of the System consist of annuity benefits, refunds of contributions, interest on refunds, and administrative expenses. Expenses for fiscal year 1988 were \$100.3 million, an increase of 16.0% from fiscal year 1987. Revenues exceeded expenses by \$177.6 million.

BOARD OF DIRECTORS

Elected Members

Karl W. Christey, Chair State Patrol Plan Dept. of Public Safety MN State Highway Patrol 2005 North Lilac Drive Golden Valley, MN 55422

Abigail Robles, Vice-Chair General Plan Department of Revenue Centennial Office Building St. Paul, MN 55145

Francis C. Marshall General Plan Department of Transportation 419 Transportation Building St. Paul, MN 55155

John Johnson MTC Representative 312 Central Avenue, Room 438 Minneapolis, MN 55414

Luther Thompson General Plan Department of Public Service American Center Building 160 E. Kellogg Blvd. St. Paul, MN 55101

Bernard O. Weber General Plan Department of Transportation P.O. Box 370 St. Cloud, MN 56302

Robert Whitaker Retiree Representative 1303 Watson Avenue St. Paul, MN 55116

Kenneth Yozamp Correctional Plan Minnesota Correctional Facility Box B St. Cloud, MN 56302

Appointed Members

Mel Hansen Ells Personnel Systems 1129 Plymouth Building Minneapolis, MN 55402

The Honorable Michael A. McGrath State Treasurer 303 Administration Building St. Paul, MN 55155

Otto Bang American Agency, Inc. 5851 Cedar Lake Road St. Louis Park, MN 55416

Investments

Investments contribute a substantial portion of the income to the System. Income from investments was \$162.9 million or 58.6% of total revenue. Of the total investment income, 49% is from the basic retirement funds and the remaining 51% is from the participation in the Minnesota Post Retirement Investment Fund.

Funding

The health of a retirement system is indicated by its level of funding. The higher the level of funding, the larger the ratio of assets to accrued liabilities and the greater the potential for investment income. This gives the participants a greater degree of security in their pension benefits. The actuarial valuation has determined that the current level of contributions is sufficient for the State Employees Plan, the Correctional Plan and State Patrol Plan. The actuarial section of this report has the detailed actuarial results.

The Judges Fund is partially on a terminal funding basis and partially on a pay-as-you-go basis. Neither basis provides for sound funding of a retirement plan. The Unclassified and Deferred Compensation Plans are defined contribution plans and consequently, are totally funded.

Professional Services

Actuarial services are provided for MSRS by Touche Ross & Co. The actuarial valuation data included in this report is provided by the Wyatt Company, under contract with the Legislative Commission on Pensions and Retirement. Legal counsel is provided by Merwin Peterson of the State Attorney General's Office. The System's medical advisor is the State Department of Health. The annual financial audit is conducted by the State Legislative Auditor.

Administration

Continued effort was made this year to bring the highest quality of service to the covered employees through group retirement presentations, individual counseling in person or by telephone, or written correspondence.

Acknowledgments

This report is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible stewardship for assets contributed by the members and their employers.

I would like to take this opportunity to express my gratitude to the Board of Directors, staff, the advisors, and to the many people who worked so diligently to assure the successful operation of the System.

Respectfully submitted,

Saul L. Groschen
Executive Director

MINNESOTA STATE RETIREMENT SYSTEM ADMINISTRATIVE ORGANIZATION JUNE 30, 1988

BOARD OF DIRECTORS

Karl W. Christey, Chairman Minnesota State Highway Patrol 565 Wheeler Drive Excelsior, Minnesota 55331 Telephone 612/541-9411 Term: March 3, 1986-March 5, 1990 Elected — State Patrol Member

Abigail Robles, Vice-Chairwoman Department of Revenue 1171 Kruse West St. Paul, Minnesota 55118 Telephone 612/297-1835 Term: March 3, 1986-March 5, 1990 Elected — State Employee

Mel Hansen 4505 -28th Avenue South Minneapolis, Minnesota 55406 Telephone 612/722-2182 Term: January 6, 1985-January 2, 1989 Appointed — Public Member

John Johnson Metropolitian Transit Commission 12857 Polk Street Northeast Blaine, Minnesota 55434 Telephone 612/379-2914 Term: March 7, 1988-March 2, 1992 Appointed — MTC/TOD Designate

Francis Marshall
Department of Transportation
6300 South Concord Avenue
Edina, Minnesota 55424
Telephone 612/296-3420
Term: March 7, 1988-March 2, 1992
Elected — State Employee

Michael McGrath State Treasurer 4410 West 98th Street Circle Bloomington, Minnesota 55437 Telephone 612/296-7091 Term: January 19, 1987-January 7, 1991 Appointed — Constitutional Officer Patsy Schmelzer 1729 Humboldt Avenue South Minneapolis, Minnesota 55403 Telelphone 612/377-6539 Term: January 19, 1987-January 7, 1991 Appointed — Public Member

Luther Thompson
Department of Public Service
6873 Collingwood Lane, #10
Woodbury, Minnesota 55125
Telephone 612/296-1065
Term: March 3, 1986-March 5, 1990
Elected — State Employee

Bernard Weber
Department of Transportation
126 Riverside Drive Northeast
St. Cloud, Minnesota 56301
Telephone 612/255-4268
Term: March 7, 1988-March 2, 1992
Elected — State Employee

Robert A. Whitaker 1303 Watson Avenue St. Paul, Minnesota 551167 Telephone 612/698-3315 Term: March 7, 1988-March 2, 1992 Elected — Retired State Employee

Kenneth Yozamp Department of Corrections 4125 Shadowood Drive Northeast Sauk Rapids, Minnesota 56379 Telephone 612/255-5000 Term: March 7, 1988-March 2, 1992 Elected — Correctional Plan Member

OFFICERS

Paul L. Groschen, Executive Director

Assistant Directors

Douglas Mewhorter, Employee Services and Records

Arvin L. Herman, Finance and Systems

THE ST.

MINNESOTA STATE RETIREMENT SYSTEM

529 JACKSON STREET AT 10th ST. PAUL, MINNESOTA 55101 (612) 296-2761 **OFFICERS**

Executive Director
Paul L. Groschen
Assistant Directors
Douglas Mewhorter

Arvin Herman

No

To All Minnesota State Retirement System Members

Through its retirement plans, the State of Minnesota makes promises of future benefits to its employees. To assure that these benefits will be paid, actuarial valuations and experience studies are done every year to determine costs and to test the adequacy of the financing.

The Board is especially pleased with the post-retirement increase provision which, in recent years, has been able to keep retirment benefits ahead of inflation. Retirees received an 8.054% increase in January 1988, and a 6.918% increase in January 1989. A commendation goes to the State Board of Investment for obtaining outstanding investment returns which are the basis for these increases.

The Board receives and considers requests for improvement or change in the retirement plans. The Board weighs several factors in determining whether to recommend to the Legislature that a benefit should be added--principally need, cost and equity of the proposed provision. As the Board has a responsibility to maintain a sound system, adequate financing for each plan improvement must be a major consideration. The staff and the Board encourage employees to read the periodic MSRS Newsletters for current information on legislation proposed, in progress, and accomplished.

In the past year, Bernard Weber, Robert Whitaker and Kenneth Yozamp were re-elected to the Minnesota State Retirement System Board of Directors. Francis Marshall was elected and Otto Bang was appointed as new members. I welcome the new Board members and thank Daniel Ernst and Patsy Schmelzer for their service on the Board.

On behalf of the Board and the MSRS staff, I would like to express our thanks to all the System's participants and advisors. We ask for your continued support so that, through a group effort, we may continue to provide a sound and secure retirement future.

BOARD OF DIRECTORS

Elected Members

Karl W. Christey, Chair State Patrol Plan Dept. of Public Safety MN State Highway Patrol 2005 North Lilac Drive Golden Valley, MN 55422

Abigail Robles, Vice-Chair General Plan Department of Revenue Centennial Office Building St. Paul, MN 55145

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The Honorable Michael A. McGrath State Treasurer 303 Administration Building St. Paul, MN 55155

Otto Bang American Agency, Inc. 5851 Cedar Lake Road St. Louis Park, MN 55416

Sincerely,

Karl W. Christey, Chairman
Board of Directors

SUMMARY OF RETIREMENT PLANS

PURPOSE

The Minnesota State Retirement System was established by the State Legislature in 1929 to provide retirement benefits to State employees. The System currently administers seven defined benefit plans and two defined contribution plans for most State employees and selected other public employees.

ADMINISTRATION

The administration of the System is governed by an eleven member Board of Directors. The Board includes four elected General Plan members, one elected State Patrol plan member, one elected Correctional Plan member, one elected retired member, one designated Metropolitan Transit Commission employee and three appointed by the Governor.

The management of the System is vested with the Executive Director who administers the plans in accordance with Minnesota Law and the policies of the Board. The following is a description of plans included in this report.

Defined Benefit Plans

General Employees Plan

- (a) Coverage and Contributions Most state employees, and selected metropolitan agency employees. Contributions are 3.73% employee and 3.9% employer.
- (b) Benefit Formula 1% of high five year salary for first 10 years plus 1½% for each year over 10.
- (c) Retirement age and years of service
 - Age 65 with one year service no reduction.
 - Age 62 with 30 years service no reduction.
 - Age 55 with 5 years service reduced from age 65.
 - At any age with 30 years service reduced from age 62.
 - Total and permanent disability with 5 years service.
- (d) Surviving Spouse Benefit
 - If employee was at least age 50 with 5 years of service at date of death, generally, the spouse is eligible for a 100% joint and survivor annuity starting when the employee would have attained age 55, or a refund.
- (e) Refunds
 - Contributions with 5% interest.
- (f) Annuity and Disability Options
 - 100% joint and survivor with or without bounce back.
 - 50% joint and survivor with or without bounce back.
 - 15 year period certain and life thereafter.

SUMMARY OF RETIREMENT PLANS (Continued)

Military Affairs and Transportation Pilots Plans

Provisions different from General Plan.

- (a) Coverage and Contributions
 - Employees required to retire from federal military status at age 60 and pilots. Contributions are 5.33% employees and 5.5% employers.
- (b) Retirement Age and Years of Service
 - Age 60, 62 for pilots, with at least 5 years of service no reduction.
- (c) Disability
 - Unable to perform job disability with 5 years service
 - Formula as general plan with no reduction.
 - Pilots get 75% of salary for maximum of 5 years.

State Patrol Retirement Plan

- (a) Coverage and Contributions
 - State of Minnesota Highway Patrolmen, conservation officers and crime bureau officers.
 Contributions are 8.5% employee and 18.9% employer.
- (b) Benefit Formula
 - 2½% of high five successive years salary for first 25 years of service plus 2% for each year over 25.
- (c) Retirement Age and Years of Service
 - Age 55 with 5 years of service no reduction.
 - Disability same as Correctional Officers Plan.
- (d) Survivor Benefits
 - Death of member in service spouse gets 20% of final average salary. With 10 or more years of service, changes to a 100% joint and survivor annuity amount as of the date the employee would have attained age 55.
 - Children get 10% of final average salary per child plus \$20 per month prorated equally to such children until age 18 or 22 if a student, or until married. Total benefit limited to 40% of final average salary.
 - Refund with 5% interest if no survivor benefit payable.
- (e) Refunds
 - Contributions with 5% interest.
- (f) Annuity and Disability Option
 - 100% joint and survivor with or without reversion.
 - 50% joint and survivor with or without reversion.

SUMMARY OF RETIREMENT PLANS (Continued)

Correctional Employees Plan

Provisions different from General Plan

(a) Coverage and Contributions

— State employees who have direct contact with inmates at Minnesota Correctional Facilities. Contributions are 4.9% employee and 8.7% employer.

(b) Benefit Formula

— 2½% of high five year average salary for first 25 years of service and 2% for each year over 25 payable for 84 months or until age 65, then reverts to General Plan formula.

(c) Retirement Age and Years of Service

Age 55 with 5 years service

— Unable to perform job disability with 5 years service.

— If disability is job related, benefit is equal to 50% of high five average salary plus $2\frac{1}{2}$ % for each year in excess of 20 through 25 and thereafter at 2%.

Judges Retirement Plan

(a) Coverage and Contributions

— All Minnesota District, Appellate and Supreme Court Judges. Contributions are the Social Security rate plus 1/2% for non-Social Security judges. Social Security judges pay for Social Security up to the maximum, then to the fund. Employer contributions are direct funded from a general fund appropriation as needed.

(b) Benefit Formula

- 2½% of high five years average salary within the last 10 years of service for each year of service prior to July 1, 1980 plus 3% of same average salary for service after June 30, 1980.
- Benefit is reduced by 50% of primary benefit amount payable from Social Security.

(c) Retirement Age and Years of Service

- Age 70 with 1 year service no reduction.
- Age 65 with 5 years service no reduction.
- Age 62 with 5 years service reduced from age 65.

(d) Disability

- Unable to perform the duties.
- Continuation of full salary for two years, then as computed under the formula with no reduction, subject to minimum of 25% of high five year salary. Benefit is reduced by 50% of primary amount payable from Social Security.

(e) Survivor Benefits

Spouse eligible for 60% of normal annuity subject to a minimum of 25% of final average salary.
 If covered by Social Security, normal annuity amount is reduced by 50% of judge's primary benefit amount from Social Security.

(f) Refunds

— Contributions with 5% interest.

(g) Annuity and Disability Options

- 100% joint and survivor.
- 50% joint and survivor.
- 10 year certain and life thereafter.
- 15 year certain and life thereafter.

