



**M**INNESOTA  
**S**TATE  
**R**ETIREMENT  
**S**YSTEM

870684



**COMPREHENSIVE ANNUAL REPORT**  
**July 1, 1985 — June 30, 1986**

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**COMPREHENSIVE ANNUAL FINANCIAL REPORT  
of the  
MINNESOTA STATE RETIREMENT SYSTEM**

**July 1, 1985 — June 30, 1986**

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 ENDED JUNE 30, 1986**

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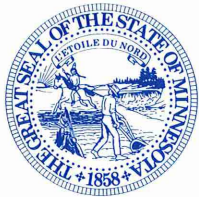
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## MINNESOTA STATE RETIREMENT SYSTEM

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

### OFFICERS

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

No.

### LETTER OF TRANSMITTAL

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, 1986. 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, employer contributions and investment income provide the funding for the System. Contributions and investment income for fiscal year 1986 were \$300,535,000. This represents a 28% increase from fiscal year 1985.

#### Expenses

The expenses of the System consist of annuity benefits, refunds of contributions, interest on refunds and administrative expenses. Expenses for fiscal year 1986 were \$77,402,000, a increase of 15.0% from fiscal year 1985. Revenues exceeded expenses by \$223,133,000 during fiscal year 1986.

#### Investments

Investments contribute a substantial portion of the income to the System. Income from investments was \$193,931,000 or 68.3% of total revenue. Of the total investment income, 70% is from the basic retirement funds and the remaining 30% 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. Our actuary has determined that the current level of contributions is sufficient for the State Employees Plan, the Correctional 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 total funded.

### Professional Services

Actuarial services are provided by James Magalski, FSA, and James Verlautz, FSA, of Touche Ross & Co. Legal counsel is provided by Merwin Peterson of the State Attorney General office. The Systems medical advisor is the State Commissioner 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.

### Acknowledgements

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,



Paul L. Groschen  
Executive Director

**MINNESOTA STATE RETIREMENT SYSTEM  
ADMINISTRATIVE ORGANIZATION  
JUNE 30, 1986**

**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 612/296-3491  
Term: March 3, 1986-March 5, 1990  
Elected — State Employee

Daniel Ernst  
Department of Natural Resources  
1666 Stillwater Avenue  
St. Paul, Minnesota 55106  
Telephone 612/296-0600  
Term: March 5, 1984-March 7, 1988  
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  
Metropolitan Transit Commission  
12857 Polk Street NorthEast  
Blaine, Minnesota 55434  
Telephone 612/379-2914  
Term: March 5, 1984-March 7, 1988  
Appointed — MTC/TOD Designate

Marlene Johnson  
Office of the Lieutenant Governor  
24 South St. Albans Place  
St. Paul, Minnesota 55105  
Telephone 612/296-2374  
Term: Co-Terminous with Governor's  
Appointed — Constitutional Officer

Luther Thompson  
Department of Public Service  
2212 Kings Drive  
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 4, 1984-March 7, 1988  
Elected — State Employee

Leo D. Wells  
1755 Highland Parkway  
St. Paul, Minnesota 55116  
Telephone 612/690-4949  
Term: January 2, 1984-January 5, 1987  
Appointed — Public Member

Robert A. Whitaker  
1303 Watson Avenue  
St. Paul, Minnesota 55116  
Telephone 612/698-3315  
Term: March 3, 1986-March 7, 1988  
Elected — Retired State Employee

Kenneth Yozamp  
Department of Corrections  
105 Shadowood Drive  
Sauk Rapids, Minnesota 56379  
Telephone 612/251-3510  
Term: March 5, 1984-March 7, 1988  
Elected — Correctional Plan Member

**OFFICERS**

Paul L. Groschen, Executive Director

Assistant Directors

Douglas Mewhorter, Employee Services and Records  
Arvin L. Herman, Finance and Systems





## MINNESOTA STATE RETIREMENT SYSTEM

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

### OFFICERS

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

No.

To All Employees Covered by the  
Minnesota State Retirement System

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

The Board is especially pleased with the post retirement increase provision which, in recent years, has been able to keep retirement benefits ahead of inflation. Retirees received a 7.884% increase in January 1986, and will receive a 9.792% increase in January 1987. 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.

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.

Sincerely,

*Karl W. Christey*  
Karl W. Christey, Chairman  
Board of Directors

## SUMMARY OF RETIREMENT SYSTEM 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

#### State Employees Retirement Fund General Employees Plan

- (a) Coverage — Virtually all state employees, and selected metropolitan agency employees except those specified to other plans such as teachers.
- (b) Benefit Formula — 1 % of high five year average salary for first 10 years of service plus 1 ½ % 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 if age and length of service when added together totals 85 or more, and provided eligibility occurs by 12/31/86 — no reduction if retirement occurs by 6/30/87.
  - Age 55 with 10 years service — reduced from age 65.
  - At any age with 30 years service — reduced from age 62.
- (d) Disability
  - Total and permanent.
  - Under age 65 with 10 years service — no reduction.
  - Age 50 with 5 years service — no reduction.
  - Formula as in (c) with no reduction.
- (e) Surviving Spouse Benefit
  - If employee was at least age 50 with 10 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 of all contributions plus 5 % interest compounded annually.
- (f) Refunds
  - All employee contributions plus interest at 5 % compounded annually.
- (g) Annuity and Disability Options
  - 100% joint and survivor.
  - 50% joint and survivor.
  - 15 year period certain and life thereafter.



**SUMMARY OF RETIREMENT SYSTEM PLANS (Continued)**

## (h) Contributions

- 3.73 % employee and 3.9 % employer.

**Correctional Officers Plan**

Provisions different from General Plan

## (a) Coverage

- State employees who have direct contact with inmates at Minnesota Correctional Facilities.

## (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 10 years service.

## (d) Disability

- Unable to perform the duties.
- Under age 55.
- Formula, or equal to 50 % of high five average salary plus 2½ % for each year in excess of 20 through 25 and thereafter at 2 % if job related.

## (e) Contributions

- 4.9 % employee and 8.7 % employer.

**Military Affairs and Transportation Pilots Plans**

Provisions different from General Plan

## (a) Coverage

- Employees required to retire from federal military status at age 60 and pilots.

## (b) Retirement Age and Years of Service

- Age 60, 62 for pilots, with at least 10 years of service — no reduction.

## (c) Disability

- Unable to perform the duties.
- Under age 60, 62 for pilots, with 10 years service — no reduction.
- Age 50 with 5 years service — no reduction.
- Formula as general plan with no reduction.
- Pilots get 75 % of salary for maximum of 5 years.

## (d) Contributions

- 5.33 % employee and 5.5 % employer.

**State Patrol Retirement Plan**

## (a) Coverage

- State of Minnesota Highway Patrolmen, conservation officers and crime bureau officers.

## (b) Benefit Formula

- 2½ % of high five successive years salary for first 25 years of service plus 2 % for each year over 25.

**SUMMARY OF RETIREMENT SYSTEM PLANS (Continued)**

- (c) Retirement Age and Years of Service
  - Age 55 with 10 years of service — no reduction.
- (d) Disability
  - Same as Correctional Officers Plan.
- (e) Survivor Benefits
  - Spouse.
    - Death of member in service — 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
    - Death of member in service — 10% of final average salary per child plus \$20 per month prorated equally to such children until age 18 or age 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.
- (f) Refunds
  - Refund of contributions with 5% interest.
- (g) Annuity and Disability Option
  - 100% joint and survivor.
  - 50% joint and survivor.
  - 100% joint and survivor with reversion.
  - 50% joint and survivor with reversion.
- (h) Contributions
  - 8.5% employee and 18.9% employer. No Social Security coverage.

**Judges Retirement Plan**

- (a) Coverage
  - All Minnesota District, Appellate and Supreme Court Judges.
- (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 rendered after June 30, 1980.
  - If covered by Social Security, benefit is reduced by 75% 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 10 years service — no reduction.
  - Age 62 with 10 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 average salary. If covered by Social Security, benefit is reduced by 75% of primary amount payable from social security.
- (e) Death Benefits
  - Spouse eligible for 60% of normal annuity subject to a minimum of 25% of final average salary. If judge covered by Social Security, judges normal annuity amount is reduced by 75% of judge's primary benefit amount from Social Security but a minimum of 25% of final average salary exclusive of Social Security is payable.
- (f) Refunds
  - Refund of all contributions plus interest at the rate of 5% compounded annually.



**SUMMARY OF RETIREMENT SYSTEM PLANS (Continued)**

## (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.

## (h) Contributions

- Social Security rate plus 1/2 % employee.
- Balance necessary from employer.
- Social Security maximum paid first, then balance of contributions at the Social Security rate to the fund.
- 1/2 % contribution paid entirely to the fund.

**Legislators Retirement Plan**

## (a) Coverage

- All legislators.

## (b) Benefit Formula

- 2½ % 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 % of benefit and next two children get 12.5 % for a family maximum of 100% of member benefit.

## (e) Refunds

- Refund of contributions with 5 % interest.

## (f) Contributions

- 9% employee and terminal funding of annuity by employer.

**Elective Officers Plan**

## (a) Coverage

- Elected Constitutional Officers.

## (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 % of benefit and next two children get 12.5 % for a family maximum of 100% of member benefit.
- Refund of contributions with 5 % interest if no survivor benefit payable.

## (e) Refunds

- Refund of contributions with 5 % interest.

## (f) Contributions

- 9% employee and payment of annuity benefits as they occur from the employer.

**SUMMARY OF RETIREMENT SYSTEM PLANS (Continued)****Defined Contribution Plans****Unclassified Employees Plan**

- (a) Coverage
  - Certain specified employees of the State of Minnesota in unclassified positions.
- (b) Benefits
  - Annuity or disability benefit or withdrawal of contributions and investment gain or loss; refund of one-half the account plus annuity based on the remaining one-half.
- (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.
- (e) Disability
  - Total and permanent.
  - Refund of total account; refund of one-half the account plus annuity or annuity based on entire account.
- (f) Refunds
  - Value of account.
- (g) Annuity and Disability Option
  - 100% joint and survivor.
  - 50% joint and survivor.
  - 15 year period certain.
- (h) Contributions
  - 4% employee and 6% employer credited to employees account.

**Deferred Compensation Plan — IRS Code 457**

- (a) Coverage
  - Optional for all State employees and employees of political subdivisions.
- (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.
  - Death.
  - Unforeseeable emergency.
  - Delayed distribution after termination of service.



**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.

**(e) Contributions**

- Tax deferred.
- Minimum of \$10.00 per pay period.
- Maximum of 33<sup>1</sup>/<sub>3</sub> % of includable compensation or \$7,500, whichever is less.

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

## **1986 LAW CHANGES**

### **STATE EMPLOYEES RETIREMENT PLAN**

#### **Laws of 1986, Chapter 458**

Section 4 changes the eligibility requirements for the surviving spouse benefit from age 55 with 10 years of service to age 50 with 10 years of service and allows the surviving spouse to begin receiving the annuity when the member would have turned age 55.

Section 21 allows a member who qualified for the Rule of 85 within the current window period, which ends December 31, 1986, to work through June 30, 1987 and still retire under provisions of the Rule of 85.

Section 31 and 32 allows certain employees who were excluded from the Correctional Plan because they were too old to accrue 10 years service to elect Correctional Plan coverage.

Section 38 gives the 25% annuity increase granted to pre-1973 retirees in 1973 to those who qualified under pre-1973 laws but who deferred retirement until after age July 1, 1973.

### **UNCLASSIFIED RETIREMENT PLAN**

#### **Laws of 1986, Chapter 458**

Section 7 adds certain State University administrative employees to the Unclassified Retirement Plan.





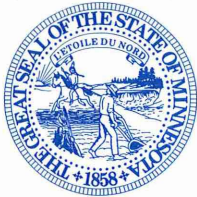
# **MINNESOTA STATE RETIREMENT SYSTEM**

## **SECTION II**

### **FINANCIAL SECTION**







STATE OF MINNESOTA

OFFICE OF THE LEGISLATIVE AUDITOR

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

JAMES R. NOBLES, LEGISLATIVE AUDITOR

Executive Director and Members of the Board  
Minnesota State Retirement System


We have examined the combining and individual fund financial statements of the Minnesota State Retirement System as of and for the year ended June 30, 1986 as presented in the financial section of this report. Our examination was made in accordance with generally accepted auditing standards, and accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.


As explained in Note 6, 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 the unrealized capital gains or losses. Since the statutory provision deviates from generally accepted accounting principles, the basic statements are not in compliance with the statute. Note 6 contains the disclosures which must be considered together with the basic financial statements to achieve statutory reporting requirements.

In our opinion, the combining and individual fund financial statements referred to above present fairly the financial position of the individual funds of the Minnesota State Retirement System at June 30, 1986, 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 applied on a basis consistent with that of the preceding year. In addition, except for the valuation of securities, as discussed in the preceding paragraph, the aforementioned financial statements are in compliance with the reporting requirements of Minnesota Statute Section 356.20.

Our examination was made for the purpose of forming an opinion on the combining and individual fund financial statements. The Schedule of Administrative Expenses included in the financial section is presented for purposes of additional analysis and is not a required part of the financial statements of the Minnesota State Retirement System. The information has been subjected to the auditing procedures applied in the examination of the combining and individual fund financial statements and in our opinion, is fairly stated in all material respects in relation to the combining financial statements taken as a whole.

Sincerely,

  
James R. Nobles  
Legislative Auditor

  
John Asmussen, CPA  
Deputy Legislative Auditor

November 21, 1986



**COMBINING BALANCE SHEET**  
**JUNE 30, 1986**

ASSETS	Defined Benefit Plans				Defined Contribution Plans	
	Total	State Employees	State Patrol	Judges	Unclassified	Deferred Compensation
Cash	\$ 89,744	\$ 13,875	\$ 535	\$ 23,103	\$ 52,231	\$ 0
Short term investments (at cost)(3)	45,726,570	38,435,014	5,035,109	1,352,447	380,000	524,000
Accounts receivable:						
Member contributions	2,176,284	1,991,132	111,778	6,227	67,147	0
Employer contributions	2,302,243	1,954,497	248,541	0	99,205	0
Other	25,939	209	0	400	0	25,330
Accrued Interest	245,204	209,989	27,638	7,506	0	71
Due from other plans	248,503	162,119	0	0	86,384	0
Due from other funds	91,453	54,787	3,437	33,229	0	0
Fixed Investments (at cost) (3)	243,361,074	225,928,580	16,326,217	1,106,277	0	0
Equity Investments (at cost) (3)	595,437,102	552,650,327	40,104,727	2,682,048	0	0
Fixed Assets (4)	74,768	74,768	0	0	0	0
Restricted Assets	702,691,253	497,345,000	53,535,000	10,620,000	37,658,484	103,532,769
Total Assets	<u>\$1,592,470,137</u>	<u>\$1,318,820,297</u>	<u>\$115,392,982</u>	<u>\$15,831,237</u>	<u>\$38,343,451</u>	<u>\$104,082,170</u>
<b>LIABILITIES</b>						
Accounts Payable						
Annuitants	\$ 4,313	\$ 4,313	\$ 0	\$ 0	\$ 0	\$ 0
Accrued expenses	274,288	269,065	0	0	0	5,223
Deferred Revenue	70,969	0	0	70,969	0	0
Due to MPRI Fund	847,268	66,231	781,037	0	0	0
Due to Other Funds	217,865	86,384	58,872	31,801	14,672	26,136
Due to General Fund	0	0	0	0	0	0
Security Purchases	50,939	0	0	0	0	50,939
Total Liabilities	<u>\$ 1,465,642</u>	<u>\$ 425,993</u>	<u>\$ 839,909</u>	<u>\$ 102,770</u>	<u>\$ 14,672</u>	<u>\$ 82,298</u>
<b>RESERVES</b>						
Post Retirement Fund reserve(5)	\$ 561,500,000	\$ 497,345,000	\$ 53,535,000	\$10,620,000	\$ 0	\$ 0
Member reserve	409,366,135	248,006,034	15,361,063	3,670,387	38,328,779	103,999,872
Disability reserve	823,290	0	823,290	0	0	0
Survivor reserve	68,063	0	68,063	0	0	0
"Old law" Judges reserve	2,022,507	0	0	2,022,507	0	0
Add'l Judges & Survivors reserve	9,142,865	0	0	9,142,865	0	0
State reserve	1,097,928,385	993,546,061	78,736,150	25,646,174	0	0
Total Required Reserves (6)	<u>\$2,080,851,245</u>	<u>\$1,738,897,095</u>	<u>\$148,523,566</u>	<u>\$51,101,933</u>	<u>\$38,328,779</u>	<u>\$103,999,872</u>
Unfunded accrued liability (at cost) (6)	<u>(489,846,750)</u>	<u>(420,502,791)</u>	<u>(33,970,493)</u>	<u>(35,373,466)</u>	<u>0</u>	<u>0</u>
Net Reserves	<u>\$1,591,004,495</u>	<u>\$1,318,394,304</u>	<u>\$114,553,073</u>	<u>\$15,728,467</u>	<u>\$38,328,779</u>	<u>\$103,999,872</u>
Total Liabilities and Reserves	<u>\$1,592,470,137</u>	<u>\$1,318,820,297</u>	<u>\$115,392,982</u>	<u>\$15,831,237</u>	<u>\$38,343,451</u>	<u>\$104,082,170</u>

See notes to Financial Statements.

**COMBINING STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES**  
**YEAR ENDED JUNE 30, 1986**

	Total	Defined Benefit Plans			Defined Contribution Plans	
		State Employees	State Patrol	Judges	Unclassified	Deferred Compensation
Operating Revenues						
Member contributions	\$ 40,980,221	\$ 38,356,191	\$ 2,062,048	\$ 561,982	\$ 0	\$ 0
Employer contributions	45,163,495	40,565,120	4,598,375	0	0	0
General Fund appropriation	3,530,842	1,295,732	62,316	2,172,794	0	0
Investment income (7)	112,934,806	99,485,921	7,419,076	549,783	535,207	4,944,819
MPRI Fund income	58,909,610	52,302,900	5,549,576	1,057,134	0	0
G/L on Investment	10,710,465	9,938,836	717,671	53,958	0	0
Realized and unrealized gains	11,375,797	0	0	0	4,840,590	6,535,207
Other income	385,480	3,723	0	81,175	91,860	208,722
Total Operating Revenues	\$ 283,990,716	\$ 241,948,423	\$ 20,409,062	\$ 4,476,826	\$ 5,467,657	\$ 11,688,748
Operating Expenses						
Annuity benefits	\$ 53,569,151	\$ 47,165,537	\$ 4,566,626	\$ 1,836,988	\$ 0	\$ 0
Disability benefits	2,370,920	2,266,453	57,291	47,176	0	0
Survivor benefits	529,198	0	22,332	506,866	0	0
Member refunds	6,383,142	6,340,655	41,993	0	494	0
Refunds upon death	324,690	324,690	0	0	0	0
Other refunds	123,432	90,846	1,120	0	5,229	26,237
Interest on refunds	976,949	968,140	8,574	0	235	0
Administrative expenses (9)	1,854,713	1,356,916	59,415	31,815	136,228	270,339
Investment fees	1,467,539	1,373,516	87,880	6,143	0	0
Total Operating Expenses	\$ 67,599,734	\$ 59,886,753	\$ 4,845,231	\$ 2,428,988	\$ 142,186	\$ 296,576
Other Changes in Reserves						
Member contributions	14,002,529	0	0	0	1,959,768	12,042,761
Employer contributions	2,541,390	0	0	0	2,541,390	0
Member withdrawals	(9,802,689)	0	0	0	(2,177,809)	(7,624,880)
Plan transfers	0	(921,603)	0	0	921,603	0
Total Other Changes	\$ 6,741,230	\$ (921,603)	\$ 0	\$ 0	\$ 3,244,952	\$ 4,417,881
Net Reserve Additions	223,132,212	181,140,067	15,563,831	2,047,838	8,570,423	15,810,053
Reserve Balance at June 30, 1985	\$1,367,872,283	\$1,137,254,237	\$ 98,989,242	\$13,680,629	\$29,758,356	\$ 88,189,819
Reserve Balance at June 30, 1986	\$1,591,004,495	\$1,318,394,304	\$114,553,073	\$15,728,467	\$38,328,779	\$103,999,872

See notes to Financial Statements.



**STATE EMPLOYEES RETIREMENT FUND**  
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES**  
**YEAR ENDED JUNE 30, 1986**

	<u>Total</u>	<u>Member Reserve</u>	<u>Survivor Reserve</u>	<u>MPRIF Reserve</u>	<u>STATE Reserve</u>
Operating Revenues					
Member contributions	\$ 38,356,191	\$ 37,983,463	\$ 0	\$ 0	\$ 372,728
Employer contributions	40,565,120	0	0	0	40,565,120
State appropriation	1,295,732	0	0	0	1,295,732
Investment income (7)	99,485,921	0	0	0	99,485,921
MPRI income	52,302,900	0	0	52,302,900	0
Gain on equity sales	9,938,836	0	0	0	9,938,836
Other	3,723	0	0	0	3,723
Total Operating Revenues	\$ 241,948,423	\$ 37,983,463	\$ 0	\$ 52,302,900	\$ 151,662,060
Operating Expenses					
Benefits					
Annuity	47,165,537	0	0	45,870,615	1,294,922
Disability	2,266,453	0	0	2,266,453	0
Refunds					
Left service	6,340,655	6,340,655	0	0	0
Employee death	324,690	324,690	0	0	0
Other refunds	90,846	90,846	0	0	0
Interest on refunds	968,140	0	0	0	968,140
Administrative expenses (9)	1,356,916	0	0	0	1,356,916
Investment fees	1,373,516	0	0	0	1,373,516
Total Operating Expenses	\$ 59,886,753	\$ 6,756,191	\$ 0	\$ 48,137,068	\$ 4,993,494
Other Changes in Reserves					
Actuarial transfers	0	0	(215,385)	61,565	153,820
Inactive employee transfer	0	(93,245)	0	0	93,245
New annuity transfers	0	(8,543,591)	0	68,534,603	(59,991,012)
Plan transfers	(921,603)	(463,738)	0	0	(457,865)
Total Other Changes	\$ (921,603)	\$ (9,100,574)	\$ (215,385)	\$ 68,596,168	\$ (60,201,812)
Net Reserve Additions	\$ 181,140,067	\$ 22,126,698	\$ (215,385)	\$ 72,762,000	\$ 86,466,754
Net Reserves at June 30, 1985*	<u>\$1,137,254,237</u>	<u>\$225,879,336</u>	<u>\$215,385</u>	<u>\$424,583,000</u>	<u>\$486,576,516</u>
Net Reserves at June 30, 1986**	<u>\$1,318,394,304</u>	<u>\$248,006,034</u>	<u>\$ 0</u>	<u>\$497,345,000</u>	<u>\$573,043,270</u>

\*Includes Unfunded Liabilities of \$381,685,158. FY 1985 increase was \$76,671,314.

\*\*Includes Unfunded Liabilities of \$420,502,791. FY 1986 increase was \$38,817,633.

See notes to Financial Statements.