SUMMARY OF RETIREMENT SYSTEM PLANS (Continued)

General Fund

Legislators Retirement Plan

- (a) Coverage and Contributions
 - All legislators. Contributions are 9% employee and as needed from general fund appropriation for employer.
- (b) Benefit Formula
 - 21/2% of high five year average salary with a maximum of 20 years.
- (c) Retirement age and years of service
 - Age 62 with 6 years of service No reduction.
 - Age 60 with 6 years of service Reduced from age 62.
- (d) Survivor benefits
 - Spouse gets 50% of benefit.
 - First child gets 25%, the next two children get 12.5% for a maximum of 100% of member benefit
- (e) Refunds
 - Contributions with 5% interest.

Elective Officers Plan

- (a) Coverage and Contributions
 - Elected Constitutional Officers. Contributions are 9% employee and as needed from general fund appropriation for employer.
- (b) Benefit Formula
 - 2½% of high five year average salary.
- (c) Retirement age and years of service
 - Age 62 with 8 years of service No reduction.
 - Age 60 with 8 years of service Reduced from age 62.
- (d) Survivor benefits
 - Spouse gets 50% of benefit.
 - First child gets 25%, the next two children get 12.5% for a maximum of 100% of member benefit.
- (e) Refunds
 - Contributions with 5% interest.

SUMMARY OF RETIREMENT SYSTEM PLANS (Continued)

Defined Contribution Plan

Unclassified Employees Plan

- (a) Coverage and Contributions
 - Certain specified employees of the State of Minnesota in unclassified positions. Contributions are 4% employee and 6% employer.
- (b) Benefits
 - Annuity benefit or withdrawal of account balance.
- (c) Formula
 - Money purchase based upon age and 5% interest assumption.
- (d) Retirement Age and Years of Service
 - Age 58 with any length of service.
 - Total and permanent disability.
- (e) Refunds
 - Value of account.
- (f) Annuity and Disability Option
 - 100% joint and survivor with or without bounce back.
 - 50% joint and survivor with or without bounce back.
 - 15 year period certain.

Agency Fund

Deferred Compensation Plan — IRS Code 457

- (a) Coverage and Contributions
 - Optional for all State employees and employees of political subdivisions. Contributions are tax deferred with a \$10 per pay period minimum and a 331/3% of compensation or \$7,500 maximum.
- (b) Investment Selection
 - Minnesota Supplemental Investment Fund
 - Income Share Account.
 - Growth Share Account.
 - Money Market Account.
 - Common Stock Index Account.
 - Guaranteed Return Account.
 - Minnesota Mutual Life Insurance Company
 - Fixed annuity contract.
 - Variable annuity contract.
 - Great West Life Assurance Company
 - Daily Interest Guarantee Fund.
 - Guaranteed Certificate Fund 30, 60 and 84 month.
 - Growth Fund.
- (c) Withdrawal Events
 - Termination of service or death.
 - Unforeseeable emergency.

SUMMARY OF RETIREMENT SYSTEM PLANS (Continued)

- (d) Withdrawal Options
 - Minnesota Supplemental Investment Fund
 - Lump sum.
 - Lump sum purchase of a fixed or variable annuity contract.
 - Monthly installment over a period specified not to exceed 240 months.
 - Insurance Companies
 - The life of the participant.
 - The life of the participant or a period certain, whichever is greater.
 - The joint lifetime of the participant and a named beneficiary.

These summary plan descriptions are not intended to be all inclusive, they are provided for general information purposes only.



STATE OF MINNESOTA

OFFICE OF THE LEGISLATIVE AUDITOR

VETERANS SERVICE BUILDING, ST. PAUL, MN 55155 • 612/296-4708

JAMES R. NOBLES, LEGISLATIVE AUDITOR

INDEPENDENT AUDITOR'S REPORT

Executive Director and Members of the Board

Minnesota State Retirement System

We have audited the combined financial statements of the Minnesota State Retirement System and the combining and individual fund financial statements of the system as of and for the year ended June 30, 1988, as presented in the financial section of this report. These financial statements are the responsibility of the system'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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the general purpose financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the general purpose 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, investments are valued at cost or amortized cost as required by generally accepted accounting principles. Minnesota statutes require valuation of all securities at cost plus one-third of 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 8 contains the disclosures which must be considered together with the basic financial statements to achieve statutory reporting requirements.

In our opinion, the combined financial statements referred to above present fairly, in all material respects, the financial position of the Minnesota State Retirement System at June 30, 1988, and the results of its operations and changes in its financial position for the year then ended in conformity with generally accepted accounting principles. Also, in our opinion, the combining and individual fund financial statements referred to above present fairly, in all material respects, the financial position of the individual funds of the Minnesota State Retirement System at June 30, 1988, and the results of operations and changes in financial position of such funds 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 Minn. Stat. Section 356.20.

Our audit was made for the purpose of forming an opinion on the combined financial statements taken as a whole and on the combining and individual fund financial statements. The supplemental schedule of administrative expenses, which is the responsibility of the system's management, is presented for purposes of additional analysis and is not a required part of the combined financial statements of the Minnesota State Retirement System. The information has been subjected to the auditing procedures applied in the audit of the combined, combining, and individual fund financial statements and, in our opinion, is fairly stated in all material respects in relation to the combined financial statements taken as a whole.

James R. Nobles Legislative Auditor John Asmussen, CPA Deputy Legislative Auditor

COMBINING BALANCE SHEET JUNE 30, 1988 (In Thousands)

		Define	d Benefit Fun	ds		Defined Con- tribution Fund	Agency Fund	Memoran	dum Only
ASSETS	State Employees	State Patrol	Correctional Employees	Judges	General Fund Plans	Unclas- sified	Deferred Com- pensation	1988 Totals	1987 Totals
Cash	\$ 15	\$ 1	\$ 1	\$ 4	\$ 0	\$ 1	\$ 14	\$ 36	\$ -329
Short term investments (at cost) Accounts receivable:	50,661	4,252	4,438	194	0	469	880	60,894	74,822
Member contributions	2,436	143	122	19	2	101	2,143	4,966	4.658
Employer contributions	2,298	317	195	0	0	158	0	2,968	2,458
Other	4	1	0	0	0	0	36	41	43
Accrued Interest	214	16	11	1	0	0	0	242	394
Due from other plans	290	0	0	0	0	0	0	290	163
Due from other funds	0	0	270	0	3,672	0	0	3,942	3,445
Fixed Investments (at cost)	242,865	18,237	11,269	936	0	0	0	273,307	261,305
Equity Investments (at cost)	665,606	50,605	30,844	2,343	0	0	0	749,398	677,643
Deposits with Insurance Companies	0	0	0	0	0	0	201,266	201,266	134,516
Fixed Assets	78	0	0	0	0	0	0	78	66
Restricted Assets	649,064	72,739	25,435	17,812	8,496	50,197	123,232	946,975	833,930
	\$1,613,531	\$146,311	\$72,585	\$21,309	\$12,170	\$50,926	\$327,571	\$2,244,403	\$1,993,772
LIABILITIES									
Accounts Payable							. 6		2
Annuitants	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Accrued expenses	300	3	2	0	0	0	8	313	307
Deferred Revenue	0	0	0	42	0	0	0	42	54
Due to MPRI Fund	3,850	184	0	456	0	0	0	4,490	1,598
Due to other plans	0	56	137	37	32	13	15	290	165
	\$ 4,150	\$ 243	\$ 139	\$ 535	\$ 32	\$ 13	\$ 23	\$ 5,135	\$ 2,124
RESERVES									
MPRI Fund reserve	\$ 649,064	\$ 72,739	\$25,435	\$17,812	\$ 8,496	\$ 0	\$ 0	\$ 773,546	\$ 670,111
Member reserve	286,714	17,863	10,965	4,018	3,575	50,913	327,548	701,596	597,729
Non-MPRI Fund reserve	0	7,446	0	12,137	4,233	0	0	23,816	13,271
State reserve	1,179,698	77,014	45,054	25,742	10,507	0	0	1,338,015	1,226,861
Total Required Reserves	\$2,115,476	\$175,062	\$81,454	\$59,709	\$26,811	\$50,913	\$327,548	\$2,836,973	\$2,507,972
Unfunded accrued liability (at cost)	(506,095)	(28,994)	(9,008)	(38,935)	(14,673)	0	0	(597,705)	(516,324)
Net Reserves	\$1,609,381	\$146,068	\$72,446	\$20,774	\$12,138	\$50,913	\$327,548	\$2,239,268	\$1,991,648
Total Liabilities and Reserves	\$1,613,531	\$146,311	\$72,585	\$21,309	\$12,170	\$50,926	\$327,571	\$2,244,403	\$1,993,772

COMBINING STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1988 (In Thousands)

											Co	fined ontri- ition				
				Define	d Be	nefit Fu	nds				F	und		Memorand	un	Only
	Er	State nployees		State Patrol	t	orrec- ional ployees	J	udges	1	eneral Fund Plans		iclas- fied		1988 Totals		1987 Totals
Operating Revenues: Member contributions Employer contributions General Fund appropriations Investment income MPRI Fund income Gain/Loss on Investments Realized and unrealized gains Other income	\$	41,632 42,951 1,199 58,072 70,140 8,184 0 2	\$	2,244 4,971 62 4,636 7,682 658 0	\$	3,089 0 2,689 2,861 171 0	\$	565 0 2,650 299 1,663 19 0 56	\$	431 0 1,057 0 976 0 0	\$	0 0 0 36 0 0 505	\$	46,625 51,011 4,968 65,732 83,322 9,032 505 58	\$	43,813 47,688 5,689 109,978 79,906 22,464 5,085
Total Operating Revenues	\$	222,180	\$	20,253	9	510,563	\$	5,252	\$	2,464	\$	541	\$	261,253	\$	314,688
Operating Expenses: Annuity benefits Disability benefits Survivor benefits Refunds Interest on refunds Interest to MPRI Fund Administrative expenses	\$	61,113 2,585 0 6,486 1,004 629 1,550	\$	6,203 46 14 8 1 77 58	\$	\$ 2,590 88 0 174 22 23 82	\$	2,274 116 720 5 1 10 38	\$	1,074 0 173 15 4 2 32	\$	0 0 0 6 0 0	\$	73,254 2,835 907 6,694 1,032 741 1,910	\$	62,985 2,606 758 7,161 1,083 0
Investment fees Total Operating Expenses	\$	1,328 74,695	\$	6,508	-	3,006	\$	3,169		1,300	\$	156	\$	1,461 88,834	\$	1,576 77,917
Other Changes in Reserves: Member contributions Employer contributions Member withdrawals Plan transfers	_	0 0 0 (285)		0 0 0 0		0 0 0 44	_	0 0 0 0	_	0 (430) 0 0	_	2,167 3,176 (1,504) 241	_	2,167 2,746 (1,504) 0	: , <u>—</u>	2,474 2,709 (2,833) 0
Total Other Changes Net Reserve Additions	\$	(285)	<u>\$</u>	13,745		7,601	\$	2,083	\$	734	\$	4,080 4,465	\$	3,409 175,828	\$	2,350 239,121
Reserve Balance at June 30, 1987 Reserve Balance at June 30, 1988		1,462,181		132,323 146,068		\$64,845 \$72,446		18,691 20,774		11,404 12,138		16,448 50,913		1,735,892 1,911,720		1,496,770 1,735,891

COMBINING STATEMENT OF CHANGES IN FINANCIAL POSITION YEAR ENDED JUNE 30, 1988 (In Thousands)

						Defined Contri- bution		
	į. <u> </u>	Defin	ed Benefit Fun	ds		Fund	Memorano	dum Only
	State Employees	State Patrol	Correc- tional Employees	Judges	General Fund Plans	Unclas- sified	1988 Totals	1987 Totals
Resources Provided by: Net reserve additions	\$147,200	\$13,745	\$ 7,601	\$2,083	\$734	\$4,465	\$175,828	\$239,121
Items not requiring resources curr Depreciation	<u>26</u>	0	0	0	0	0	26	22
Total resources provided	147,226	13,745	7,601	2,083	734	4,465	175,854	239,143
Resources Used by: Equipment purchased	(38)	0	0	0	0	0	(38)	(13)
Total resources used	\$ (38)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ (38)	\$ (13)
Net Increase in Working Capital	<u>\$147,188</u>	\$13,745	\$ 7,601	\$2,083	<u>\$734</u>	\$4,465	\$175,816	\$239,130
Elements of Net Increase (Decrease in Working Capital	e)							
Current Assets Cash	\$ (122)	\$ (64)	\$ 1	\$ (32)	\$ 0	\$ (56)	\$ (273)	\$ (827)
Accounts receivable	559	60	316	5	1	57	998	225
Accrued interst and dividends	(151)	(11)	11	(1)	Ô	0	(152)	148
Due from other funds	0	(64)	270	(163)	455	0	498	474
Due from other plans	127	0	0	0	0	0	127	(84)
Short term investments	(16,280)	(2,082)	4,438	(105)	0	101	(13,928)	28,739
Fixed income investments	418	379	11,269	(63)	0	0	12,003	17,942
Equity investments	37,772	3,734	30,844	(596)	0	0	71,754	82,206
Restricted investments	62,369	11,968	25,435	3,485	178	4,364	107,799	109,835
Liabilities								
Accrued expenses	0	(2)	(2)	0	0	0	(4)	(32)
Payable to annuitants	0	0	0	0	0	0	0	. 4
Deferred revenue	0	0	0	12	0	0	12	17
Due to Other Plans	0	11	(136)	(3)	3	(1)	(126)	74
Due to MPRIF	(2,349)	(184)	0	(456)	97	0	(2,892)	(593)
Change in Reporting Equity	64,845	0	(64,845)	0	0	0	0	1,002
Working Capital Change	\$147,188	\$13,745	\$ 7,601	\$2,083	<u>\$734</u>	\$4,465	\$175,816	\$239,130

STATE EMPLOYEES RETIREMENT FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1988 (In Thousands)

On another Resonance		Total	Member Reserve	MPRIF Reserve	State Reserve
Operating Revenues: Member Contributions		¢ 41.621	\$ 41.260	¢ 0	¢ 271
		\$ 41,631	\$ 41,260	\$ 0	\$ 371 42,951
Employer Contributions		42,951	0	0	
General Fund appropriations Investment Income		1,199 58,072	0	0	1,199 58,072
MPRI Fund Income		70,140	0	70,140	0
Gain (Loss) on Investments		8,184	0	70,140	8,184
Other income		0,104	0	0	0,104
Total Operating Revenues		\$ 222,179	\$ 41,260	\$ 70,140	\$110,779
Operating Expenses:					
Annuity Benefits		61,113	0	59,914	1,199
Disability benefits	7 4 -	2,584	0 _	2,584	0
Refunds		6,486	6,486	0	0
Interest on Refunds		1,004	0	0	1,004
Interest to MPRI Fund		629	0	0	629
Administrative Expenses		1,550	0	0	1,550
Investment Fees		1,328	0	0	1,328
Total Operating Expenses		\$ 74,694	\$ 6,486	\$ 62,498	\$ 5,710
Other Changes in Reserves:					
Actuarial Transfers		0	0	3,850	(3.850)
Inactive Employee Transfers		0	(132)	0	132
New Annuity Transfers	J.	0	(9,614)	73,557	(63,943)
Plan Transfers		(285)	(185)	0	(100)
Total Other Changes		\$ (285)	\$ (9,931)	\$ 77,407	\$(67,761)
Net Reserve Additions		\$ 147,200	\$ 24,843	\$ 85,049	\$ 37,308
Balance June 30, 1987*		\$1,462,181	\$261,871	\$564,015	\$636,295
Balance June 30, 1988**		\$1,609,381	\$286,714	\$649,064	\$673,603

^{*}Includes a reduction for Unfunded Liabilities of \$413,402,000. FY 1987 Unfunded Liability increase was \$36,010,000. **Includes a reduction for Unfunded Liabilities of \$506,095,000. FY 1988 Unfunded Liability increase was \$85,592,000.

STATE PATROL RETIREMENT FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1988 (In Thousands)

	Total	Member Reserve	Non- MPRIF Reserve	MPRIF Reserve	State Reserve
Operating Revenues:					
Member Contributions	\$ 2,244	\$ 2,239	\$ 0	\$ 0	\$ 5
Employer Contributions	4,971	0	0	0	4,971
General Fund Appropriations	62	0	0	0	62
Investment Income	4,636	0	0	0	4,636
MPRI Fund Income	7,682	0	0	7,682	0
Gain (Loss) on Investments	658	0	0	0	658
Total Operating Revenues	\$ 20,253	\$ 2,239	\$ 0	\$ 7,682	\$10,332
Operating Expenses:					
Annuity Benefits	6,203	0	231	5,910	62
Disability Benefits	46	0	46	0	0
Survivor Benefits	14	0	14	0	0
Refunds	8	8	0	Ö	0
Interest on Refunds	1	0	0	0	1
Interest to MPRI Fund	77	0	0	ő	77
Administrative Expenses	58	0	0	0	58
Investment Fees	101	0	0	0	101
Total Operating Expenses	\$ 6,508	\$ 8	\$ 291	\$ 5,910	\$ 299
Other Changes in Reserves:					
Actuarial Adjustments	0	0	6,735	185	(6,920)
New Annuity Transfers	0	(1,224)	0	10,012	(8,788)
Total Other Changes	\$ 0	\$(1,224)	\$6,735	\$10,197	\$(15,708)
Net Reserve Additions	\$ 13,745	\$ 1,007	\$6,444	\$11,969	\$ (5,675)
Balance June 30, 1987*	\$132,323	\$16,856	\$1,002	\$60,770	\$53,695
Balance June 30, 1988**	\$146,068	<u>\$17,863</u>	<u>\$7,446</u>	<u>\$72,739</u>	\$48,020

^{*}Includes a reduction for Unfunded Liabilities of \$33,970,000. FY 1987 Unfunded Liability increase was \$1,480,000. **Includes a reduction for Unfunded Liabilities of \$28,994,000. FY 1988 Unfunded Liability decrease was \$4,976,000.

CORRECTIONAL EMPLOYEES RETIREMENT FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1988 (In Thousands)

	Total	Member Reserve	MPRIF Reserve	State Reserve
Operating Revenues:				
Member Contributions	\$ 1,754	\$ 1,739	\$ 0	\$ 15
Employer Contributions	3,089	0	0	3,089
General Fund appropriations	0	0	0	
Investment Income	2,689	0	0	2,689
MPRI Fund Income	2,861	0	2,861	0
Gain (Loss) on Investments	171	0	0	171
Other income		0	0	0
Total Operating Revenues	\$10,564	\$ 1,739	\$ 2,861	\$ 5,964
Operating Expenses:				
Annuity Benefits	2,590	0	2,590	0
Disability Benefits	88	0	88	0
Refunds	174	174	0	0
Interest on Refunds	22	0	0	22
Interest to MPRI Fund	23	0	0	23
Administrative Expenses	82	0	0	82
Investment Fees	27	0	0	27
Total Operating Expenses	\$ 3,006	\$ 174	\$ 2,678	\$ 154
Other Changes in Reserves:				
Actuarial Transfers	. 0	0	(269)	269
Inactive Employee Transfers	0	(2)	0	2
New Annuity Transfers	0	(392)	2,841	(2,449)
Plan Transfers	43	6	0	37
Total Other Changes	\$ 43	\$ (388)	\$ 2,572	\$(2,141)
Net Reserve Additions	\$ 7,601	\$ 1,177	\$ 2,755	\$ 3,669
Balance June 30, 1987*	\$64,845	\$ 9,788	\$22,680	\$32,377
Balance June 30, 1988**	<u>\$72,446</u>	\$10,965	\$25,435	\$36,046

^{*}Includes a reduction for Unfunded Liabilities of \$7,101,000. FY 1987 Unfunded Liability increase was \$2,808,000. **Includes a reduction for Unfunded Liabilities of \$9,008,000. FY 1988 Unfunded Liability increase was \$1,907,000.

JUDGES RETIREMENT FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1988 (In Thousands)

	Total	Member Reserve	Non- MPRIF Reserve	MPRIF Reserve	State Reserve
Operating Revenues:					
Member Contributions	\$ 565	\$ 565	\$ 0	\$ 0	\$ 0
General Fund Appropriations	2,650	0	0	0	2,650
Investment Income	299	0	0	0	299
MPRI Fund Income	1,663	0	0	1,663	0
Gain (Loss) on Investments	19	0	0	0	19
Other Income	56	0	0	0	56
Total Operating Revenues	\$ 5,252	\$ 565	<u>\$</u>	\$ 1,663	\$ 3,024
Operating Expenses:					
Annuity Benefits	2,273	0	584	1,689	0
Disability Benefits	116	0	20	96	0
Survivor Benefits	721	0	721	0	0
Refunds	5	5	0	0	0
Interest on Refunds	1	0	0	0	1
Interest to MPRI Fund	9	0	0	0	9
Administrative Expenses	38	0	0	0	38
Investment fees	5	0	0	0	5
Total Operating Expenses	\$ 3,168	\$ 5	\$ 1,325	\$ 1,785	\$ 53
Other Changes in Reserves:					
Actuarial Adjustments	0	0	861	456	(1,317)
Inactive Transfers	0	(3)	0	0	3
New Annuity Transfers	0	(368)	332	3,151	(3,115)
Total Other Changes	<u>\$ 0</u>	\$ (371)	\$ 1,193	\$ 3,607	\$ (4,429)
Net Reserve Additions	\$ 2,084	\$ 189	\$ (132)	\$ 3,485	\$ (1,458)
Balance June 30, 1987*	\$18,690	\$ 3,828	\$12,269	\$14,327	\$(11,734)
Balance June 30, 1988**	<u>\$20,774</u>	<u>\$4,017</u>	<u>\$12,137</u>	<u>\$17,812</u>	<u>\$(13,192)</u>

^{*}Includes a reduction for Unfunded Liabilities of \$35,373,000. FY 1987 Unfunded Liability increase was \$2,211,000. **Includes a reduction for Unfunded Liabilities of \$38,935,000. FY 1988 Unfunded Liability increase was \$3,562,000.

LEGISLATIVE RETIREMENT PLAN STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1988 (In Thousands)

	Total	Members Reserve	Non- MPRIF Reserve	MPRIF Reserve	State Reserve
Operating Revenues:					
Member Contributions	\$ 397	\$ 396	\$ 0	\$ 0	\$ 1
General Fund Appropriations	925	0	0	0	925
MPRI Fund Income	976	0	0	976	0
Total Revenues	\$ 2,298	\$ 396	<u>\$ 0</u>	\$ 976	\$ 926
Operating Expenses:					
Annuity Benefits	1,019	0	0	1,019	.4.4
Survivor Benefits	130	0	130	0	0
Member Withdrawals	15	15	0	0	0
Refunds Upon Death	0	0	0	0	0
Interest on Refunds	4	0	0	0	4
Interest to MPRI Fund	2	0	0	0	2
Administrative Expenses	31	0	0	0	31
Total Expenses	\$ 1,201	<u>\$ 15</u>	\$ 130	\$ 1,019	\$ 37
Other Changes in Reserves:					
Actuarial Transfers	0	0	3,643	(162)	(3,481)
New Annuity Transfers	.0	(21)	0	383	(362)
Transfers to General Fund	(397)	0	0	0	(397)
Total Other Changes	\$ (397)	\$ (21)	\$ 3,643	\$ 221	\$(4,240)
Net Reserve Additions	\$ 700	\$ 360	\$ 3,513	\$ 178	\$(3,351)
Balance June 30, 1987*	\$11,157	\$2,937	<u>\$ 0</u>	\$8,318	\$ (98)
Balance June 30, 1988**	<u>\$11,857</u>	\$3,297	\$3,513	\$8,496	\$(3,449)

^{*}Includes a reduction for Unfunded Liabilities of \$11,925,000. FY 1987 Unfunded Liability decrease was \$131,000. **Includes a reduciton for Unfunded Liabilities of \$13,025,000. FY 1988 Unfunded Liability increase was \$1,100.000.

ELECTIVE STATE OFFICERS RETIREMENT PLAN STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1988 (In Thousands)

	Total	Members Reserve	Non- MPRIF Reserve	State Reserve
Operating Revenues:				
Member Contributions	\$ 34	\$ 34	\$ 0	\$ 0
General Fund Appropriations	_132			_132
Total Revenues	\$166	\$ 34	<u>\$ 0</u>	\$132
Operating Expenses:				
Annuity Benefits	54	0	54	0
Survivor Benefits	43	0	43	0
Refunds	0	0	0	0
Interest on Refunds	0	0	0	0
Administrative Expenses	1	0	0	1
Total Expenses	<u>\$ 98</u>	\$ 0	<u>\$ 97</u>	<u>\$ 1</u>
Other Changes in Reserves:				
Actuarial Adjustments	0	0	817	(817)
Transfers to General Fund	_(34)	0	0	(34)
Total Other Changes	<u>\$(34)</u>	<u>\$</u> 0	\$817	<u>\$(851)</u>
Net Reserve Additions	\$ 34	\$ 34	\$720	\$(720)
Balance June 30, 1987*	<u>\$246</u>	\$245	<u>\$ 0</u>	<u>\$ 1</u>
Balance June 30, 1988**	<u>\$280</u>	<u>\$279</u>	<u>\$720</u>	<u>\$(719)</u>

^{*}Includes a reduction for Unfunded Liabilities of \$1,554,000. FY 1987 Unfunded Liability increase was \$78,000. **Includes a reduction for Unfunded Liabilities of \$1,648,000. FY 1988 Unfunded Liability increase was \$94,000.

DEFERRED COMPENSATION FUND STATEMENT OF CHANGES IN ASSETS, LIABILITIES AND RESERVES YEAR ENDED JUNE 30, 1988 (In Thousands)

ASSETS	Balance July 1, 1987	Increases	<u>Decreases</u>	Balance June 30, 1988
Cash	\$ 33	\$ 38,408	\$ 38,427	\$ 14
Short term investments (at cost) Accounts Receivable:	881	13,693	13,694	880
Member contributions	2,331	2,143	2,331	2,143
Other	32	36	32	36
Deposits With Insurance Companies	134,516	82,361	15,611	201,266
Restricted Assets	117,986	35,691	30,445	123,232
TOTAL ASSETS	\$255,779	\$172,332	\$100,540	\$327,571
LIABILITIES AND RESERVES				
Accounts Payable — Accrued Expenses	\$ 6	\$ 8	\$ 6	\$ 8
Due to Other Funds	16	15	16	15
Member Reserves	255,757	93,620	21,829	327,548
TOTAL RESERVES AND RESERVES	<u>\$255,779</u>	\$ 93,643	\$ 21,851	\$327,571

NOTES TO THE FINANCIAL STATEMENTS

1. DESCRIPTION OF THE SYSTEM

The Minnesota State Retirement System is the administrator of a multiple-employer, cost-sharing public employee retirement system. It consists of five defined benefit funds, one defined contribution fund and one agency fund. The System is a part of the State of Minnesota's reporting entity and is included with their fiduciary funds. At June 30, 1988, the number of employers participating in the various funds was:

State of Minnesota	1
University of Minnesota	1
Counties	26
Cities	47
School Districts	47
Other Employers	59
	181

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of accounting

The basic financial statements were prepared using the accrual basis of accounting in accordance with the National Council of Governmental Accounting, Statement 1, "Governmental Accounting and Financial Reporting Principles."