**STATE PATROL RETIREMENT FUND**  
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES**  
**YEAR ENDED JUNE 30, 1986**

	<u>Total</u>	<u>Member Reserve</u>	<u>Survivor Reserve</u>	<u>Disability Reserve</u>	<u>MPRIF Reserve</u>	<u>State Reserve</u>
Operating Revenues						
Member contributions	\$ 2,062,048	\$ 2,067,998	\$ 0	\$ 0	\$ 0	\$ (5,950)
Employer contributions	4,598,375	0	0	0	0	4,598,375
State appropriation	62,316	0	0	0	0	62,316
Investment income (7)	7,419,076	0	0	0	0	7,419,076
MPRI income	5,549,576	0	0	0	5,549,576	0
Gain on equity sales	717,671	0	0	0	0	717,671
Total Operating Revenues	\$ 20,409,062	\$ 2,067,998	\$ 0	\$ 0	\$ 5,549,576	\$12,791,488
Operating Expenses						
Benefits						
Annuity	4,566,626	0	0	0	4,353,889	212,737
Disability	57,291	0	0	57,291	0	0
Survivor	22,332	0	22,332	0	0	0
Refunds						
Member	41,993	41,993	0	0	0	0
Other Refunds	1,120	1,120	0	0	0	0
Interest on Refunds	8,574	0	0	0	0	8,574
Administrative expenses	59,415	0	0	0	0	59,415
Investment fees	87,880	0	0	0	0	87,880
Total Operating Expenses	\$ 4,845,231	\$ 43,113	\$ 22,332	\$ 57,291	\$ 4,353,889	\$ 368,606
Other Changes in Reserves						
Actuarial Adjustments	0	0	(3,039)	90,145	781,037	(868,143)
New Annuity Transfers	0	(877,102)	0	(240,657)	7,365,276	(6,247,517)
Total Other Changes	\$ 0	\$ (877,102)	\$ (3,039)	\$ (150,512)	\$ 8,146,313	\$ (7,115,660)
Net Reserve Additions	\$ 15,563,831	\$ 1,147,783	\$(25,371)	\$ (207,803)	\$ 9,342,000	\$ 5,307,222
Net Reserves at June 30, 1985*	\$ 98,989,242	\$14,213,280	\$ 93,434	\$1,031,093	\$44,193,000	\$39,458,435
Net Reserves at June 30, 1986**	\$114,553,073	\$15,361,063	\$ 68,063	\$ 823,290	\$53,535,000	\$44,765,657

\*Includes Unfunded Liabilities of \$35,450,432. FY 1985 Unfunded Liability increase was \$3,334,307.

\*\*Includes Unfunded Liabilities of \$33,970,493. FY 1986 Unfunded Liability decrease was \$1,479,939.

See notes to Financial Statements.



**JUDGES RETIREMENT FUND**  
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES**  
**YEAR ENDED JUNE 30, 1986**

	Total	Member Reserve	Additional Reserve	"Old Law" Reserve	MPRIF Reserve	State Reserve
Operating Revenues						
Member contributions	\$ 561,982	\$ 553,368	\$ 8,462	\$ 0	\$ 0	\$ 152
State Appropriation	2,172,794	0	0	0	0	2,172,794
Investment income (7)	549,783	0	0	0	0	549,783
MPRI income	1,057,134	0	0	0	1,057,134	0
Gain on Equity Sales	53,958	0	0	0	0	53,958
Other Income	81,175	0	0	0	0	81,175
Total Operating Revenues	\$ 4,476,826	\$ 553,368	\$ 8,462	\$ 0	\$ 1,057,134	\$ 2,857,862
Operating Expenses						
Benefits						
Annuity	1,836,988	0	465,516	221,174	1,150,298	0
Disability	47,176	0	0	0	47,176	0
Survivor	506,866	0	506,866	0	0	0
Refunds						
Other Refunds	0	0	0	0	0	0
Administrative expenses	31,815	0	0	0	0	31,815
Investment fees	6,143	0	0	0	0	6,143
Total Operating Expenses	\$ 2,428,988	\$ 0	\$ 972,382	\$ 221,174	\$ 1,197,474	\$ 37,958
Other Changes in Reserves						
Adjust reserves to actuarial requirement	0	0	1,088,079	308,643	(32,993)	(1,363,729)
Inactive transfers	0	(8,462)	0	0	0	8,462
New annuity transfers	0	(184,278)	(235,151)	0	1,764,333	(1,344,904)
Total Other Changes	\$ 0	\$ (192,740)	\$ 852,928	\$ 308,643	\$ 1,731,340	\$ (2,700,171)
Net Reserve Additions	\$ 2,047,838	\$ 360,628	\$ (110,992)	\$ 87,469	\$ 1,591,000	\$ 119,733
Net Reserves at June 30, 1985*	\$13,680,629	\$3,309,759	\$9,253,857	\$1,935,038	\$ 9,029,000	\$ (9,847,025)
Net Reserves at June 30, 1986**	\$15,728,467	\$3,670,387	\$9,142,865	\$2,022,507	\$10,620,000	\$ (9,727,292)

\*Includes a reduction for Unfunded Liabilities of \$33,162,268. FY 1985 Unfunded Liability increase was \$2,629,751.

\*\*Includes a reduction for Unfunded Liabilities of \$35,373,466. FY 1986 Unfunded Liability increase was \$2,211,198.

See note to Financial Statements.

**COMBINING STATEMENT OF CHANGES IN FINANCIAL POSITION**  
**YEAR ENDED JUNE 30, 1986**

	<u>Total</u>	<u>Defined Benefit Plans</u>			<u>Defined Contribution Plans</u>	
		<u>State Employees</u>	<u>State Patrol</u>	<u>Judges</u>	<u>Unclassified</u>	<u>Deferred Compensation</u>
Resources Provided by:						
Net reserve balance additions	\$223,132,212	\$181,140,067	\$15,563,831	\$2,047,838	\$8,570,423	\$15,810,053
Items not requiring resources currently:						
Depreciation	22,737	22,737	0	0	0	0
Total resources provided	223,154,949	181,162,804	15,563,831	2,047,838	8,570,423	15,810,053
Resources Used by:						
Equipment purchased	(2,878)	(2,878)	0	0	0	0
Total resources used	\$ (2,878)	\$ (2,878)	\$ 0	\$ 0	\$ 0	\$ 0
Increase in Working Capital	<u>\$223,152,071</u>	<u>\$181,159,926</u>	<u>\$15,563,831</u>	<u>\$2,047,838</u>	<u>\$8,570,423</u>	<u>\$15,810,053</u>
Elements of Net Increase (Decrease) in Working Capital						
Current Assets						
Cash	\$ 74,319	\$ 11,069	\$ (2,528)	\$ 19,676	\$ 49,347	\$ (3,245)
Accounts receivable	(1,662)	513,371	(530,122)	9,285	38	5,766
Accrued interest and dividends	(171,953)	(162,903)	(12,544)	3,808	(302)	(12)
Due from other funds	(1,044,431)	0	0	(1,023,706)	(20,725)	0
Due from other plans	44,589	(41,795)	0	0	86,384	0
Short term investments	(23,420,767)	(22,189,578)	(1,931,000)	649,811	(340,000)	390,000
Fixed income investment	44,541,366	42,055,235	2,359,493	126,638	0	0
Equity investments	93,458,341	85,957,597	7,122,923	377,821	0	0
Restricted investments	107,107,093	72,700,435	8,560,962	1,623,993	8,738,684	15,483,019
Liabilities						
Accrued expenses	(60,238)	(8,383)	3,104	225	0	(55,184)
Due annuitants	(363)	(363)	0	0	0	0
Due Unclassified Plan	0	0	0	0	0	0
Due to Other Plans	(48,577)	(86,384)	(6,457)	(2,442)	56,997	(10,291)
Due MPRIF	2,665,271	2,402,542	0	262,729	0	0
Due State	9,083	9,083	0	0	0	0
Working Capital Change	<u>\$223,152,071</u>	<u>\$181,159,926</u>	<u>\$15,563,831</u>	<u>\$2,047,838</u>	<u>\$8,570,423</u>	<u>\$15,810,053</u>

See notes to Financial Statements.



## NOTES TO THE FINANCIAL STATEMENTS

## 1. DESCRIPTION OF THE SYSTEM

The Minnesota State Retirement System is composed of three defined benefit funds and two defined contribution funds administered in accordance with Minnesota Statutes, Chapters 352, 356, and 490.

Membership includes most State employees and metropolitan agency employees. Most Minnesota public employees are also eligible to voluntarily participate in the Deferred Compensation Fund.

In general, the system provides retirement benefits based on a member's high five years of salary and the total years of service. In addition, the system provides benefits to members upon disability and to survivors upon death of eligible members. The benefit due defined contribution plan members is their account balance either in lump sum payout or a monthly payout.

## 2. Summary of Significant Accounting Policies.

## (a) Employee Contributions

Employee contributions are established by statute as a percentage of total compensation and are deducted from the employee's salary and remitted by the employers. The Employee Contribution Reserve represents employee contributions less amounts transferred to reserves for retirement and disability or refunded.

## (b) Employer Contributions

Employer contributions are set by statute as a percentage of total compensation with the exception of the Judges Fund. For the Judges Fund, the employer contributions are on a "terminal funding basis." The counties pay to the fund a basic retirement benefit for county and probate court judges retired prior to January 1, 1974. All other funds necessary for the administration of the Judges Retirement Fund are appropriated from the State General Fund as needed.

## (c) Benefit and Disability Reserves

The benefit and disability reserves represent the present value of benefits in effect as of June 30. All benefit and disability payments are made from these reserves. The accumulated contributions of the employees are transferred to these reserves upon retirement. The balance necessary to fully fund their benefit as well as any monies necessary for mortality adjustments are transferred from the State contribution reserve.

## (d) State Contribution Reserve

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

## (e) Actuarial Valuations

Actuarial valuations are performed annually and experience studies are performed every four years. The last completed experience study was as of June 30, 1983. 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 6½% and interest assumption of 8% are prescribed by statute.

## (f) Investments

Short term and long term debt security investments are reported at cost. Equities are reported at the lower of cost or market. Market value at June 30, 1986 was \$1,051,272,904. At June 30, 1985 the market value of all investments was \$837,281,651. Space restrictions make it impractical to print the entire investment portfolio in this report. However a portfolio list is available for review upon request.



## NOTES TO THE FINANCIAL STATEMENTS (Continued)

## (g) Equipment and Fixtures

Equipment and fixtures are capitalized at the time of acquisition. Depreciation is computed on the straight line method over the estimated useful life of the asset.

## (h) Basis of Accounting

The basic financial statements were prepared using the accrual basis of accounting in accordance with Generally Accepted Accounting Principles (GAAP).

## 3. Investments are comprised of:

	<u>Total</u>	<u>State Employees Fund</u>	<u>State Patrol Fund</u>	<u>Judges Fund</u>
<b>At Cost</b>				
Short Term	\$ 44,822,570	\$ 38,435,014	\$ 5,035,109	\$1,352,447
Debt Security	243,361,074	225,928,580	16,326,217	1,106,277
Pooled Equity	595,437,102	552,650,327	40,104,727	2,682,048
Total	\$ 883,620,746	\$817,013,921	\$61,466,053	\$5,140,772
<b>At Market</b>				
Short Term	\$ 44,822,570	\$ 38,435,014	\$ 5,035,109	\$1,352,447
Debt Security	244,272,400	226,811,093	16,354,431	1,106,876
Pooled Equity	762,177,934	707,717,089	51,011,973	3,448,872
Total	\$1,051,272,904	\$972,963,196	\$72,401,513	\$5,908,195

## 4. Capital Equipment

Cost of Equipment and Fixtures	\$208,740
Less: Accumulated depreciation	<u>133,972</u>
Depreciated Cost	\$ 74,768

## 5. Minnesota Post Retirement Investment Fund (MPRIF)

- a. MPRIF 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 MPRIF. Participation in MPRIF is shown as the required reserves as determined by the actuary.
- b. MPRIF income represents the 5% earnings on required reserves for fiscal year 1986 plus the 1985 income used to pay the January 1986 benefit increase. Income in excess of 5% was used to increase annuity benefits by 9.792% effective January 1, 1987. Benefits were increased 7.884% effective January 1, 1986.