(b) Investments

Short-term and equity investments are reported at cost. Fixed income securities are reported at amortized cost. Market value at June 30, 1988 was \$1.30 billion. At June 30, 1987, the market value of all investments was \$1.20 billion. Space restrictions make it impractical to print the entire investment portfolio in this report. However a portfolio list is available upon request.

(c) Risk Categories

Investments are classified according to their level of risk into the following categories:

- 1 Investments which are insured or registered, or for which the securities are held by the state or its agent in the state's name.
- 2 Investments which are uninsured or unregistered, and for which the securities are held by a broker or dealer's trust department or agent in the state's name.
- 3 Same as Category 2 but the securities are not held in the state's name.

(d) Restricted Assets

Restricted assets are the MSRS funds' participation in various investment trust funds administered by the State Board of Investment. For the defined benefit funds, these amounts are invested in the MPRI Fund. For the defined contribution and agency funds, these amounts are invested in the Minnesota Supplemental Investment (MSI) Fund.

(e) Fixed Assets

Fixed assets consist entirely of office equipment and fixtures which were capitalized at cost at the time of acquisition. Depreciation is computed on the straight-line method over estimated useful lives ranging from 3-20 years.

(f) Reserves

(1) Employee Reserve

The Employee reserve is credited with the cumulative employee contributions. Upon retirement these contributions are combined with the necessary state reserve funds and transferred to the MPRI Fund to provide an annuity. Employees who terminate their employment prior to retirement may elect to receive a refund of their contributions plus interest or a deferred annuity.

(2) State Reserve

The State reserve is credited with all investment earnings and employer contributions. Also included in this reserve is the unfunded accrued liability which is the actuarily determined amount necessary to place the retirement fund on a fully funded basis.

(3) MPRI Fund Reserve

The MPRI Fund reserve equals the corresponding assets invested in the MPRI Fund, the proceeds from which are used to pay the monthly pension benefits of eligible retirees. This amount is adjusted annually to fully fund the actuarial value of benefits remaining.

(4) NonMPRI Fund Reserve

The NonMPRI Fund reserve is the unfunded actuarial value of future benefits to be paid to retirees and beneficiaries who are not eligible to participate in the MPRI Fund.

(g) Deposits with Insurance Companies

Deposits with Insurance Companies is the Deferred Compensation Fund combined participant account balances and annuity contracts held by authorized insurance companies.

(h) Actuarial Valuations

Actuarial valuations and experience studies are performed annually. The entry age normal method, a projected benefit cost method, is used to value the funds with contributions being made as a level percentage of covered employee salaries. A salary scale of $6\frac{1}{2}$ % and interest assumption of 8% are prescribed by statute.

3. CASH AND INVESTMENTS

(a) Cash

MSRS cash is deposited into state treasury accounts. At June 30, 1988 and throughout the fiscal year then ended, these accounts were secured by pledged collateral and deposit insurance to the extent required by Minnesota statutes.

(b) Investment Policies

Pursuant to Minnesota statutes, the assets of the MSRS funds are pooled with those of other funds and invested by the State Board of Investment. These investments are restricted to obligations and stocks of the United States and Canadian governments, their agencies and their registered corporations; short-term obligations of specific high quality; and various alternative investments prescribed in statute are limited to 35% of the fund pool.

(c) Investment Risk

Of a total Risk Category 3 amount, approximately \$22.6 million held by the state in short-term investment pools, \$4.9 million was attributable to MSRS funds. All other MSRS investments were classified as Risk Category 1.

(d) Investment Values

Market values and costs of investments were as follows (In Thousands):

	Total	State Employees Fund	State Patrol Fund	Correctional Employees Fund	Judges Fund
At Market:					
Short-Term	\$ 59,550	\$ 50,665	\$ 4,252	\$ 4,438	\$ 195
Debt Security	266,766	237,159	17,726	10,999	882
Pooled Equity	871,908	775,604	59,977	35,971	2,356
Total	\$1,198,224	\$1,063,428	\$79,955	\$51,408	\$3,433
At Cost:					
Short-Term	\$ 59,550	\$ 50,665	\$ 4,252	\$ 4,438	\$ 195
Debt Security	273,307	242,865	18,237	11,269	936
Pooled Equity	749,398	665,606	50,605	30,845	_2,342
Total	\$1,082,255	\$ 959,136	\$73,094	\$46,552	\$3,473

4. CAPITAL EQUIPMENT

Cost of Equipment and Fixtures	\$252,832
Less: Accumulated Depreciation	(175,196)
Undepreciated Cost	\$ 77,636

5. MINNESOTA POST RETIREMENT INVESTMENT FUND (MPRI Fund)

- (a) MPRI Fund is a joint investment fund for retired members. When members retire, the money required to pay the annuity for the expected life is transferred to the MPRI Fund. Participation in the MPRI Fund is shown as the required reserves as determined by the actuary.
- (b) MPRI Fund income represents the 5% earnings on the required reserves for fiscal year 1988 plus the 1987 income used to pay the January, 1988 benefit increase. Income in excess of 5% was distributed according to Minnesota Statutes, Section 11A.18, Subdivision 9.

6. DEFERRED COMPENSATION FUND

All member contributions to the Deferred Compensation Fund remain the property and responsibility of the participating employers. MSRS is responsible for exercising due care in the administration of the fund.

7. LEASES

The office facilities and twenty parking spaces are leased by an agreement through September 30, 1990, requiring an annual rent payment of \$94,395.

8. ACTUARIAL VALUATIONS

Minnesota Statutes require annual actuarial valuations using the entry age normal cost method with an 8% interest rate assumption and a 6½% salary increase assumption.

Minnesota Statutes also provide that actuarial valuations include one third of unrealized market value gains or losses. The lower of cost or market is required on the balance sheet. The following shows the unfunded liability with each method.

	Unfunded Liability (In Thousands)				
	Cost	Basis	Actuarial Basis		
	1988 1987		1988	1987	
State Employees Retirement Fund	\$506,095	\$413,402	\$471,331	\$375,659	
State Patrol Retirement Fund	28,994	28,305	26,707	24,231	
Correctional Employees Retirement Fund	9,008	7,101	7,389	4,593	
Judges Retirement Fund	38,935	35,343	38,948	35,253	
Legislative Retirement Plan	13,025	11,925	13,025	11,925	
Elective State Officers Retirement Plan	1,648	1,554	1,648	1,554	

9. PENSION BENEFIT OBLIGATION

The pension benefit obligation is a standardized measure of the actuarial present value of credited projected benefits. It is intended to help statement users to assess the funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among public employee retirement systems. The assumptions are the same as those of the statutory method, however the method of computation is different.

	(In Thousands)					
	State Employees Retirement Fund	State Patrol Retirement Fund	Correctional Employees Retirement Fund	Judges Retirement Fund	Legislative Retirement Plan	Elective State Officers Retirement Plan
Retirees and beneficiaries receiving benefits and terminated employees not receiving benefits	\$ 669,694	\$ 81,485	\$28,309	\$30,576	\$16,240	\$1,004
Current Employees: Accumulated employee contributions						
including allocated investment income	359,590	23,415	12.818	5,177	2,949	242
Employee financed-vested	588,594	50,610	24,311	16,581	3,076	417
Employer financed-nonvested	157,567	11,839	3,704	7,055	1,493	97
Total Pension Benefit Obligation	1,775,445	167,349	69,142	59,389	23,758	1,760
Net assets available for benefits (Cost Basis)	1,609,381	146,068	72,446	20,774	11,857	281
Unfunded (Assets in Excess of) Pension Benefit	\$ 166,064	\$ 21,281	\$(3,304)	\$38,615	\$11,901	\$1,479

10. COMPARISON OF CONTRIBUTIONS

The contribution rates for each of the defined benefit funds are not actuarilly determined but rather are set by statute. These rates are intended to be sufficient to fully fund the actuarial liabilities by the year 2009. Annual reviews are made by the actuary to determine their sufficiency. Comparisons of the actual to the actuarially required contributions are as follows:

	(In Thousands)							
Year Ended June 30, 1988:	State Employees Retirement Fund	State Patrol Retirement Fund	Correctional Employees Retirement Fund	Judges Retirement Fund	Legislative Retirement Plan	Elective State Officers Retirement Plan		
Employee Contributions Employer Contributions	\$41,632 42,951	\$2,244 4,971	\$1,753 3,089	\$ 565 0	\$ 397 0	\$ 34		
Total Contributions Made	\$84,583	\$7,215	\$4,842	\$ 565	\$ 397	\$ 34		
Required Contributions (as determined by actuary)	79,680	6,101	3,342	4,180	_1,410	139		
Funding Surplus (Deficit)	\$ 4,903	\$1,114	\$1,500	\$(3,615)	\$(1,013)	\$(105)		

11. DESCRIPTIONS OF INDIVIDUAL DEFINED BENEFIT FUNDS

(a) State Employees Retirement Fund

The State Employees Retirement Fund includes the General Employees Plan, a multiple-employer, cost-sharing plan, and the Military Affairs and Transportation Pilots Plan, a single-employer plan. Only certain employees of the Departments of Military Affairs and Transportation are eligible to be members of the Military Affairs and Transportation Pilots Plan, but all state employees who are not members of another plan are members of the General Employees Plan.

Membership statistics at June 30, 1988 were as follows:

Members receiving benefits: Retirees Beneficiaries	12,125 753
Terminated members: Vested, not receiving benefits Nonvested	1,162 4,108
Active members: Vested Nonvested	28,733 18,315
Total	65,196
Annualized Payroll (06/30/88)	\$1,236,608,000

Minnesota Statutes, Section 352.04 require that eligible employees contribute 3.73% of their total compensation; the matching employer contribution is 3.90%.

Members become eligible for retirement benefits upon reaching the age of 62 with 30 years of service, age 65 with no minimum length of service, age 55 with 5 years of service for reduced benefits, or at any age with 30 years of service, also with reduced benefits. The benefit is 1% of the high five year average salary for 10 years plus 1½% for each year over 10.

(b) State Patrol Retirement Fund

The State Patrol Retirement Fund includes only the State Patrol Retirement Plan, a single-employer plan. Membership is limited to only those state employees who are state troopers, conservation officers, or crime bureau officers.

Membership statistics at June 30, 1988 were as follows:

Members receiving benefits: Retirees Beneficiaries	352 103
Terminated members: Vested, not receiving benefits Nonvested	16
Active members: Vested Nonvested	480 261
Total	1,221
Annualized Payroll (06/30/88)	\$27,520,000

Minnesota Statutes, Section 352.91 requires that eligible employees contribute 8.50% of their total compensation; the matching employer contribution is 18.90%. Members become eligible for retirement benefits upon reaching the age of 55 with a minimum of five years of service. The benefit is $2\frac{1}{2}\%$ of the high five year average salary and 2% for each year over 25.

(c) Correctional Employees Retirement Fund

The Correctional Employees Retirement Fund includes only the Correctional Plan, a single-employer plan. Membership is limited to only those state employees who have direct responsibility for inmates at Minnesota correctional facilities.

Membership statistics at June 30, 1988 were as follows:

Members receiving benefits: Retirees Beneficiaries	334 12
Terminated members: Vested, not receiving benefits Nonvested	47 80
Active members: Vested Nonvested	427 841
Total	1,741
Annualized Payroll (06/30/88)	\$36,490,000

Minnesota Statutes, Section 352.91 requires that eligible employees contribute 4.90% of their total compensation; the matching employer contribution is 8.70%.

Members become eligible for retirement benefits upon reaching the age of 55 with a minimum of five years of service. The benefit is $2\frac{1}{2}\%$ of the high five year average salary and 2% for each year over 25 payable for 84 months or until age 65. At age 65 or after 84 months, benefits revert to those of the General Employees Plan.

(d) Judges Retirement Fund

The Judges Retirement Fund includes only the Judges Retirement Plan, a single-employer plan. Active membership is limited to Minnesota district, appellate and Supreme Court judges. Retirees also include municipal and county court judges.

Membership statistics at June 30, 1988 were as follows:

Members receiving benefits: Retirees Beneficiaries	99 62
Terminated members: Vested, not receiving benefits Nonvested	5 0
Active members: Vested Nonvested	125 121
Total	412
Annualized Payroll (06/30/88)	\$18,367,000

Minnesota Statutes, Section 490.123 specifies that member salary deductions are equal to the Social Security rate plus 1¼% of salary if they are covered by Social Security. The Social Security contribution is first satisfied by the deductions paid to the Social Security Administration. Once the FICA-taxable wage maximum is reached the full deductions are credited to the Judges Plan. Members not covered by Social Security contribute the Social Security amount plus an additional one-half percent.

This single-employer plan is terminally funded. Employer contributions are made only at the time of retirement.

Members become eligible for retirement benefits upon reaching the age of 65 with five years of service, 62 with 5 years of service and a reduced benefit, or mandatory retirement at age 70 and one year of service. The benefit is $2\frac{1}{2}\%$ of the high five year average salary within the last 10 years for each year of service prior to July 1, 1980 plus 3% of same average salary for service after June 30, 1980.

(e) General Fund Plans

The General Fund Plans include the Legislative Retirement Plan and the Elective State Officers Plan, both of which are single-employer plans. Members of the Minnesota House of Representatives and Senate are included in the Legislators Retirement Plan; the Elective State Officers Plan includes only the elected constitutional officers.

Membership statistics at June 30, 1988 were as follows:

	Legislative Retirement Plan	Elective State Officers Plan
Members receiving benefits: Retirees Beneficiaries	125 36	3 5
Terminated members: Vested, not receiving benefits Nonvested	97 17	5
Active members: Vested Nonvested	102 99	3 3
Totals	476	20
Annualized Payroll (06/30/88)	\$5,360,000	\$411,000

Minnesota Statutes, Sections 3A.03 and 352C.09 require that legislators contribute 9.00% of their regular salary and elected officers contribute 9.00% of their salary. These plans are funded by annual appropriations from the state's General Fund.

Legislators become eligible for retirement benefits upon reaching the age of 62 with 6 years of service or for a reduced benefit at age 60 with the same service. The benefit is $2\frac{1}{2}$ % of the high five year average salary with a maximum of 20 years. The Elective State Officers Plan has the same benefit eligibility requirements except for 8 years of service and excluding the 20 year limit.

12. DEFINED CONTRIBUTION PLAN

The Unclassified Fund includes only the Unclassified Employees Retirement Plan, a multiple-employer defined contribution plan. Membership is limited to certain specified employees of the State of Minnesota and various other statutorily specified entities. Membership statistics at June 30, 1988 were as follows:

Active members	1,469
Inactive members	559
Annualized Payroll (06/30/88)	\$55,856,000

Minnesota Statutes, Section 352D.01-.12 authorize creation of this plan and specify contribution rates of 4% for the employee and 6% for the employer. Member benefits vest only to the extent of the value of their accounts; i.e., cumulative employee contributions and employer contributions plus investment income less administrative expenses. Retirement and disability benefits are available through conversion, at the member's option, to the General Employee Plan.

13. OPTIONAL RETIREMENT ANNUITIES

In the defined benefit funds, four joint and survivor annuity options are available. Either 50% or 100% joint and survivor options may be elected. Additionally, annuities may take the form of joint and survivor options with reversion to the single-life amount if the beneficiary predeceases. A fifteen year certain and life thereafter option is available, and for the Judges Plan a 10 year certain option is provided. Legislators and Elective State Officer plans have no options but automatically provide a 50% continuance to a surviving spouse.

14. CHANGE IN ACCOUNTING

In previous years, the Correctional Employees Retirement Plan was included in the State Employees Retirement Fund. As a result of Session Laws 1987, Chapters 259 and 372, this plan became a separate fund as of July 1, 1987.

15. REQUIRED SUPPLEMENTAL INFORMATION

Ten-year historical trend information designed to provide information about progress in accumulating sufficient assets to pay benefits when due is presented on the pages which follow.

SUPPLEMENTAL INFORMATION ANALYSIS OF FUNDING PROGRESS (IN THOUSANDS) Unaudited

Fiscal Year	Net Assets Available for Benefits (Cost)	Pension Benefit Obligation	Percentage Funded	Unfunded Pension Benefit Obligation	Annual Covered Payroll (Historical)	Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll		
STATE I	STATE EMPLOYEES RETIREMENT FUND:							
1985* 1986* 1987* 1988	\$1,158,383 1,370,049 1,585,971 1,609,381	\$1,285,197 1,439,134 1,650,993 1,775,445	90.1 95.2 96.1 90.6	\$126,814 69,085 65,022 166,064	\$1,010,726 998,258 1,058,471 1,091,511	12.5 6.9 6.1 15.2		
*Note: Ir	ncludes the Corr	rectional Employ	vees Retirement	Fund.				
STATE I	PATROL RETI	REMENT FUNI):					
1985 1986 1987 1988	\$100,486 118,175 136,397 146,068	\$128,874 142,626 153,107 167,349	78.0 82.9 89.1 87.3	\$28,388 24,451 16,710 21,281	\$24,268 24,163 25,132 26,085	117.0 101.2 66.5 81.6		
CORRE	CCTIONAL EM	PLOYEES RET	IREMENT FU	ND:				
1988*	\$72,446	\$69,142	104.8	\$(3,304)	\$33,155	(10.0)		
**Note:	Prior years were	e included in the	State Employee	es Retirement F	und until July 1	, 1987.		
JUDGE	S RETIREMEN	T FUND:						
1985 1986 1987 1988	\$13,784 15,983 18,781 20,774	\$40,074 51,178 53,677 59,389	29.3 31.2 35.0 35.0	\$33,290 35,195 34,896 38,615	\$15,016 14,913 15,644 16,102	221.7 236.0 223.1 239.8		
LEGISI	ATIVE RETIR	EMENT PLAN						
1985 1986 1987 1988	\$ 8,398 9,535 11,158 11,857	\$18,066 20,532 21,950 23,758	46.5 46.4 50.8 49.9	\$ 9,668 10,997 10,792 11,901	\$4,416 4,366 4,786 4,386	218.9 251.9 225.5 271.3		
ELECT	ED STATE OFF	FICERS RETIR	EMENT PLAN	:				
1985 1986 1987 1988	\$197 230 246 281	\$1,595 1,555 1,619 1,757	12.4 14.8 15.2 16.0	\$1,398 1,325 1,373 1,476	\$359 344 355 365	389.4 385.2 386.8 404.4		

SUPPLEMENTAL INFORMATION REVENUES BY SOURCES (IN THOUSANDS)

STATE EMPLOYEES RETIREMENT FUND:

Fiscal Year	Employee Contributions	Employer Contributions	Investment Income	Other	Total
1979*	\$23,229	\$36,967	\$ 29,339	\$21,246	\$110,781
1980*	25,442	40,651	40,424	2,746	109,263
1981*	28,317	45,027	65,934	220	139,498
1982*	28,388	45,335	91,972	1,823	159,518
1983*	37,306	29,137	91,100	1,952	159,495
1984*	33,343	50,640	83,322	1,355	168,660
1985*	35,220	37,625	108,531	1,331	182,707
1986*	38,356	40,565	161,728	1,299	241,948
1987*	40,625	42,911	192,178	1,245	276,959
1988	41,632	42,951	136,396	1,201	222,180

^{*}Note: Includes the Correctional Employees Retirement Fund.

STATE PATROL RETIREMENT FUND:

Fiscal Year	Employee Contributions	Employer Contributions	Investment Income	Other	Total
1979	\$1,067	\$3,173	\$ 2,615	\$ 0	\$ 6,855
1980	1,203	3,608	3,752	188	8,751
1981	1,283	3,842	5,795	4	10,924
1982	1,341	4,009	6,260	63	11,673
1983	1,961	3,909	7,585	70	13,525
1984	1,877	4,638	6,776	59	13,350
1985	1,964	4,362	9,145	63	15,534
1986	2,062	4,598	13,686	62	20,408
1987	2,164	4,778	16,462	63	23,467
1988	2,244	4,971	12,976	62	20,253

CORRECTIONAL EMPLOYEES RETIREMENT FUND:

Fiscal	Employee	Employer	Investment		
Year	Contributions	Contributions	Income	Other	Total
1988*	\$1,753	\$3,089	\$5,721	\$0	\$10,563

^{*}Note: Prior years were included in the State Employees Retirement Fund until July 1, 1987.

SUPPLEMENTAL INFORMATION REVENUES BY SOURCES (IN THOUSANDS)

JUDGES RETIREMENT FUND:

Fiscal Year	Employee Contributions	Employer Contributions	Investment Income	Other	Total
1979	\$403	\$2,041	\$ 450	\$ 0	\$2,894
1980	416	1,181	496	7	2,100
1981	490	1,164	742	0	2,396
1982	469	525	858	0	1,852
1983	527	2,624	976	0	4,127
1984	466	1,671	951	86	3,174
1985	501	2,226	1,219	84	4,030
1986	562	2,173	1,661	81	4,477
1987	563	2,405	2,699	62	5,729
1988	565	2,650	1,980	57	5,252

LEGISLATIVE RETIREMENT PLAN:

Fiscal Year	Employee Contributions	Employer Contributions	Investment Income	Other	Total
1979	\$220	\$0	\$ 0	\$ 118	\$ 338
1980	312	0	0	259	571
1981	340	0	67	1,745	2,152
1982	263	0	167	769	1,199
1983	377	0	243	1,681	2,301
1984	331	0	305	794	1,430
1985	357	0	620	604	1,581
1986	387	0	749	981	2,117
1987	430	0	979	1,847	3,256
1988	397	0	976	925	2,298

ELECTIVE STATE OFFICERS RETIREMENT PLAN:

Fiscal Year	Employee Contributions	Employer Contributions	Investment Income	Other	Total
1979	\$17	\$0	\$0	\$ 85	\$102
1980	25	0	0	94	119
1981	24	0	0	87	111
1982	24	0	0	86	110
1983	26	0	0	135	161
1984	27	0	0	101	128
1985	29	0	0	95	124
1986	31	0	0	101	132
1987	32	0	0	132	164
1988	34	0	0	132	166

SUPPLEMENTAL INFORMATION EXPENSES BY TYPE (IN THOUSANDS)

STATE EMPLOYEES RETIREMENT FUND:

Fiscal		Administrative			
Year	Benefits	Expenses	Refunds	Other	_Total_
1979*	\$20,344	\$1,041	\$ 6,098	\$ 0	\$27,483
1980*	23,083	1,063	7,273	20	31,439
1981*	25,100	1,335	6,886	126	33,447
1982*	28,783	955	9,310	1	39,049
1983*	33,420	933	6,048	227	40,628
1984*	37,137	1,406	14,800	11,563	64,906
1985*	42,957	1,372	7,500	1,266	53,095
1986*	49,432	1,357	7,724	1,374	59,887
1987*	57,057	1,449	7,996	1,475	67,977
1988	63,697	1,550	7,490	1,958	74,695

^{*}Note: Includes the Correctional Employees Retirement Fund.

STATE PATROL RETIREMENT FUND:

Fiscal		Administrative			
Year	Benefits	Expenses	Refunds	Other	Total
1979	\$1,428	\$37	\$ 26	\$ 0	\$1,491
1980	1,553	32	54	16	1,655
1981	1,724	53	41	5	1,823
1982	2,082	41	87	0	2,210
1983	2,826	41	49	17	2,933
1984	3,431	47	279	802	4,559
1985	3,970	54	6	80	4,110
1986	4,646	59	52	88	4,845
1987	5,431	74	99	93	5,697
1988	6,263	58	9	178	6,508

CORRECTIONAL EMPLOYEES RETIREMENT FUND:

Fiscal		Administrative			
Year	Benefits	Expenses	Refunds	Other	Total
1988*	\$2,678	\$82	\$196	\$50	\$3,006

^{*}Note: Prior years were included in the State Employees Retirement Fund.

SUPPLEMENTAL INFORMATION EXPENSES BY TYPE (IN THOUSANDS)

JUDGES RETIREMENT FUND:

Fiscal		Administrative			
Year	Benefits	Expenses	Refunds	<u>Other</u>	Total
1979	\$1,279	\$15	\$ 4	\$ 0	\$1,298
1980	1,339	11	7	0	1,357
1981	1,443	34	47	0	1,524
1982	1,574	26	26	0	1,626
1983	1,769	26	23	1	1,819
1984	1,979	28	108	262	2,377
1985	2,158	29	1	6	2,194
1986	2,391	32	0	6	2,429
1987	2,726	34	0	7	2,767
1988	3,110	0	0	0	3,110

LEGISLATIVE RETIREMENT PLAN:

Fiscal Year			Refunds	Other	Total
1979	\$ 303	\$ 8	\$ 25	\$ 0	\$ 336
1980	332	10	16	0	358
1981	419	9	49	0	477
1982	526	15	12	0	553
1983	601	21	96	0	718
1984	696	27	53	0	776
1985	784	31	119	0	934
1986	885	29	3	63	980
1987	1,038	34	130	0	1,202
1988	1,149	31	19	2	1,201

ELECTIVE STATE OFFICERS RETIREMENT PLAN:

Fiscal		Administrative			
Year	Benefits	Expenses	Refunds	Other	Total
1979	\$ 87	\$ 0	\$ 8	\$0	\$ 95
1980	89	0	0	0	89
1981	86	0	0	0	86
1982	86	0	0	0	86
1983	89	1 -	44	0	134
1984	95	3	3	0	101
1985	102	4	17	0	123
1986	99	2	0	2	103
1987	97	2	17	0	116
1988	97	2	0	0	99

SCHEDULE OF ADMINISTRATIVE EXPENSES YEAR ENDED JUNE 30, 1988 (In Thousands)

	1988	1987
Personal Services	ф1.115	¢1.057
Staff salaries	\$1,115	\$1,057
Social Security Retirement	77 44	73 42
Insurance	92	66
Total Personal Services	\$1,328	\$1,238
Professioal Services		
Actuarial	\$ 110	\$ 52
Data processing	266	229
Disability examinations	9	9
Legal counsel Other professional services	111	6 121
Total Professional Services	\$ 505	\$ 417
Communication		
Printing	\$ 49	\$ 28
Telephone	5	8
Postage Travel	87	78 3
Subscriptions and memberships	3	2
Total Communication		
Total Communication	\$ 147	\$ 119
Rentals		
Office Space	\$ 92	\$ 72
Total Rentals	\$ 92	\$ 72
M. A.		
Miscellaneous Utilities	¢ 1.4	ф 1.1
Supplies	\$ 14 22	\$ 11 17
Repairs and maintenance agreements	19	17
Department head and board member expense	8	11
Statewide indirect cost	31	Ô
Depreciation	26	21
Other purchased services	4	17
Total Miscellaneous	\$ 124	\$ 94
Total Operating Expenses	\$2,196	\$1,940
European distributed by Europe		
Expenses distributed by Fund: State Employees	¢1.550	¢1 440
State Patrol Fund	\$1,550 58	\$1,449
Correctional Fund	82	74
Judges Retirement Fund	38	34
Unclassified Employees	150	156
Deferred Compensation	286	192
Legislators	31	34
Elected Officials	1	1
Total Distribution	\$2,196	\$1,940



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March 9, 1989

PERSONAL AND CONFIDENTIAL

Board of Directors Minnesota State Retirement System 529 Jackson Street at 10th St. Paul, Minnesota 55101

Members of the Board:

We have performed an actuarial valuation as of July 1, 1988 for the following six funds:

- . State Employees Retirement Fund
- Correctional Employees Retirement Fund
- . State Patrol Retirement Fund
- Judges Retirement Fund
- . Legislators Retirement Fund
- . Elective State Officers Retirement Fund

The valuation of each Fund provides a comparison of the Statutory contribution to the required contribution. The required contribution under Chapter 356 consists of the normal cost, a supplemental contribution which will amortize the unfunded liability as a level percentage of pay by a future date and an allowance for expenses. The future date for amortization is 2011 for State Employees, 2017 for Correctional Employees and 2009 for State Patrol, Judges, Legislators, and Elective State Officers.