6. In determining the accrued liability and unfunded accrued liability as of June 30, 1986, Minnesota Statutes, Chapter 356 requires that equities be valued at cost plus one-third of the unrealized gain or loss on investments. GAAP requires that equities be valued at lower of cost or market. Therefore, the assets and unfunded liability are reported both ways for the three funds shown below. The balance sheet reflects the GAAP method only. These schedules were prepared by Touche Ross & Company, the actuary of MSRS.

## NOTES TO FINANCIAL STATEMENTS (Continued)

In addition, the accrued liability and the unfunded accrued liability were calculated by Wyatt Company for the Legislative Commission on Pensions and Retirement. These are presented as supplemental information.

The actuarial valuations were made using the entry age normal actuarial cost method. A rate of return on investments was assumed to be 8% compounded annually.

**Determination of Accrued Liability and  
Unfunded Accrued Liability as of June 30, 1986**

## STATE EMPLOYEES' RETIREMENT FUND

	(1)	(2)	(3)
	Present Value of Benefits	Present Value of Applicable Portion of Normal Cost Contribution	Accrued Liability Equals Reserves Required (1)-(2)
<b>A. DETERMINATION OF ACCRUED LIABILITY</b>			
1. Active Members			
a. Retirement benefits	\$1,318,447,450	\$363,098,810	\$ 955,348,640
b. Disability benefits	91,427,354	29,206,556	62,220,798
c. Refundments due to death or withdrawal	174,689,887	135,754,229	38,935,658
d. Surviving spouse benefits	99,343,010	30,181,755	69,161,255
e. Deferred retirement benefits	138,478,661	47,454,296	91,024,365
f. Subtotal	\$1,822,386,362	\$605,695,646	\$1,216,690,716
2. Deferred annuitants	22,794,747	—	22,794,747
3. Former members without vested rights	1,993,939	—	1,993,939
4. Additional liability due July 1 retirees	72,693	—	72,693
5. Participation in MPRI Fund	497,345,000	—	497,345,000
6. Total	\$2,344,592,741	\$605,695,646	\$1,738,897,095

## B. DETERMINATION OF UNFUNDED ACCRUED LIABILITY

	Touche Ross 33% Market Value	Wyatt Company 33% Market Value	Cost Basis
Accrued Liability	\$1,738,897,095	\$1,715,902,000	\$1,738,897,095
Valuation assets	1,370,049,308	1,370,049,000	1,318,394,304
Unfunded accrued liability	\$ 368,847,787	\$ 345,853,000	\$ 420,502,791



## NOTES TO THE FINANCIAL STATEMENTS (Continued)

STATE PATROL RETIREMENT FUND	(1)	(2) Present Value of Applicable Portion of Normal Cost Contribution	(3) Accrued Liability Equals Reserves Required (1)-(2)
	Present Value of Benefits		
<b>A. DETERMINATION OF ACCRUED LIABILITY</b>			
1. Active Members			
a. Retirement benefits	\$115,392,800	\$42,185,720	\$ 73,207,080
b. Disability benefits	10,642,190	5,523,409	5,118,781
c. Refundments due to death or withdrawal	377,262	951,722	(574,460)
d. Survivors and children benefits	4,670,275	2,891,448	1,778,827
e. Vested termination benefits	13,973,950	7,924,749	6,049,201
f. Total active	\$145,056,477	\$59,477,048	\$ 85,579,429
2. Deferred annuitants	1,889,487	—	1,889,487
3. Former members without vested rights	49,105	—	49,105
4. Survivors-children	68,063	—	68,063
5. Disabled members	823,290	—	823,290
6. Participation in MPRI Fund	53,535,000	—	53,535,000
7. 6% increase in retirement benefit fund for pre-73 retirees	6,576,272	—	6,576,272
8. Additional amounts due July 1 retirees	2,920	—	2,920
9. Total	\$208,000,614	\$59,477,048	\$148,523,566
<b>B. DETERMINATION OF UNFUNDED ACCRUED LIABILITY</b>			
	Touche Ross 33% Market Value	Wyatt Company 33% Market Value	Cost Basis
Accrued Liability	\$148,523,566	\$149,064,000	\$148,523,566
Valuation assets	118,174,622	118,174,000	114,553,073
Unfunded accrued liability	\$ 30,348,944	\$ 30,890,000	\$ 33,970,493



## NOTES TO THE FINANCIAL STATEMENTS (Continued)

## JUDGES RETIREMENT FUND

	(1)	(2)	(3)
	<u>Present Value of Benefits</u>	<u>Present Value of Applicable Portion of Normal Cost Contribution</u>	<u>Accrued Liability Equals Reserves Required (1)-(2)</u>
<b>A. DETERMINATION OF ACCRUED LIABILITY</b>			
1. Active Members			
a. Retirement benefits	\$39,006,251	\$14,630,660	\$24,375,591
b. Disability benefits	3,407,653	2,192,756	1,214,897
c. Refundments due to death or withdrawal	—	—	—
d. Surviving spouse benefits	7,488,240	4,967,850	2,520,390
e. Subtotal	\$49,902,144	\$21,791,266	\$28,110,878
2. Deferred annuitants	1,205,383	—	1,205,383
3. Former members without vested rights	0	—	0
4. Retirement and survivor benefits from Judge's Fund	11,165,672	—	11,165,672
5. Participation in MPRI Fund	10,620,000	—	10,620,000
6. Total	\$72,893,199	\$21,791,266	\$51,101,933

## B. DETERMINATION OF UNFUNDED ACCRUED LIABILITY

	<u>Touche Ross 33% Market Value</u>	<u>Wyatt Company 33% Market Value</u>	<u>Cost Basis</u>
Accrued Liability	\$51,101,933	\$51,360,000	\$51,101,933
Valuation assets	15,982,674	15,982,000	15,728,467
Unfunded accrued liability	\$35,119,259	\$35,378,000	\$35,373,466

## 7. Investment Income

Total Investment Income for the year was \$171,844,416. Earnings by fund and type are shown below:

	<u>State Employees</u>	<u>State Patrol</u>	<u>Judges</u>	<u>Unclassified</u>	<u>Deferred Compensation</u>
Short Term	\$ 2,286,396	\$ 410,755	\$ 75,547	\$ 46,339	\$ 46,897
Debt Income	37,293,641	2,689,451	182,103	—	—
Pooled Equity	59,905,884	4,318,870	292,133	—	—
Fixed Return	—	—	—	488,868	4,897,922
MPRI Fund	52,302,900	5,549,576	1,057,134	—	—
Total	\$151,788,821	\$12,968,652	\$1,606,917	\$535,207	\$4,944,819

## 8. Leases

The office facilities and twenty parking spaces are leased by an agreement through September 30, 1987, requiring an annual rent payment of \$71,175.

9. **SCHEDULE OF ADMINISTRATIVE EXPENSES**  
**YEAR ENDED JUNE 30, 1986**

Personal Services	
Staff salaries	\$1,048,925
Social Security	70,711
Retirement	41,095
Insurance	68,528
Unemployment Compensation	694
Total Personal Services	<u>\$1,229,953</u>
Professional Services	
Actuarial	\$ 51,730
Data processing	179,602
Audit	15,119
Disability examinations	9,025
Legal counsel	9,426
Other professional services	76,526
Total Professional Services	<u>\$ 341,428</u>
Communication	
Printing	\$ 48,367
Telephone	9,657
Postage	72,951
Travel	13,648
Subscriptions and memberships	1,431
Total Communication	<u>\$ 146,054</u>
Rentals	
Office Space	\$ 67,972
Total Rentals	<u>\$ 67,972</u>
Miscellaneous	
Utilities	\$ 12,513
Supplies	20,345
Repairs and maintenance agreements	16,538
Department head and board member expense	1,770
Depreciation	22,737
Settlements	10,000
Other purchased services	16,061
Total Miscellaneous	<u>99,964</u>
Total Operating Expenses	<u>\$1,885,371</u>
Expenses distributed by Fund:	
State General Retirement	\$1,356,916
State Patrol Fund	59,415
Judges Retirement Fund	31,835
Unclassified Employees	136,228
Deferred Compensation	270,339
Legislators	29,088
Elected Officials	1,550
Total Distribution	<u>\$1,885,371</u>





# **MINNESOTA STATE RETIREMENT SYSTEM**

## **SECTION III**

### **ACTUARIAL SECTION**



February 4, 1987

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

Ladies and Gentlemen:

We have performed an actuarial valuation as of June 30, 1986 for the following three funds:

Minnesota State Retirement System,  
Judges Retirement Fund

Minnesota State Retirement System,  
State Patrol Retirement Fund

Minnesota State Retirement System,  
State Employees' Retirement Fund

The valuation was performed on the basis of accepted actuarial methods and procedures, in accordance with the applicable provisions set forth in Minnesota Statutes (Chapter 356) and stipulated in the Contract between the State of Minnesota and Touche Ross & Co.

We hereby certify that the entry age normal cost method was utilized in determining the accrued liability for all benefits payable under the Fund.

We hereby certify that on the basis of this valuation, contributions required from employees and the State under Minnesota Statutes (Chapter 352) represent 110.1% of the requirements set forth in Chapter 356 for the State Patrol Retirement Fund and 105.3% of the requirements set forth in Chapter 356 for the State Employees' Retirement Fund.

We further certify the following:

The actuarial valuation determines a contribution amount which includes the normal cost (computed as a level percentage of payroll and the Entry Age Normal actuarial cost meth-



February 4, 1987  
Board of Directors  
Minnesota State Retirement System  
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od) and a level percentage amortization of the unfunded actuarial liability by the year 2009 for the Judges and State Patrol Plans, and by the year 2010 for the State Employees' Plan.

#### Contributions:

##### Judges -

Participants contribute amounts specified by state law. State employer contributions to the fund are made on a "terminal funding" basis. Total contributions of the year ended June 30, 1986 were less than the amount determined as of June 30, 1985 by the method described in the above paragraph.

##### State Patrol -

The contributions made during the year ended June 30, 1986 exceeded the required contribution calculated in the prior valuation.

##### State Employees -

The contributions made during the year ended June 30, 1986 were less than the required contribution calculated in the prior valuation.

#### Changes since prior valuation:

##### Judges -

The only change in assumptions since the previous valuation is in the expected cost of the modified cash refund annuity. In prior years, the cost was estimated to equal 2% of the accrued liability for actives. This year the 2% was decreased to 1%.

##### State Patrol -

No changes in the actuarial assumptions or methods have been made since the previous valuation.

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Board of Directors  
Minnesota State Retirement System  
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State Employees' -

The only change in assumptions since the previous valuation is in the assumed cost of the modified cash refund annuity. In prior years, the cost was estimated to equal 2% of the accrued liability for actives. This year the 2% was changed to 1%.

For the June 30, 1986 valuation we changed the method of allocating present value of return of contribution benefits between future normal cost and accrued liability. The new method does not change the present value of benefits, only the allocation between future costs and accrued liability.

The Legislature passed an amendment to the State Employees' Retirement Plan. The amendment changed the eligibility requirements for the pre-retirement spouse benefit from age 55 and 10 years of service to age 50 and 10 years of service. The benefit payment is to begin when the employee would have attained age 55. If the employee has attained age 55 at the time of death, the payments to the spouse commence immediately. This change was reflected in the June 30, 1986 valuation.