The primary actuarial assumptions, which are set by Statute, include an interest rate of 8% prior to retirement and 5% thereafter, and a salary scale of 6-1/2%. In addition, the Statutes require that assets be valued at cost plus 1/3 of unrealized gains or losses with the exception of assets in the Minnesota Post Retirement Investment Fund which are based on the actuarial required reserves using 5% interest.

The pension laws for the Judges Retirement Fund were amended to reduce vesting eligibility from 10 years to 5 years and to reduce the Social Security Benefit Offset in the Coordinated Plan from 75% to 50%. Benefits for the State Employees, Correctional Employees, State Patrol, Legislators and Elective State Officers Funds were not changed.

Board of Directors March 9, 1989 Page 2

The changes in the plan provisions for the Judges Fund increased the Actuarial Accrued Liability by \$1,748,000.

The valuation indicates that the present assets and expected future contributions required by Statute with investment earnings thereon are sufficient to provide the benefits to be paid in the future by the six Funds. However, the funding for the Judges, Legislators and Elective State Officers Funds do not require employer Statutory contributions prior to retirement as do the State Employees, Correctional Employees and State Patrol Funds.

The current funding level based on the actuarial accrued liability determined by the entry age normal cost method and the asset value used for valuation purposes is as follows:

State Employees	78%
Correctional Employees	91%
State Patrol	85%
Judges	35%
Legislators	48%
Elective State Officers	15%

The low percentages for Judges, Legislators and Elective State Officers reflect the deferral of employer contributions to the time of retirement.

We certify that to the best of our knowledge and belief, this actuarial valuation was performed in accordance with the requirements of Section 356.215 Minnesota Statutes and the requirements of the Standards for Actuarial Work in effect on August 22, 1988. We certify that the valuation was performed using the entry age normal actuarial cost method with normal costs expressed as a level percentage of earnings. The financial information and employee data used in the actuarial valuation are those submitted to us by the Minnesota State Retirement System.

Very truly yours,

Robert E. Perkins

Robert E. Parkins

Fellow, Society of Actuaries

REP/kp

THE Wyatt COMPANY

COST METHOD AND ASSUMPTIONS

Actuarial Cost Method		Entry Age Normal with costs allocated as level percentage of payroll.
Assun	nptions	
1.	Retirement	State Employees Plan, Graded rates from age 58; Correctional Plan, age 58; State Patrol, age 58 if hired after June 30, 1961, age 63 if hired before July 1, 1961; Judges Plan, age 68; Elective Officers and Legislators, age 62.
2.	Mortality	1971 Group Annuity Mortality Table with a 8 year set back for females. The Combined Annuity Table for disabilitants.
3.	Separation	Graded rates based on actual experiences.
4.	Expense	State Employees Plan (.26% of payroll); Correctional Plan (.30%); State Patrol (.60%); Judges (.29%); Elective Officers (.39%); Legislative (.70%).
5.	Interest	8% pre-retirement — 5% post-retirement
6.	Salary increases	6.5% per year
7.	Contribution Refund	Employees withdrawing are assumed to take the larger of a refund or a deferred benefit.
8.	Social Security	Correctional Plan, based on the present law and 6.5% salary scale. Only state service earning used. Judges Plan, \$833 per month primary amount, 7.51% contribution rate for 1988-89 and 7.65% thereafter with \$45,000 covered salary.
9.	Asset Valuation	Cost plus 1/3 unrealized gains or losses.

REQUIRED RESERVES JULY 1, 1988 (In Thousands)

	State Employees Fund	Correctional Fund	State Patrol Fund	Judges Fund	Elective Officers Plan	Legislative Plan
Active Members	** 0=0=44		A =0.010	***	.	A 0.440
Retirement Annuities	\$1,070,766	\$41,534	\$ 78,918	\$25,401	\$ 930	\$ 8,419
Disability Benefits	74,627	973	6,389	1,263	0	0
Survivors Benefits	92,180	1,425	2,211	2,347	18	343
Deferred Retirements	238,112	9,961	6.259	0	0	-(6)
Refunds	(29,903)	(748)	(200)	121	(23)	(114)
Total	\$1,445,782	\$53,145	\$ 93,577	\$29,132	\$ 925	\$ 8,642
Deferred Retirements	\$ 18,321	\$ 2,629	\$ 1,248	\$ 627	\$ 268	\$ 4,152
Former Members Not Vested	2,309	245	52	0	16	79
Annuitants in MPRIF	649,064	25,435	72,739	17,812	0	8,496
Annuitants Not in MPRIF	0	0	7,446	12,137	720	3,513
Total Required Reserves	\$2,115,476	\$81,454	\$175,062	\$59,708	<u>\$1,929</u>	\$24,882

ACTUAL COMPARED TO RECOMMENDED RATES

	Act	tual Contribution Rate	es	Recommended
	Employee	Employer	Total	Rate
State Employees Fund	3.73%	3.9%	7.63%	7.61%
Correctional Fund	4.90	8.7	13.60	10.37
State Patrol Fund	8.50	18.9	27.40	23.87
Judges Fund	4.44 (1)	0.0(2)	4.44	28.24
Elected Officers Plan	9.00	0.0(2)	9.00	39.43
Legislative Plan	9.00	0.0(2)	9.00	33.58

(1) Represents average rate of receipts.(2) Employer contributions are appropriated directly from State General Fund as needed.

SOLVENCY TEST — FUNDING RATIO (In Thousands)

Valuation Date	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Employer Financed Portion	Reported Assets	C	Portion overed orted A	By	Funding Ratio Ratio
STATE EM	APLOYEES RET	TIREMENT FU ate Accrued Lia						
6-30-79 6-30-80 6-30-81 6-30-82 6-30-83 6-30-84 6-30-85 6-30-86 6-30-87	\$121,816 136,370 153,318 165,800 192,707 205,711 225,879 24,006 271,658 286,714	\$179,315 205,333 230,625 282,185 313,795 356,599 424,798 497,345 586,695 649,064	\$ 365,970 425,544 477,716 590,922 660,622 749,240 868,262 993,546 1,107,870 1,179,698	\$ 482,466 569,166 675,227 783,650 902,506 966,003 1,158,383 1,370,049 1,585,971 1,644,145	100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100	49.6 53.5 61.0 56.8 59.9 57.9 58.5 62.9 65.7 60.0	72.3 74.2 78.4 75.4 77.3 75.9 76.3 78.8 80.7 77.7
CORRECT 6-30-88*	FIONAL PLAN \$10,965	\$25,435	\$45,054	\$74.065	100	100	92 (00.0
	TROL RETIRE		\$43,034	\$74,065	100	100	83.6	90.9
6-30-79 6-30-80 6-30-81 6-30-82 6-30-83 6-30-84 6-30-85 6-30-86 6-30-87	\$ 8,505 9,433 10,252 10,955 12,172 12,762 14,213 15,361 16,856 17,863	\$14,229 17,210 20,256 25,504 31,992 41,150 50,657 61,006 68,457 80,185	\$46,064 59,188 70,010 74,997 88,010 65,770 69,569 72,157 75,315 77,014	\$ 41,713 49,620 58,720 668,183 78,775 886,785 100,486 118,175 136,397 148,355	100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100	42.1 38.8 40.3 42.3 39.3 50.0 51.2 57.9 67.8 65.3	61.5 57.8 58.4 61.2 59.6 72.5 74.7 79.6 84.9 84.7
	RETIREMENT I							
6-30-79 6-30-80 6-30-81 6-30-82 6-30-83 6-30-84 6-30-85 6-30-86 6-30-87	\$1,554 1,868 2,178 2,535 2,858 3,063 3,310 3,670 3,829 4,018	\$10,649 11,925 13,156 14,817 16,973 18,181 20,218 21,786 26,595 29,949	\$16,976 17,574 17,282 17,875 20,725 21,134 23,315 25,645 23,610 25,741	\$ 6,845 7,641 8,514 8,740 11,049 11,792 13,784 15,983 18,781 20,670	100 100 100 100 100 100 100 100	49.7 48.4 48.2 41.9 48.3 52.0 51.8 56.5 56.2 55.9	0 0 0 0 0 0 0 0	23.5 24.4 26.1 24.8 27.2 27.8 29.4 31.3 34.8 34.8

^{*}The Correctional Plan was included with the State Employees Retirement Plan until July 1, 1987.

SOLVENCY TEST — FUNDING RATIO (In Thousands)

Valuation Date	(1) Active Member Contributions	Active Retirees Member and		Reported Assets	Portion Covered By Reported Assets (1) (2) (3)			Funding Ratio Ratio
ELECTIV	E OFFICERS P	LAN						
6-30-85	\$197	\$917	\$631	\$197	100	0	0	11.3
6-30-86	228	741	737	230	100	0	0	13.5
6-30-87	245	718	837	246	100	0	0	13.7
6-30-88	278	720	931	281	100	0	0	14.6
LEGISLA	ΓIVE PLAN							
6-30-85	\$2,417	\$ 8,384	\$7,344	\$ 8,398	100	71.3	0	46.3
6-30-86	2,742	9,593	9,256	9,535	100	70.8	0	44.2
6-30-87	2,937	11,354	8,792	11,158	100	72.4	0	48.3
6-30-88	3,296	12,009	9,577	11,857	100	71.3	0	47.7

UNFUNDED ACCRUED LIABILITY (UAL) (In Thousands)

Valuation	Aggregate Accured Liabilites	Reported Assets	UAL	Member Payroll	UAL As a % Payroll
STATE EM	IPLOYEES RETIREMI	ENT FUND			
6-30-79	\$ 667,101	\$ 767,247	\$184,635	\$ 637,593	29.0
6-30-80	767,247	569,166	198,081	703,470	28.2
6-30-81	861,658	675,227	186,431	796,297	23.4
6-30-82	1,038,907	783,650	255,258	830,395	30.7
6-30-83	1,167,124	902,506	264,618	893,430	29.6
6-30-84	1,311,550	996,003	315,547	949,9511	33.2
6-30-85	1,518,939	1,158,383	360,556	1,079,715	33.4
6-30-86	1,738,897	1,370,049	368,848	1,169,240	31.5
6-30-87	1,966,223	1,585,971	380,252	1,243,198	30.6
6-30-88	2,115,476	1,644,145	471,331	1,316,671	35.8
CORRECT	TIONAL PLAN				
6-30-88*	\$ 81,454	\$ 74,065	\$ 7,389	\$ 38,807	19.0
0-30-00	\$ 61,434	\$ 74,003	\$ 7,309	\$ 30,007	19.0
STATE PAT	FROL RETIREMENT	FUND			
6-30-79	\$ 67,798	\$ 41,713	\$ 26,085	\$ 16,429	158.8
6-30-80	85,830	49,620	36,210	18,004	201.1
6-30-81	100,518	58,720	41,798	19,967	209.3
6-30-82	111,456	68,183	43,272	20,923	206.8
6-30-83	132,175	78,775	53,400	23,067	231.5
6-30-84	119,682	86,785	32,898	23,016	142.9
6-30-85	134,440	100,486	33,953	25,876	131.2
6-30-86	148,524	118,175	30,349	27,474	110.5
6-30-87	160,628	136,397	24,231	28,583	84.8
6-30-88	175,062	148,355	26,707	29,267	91.3
HIDGES E	RETIREMENT FUND				
		0.45	¢ 22.224	¢ 0.00	222.5
6-30-79	\$ 29,179	\$ 6,845	\$ 22,334	\$ 9,606	232.5
6-30-80 6-30-81	31,367	7,651	23,726	10,278	230.8
	32,615	8,514	23,101	10,619	227.0
6-30-82 6-30-83	35,217 40,556	8,740 11,049	26,477 29,507	10,616 12,685	249.4 232.6
6-30-83	40,336	11,792	300,586	14,083	217.2
6-30-84	46,843	13,784	33,058	15,146	217.2
6-30-86	51,102	15,784	35,119	16,616	211.4
6-30-87	54,034	18,781	35,253	15,999	220.3
6-30-88	59,708	20,760	38,948	17,109	227.6
0 20 00	37,100	20,700	50,740	17,107	221.0

^{*}The Correctional Plan was included with the State Employees Retirement Fund until July 1, 1987.

UNFUNDED ACCRUED LIABILITY (UAL)

(In Thousands)

Valuation Date	Aggregate Accured Liabilites	Reported Assets	UAL	Member Payroll	UAL As a % Payroll
ELECTIVE	E OFFICERS PLAN				
6-30-85	\$ 1,745	\$ 197	\$ 1,548	\$ 366	423.0
6-30-86	1,706	230	1,476	392	376.5
6-30-87	1,800	246	1,554	373	416.6
6-30-88	1,929	281	1,648	386	426.9
LEGISLAT	TIVE PLAN				
6-30-85	\$ 18,145	\$ 8,398	\$ 9,747	\$ 4,507	216.3
6-30-86	21,591	9,535	12,056	4,880	247.0
6-30-87	23,083	11,158	11,925	4,765	250.3
6-30-88	24,882	11,857	13,025	4,932	264.1

INVESTMENT RESULTS COMPARED TO SELECTED PERFORMANCE STANDARDS

		FIS		ANNUALIZED			
	1984	1985	1986	1987	1988	3 YR.	5 YR.
Rate of Return — Time Weighted Basic Retiremend Funds							
Including alternative assets ¹	(5.5)	26.8	26.2	14.5	(0.3)	13.0	11.6
Excluding alternative assets	(6.3)	28.4	29.0	15.8	(0.8)	14.0	12.3
Comparison Standards							
Median Balance Fund ²	(21.)	26.3	25.1	13.1	1.1	13.5	13.1
Stock/Bond Composite ³	(4.7)	29.8	29.2	15.4	(0.2)	14.2	12.0
Inflation	4.2	3.7	1.7	3.7	3.9	3.1	3.5

The time and weighted total rate of return measures earned income and realized and unrealized market value changes.

- 1) Alternative equity assets include real estate, venture capital and resource funds.
- 2) Wilshire Associates Trust Universe Comparison Service median tax-exempt balanced portfolio.
- 3) 65/30/5 Wilshire 5000/Salomon Broad Investment Grade Bond Index/91 Day T-Bills composite.

DISTRIBUTION OF INVESTMENTS

	1984	1985	1986	1987	1988
Basic Retirement Funds					
Common Stocks	56.1%	59.9%	62.2%	59.8%	57.5%
Bonds	27.4	23.4	22.8	19.8	19.5
Cash Equivalents	10.9	9.6	5.6	9.8	10.3
Real Estate	4.6	5.5	7.2	7.7	8.9
Venture Capital	0.2	0.9	1.4	1.7	2.6
Resource Funds	0.8	0.7	0.8	1.2	1.2
	100.0	100.00	100.0	100.0	100.0

SUMMARY DATA FOR THE FISCAL YEAR ENDED JUNE 30, 1988

ACTIVE	Number	Increases	Decreases					Num	Average		
EMPLOYEES	Beg. of Yr.	New	Refunds	Annuities	Inactive	Death	Transfers	Total	Vested	Non-Vested	Contributions
General Plan	45,700	6,915	3,149	774	1,581	40	(28)	47,043	18,264	28,779	\$ 5,866
Correctional Plan	1,223	120	46	19	18	1	9	1,268	427	841	8,129
Mil. Aff. Plan	7	0	0	1	1	0	0	5	1	4	11,622
State Patrol	771	6	1	32	3	0	0	741	480	261	23,468
Judges Plan	238	17	0	8	0	0	1	245	124	121	15,889
Legislative Plan	201	3	0	0	3	0	0	201	101	100	12,264
Elective Office	6	0	0	0	0	0	0	6	3	3	33,464

INACTIVE	Number				Decreases To		Nun	Average		
EMPLOYEES	Beg. of Yr.	Increases	Active	Annuity	Refunds	Retirement Fund	Total	Vested	Non-Vested	Contributions
General Plan	5,521	1,616	262	112	570	923	5,270	1,162	4,108	\$ 1,503
Correctional Plan	129	17	2	4	9	4	127	47	80	3,790
Mil. Aff. Plan	1	2	0	0	0	0	3	0	3	2,580
State Patrol	24	5	0	4	0	0	25	16	9	11,330
Judges Plan	7	1	0	2	1	0	5	4	1	16,466
Legislative Plan	117	3	0	5	1	0	114	97	17	7,159
Elective Office	6	0	0	0	0	0	6	5	1	12,552

Number Decreases				Number End of Year			All Annuitants			New in Fiscal Year			
ANNUITANTS	Beg. of Yr.	Increases	Deaths	Transfers	Members	Survivor	Total	Age	Service	Benefit	Age	Service	Benefit
General Plan	11,653	975	422	(7)	11,447	752	12,199	72.8	21.0	\$434	63.3	20.5	\$524
Correctional Plan	322	28	10	0	328	12	340	66.8	19.8	667	58.2	18.2	987
Mil. Aff. Plan	3	1	1	0	2	1	. 3	69.5	26.4	1,347	_	_	_
State Patrol	411	46	18	(2)	339	98	437	66.0	26.2	1,380	57.9	27.2	1,726
Judges Plan	147	17	8	0	94	62	156	74.6	21.8	2,065	66.0	21.8	2,025
Legislative Plan	166	8	5	0	125	44	169	71.2	13.8	685	62.2	9.5	403
Elective Office	8	0	0	0	5	3	8	75.2	14.9	1,574	_	_	_

	Number	Increases	Decreases		Number	All Annuitants			New in Fiscal Year		
DISABILITANTS	Beg. of Yr.	New	Deaths	Adjustments	End of Yr.	Age	Service	Benefit	Age	Service	Benefit
General Plan	671	44	52	(3)	660	66.9	17.5	306	55.6	15.6	\$309
Correctional Plan	11	1	6	0	6	55.4	16.7	791	46.1	9.8	458
State Patrol	13	0	0	0	13	58.4	20.9	1,048	_		_
Judges Plan	5	0	0	0	5	69.2	17.3	2,012	_	_	_

	N	umber of Refund	S	Avera	ge Age	Average	Service		
REFUNDS	Male	Female	Total	Male	Female	Male	Female	Vested Refunds	
General Plan	1,540	2,607	4,147	33.3	33.1	2.5	2.7	177	
Correctional Plan	48	10	58	31.1	29.4	3.2	2.7	2	
State Patrol Plan	1	0	1	34.5	_	3.8	_	0	
Judges Plan	0	1	1	_	37.9	_	3.5	0	
Legislative Plan	1	0	1	43.5	_	10.0	_	1	

ACTIVE EMPLOYEES

		age Entry				A	Averages For All Members					
Year		New Men			Entry Age			ttained A			rvice Cre	
Ending	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
STATE E	MPLOY	EES RE	FIREM	ENT FU	JND							
6/30/79	30.7	28.9	29.4	29.7	28.1	28.9	40.1	35.5	37.8	9.2	5.7	7.5
6/30/80	31.4	29.9	30.5	29.6	28.2	28.9	40.5	36.1	38.2	9.2	5.7	7.5
6/30/81	28.9	27.8	28.2	29.9	28.8	29.3	40.0	35.9	37.8	9.4	5.9	7.6
6/30/82	28.4	27.3	27.7	29.3	28.4	28.8	40.5	36.5	38.4	10.0	6.4	8.1
6/30/83 6/30/84	28.7 29.7	27.4 29.4	27.9 29.6	29.2 30.4	28.3 30.1	28.7 30.3	40.9 41.6	36.9 37.7	38.8 39.5	10.5 10.8	6.8 7.0	8.5 8.8
6/30/85	31.6	31.0	31.2	30.4	30.1	30.3	41.7	38.0	39.3	10.8	7.0	9.0
6/30/86	32.0	31.2	31.5	30.5	30.4	30.5	41.8	38.2	39.9	11.0	7.4	9.1
6/30/87	32.4	31.9	32.1	30.5	30.5	30.5	41.9	38.5	40.1	11.2	7.6	9.3
6/30/88	33.6	33.6	33.6	30.7	30.8	30.8	42.1	39.0	40.4	11.2	7.7	9.3
CORREC	TIONA	L OFFIC	ERS R	ETIRE	MENT FU	JND						
6/30/79	28.5	31.0	28.9	28.0	28.8	28.1	36.4	36.9	36.5	6.8	6.0	6.7
6/30/80	30.1	32.8	30.7	28.1	29.4	28.2	36.2	36.4	36.2	7.0	5.7	6.9
6/30/81	28.4	29.2	28.6	28.5	29.8	28.6	36.2	36.7	36.3	7.1	6.0	7.0
6/30/82	27.7	27.3	27.9	28.0	28.7	28.1	36.0	36.9	36.1	7.0	6.5	6.9
6/30/83	26.5	28.3	26.7	27.7	28.8	27.8	35.4	36.5	35.5	6.7	6.4	6.7
6/30/84	28.7	32.4	29.3	28.8	31.1	29.1	35.6	36.2	35.7	6.7	4.4	6.4
6/30/85 6/30/86	29.2 29.8	28.6 32.1	29.0 30.4	28.9 29.0	30.4 31.1	29.1 29.3	35.2 36.8	36.2 36.2	36.1 36.7	7.2 7.7	4.8 5.2	6.9 7.4
6/30/87	30.0	30.0	30.4	29.0	30.8	29.3	37.3	35.9	37.1	8.2	5.2	7.4
6/30/88	29.8	31.5	30.3	29.1	31.0	29.4	37.7	36.2	37.5	8.6	5.2	8.1
STATE PA	ATROL	RETIRE	MENT	FUND								
6/30/79	28.2	26.5	28.1	27.9	26.1	27.9	41.0	29.7	40.8	13.6	4.2	13.4
6/30/80	25.7	22.5	25.5	26.5	24.1	26.4	40.9	30.1	40.7	13.7	4.8	13.5
6/30/81	27.6	27.8	27.6	26.8	25.0	26.8	40.8	30.6	40.5	13.7	5.0	13.5
6/30/82	24.7	_	24.7	26.2	24.6	26.2	41.1	31.7	40.9	14.2	6.0	14.0
6/30/83	26.4	23.0	26.2	26.1	24.3	26.0	40.7	31.2	40.4	13.8	6.0	13.6
6/30/84	28.0	31.7	28.3	27.1	26.0	27.0	41.0	32.9	40.7	14.0	6.9	13.8
6/30/85 6/30/86	27.8 26.5	23.3 22.8	27.4 26.4	27.0 26.9	25.3 25.1	26.9 26.8	40.8 40.5	32.4 33.0	40.5 40.3	13.9 13.7	7.1 7.9	13.7 13.5
6/30/87	26.0	36.7	26.4	26.8	25.5	26.7	40.7	34.1	40.5	14.0	8.6	13.8
6/30/88	32.5	34.2	32.7	26.8	25.5	26.7	40.9	35.1	40.6	14.2	9.6	14.0
JUDGES	RETIR	EMENT	FUND									
6/30/79	N/A	N/A	38.7	41.1	40.6	41.1	53.2	47.2	52.9	11.5	6.6	11.3
6/30/80	N/A	N/A	46.3	41.3	42.5	41.3	53.8	47.5	53.6	11.7	4.0	11.4
6/30/81	44.8	33.0	43.8	41.2	41.4	41.2	53.5	45.9	53.2	11.9	4.6	11.6
6/30/82	41.3		41.3	41.3	41.8	41.3	53.9	46.9	53.7	12.2	5.2	12.0
6/30/83	41.7	37.8	41.0	41.2	40.4	41.2	53.6	44.4	53.0	11.9	4.1	11.5
6/30/84	43.6	44.0	43.7	41.7	41.8	41.7	54.0	45.5	53.3	12.1	3.7	11.4
6/30/85 6/30/86	38.0 48.1	25.4 38.7	34.2 47.2	41.5	41.5	41.5	53.8	45.7	53.1	12.2	4.2	11.5
6/30/87	45.6	48.6	46.4	41.7 41.7	41.4 42.8	41.7	54.3 54.0	46.4 48.1	53.5 53.4	12.4 12.2	5.0 5.2	11.8 11.5
6/30/88	44.9	43.2	44.6	41.8	43.0	42.0	53.9	48.0	53.4	11.9	5.0	11.5

EMPLOYEES ELIGIBLE TO AN IMMEDIATE ANNUITY ON JUNE 30, 1988

STATE EMPLOYEES RETIREMENT FUND

	Male	Female	Total
Full Benefit	414	330	744
Reduced Benefit Due To Early Retirement	2,710	1,720	4,430
Proportional Benefit (Age Equal To Or Greater Than 65, Service Less Than 10 Years)	146	238	384
Employees Not Eligible To Immediate Benefit	18,241	23,244	41,485
Totals	21,511	25,532	47,043
CORRECTIONAL OFFICERS RETIREMENT FUND			
Full Benefit	34	4	38
Employees Not Eligible To Immediate Benefit	1,042	188	1,230
Totals	1,076	192	1,268
STATE PATROL RETIREMENT FUND			
Full Benefit	50	1	51
Employees Not Eligible To Immediate Benefit	663	27	690
Totals	713	28	741
JUDGES RETIREMENT FUND	2.7	0	27
Reduced Benefit Full Benefit	27 19	0	27 20
Judges Not Eligible To Immediate Benefit	172	27	199
Totals	218	28	246
	2.0		2.0
LEGISLATIVE PLAN			
Full Benefit	7	0	7
Reduced Benefit Members Not Eligible For Immediate Benefit	7 157	1 29	8 186
Totals	$\frac{137}{171}$	$\frac{29}{30}$	$\frac{180}{201}$
Totals	1 / 1	30	201
ELECTIVE OFFICERS PLAN			
Full Benefit	0	0	0
Members Not Eligible For Immediate Benefit	4	$\frac{2}{2}$	6
Totals	4	2	6