Benefits paid to some retirees and beneficiaries of each of the three funds increased 7.884% on January 1, 1986 in accordance with Chapter 11A of the Minnesota Statutes.

Actuarial valuations are performed once a year. The most recent valuation was as of June 30, 1986.

For actuarial report purposes, plan assets are valued at cost plus one-third of unrealized gains on stock and fixed income investments.

All employee and financial data were provided by the plan administrator, and we relied on that data, performing only general checks of reasonableness.


February 4, 1987  
Board of Directors  
Minnesota State Retirement System  
Page 4

In general, the actuarial assumptions were specified by the administrative board of the plan on the basis of an experience study performed as of June 30, 1983. However, the interest and salary scale assumptions are set by state law.

It is our opinion that the assumptions used produce results which, in the aggregate, relate reasonably to the past and anticipated experience of the plan.

The "Determination of Accrued Liability" and the "Determination of the Unfunded Liability - Chapter 356" as found in note 7 of the notes to financial statements of this report were prepared by Touche Ross & Co.

TOUCHE ROSS & CO.

  
James M. Magalska, F.S.A.

  
James F. Verlautz, F.S.A.

/cdg



## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

	State Employees Retirement Fund	State Patrol Retirement Fund	Judges Retirement Fund
1. Mortality:	1. 1971 Group Annuity Mortality Table with ages set back eight years for females. Adopted 1980.	1. Same	1. Same
2. Post-Disablement Mortality:	2. Combined Annuity Mortality Table. Adopted 1972.	2. N/A	2. N/A
3. Withdrawal:	3. Graded rates based on actual experience developed by the June 30, 1971 experience analysis. Adopted 1972.	3. Graded rates starting at .03 at age 20 and decreasing uniformly to zero at age 55.	3. None. Adopted 1980.
4. Expenses:	4. Prior year's expense as a percentage of prior year's payroll.	4. Same	4. Same
5. Interest Rate:	5. Set by statute at 8% per-retirement and 5% post-retirement. Adopted 1984.	5. Same	5. Same
6. Salary Scale:	6. Set by statute at 6½% per annum. Adopted 1984.	6. Same	6. Same
7. Assumed Retirement Age:	7. Graded rates beginning at age 58 for the General Employees Plan. Assumed age 60 for the Military Affairs Plan and age 58 for the Correctional Officers Plan. Adopted 1979. 50% of those eligible for Rule of 85 assumed to retire and all members 65 and over assumed to retire in one year. Adopted 1984.	7. Age 58 for State Patrolmen and for State Police Officers hired after June 30, 1961. Age 63 for State Police Officers hired before July 1, 1961. Adopted 1984.	7. Judges Plan: Later of Age 68 or one year hence. Adopted 1984. Supreme Court Justices Only: Latest of — — age 70 — 12 years of service, or — one year from valuation date. Adopted 1979.
8. Actuarial Method:	8. Entry age cost method, with normal cost determined as a level percentage of future covered payroll, on an individual basis. Prescribed by statute. Unfunded liability is amortized by level percent of payroll method.	8. Same	8. Same
9. Social Security:	9. Correctional Officers Plan Only: Based on the present law and 6½% salary scale applicable to current salaries. Three percent wage base and cost of living increases are projected. Adopted 1984.	9. N/A	9. a. Primary amount: \$760.10 per month, increasing with salary scale. Adopted 1974. b. Level contribution rate: 7.15% assumed for all future years. Adopted 1974. c. Covered annual wages: \$42,000 increasing with salary scale. Adopted 1974.
10. Assumed survivor status:	10. N/A	10. 100% assumed married, female spouse 3 years younger. Fifteen percent load on spouse benefits for children's benefits. Adopted 1979.	10. 100% assumed married, female spouse 3 years younger. Adopted 1979.
11. Contribution refund:	11. 60% of employees with a vested benefit withdrawing before retirement are assumed to elect return of contributions in lieu of a deferred benefit. Adopted 1982 (1).	11. All employees withdrawing after ten years of service were assumed to leave their contributions on deposit and receive a deferred annuitant benefit. Adopted 1979.	11. N/A

**ANALYSIS OF CHANGE IN THE UNFUNDED ACCRUED LIABILITY**  
**Fiscal Year Ending June 30, 1986**

	<u>STATE EMPLOYEES FUND</u>	<u>STATE PATROL FUND</u>	<u>JUDGES FUND</u>
1. Unfunded accrued liability as of June 30, 1985	\$360,556,065	\$33,953,349	\$33,058,496
2. Change due to current rate of funding and interest requirements			
a. 1984-85 past service contribution	(12,308,900)	(1,892,316)	2,644,680
b. 5% interest requirement	28,844,485	2,716,268	(688,873)
3. Change due to actuarial gains or losses because of experience deviations from expected			
a. Salary increases	11,243,001	(55,605)	416,720
b. Investment income	(81,138,502)	(5,845,179)	(457,652)
c. MPRI Fund mortality	61,565	781,037	(32,993)
d. Withdrawals, death, disability	15,170,893	691,390	243,648
e. New entrants	4,971,026	—	—
f. Social Security	N/A	N/A	17,664
g. Mortality on other retirees	N/A	N/A	195,895
4. Increase due to change in eligibility for spouse death benefit	2,681,795	N/A	N/A
5. Decrease due to lowering assumed cost of cash refund annuity	(11,660,941)	N/A	N/A
6. Increase due to changes in method	50,427,300	N/A	(278,326)
Unfunded accrued liability as of June 30, 1986	<u>\$368,847,787</u>	<u>\$30,348,944</u>	<u>\$35,119,259</u>



## DEPTH OF FUNDING — PLAN CONTINUATION BASIS

The Plan Continuation Ratio is an indication of the extent to which the benefits earned to date are funded. The value of the benefits **earned to date** are calculated on a plan continuation basis applying all ongoing actuarial assumptions including assumed future salary increases and turnover. It is measured by the ratio of the valuation assets to the present value of accrued benefits.

On this basis, a ratio of 100% indicates full funding of all benefits earned to date.

## STATE EMPLOYEES RETIREMENT FUND

Valuation Date	Present Value of Accrued Benefits			Reported Assets	Portion of Benefits Earned To Date Covered By Reported Assets
	Active, Deferred Inactive	Retirees and Beneficiaries	Total		
6-30-77	\$266,439,050	\$140,980,813	\$407,419,863	\$357,556,308	87.8%
6-30-78	314,298,931	51,518,891	465,817,822	408,755,610	87.8
6-30-79	384,816,431	179,314,989	564,131,420	482,465,961	85.5
6-30-80	448,335,844	205,332,561	653,668,405	569,165,868	87.1
6-30-81	508,876,656	230,624,886	739,501,542	675,227,139	91.3
6-30-82	580,683,102	282,184,551	862,867,653	783,649,606	90.8
6-30-83	660,127,016	313,794,837	973,921,853	902,506,393	92.7
6-30-84	712,480,059	356,599,158	1,069,079,217	996,003,433	93.2
6-30-85	810,691,499	424,798,385	1,235,489,884	1,158,383,330	93.8
6-30-86	875,413,271	497,345,000	1,372,758,271	1,370,049,308	99.8

## STATE PATROL RETIREMENT FUND

Valuation Date	Present Value of Accrued Benefits			Reported Assets	Portion of Benefits Earned To Date Covered By Reported Assets
	Active, Deferred Inactive	Retirees and Beneficiaries	Total		
6-30-79	\$ 49,097,648	\$ 14,228,659	\$ 63,326,307	\$ 41,712,515	65.9%
6-30-80	61,488,728	17,209,819	78,698,547	49,620,012	63.1
6-30-81	71,272,075	20,255,867	91,527,942	58,720,161	64.2
6-30-82	76,462,655	25,503,946	101,966,601	68,183,407	66.9
6-30-83	84,049,002	36,111,773	120,160,775	78,774,772	65.6
6-30-84	78,100,467	41,149,847	119,250,314	86,784,592	72.8
6-30-85	83,911,024	50,657,207	134,568,231	100,486,325	74.7
6-30-86	86,827,008	61,005,545	147,832,553	118,174,622	79.9

## JUDGES RETIREMENT FUND

Valuation Date	Present Value of Accrued Benefits			Reported Assets	Portion of Benefits Earned To Date Covered By Reported Assets
	Active, Deferred Inactive	Retirees and Beneficiaries	Total		
6-30-77	\$ 12,699,612	\$ 3,187,489	\$ 15,887,101	\$ 3,946,736	24.8%
6-30-78	13,422,248	3,844,849	17,267,097	4,933,299	28.6
6-30-79	17,665,090	10,648,749	28,313,839	6,845,192	24.2(1)
6-30-80	20,698,947	11,924,903	32,623,850	7,641,062	23.4
6-30-81	24,231,198	13,155,634	37,386,832	8,513,941	22.8
6-30-82	24,868,165	14,817,093	39,685,258	8,740,420	22.0
6-30-83	27,811,530	16,973,342	44,784,872	11,049,076	24.7
6-30-84	29,198,235	18,181,304	47,379,539	11,791,860	24.9
6-30-85	32,407,334	20,217,895	52,625,229	13,784,402	26.2
6-30-86	35,754,320	21,785,672	57,539,992	15,982,674	27.8

(1) Several law changes subsequent to the establishment of the fund brought all Judges and Judges Survivors plans into the fund. This is the first valuation that recognized all of the various Judges plans.



**SOLVENCY TEST — FUNDING RATIO**

One of the tests of financial solvency is to determine what portion of the accrued liabilities are covered by current assets. If the funding is on a sound basis, the retirement fund will pay all promised benefits when due.

In a short term solvency test, the fund's current assets are compared with the liabilities for active member contributions (liability 1), the liabilities for future benefits to present retired lives (liability 2) and the employer liability for service already rendered by active employees (liability 3). Generally, if the fund has been using level cost financing, the funded portion of liability 3 should increase over time with liability 1 and 2 being fully funded.

**STATE EMPLOYEES RETIREMENT FUND****Aggregate Accrued Liabilities For**

Valuation Date	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered By Reported Assets			Funding Ratio (1) + (2) + (3)
					(1)	(2)	(3)	
6-30-77	\$ 87,098,476	\$140,980,813	\$293,079,566	\$357,556,308	100	100	44.2	68.6
6-30-78	100,278,842	151,518,891	343,729,375	408,755,610	100	100	45.7	68.6
6-30-79	121,815,771	179,314,989	365,970,371	482,465,961	100	100	49.6	72.3
6-30-80	136,370,228	205,332,561	425,544,372	569,165,868	100	100	53.5	74.2
6-30-81	153,317,649	230,624,886	477,715,767	675,227,139	100	100	61.0	78.4
6-30-82	165,800,421	282,184,551	590,922,381	783,649,606	100	100	56.8	75.4
6-30-83	192,707,448	313,794,837	660,622,148	902,506,393	100	100	59.9	77.3
6-30-84	205,710,981	356,599,158	749,240,161	966,003,433	100	100	57.9	75.9
6-30-85	225,879,336	424,798,385	868,261,674	1,158,383,330	100	100	58.5	76.3
6-30-86	248,006,034	497,345,000	993,546,061	1,370,049,308	100	100	62.9	78.8

**STATE PATROL RETIREMENT FUND****Aggregate Accrued Liabilities For**

Valuation Date	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered By Reported Assets			Funding Ratio (1) + (2) + (3)
					(1)	(2)	(3)	
6-30-77	\$6,873,913	\$11,132,877	\$36,019,646	\$31,081,251	100	100	36.3	57.5
6-30-78	7,747,055	12,618,680	39,277,660	36,348,010	100	100	40.7	60.9
6-30-79	8,505,215	14,228,659	46,063,984	41,712,515	100	100	42.1	61.5
6-30-80	9,432,724	17,209,819	59,187,851	49,620,012	100	100	38.8	57.8
6-30-81	10,251,899	20,255,867	70,010,143	58,720,161	100	100	40.3	58.4
6-30-82	10,954,514	25,503,946	74,997,233	68,183,407	100	100	42.3	61.2
6-30-83	12,172,335	31,992,242	88,010,378	78,774,772	100	100	39.3	59.6
6-30-84	12,762,346	41,149,847	65,770,025	86,784,592	100	100	50.0	72.5
6-30-85	14,213,280	50,657,207	69,569,187	100,486,325	100	100	51.2	74.7
6-30-86	15,361,063	61,005,545	72,156,958	118,174,622	100	100	57.9	79.6

**JUDGES RETIREMENT FUND****Aggregate Accrued Liabilities For**

Valuation Date	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered By Reported Assets			Funding Ratio (1) + (2) + (3)
					(1)	(2)	(3)	
6-30-77	\$920,246	\$3,187,489	\$15,124,130	\$3,946,736	100	94.9	0	20.5
6-30-78	1,263,739	3,844,849	15,276,202	4,933,299	100	95.4	0	24.2
6-30-79	1,553,850	10,648,749	16,976,458	6,845,192	100	49.7	0	23.5(1)
6-30-80	1,867,726	11,924,903	17,574,412	7,641,062	100	48.4	0	24.4
6-30-81	2,177,802	13,155,634	17,281,815	8,513,941	100	48.2	0	26.1
6-30-82	2,535,186	14,817,093	17,864,867	8,740,420	100	41.9	0	24.8
6-30-83	2,857,495	16,973,342	20,725,473	11,049,076	100	48.3	0	27.2
6-30-84	3,062,588	18,181,304	21,133,997	11,791,860	100	52.0	0	27.8
6-30-85	3,309,759	20,217,895	23,315,244	13,784,402	100	51.8	0	29.4
6-30-86	3,670,387	21,785,672	25,645,874	15,982,674	100	56.5	0	31.3

(1) Several law changes subsequent to the establishment of the fund brought all Judges and Judges Survivors plans into the fund. This is the first valuation that recognized all of the various Judges plans.



**UNFUNDED ACCRUED LIABILITY (UAL)**

The unfunded accrued liability is the total liability of a fund for benefits earned in the past as well as those earnable in the future, less the assets on hand, less the present value of future employee contributions and less the present value of future employer normal cost contributions.

Looking at just the dollar amounts of the UAL can be misleading. By dividing the unfunded accrued liability by the active employee payroll, we can provide an index which indicates whether the fund is becoming financially stronger or weaker. The smaller the ratio of unfunded liabilities to active member payroll, the stronger the fund.

**STATE EMPLOYEES RETIREMENT FUND**

<u>Valuation Date</u>	<u>Aggregate Accrued Liabilities</u>	<u>Reported Assets</u>	<u>UAL</u>	<u>Active Member Payroll</u>	<u>UAL As A % of Active Member Payroll</u>
6-30-77	\$521,158,855	\$357,556,308	\$163,602,547	\$483,203,504	33.9
6-30-78	595,527,108	408,755,610	186,771,498	569,301,385	32.8
6-30-79	667,101,131	482,465,961	184,635,170	637,592,557	29.0
6-30-80	767,247,161	569,165,868	198,081,293	703,470,202	28.2
6-30-81	861,658,302	675,227,139	186,431,163	796,297,430	23.4
6-30-82	1,038,907,353	783,649,606	255,257,747	830,395,472	30.7
6-30-83	1,167,124,433	902,506,393	264,618,040	893,430,208	29.6
6-30-84	1,311,550,300	996,003,433	315,546,867	949,950,593	33.2
6-30-85	1,518,939,395	1,158,383,330	360,556,065	1,079,714,997	33.4
6-30-86	1,738,897,095	1,370,049,308	368,847,787	1,169,240,234	31.5

**STATE PATROL RETIREMENT FUND**

<u>Valuation Date</u>	<u>Aggregate Accrued Liabilities</u>	<u>Reported Assets</u>	<u>UAL</u>	<u>Active Member Payroll</u>	<u>UAL As A % of Active Member Payroll</u>
6-30-77	\$54,026,436	\$31,081,251	\$22,945,185	\$12,974,808	176.8
6-30-78	59,643,395	36,348,010	23,295,385	13,771,848	169.2
6-30-79	67,797,858	41,712,515	26,085,343	16,429,135	158.8
6-30-80	85,830,394	49,620,012	36,210,382	18,003,587	201.1(1)
6-30-81	100,517,909	58,720,161	41,797,748	19,967,408	209.3
6-30-82	111,455,693	68,183,407	43,272,286	20,922,575	206.8
6-30-83	132,174,955	78,774,772	53,400,183	23,066,558	231.5
6-30-84	119,682,218	86,784,592	32,897,626	23,016,272	142.9
6-30-85	134,439,674	100,486,325	33,953,349	25,875,980	131.2
6-30-86	148,523,566	118,174,622	30,348,944	27,474,215	110.5

**JUDGES RETIREMENT FUND**

<u>Valuation Date</u>	<u>Aggregate Accrued Liabilities</u>	<u>Reported Assets</u>	<u>UAL</u>	<u>Active Member Payroll</u>	<u>UAL As A % of Active Member Payroll</u>
6-30-77	\$19,231,865	\$3,946,736	\$15,285,129	\$9,041,000	169.1
6-30-78	20,384,790	4,933,299	15,451,491	9,089,988	170.0
6-30-79	29,179,057	6,845,192	22,333,865	9,606,000	232.5(2)
6-30-80	31,367,041	7,641,062	23,725,979	10,278,000	230.8
6-30-81	32,615,251	8,513,941	24,101,310	10,618,500	227.0
6-30-82	35,217,146	8,740,420	26,476,726	10,616,226	249.4
6-30-83	40,556,310	11,049,076	29,507,234	12,685,000	232.6
6-30-84	42,377,889	11,791,860	30,586,029	14,083,111	217.2
6-30-85	46,842,898	13,784,402	33,058,496	15,145,615	218.3
6-30-86	51,101,933	15,982,674	35,119,259	16,616,138	211.4

(1) The ratio increased due to a change in actuarial assumptions of which the change for mortality had the greatest impact.

(2) Several law changes subsequent to the establishment of the fund brought all Judges and Judges Survivors plans into the fund. This is the first valuation that recognized all of the various Judges plans.



**CURRENT SUPPORT**

Employee and employer contributions are set by statute at a specified rate and apply to total salary. The employer additional contributions are for the purpose of paying for the unfunded accrued liability. It has been a philosophy of the legislature that the employee and employer share the normal cost of retirement benefits on an equal basis.

	<u>Employee Contributions</u>	<u>Employer Contributions</u>	<u>Total</u>
<b>STATE EMPLOYEES RETIREMENT FUND</b>			
General Employees Plan	3.73 %	3.9 %	7.63 %
Military Affairs Plan	5.33 %	5.5 %	10.83 %
Correctional Officers Plan	4.9 %	8.7 %	13.6 %
<b>STATE PATROL RETIREMENT FUND</b>	8.5 %	18.9 %	27.4 %

**JUDGES RETIREMENT FUND**

Judges pay the social security tax rate, applied to their entire salary, plus an additional 1/2 % subject to a minimum of 7 % in total. All judges appointed after January 1, 1974, and those judges that elected to be covered by Social Security after the fund was established first pay up to the maximum at the social security rate to Social Security, with the remainder paid to the Judges Fund. For those judges that did not elect Social Security coverage, their entire contribution is paid to the Judges Fund. Any additional funds needed for the administration of the fund are appropriated from the State General Fund as needed.

**NORMAL COST**

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

Comparative normal cost figures, including administrative expenses, were as follows:

<u>Valuation Date</u>	<u>STATE EMPLOYEES RETIREMENT FUND</u>		<u>STATE PATROL FUND</u>	<u>JUDGES FUND</u>
	<u>General Employees Plan</u>	<u>Correctional Officers Plan</u>		
6-30-77	7.23 %	11.18 %	14.72 %	13.27 %
6-30-78	7.20 %	11.16 %	14.44 %	12.79 %
6-30-79	6.67 %	10.38 %	14.83 %	13.67 %
6-30-80	7.00 %	10.82 %	15.68 %	15.32 %
6-30-81	6.91 %	11.23 %	15.95 %	14.89 %
6-30-82	7.02 %	10.70 %	17.14 %	15.33 %
6-30-83	7.14 %	10.80 %	17.83 %	15.25 %
6-30-84	6.31 %	9.67 %	18.95 %	14.10 %
6-30-85	6.39 %	9.71 %	18.96 %	13.72 %
6-30-86	5.70 %	9.55 %	19.10 %	13.64 %



# **Minnesota State Retirement System**

## **SECTION IV**

### **STATISTICAL SECTION**



### INVESTMENT RESULTS COMPARED TO SELECTED PERFORMANCE STANDARDS

	FISCAL YEAR					ANNUALIZED	
	1982	1983	1984	1985	1986	3 YR.	5 YR.
Rate of Return — Time Weighted							
Basic Retirement Funds							
Including alternative assets <sup>1</sup>	2.0	40.5	(5.5)	26.8	26.2	14.9	16.8
Excluding alternative assets	1.8	42.1	(6.3)	28.4	29.0	15.8	17.5
Comparison Standards							
Median Balance Fund <sup>2</sup>	(0.1)	41.3	(2.1)	26.3	25.1	16.4	17.6
Stock/Bond Composite <sup>3</sup>	(1.6)	50.3	(4.7)	29.8	29.2	16.9	18.8
Inflation	7.1	2.6	4.2	3.7	1.7	3.2	3.9

The time 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) 50/45/5 Wilshire 5000/Salomon Broad Bond Index/91 Day T-Bills composite through 12-31-82, 65/30/5 composite thereafter.

### DISTRIBUTION OF INVESTMENTS

Minnesota Statutes provide that the total of equity investments which include stocks, convertible issues, commingled funds and limited partnerships cannot exceed 75% of the total market value.