REFUND STATISTICS

Year Ending	Nun Male	nber of Refu Female	ınds Total	Male	Age Female	Years Male	Forfeited Female	Number Forfeiting Vested Rights
					Temate	<u>iviaic</u>	Temate	vested Rights
STATE EM								
6-30-79	2,145	4,036	6,181	32.5	30.9	2.3	2.3	110
6-30-80	2,151	4,240	6,391	35.6	30.5	2.3	2.4	138
6-30-81	1,960	4,259	6,219	32.3	30.7	1.8	1.8	150
6-30-82	2,633	4,967	7,600	32.7	31.0	2.5	2.3	273
6-30-83	2,184	3,755	5,939	36.5	33.4	1.8	2.0	145
6-30-84	1,814	3,201	5,015	35.0	33.0	2.7	2.9	217
6-30-85	1,663	3,007	4,670	34.3	32.8	2.9	2.8	200
6-30-86	1,330	2,604	3,934	34.3	32.5	3.3	3.0	175
6-30-87	1,230	2,584	3,814	35.1	33.4	3.3	2.9	184
6-30-88	1,540	2,607	4,147	33.3	33.1	2.5	2.7	177
CORRECT	TIONAL O	FFICERS 1	RETIREM	ENT FU	ND			
6-30-79	117	15	132	31.1	34.9	2.3	2.8	2
6-30-80	112	23	135	30.6	30.6	3.6	2.8	1
6-30-81	82	19	101	31.7	32.5	2.1	2.1	3
6-30-82	86	11	97	31.8	34.3	2.9	3.1	3
6-30-83	67	12	79	32.5	34.4	2.6	1.6	1
6-30-84	69	10	79	32.6	29.7	3.6	2.5	3 2 2 2 2
6-30-85	68	16	84	31.6	31.9	2.6	3.5	2
6-30-86	66	20	86	31.5	31.6	3.5	2.2	2
6-30-87	56	15	71	32.3	31.6	3.8	2.4	2
6-30-88	48	10	58	31.1	29.4	3.2	2.7	2
STATE PAT	TROL RE	FIREMEN	Γ FUND					
6-30-79	4	2	6	35.5	29.5	4.6	6.1	0
6-30-80	8	3	11	32.9	29.7	5.7	0.1	2
6-30-81	10	1	11	30.0	22.0	2.6	1.3	0
6-30-82	10	0	10	34.0	_	7.4		4
6-30-83	12	0	12	31.8	_	2.0	_	1
6-30-84	6	2	8	36.7	27.7	9.5	0.5	2
6-30-85	5	2	7	29.6	28.7	0.4	0.4	0
6-30-86	5	1	6	32.6	33.8	4.5	5.1	1
6-30-87	8	0	8	34.0	_	5.8		1
6-30-88	1	0	1	34.5	_	3.8	_	0
JUDGES R	RETIREM	ENT FUNI						
6-30-81	5	0	5	53.6	_	6.4		0
6-30-82	2	1	3	49.5	47.0	6.5	8.0	0
6-30-83	3	0	3	49.7		5.7	_	0
6-30-84	1	0	1	42.2		1.4		0
6-30-85	0	0	0				_	0
6-30-86	0	0	0				_	0
6-30-87	0	0	0	_	_	_	-	0
6-30-88	0	1	1		37.9	_	3.5	0
LEGISLAT	TIVE RET	TREMENT	PLAN					
6-30-88	1	0	1	43.5	_	1.0	_	0

STATE EMPLOYEES RETIREMENT FUND SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT

Amount of		Number	Type of Retirement					Option Selected			
Monthly Benefit	Deferred	of Retirees	1	_2_	3	4	_5	Life	I	II	III
\$ 0- 199	443	4,182	3,628	231	314	0	9	3,375	707	79	21
200- 399	288	3,759	3,247	271	237	0	4	2,883	812	52	12
400- 599	211	1,969	1,767	106	94	0	2	1,457	474	25	13
600- 799	108	1,145	1,057	35	53	0	0	738	383	6	18
800- 999	47	745	710	10	25	0	0	447	291	1	6
1000-1199	17	493	465	9	18	1	0	230	256	4	3
1200-1399	20	268	259	1	7	1	0	138	123	1	5
1400-1599	10	151	149	0	1	1	0	77	73	0	1
1600-1799	3	83	80	0	3	0	0	30	52	1	0
1800-1999	4	52	52	0	0	0	0	16	36	0	0
Over 2000	11	30	30	0	0	0	_0	14	16	0	_0
Totals	1,162	12,877	11,444	663	752	3	15	9,405	3,224	169	79

Types

- 1 General Plan Annuitants
- 2 General Plan Disabilitants
- 3 General Plan Survivors
- 4 Military Affairs Plan
- 5 Unclassified Plan

Options:

Life Straight Life Annuity

- I Joint & Survivor
- II Death While Eligible
- III Period Certain

STATE PATROL RETIREMENT FUND SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT

Amount of		Number		Type of Retirement					tion Select	ed
Monthly Benefit	Deferred	of <u>Retirees</u>	1	2	3	4	_5	Life	<u>I</u>	<u>II</u>
\$ 0-199	2	5	2	0	0	0	3	5	0	0
200- 399	2	17	7	0	0	8	2	5	8	4
400- 599	1	66	14	0	0	52	0	7	49	10
600- 799	4	37	24	2	0	11	0	6	30	1
800- 999	3	37	23	5	1	8	0	9	26	2
1000-1199	1	47	40	1	0	6	0	17	28	2
1200-1399	1	55	47	1	1	6	0	16	37	2
1400-1599	0	53	50	0	0	3	0	20	33	0
1600-1799	0	56	51	1	0	4	0	24	30	2
1800-1999	1	39	38	1	0	0	0	30	9	0
Over 2000	_1	_43	43	0	0	_0	0	<u>29</u>	14	_0
Totals	16	455	339	11	2	98	5	168	264	23

Types

- 1 Retired Members
- 2 Disabilitants That Participate in the MPRIF
- 3 Disabilitants Not Participating in MPRIF
- 4 Survivors Who Participate in MPRIF
- 5 Survivors Who Do Not Participate in MPRIF

Options:

Life Full Life Annuity

- I Joint & Survivor
- II Death While Eligible

JUDGES RETIREMENT FUND SCHEDULE OF RETIRED JUDGES BY TYPE OF BENEFIT

Amount of		Number	_	Type of Retirement					Option Selected			
Monthly Benefit	Deferred	of Retirees	1	2	3	4	<u>5</u>	6	Life	_I	II	III
\$ 0-199	0	0	0	0	0	0	0	0	0	0	0	0
200- 399	0	4	0	0	O	O	0	4	4	0	0	0
400- 599	1	12	3	0	0	0	0	9	10	1	1	0
600- 799	1	5	1	2	0	0	O	2	3	0	2	O
800- 999	0	14	3	2	0	0	O	9	11	2	1	0
1000-1199	0	13	4	2	O	0	2	5	6	3	4	0
1200-1399	0	26	6	0	1	0	1	18	20	4	2	0
1400-1599	0	14	8	1	0	0	2	3	8	4	2	O
1600-1799	0	8	1	1	2	1	0	3	3	3	2	0
1800-1999	1	14	12	2	0	O	0	0	3	6	4	1
Over 2000	2	_51	34	12	1	0	1	_3	9	18	21	3
Totals	5	161	72	22	4	1	6	56	77	41	39	4

Types

- 1 Retired Members
- 2 Disabilitants That Participate in MPRIF
- 3 Disabilitants Not Participating in MPRIF
- 4 Survivors Who Participate in MPRIF
- 5 Survivors Who Do Not Participate in MPRIF

Options:

Life Full Life Annuity

- I Joint & Survivor
- II Life + 50% Survivor
- III Period Certain

CORRECTIONAL RETIREMENT FUND SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT

Amount of		Number	Type	of Retirem	ient	Option Selected			
Monthly Benefit	Deferred	of Retirees	<u>1</u>	_2	<u>3</u>	<u>Life</u>	_I	Ш	
\$ 0- 199	4	38	36	1	1	34	4	0	
200- 399	14	72	66	0	6	64	8	0	
400- 599	26	87	85	1	1	75	11	1	
600- 799	13	45	43	1	1	39	6	0	
800- 999	10	39	35	2	2	27	12	0	
1000-1199	18	18	18	0	O	11	7	0	
1200-1399	5	14	14	0	0	8	6	0	
1400-1599	6	16	15	1	0	10	6	0	
1600-1799	0	7	6	0	1	3	4	0	
1800-1999	1	6	6	0	0	1	5	0	
Over 2000	_0	4	4	0	_0	3	_1	0	
Totals	97	346	328	6	12	275	70	1	

Types

- 1 Retired Members
- 2 Disabilitants
- 3 Survivors

Options:

Life Full Life Annuity

- I Joint & Survivor
- III Period Certain

LEGISLATORS AND ELECTED STATE OFFICERS SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT

	De	ferred	Type of Retirement						
Amount of Monthly	Elected State		Elected Sta	te Officers	Legislative				
Benefit	<u>Officers</u>	Legislators	Members	Survivor	Members	Survivor			
\$ 0- 199	2	4	0	0	8	19			
200- 399	1	14	0	1	30	17			
400- 599	0	26	0	1	29	5			
600- 799	1	13	0	1	17	2			
800- 999	0	10	1	1	13	0			
1000-1199	0	18	1	0	12	0			
1200-1399	0	5	0	1	5	1			
1400-1599	0	6	0	0	6	0			
1600-1799	1	0	0	0	3	0			
1800-1999	0	1	0	0	2	0			
Over 2000	1	_0	1	0	0	_0			
Totals	6	97	3	5	125	44			

DEFERRED COMPENSATION PLAN

These statistics include only participants in the Minnesota Supplemental Investment Fund and not the insurance company participants. On June 30, 1988, there were 4,726 active participants, 2,750 inactive participants and 630 in withdrawal status for a total of 8,106.

INVESTMENT PERFORMANCE

	PER SHAP	RE VALUES	RATE OF RETURN			
	June 30, 1987	June 30, 1988	FY 1988	5 Year Average		
Income Shares	\$26.20	\$26.31	0.4%	10.6%		
Growth Shares	19.27	18.35	(4.9)%	9.3%		
Common Stock Index	12.79	12.04	(5.9)%	12.9%*		

Average Int	erest Rates	
FY 1987	FY 1988	5 Year A

 FY 1987
 FY 1988
 5 Year Average

 Money market
 6.4%
 7.3%
 8.1%

November 3	3-Year Contract Intere	est Rates
1986	1987	1988
7.72%	8.45%	9.01%

*Wilshire 5000 Index (July 1983 — June 1986)

INVESTMENT DISTRIBUTION

Guaranteed Investment

	Current Inve	estments for Ju	ine 1988	Total Investments as of June 30, 1988			
	% of Participants	% of Dollars	Average Invested	% of Participants	% of Dollars	Average Invested	
Income Shares	29.6%	29.1%	\$163	24.7%	21.6%	\$ 7,874	
Growth Shares	18.2	14.4	132	18.4	13.9	6,809	
Money Market Common	29.1	29.4	168	38.0	47.5	11,235	
Stock Index Guaranteed	9.6	7.4	129	5.7	2.0	3,116	
Investment	13.5	19.7	243	13.2	15.0	10,192	
	100.0%	100.0%		100.0%	100.0%		

PARTICIPANT DISTRIBUTION

	Monthly Investment Per Option							
	Under \$50	\$50- \$99	\$100- \$199	\$200- \$299	\$300- \$399	\$400- \$499	\$500- \$599	Over \$600
Age 24 and under	38	14	4	4	0	0	0	0
Age 25 thru 34	470	230	132	29	16	12	12	5
Age 35 thru 44	708	524	410	136	44	33	54	15
Age 45 thru 54	396	406	376	169	86	43	110	29
Age 55 thru 64	172	209	258	128	72	59	118	59
Age 65 and over	5	6	16	11	5	1	6	10

PARTICIPANT WITHDRAWALS	FY 1988	
Lump sum withdrawals:	Number	Average Dollar
Partial Withdrawal	66	\$ 4,252
Full Withdrawal	139	\$ 8,263
Transfer to Insurance Co.	147	\$39,109
Survivor's Refund	6	\$35,906
Ongoing Withdrawals — June 30, 1988	630	\$ 513 per month

UNCLASSIFIED EMPLOYEES RETIREMENT PLAN

On June 30, 1988, there were 1,469 active participants and 559 inactive participants for a total of 2,028.

INVESTMENT PERFORMANCE

	SHARE	VALUES	RATE OF RETURN		
	June 30, 1987	June 30, 1988	FY 1988	5 Year Average	
Income Shares	\$26.20	\$26.31	0.4%	10.6%	
Growth Shares	19.27	18.35	4.9%	9.3%	
Common Stock Index	12.79	12.04	(5.9)%	12.9%*	
Bond Market	10.67	11.52	8.0%	13.1%**	
	Average Inter	rest Rates			
	FY 1987	FY 1988	5 Year Average		
Money Market	6.4%	7.3%	8.1%		

INVESTMENT DISTRIBUTION

	Current Investments for June 1988			Total Investments as of June 30, 1988			
	% of Participants	% of Dollars	Average Invested	% of Participants	% of Dollars	Average Invested	
Income Shares	48.2%	59.1%	\$276	47.5%	55.4%	\$17,002	
Growth Shares	22.4%	14.1%	141	24.3%	18.1%	10,821	
Money Market	17.2%	18.1%	236	18.0%	23.5%	18,960	
Bond Market	6.6%	4.2%	143	5.6%	1.5%	3,890	
Common							
Stock Index	5.6%	4.5%	185	4.6%	1.5%	4,996	
	100.0%	100.0%		100.0%	100.0%		

PARTICIPANT DISTRIBUTION

	Monthly Investment Per Option							
	Under \$50	\$50- \$99	\$100- \$199	\$200- \$299	\$300- \$399	\$400- \$499	\$500- \$599	Over \$600
Age 24 and under	28	29	56	10	0	0	2	2
Age 25 thru 34	52	133	208	132	50	7	8	6
Age 35 thru 44	31	121	239	192	116	78	20	10
Age 45 thru 54	14	48	96	102	42	41	. 11	5
Age 55 thru 64	3	21	55	49	25	21	2	0
Age 65 and over	O	6	2	2	2	0	0	0

PARTICIPANT WITHDRAWALS

PARTICIPANT WITHDRAWALS	FY 1988	
Lump sum withdrawals:	Number	Average Dollar
From active status	93	\$15,726
Survivors refund	5	\$ 8,071
Annuitants — June 30, 1988	15	\$ 222 per month

^{*}Wilshire 5000 Index (July 1983 — June 1986)
**Salomon Brothers Broad Bond Index (July 1983 — June 1986)