The distribution of investments at market value is shown below:

	1982	1983	1984	1985	1986
<b>STATE EMPLOYEES RETIREMENT FUND</b>					
Debt Security	40.6%	30.4%	28.4%	24.3%	23.3%
Short Term	9.2%	5.1%	6.7%	7.8%	4.0%
Pooled Equity	50.2%	64.5%	64.9%	67.9%	72.7%
Total Portfolio (%)	100.0%	100.0%	100.0%	100.0%	100.0%
Total Portfolio (Millions \$)	\$438.5	\$620.5	\$653.5	\$774.6	\$973.0
<b>STATE PATROL RETIREMENT FUND</b>					
Debt. Security	40.6%	25.7%	27.1%	24.5%	22.6%
Short Term	13.1%	11.7%	5.7%	11.9%	7.0%
Pooled Equity	46.3%	62.6%	67.2%	63.6%	70.4%
Total Portfolio (%)	100.0%	100.0%	100.0%	100.0%	100.0%
Total Portfolio (Millions \$)	\$36.7	\$45.9	\$47.3	\$58.4	\$72.4
<b>JUDGES RETIREMENT FUND</b>					
Debt. Security	54.5%	23.2%	24.8%	23.2%	18.7%
Short Term	14.5%	16.1%	7.7%	16.3%	22.9%
Pooled Equity	31.0%	60.7%	67.5%	60.5%	58.4%
Total Portfolio (%)	100.0%	100.0%	100.0%	100.0%	100.0%
Total Portfolio (Millions \$)	\$2.5	\$3.4	\$4.3	\$4.3	\$5.9



## SCHEDULE OF REVENUE BY SOURCE

## STATE EMPLOYEES RETIREMENT FUND

<u>Year Ending</u>	<u>Employee Contributions</u>	<u>Employer Contributions</u>	<u>Investment Income</u>	<u>Miscellaneous</u>	<u>Total</u>
6-30-77	\$18,316,117	\$28,080,209	\$23,653,136	\$2,217,806	\$72,267,268
6-30-78	20,450,119	31,426,248	22,312,348	1,403	74,190,118
6-30-79	23,228,656	36,966,944	29,339,452	21,245,704(1)	110,780,756
6-30-80	25,442,110	40,650,797	40,424,477	2,745,965	109,263,349
6-30-81	28,316,881	45,027,367	65,933,604	220,236	139,498,088
6-30-82	28,387,528	45,335,038	71,972,054	1,823,042	147,517,662
6-30-83	37,306,271	29,137,018	91,100,333	1,952,042	159,495,664
6-30-84	33,342,707	50,640,088	83,321,919	1,354,510	168,659,224
6-30-85	35,219,979	37,624,809	108,531,261	1,331,031	182,707,080
6-30-86	38,356,191	40,565,120	161,727,657	1,299,455	241,948,423

## STATE PATROL RETIREMENT FUND

<u>Year Ending</u>	<u>Employee Contributions</u>	<u>Employer Contributions</u>	<u>Investment Income</u>	<u>Miscellaneous</u>	<u>Total</u>
6-30-77	\$1,030,791	\$2,828,652	\$2,085,783	\$ 237,356	\$ 6,182,582
6-30-78	1,203,801	3,306,684	2,045,792	0	6,556,277
6-30-79	1,066,932	3,173,261	2,615,178	0	6,855,371
6-30-80	1,203,127	3,608,060	3,752,249	118,223	8,681,659
6-30-81	1,282,849	3,841,515	5,795,019	3,960	10,923,343
6-30-82	1,340,657	4,009,217	6,259,980	62,734	11,672,588
6-30-83	1,960,988	3,908,972	7,584,812	70,472	13,525,244
6-30-84	1,877,412	4,637,670	6,775,861	59,282	13,350,225
6-30-85	1,963,882	4,361,681	9,145,046	62,883	15,533,492
6-30-86	2,062,048	4,598,375	13,686,323	62,316	20,409,062

## JUDGES RETIREMENT FUND

<u>Year Ending</u>	<u>Employee Contributions</u>	<u>Employer Contributions</u>	<u>Investment Income</u>	<u>Miscellaneous</u>	<u>Total</u>
6-30-77	\$311,528	\$1,198,078	\$328,050	\$ 0	\$ 1,837,656
6-30-78	423,812	1,319,305	319,324	0	2,062,441
6-30-79	403,497	2,040,717	449,883	0	2,894,097
6-30-80	415,914	1,181,152	496,332	7,143	2,100,541
6-30-81	489,714	1,164,361	742,207	443	2,396,725
6-30-82	468,659	525,044	858,150	0	1,851,853
6-30-83	527,418	2,624,281	975,647	0	4,127,346
6-30-84	465,758	1,670,894	950,690	85,544	3,172,886
6-30-85	500,554	2,225,706	1,218,802	83,819	4,028,881
6-30-86	561,982	2,172,794	1,660,875	81,175	4,476,826

(1) Transfer of assets and liabilities from the Metropolitan Transit Commission retirement plan to the General Plan.

## REVENUE RATIOS BY SOURCE

## STATE EMPLOYEES RETIREMENT FUND

<u>Year Ending</u>	<u>Employee Contributions</u>	<u>Employer Contributions</u>	<u>Investment Income</u>	<u>Miscellaneous</u>	<u>Total</u>
6-30-77	25.3%	38.9%	32.7%	3.1%	100.0%
6-30-78	27.6	42.4	30.1	0.0	100.0
6-30-79	21.0	33.4	26.5	19.2	100.0
6-30-80	23.3	37.2	37.0	2.5	100.0
6-30-81	20.3	32.3	47.3	0.2	100.0
6-30-82	19.2	30.7	48.8	1.2	100.0
6-30-83	23.4	18.3	57.1	1.2	100.0
6-30-84	19.8	30.0	49.4	0.8	100.0
6-30-85	19.3	20.6	59.4	0.7	100.0
6-30-86	15.9	16.8	66.8	0.5	100.0

## STATE PATROL RETIREMENT FUND

<u>Year Ending</u>	<u>Employee Contributions</u>	<u>Employer Contributions</u>	<u>Investment Income</u>	<u>Miscellaneous</u>	<u>Total</u>
6-30-77	16.7%	45.8%	33.7%	3.8%	100.0%
6-30-78	18.4	50.4	31.2	0.0	100.0
6-30-79	15.6	46.3	38.1	0.0	100.0
6-30-80	13.9	41.6	43.2	1.4	100.0
6-30-81	11.7	35.2	53.1	0.0	100.0
6-30-82	11.5	34.3	53.6	0.5	100.0
6-30-83	14.5	28.9	56.1	0.5	100.0
6-30-84	14.1	34.7	50.8	0.4	100.0
6-30-85	12.6	28.1	58.9	0.4	100.0
6-30-86	10.1	22.5	67.0	0.4	100.0

## JUDGES RETIREMENT FUND

<u>Year Ending</u>	<u>Employee Contributions</u>	<u>Employer Contributions</u>	<u>Investment Income</u>	<u>Miscellaneous</u>	<u>Total</u>
6-30-77	17.0%	65.2%	17.9%	0.0%	100.0%
6-30-78	20.5	64.0	15.5	0.0	100.0
6-30-79	13.9	70.5	15.5	0.0	100.0
6-30-80	19.8	56.2	23.6	0.3	100.0
6-30-81	20.4	48.6	31.0	0.0	100.0
6-30-82	25.3	28.4	46.3	0.0	100.0
6-30-83	12.8	63.6	23.6	0.0	100.0
6-30-84	14.7	52.7	30.0	2.7	100.0
6-30-85	12.4	55.2	30.3	2.1	100.0
6-30-86	12.6	48.5	37.1	1.8	100.0



## SCHEDULE OF EXPENSES BY TYPE

## STATE EMPLOYEES RETIREMENT FUND

Year Ending	Aggregate Benefit Payments			Admin. Expense	Miscellaneous	Total
	Annuities	Disabilities	Refunds			
6-30-77	\$14,523,069	\$ 642,792	\$4,176,801	\$ 721,493	\$ 0	\$20,064,155
6-30-78	15,942,445	746,625	4,434,702	910,926	0	22,034,698
6-30-79	19,143,247	1,201,406	6,098,473	1,041,312	0	27,484,438
6-30-80	21,797,465	1,286,141	7,272,535	1,063,439	20,131	31,439,711
6-30-81	23,648,844	1,450,559	6,885,658	1,335,426	125,671	33,446,158
6-30-82	27,114,262	1,668,970	9,309,820	955,110	797	39,048,959
6-30-83	31,636,330	1,783,501	6,047,856	932,521	227,376	40,627,584
6-30-84	35,210,035	1,956,514	14,799,721	1,405,816	11,562,673(1)	64,934,759
6-30-85	40,834,688	2,121,929	7,500,095	1,371,738	1,225,931	53,054,381
6-30-86	47,165,537	2,266,453	7,724,331	1,356,916	1,373,516	59,886,753

## STATE PATROL RETIREMENT FUND

Year Ending	Aggregate Benefit Payments			Admin. Expense	Miscellaneous	Total
	Annuities	Disabilities	Refunds			
6-30-77	\$1,006,855	\$39,795	\$28,187	\$34,981	\$ 0	\$1,109,818
6-30-78	1,154,699	61,500	38,881	34,438	0	1,289,518
6-30-79	1,364,064	63,565	26,163	37,322	0	1,491,114
6-30-80	1,490,622	62,153	54,243	32,290	16,190	1,655,498
6-30-81	1,666,388	58,432	41,146	52,646	5,231	1,823,843
6-30-82	2,012,741	69,250	86,521	40,830	0	2,209,342
6-30-83	2,789,333	37,068	48,677	41,468	17,333	2,933,879
6-30-84	3,373,000	58,061	279,120	46,912	801,809(1)	4,558,902
6-30-85	3,901,046	69,398	5,723	53,899	80,278	4,110,344
6-30-86	4,588,958	57,291	51,687	59,415	87,880	4,845,231

## JUDGES RETIREMENT FUND

Year Ending	Aggregate Benefit Payments			Admin. Expense	Miscellaneous	Total
	Annuities	Disabilities	Refunds			
6-30-77	\$ 996,092	\$ 3,239	\$ 2,827	\$15,775	\$ 0	\$1,017,933
6-30-78	1,019,706	11,727	1,726	13,694	0	1,046,853
6-30-79	1,253,320	25,761	4,371	15,437	0	1,298,889
6-30-80	1,322,073	16,560	7,135	11,037	0	1,356,805
6-30-81	1,426,434	16,825	46,508	34,078	0	1,523,845
6-30-82	1,555,592	17,726	25,900	26,156	0	1,625,374
6-30-83	1,751,969	16,847	22,691	26,008	1,175	1,818,690
6-30-84	1,967,505	11,457	107,762	27,713	262,154(1)	2,376,591
6-30-85	2,112,923	44,977	634	29,463	5,627	2,193,624
6-30-86	2,343,854	47,176	0	31,815	6,143	2,428,988

(1) Write-off of Deferred Yield Account (deferred bond losses).



**SUMMARY DATA  
FOR THE  
FISCAL YEAR ENDED JUNE 30, 1986**

**STATE EMPLOYEES RETIREMENT FUND**

ACTIVE EMPLOYEES	Number Beg. of Yr.	Increases		Decreases				Net Transfers	Number At End Of Year			Average Accumulated Contributions
		New	Refunds	Annuities	Disabilities	Inactive	Death		Total	Vested	Non-Vested	
General Plan	44,398	5,213	2,556	786	25	987	77	(9)	45,171	16,798	28,373	\$5,120
Correctional Plan	1,192	196	71	8	0	89	0	(0)	1,220	341	879	6,790
Mil. Aff. Plan	7	2	1	0	0	0	0	0	8	2	6	8,793
Total	45,597	6,411	2,628	794	25	1,076	77	(9)	46,399	17,141	29,258	\$5,164

INACTIVE EMPLOYEES	Number Beg. of Yr.	Increases		Decreases				Number At End Of Year			Average Accumulated Contributions
		From Active	Transfer	To Active	To Annuity	To Refunds	To Retirement Fund	Total	Vested	Non-Veted	
General Plan	5,787	987	372	221	105	549	928	5,343	938	4,405	\$1,112
Correctional Plan	108	89	(59)	4	1	8	7	118	35	83	3,674
Mil. Aff. Plan	1	0	0	0	0	0	0	1	0	1	5,324
Total	5,896	1,076	313	225	106	557	935	5,462	973	4,489	\$1,161

ANNUITANTS	Number Beg. of Yr.	Increases		Decreases	Net Transfers	Number End of Year			Averages (Survivor Not Included)					
		New Member	New Survivor	Deaths		Members	Survivor	Total	All Annuitants on June 30		New in Fiscal Year 1986			
									Age	Service	Monthly Benefit	Age	Service	Monthly Benefit
General Plan	10,669	891	89	453	(6)	10,591	599	11,190	72.2	21.1	\$ 349	62.6	20.9	\$ 481
Correctional Plan	317	9	1	9	(1)	309	8	317	66.1	20.0	577	56.0	20.6	1,026
Mil. Aff. Plan	3	0	0	0	0	3	0	3	66.9	26.4	1,042	—	—	—
Total	10,989	900	90	462	(7)	10,903	607	11,510	72.6	21.1	\$ 355	62.5	20.9	\$ 487

DISABILITANTS	Number Beg. of Yr.	Increases New	Decreases		Net Adjustments	Number End of Yr.	Averages					
			Deaths	Rescinded			All Annuitants on June 30			New in Fiscal Year 1985		
							Age	Service	Monthly Benefit	Age	Service	Monthly Benefit
General Plan	680	40	52	0	(3)	665	66.1	17.6	\$260	56.1	16.3	\$300
Correctional Plan	12	0	1	0	0	11	56.0	16.6	540	—	—	—
Total	692	40	53	0	(3)	676	65.9	17.6	\$265	56.1	16.3	\$300

REFUNDS	Number of Refunds			Average Age of Member		Average Years of Service Forfeited		Number of Members Forfeiting Vested Rights
	Male	Female	Total	Male	Female	Male	Female	
General Plan	1,330	2,604	3,934	34.3	32.5	3.3	3.0	175
Correctional Plan	66	20	86	31.5	31.6	3.5	2.2	2
Total	1,398	2,624	4,020	34.3	32.5	3.3	2.2	277

**SUMMARY DATA  
FOR THE  
FISCAL YEAR ENDED JUNE 30, 1986**

**STATE PATROL RETIREMENT FUND**

ACTIVE EMPLOYEES	Number Beg. of Yr.	Increases		Decreases				Number At End Of Year			Average Accumulated Contributions
		New	Refunds	Annuities	Disabilities	Inactive	Death	Total	Vested	Non-Vested	
	764	37	3	27	0	2	0	769	474	295	\$19,470

INACTIVE EMPLOYEES	Number Beg. of Yr.	Increases		Decreases		Number At End Of Year			Average Accumulated Contributions
		From Active	To Active	To Annuity	To Refunds	Total	Vested	Non-Vested	
	29	2	1	3	1	26	17	9	\$9,909

ANNUITANTS	Number Beg. of Yr.	Increases New	Decreases Deaths	Net Transfers	Number End of Yr.	Averages					
						All Annuitants on June 30			New in Fiscal Year 1986		
						Age	Service	Monthly Benefit	Age	Service	Monthly Benefit
	381	34	11	(1)	403	66.1	26.2	\$949	58.9	27.8	\$1,555

DISABILITANTS	Number Beg. of Yr.	Increases New	Decreases Deaths	Net Transfers	Number End of Yr.	Averages					
						All Disabilitants on June 30			New in Fiscal Year 1986		
						Age	Service	Monthly Benefit	Age	Service	Monthly Benefit
	13	0	0	0	13	46.6	22.9	\$918	—	—	—

REFUNDS	Number of Refunds			Average Age of Member		Average Years of Service Forfeited		Number of Members Forfeiting Vested Rights	
	Male	Female	Total	Male	Female	Male	Female		
	5	1	6	32.6	33.8	4.5	5.1		1

**JUDGES RETIREMENT FUND**

ACTIVE JUDGES	Number Beg. of Yr.	Increases New	Decreases						Number At End of Year			Average Accumulated Contributions
			Refunds	Annuities	Inactive	Death	Other	Dis.	Total	Vested	Non-Vested	
Judges Plan	237	10	0	5	1	1	0	0	240	129	111	\$14,871
Supreme Court	2	0	0	0	0	0	0	0	2	2	0	0*
Total	239	10	0	5	1	1	0	0	242	131	111	\$14,871

INACTIVE JUDGES	Number Beg. of Yr.	Increases	Decreases		Number At End of Year			Average
		From Active	To Active	To Annuity	Total	Vested	Non-Vested	Accumulated Contributions
Judges Plan	7	1	0	0	8	8	0	\$14,447

ANNUITANTS	Number Beg. of Yr.	Increases New	Decreases Deaths	Number End of Yr.	Average Monthly Benefit	Average Monthly Benefit For Fiscal Year New Annuitants
Service	83	5	5	83	\$1,795	\$1,911
Disability	4	1	0	5	1,696	1,515
Survivors	52	2	4	50	896	608
Total	139	8	9	138	\$1,466	\$1,536

REFUNDS	Number of Refunds			Average Age of Member		Average Years of Service Forfeited		Number of Members Forfeiting Vested Rights	
	Male	Female	Total	Male	Female	Male	Female		
Judges Plan	0	0	0	-	-	-	-		0

\*Contributions to the survivors fund are not refundable therefore they are not credited to the individuals accounts.



## ACTIVE EMPLOYEES

Year Ending	Average Entry Age For New Members			Averages For All Members								
				Entry Age			Attained Age			Service Credit		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total

## STATE EMPLOYEES RETIREMENT FUND

## General Employees Retirement Plan

6/30/78	30.7	29.1	29.5	29.5	28.2	28.8	40.2	36.2	38.2	8.9	5.5	7.2
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	28.7	27.4	27.9	29.2	28.3	28.7	40.9	36.9	38.8	10.5	6.8	8.5
6/30/84	29.7	29.4	29.6	30.4	30.1	30.3	41.6	37.7	39.5	10.8	7.0	8.8
6/30/85	31.6	31.0	31.2	30.5	30.3	30.4	41.7	38.0	39.7	10.9	7.3	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

## Correctional Officers Retirement Plan

6/30/78	29.1	30.0	29.2	28.2	29.1	28.2	35.8	36.0	35.8	5.9	6.0	5.9
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	29.2	28.6	29.0	28.9	30.4	29.1	35.2	36.2	36.1	7.2	4.8	6.9
6/30/86	29.8	32.1	30.4	29.0	31.1	29.3	36.8	36.2	36.7	7.7	5.2	7.4

## STATE PATROL RETIREMENT FUND

6/30/78	26.1	26.3	26.1	N/A	N/A	27.9	N/A	N/A	N/A	N/A	N/A	13.3
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	27.8	23.3	27.4	27.0	25.3	26.9	40.8	32.4	40.5	13.9	7.1	13.7
6/30/86	26.5	22.8	26.4	26.9	25.1	26.8	40.5	33.0	40.3	13.7	7.9	13.5

## JUDGES RETIREMENT FUND

6/30/78	N/A	N/A	46.8	41.6	40.2	41.5	53.1	52.2	53.1	10.7	5.7	10.5
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	38.0	25.4	34.2	41.5	41.5	41.5	53.8	45.7	53.1	12.2	4.2	11.5
6/30/86	48.1	38.7	47.2	41.7	41.4	41.7	54.3	46.4	53.5	12.4	5.0	11.8



## EMPLOYEES ELIGIBLE TO AN IMMEDIATE ANNUITY ON JUNE 30, 1986

## STATE EMPLOYEES RETIREMENT FUND

## General Employees Retirement Plan

	Male	Female	Total
Full Benefit	408	301	709
Reduced Benefit Due To Early Retirement	2,133	1,517	3,650
Proportional Benefit (Age Equal To Or Greater Than 65, Service Less Than 10 Years)	81	114	195
Rule of 85	654	208	862
Subtotals	3,276	2,140	5,416
Employees Not Eligible to Immediate Benefit	17,836	21,943	39,779
Totals	21,112	24,083	45,195

## Correctional Officers Retirement Plan

Full Benefit	36	6	42
Employees Not Eligible to Immediate Benefit	1,022	156	1,178
Totals	1,058	162	1,220

## Military Affairs Retirement Plan

Full Benefit	0	0	0
Employees Not Eligible to Immediate Benefit	8	0	8
Totals	8	0	8

## STATE PATROL RETIREMENT FUND

Full Benefit	64	1	65
Employees Not Eligible to Immediate Benefit	679	26	705
Totals	743	27	770

## JUDGES RETIREMENT FUND

## Judges Plan

Reduced Benefit	20	0	20
Full Benefit	26	0	26
Judges Not Eligible to Immediate Benefit	172	22	194
Totals	218	22	240

## Supreme Court Judges

Full Benefit	2	0	2
Judges Not Eligible to Immediate Benefit	0	0	0
Totals	2	0	2

## REFUND STATISTICS

## STATE EMPLOYEES RETIREMENT FUND

## General Employees Retirement Plan

Year Ending	Number of Refunds			Average Age of Member		Average Years of Service Forfeited		Number of Members Forfeiting Vested Rights
	Male	Female	Total	Male	Female	Male	Female	
6-30-77	1,882	3,837	5,719	31.7	30.7	2.0	1.8	82
6-30-78	2,091	3,849	5,940	32.0	30.0	1.6	1.6	78
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

## Correctional Officers Retirement Plan

6-30-77	133	18	151	31.3	31.4	1.8	1.9	1
6-30-78	97	15	112	32.4	30.2	2.0	1.3	0
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
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

## STATE PATROL RETIREMENT FUND

6-30-77	9	0	9	37.9	—	4.5	—	1
6-30-78	9	0	9	34.1	—	4.9	—	1
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

## JUDGES RETIREMENT FUND

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

**SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT  
JUNE 30, 1986**

**STATE EMPLOYEES RETIREMENT FUND**

Amount of Monthly Benefit	Deferred	Number of Retirees	Type of Retirement*								Option Selected			
			1	2	3	4	5	6	7	8	Life	I	II	III
\$ 1-\$100	227	1,736	707	526	388	103	12	0	0	0	1,469	250	16	1
101- 200	165	3,231	1,559	1,278	120	222	38	1	0	13	2,687	485	54	5
201- 300	152	2,164	969	979	5	173	37	1	0	0	1,746	384	32	2
301- 400	111	1,459	712	606	0	101	39	0	0	1	1,167	274	14	4
401- 500	87	929	465	364	0	50	49	1	0	0	706	210	8	5
501- 600	58	682	396	223	0	31	30	2	0	0	493	175	4	10
601- 700	50	521	331	158	0	10	21	1	0	0	340	171	3	7
701- 800	42	378	224	120	0	10	23	1	0	0	246	130	1	1
801- 900	24	288	190	86	0	1	10	0	1	0	160	128	0	0
901-1000	14	249	170	60	0	8	11	0	0	0	135	113	1	0
Over 1000	43	549	345	148	0	3	51	0	2	0	285	264	0	0
Totals	973	12,186	6,068	4,548	513	712	321	7	3	14	9,434	2,584	133	35
Average Benefit(\$)	352	346	383	323	78	257	578	482	1,042	148	311	477	232	446

**\*Type of Retirement****# Option Selected**

1-Normal retirement for age &amp; service

Life

2-Early retirement

Option I — Joint &amp; Survivor

3-Proportionate annuity

Option II — Death while eligible and "Old Law" survivors

4-Disability retirement

Option III — Period Certain

5-Correctional Annuity

6-Correctional Disability

7-Military Affairs

8-Survivors of Deceased Former Members (Non MPRIF)



## STATE PATROL RETIREMENT FUND

Amount of Monthly Benefit	Deferred	Number of Retirees	Type Of Retirement*			Option Selected #		
			1	2	3	Life	I	II
\$ 1-\$200	0	5	5	0	0	2	3	0
201- 400	2	82	62	0	20	6	56	20
401- 600	3	52	48	2	2	12	38	2
601- 800	4	36	29	5	2	12	22	2
801-1000	3	42	38	1	3	16	23	3
1001-1200	3	58	53	3	2	19	37	2
1201-1400	0	48	48	0	0	16	32	0
1401-1600	0	42	39	1	2	18	22	2
1601-1800	0	30	29	1	0	18	12	0
1801-2000	2	12	12	0	0	11	1	0
Over 2000	0	9	9	0	0	8	1	0
Totals	17	416	372	13	31	138	247	31
Average Benefit(\$)	873	950	987	985	498	1,222	851	498

## \*Type of Retirement

- 1 — Normal retirement for age & service
- 2 — Disability (Non-MPRIF)
- 3 — Survivor

## # Option Selected

- Life
- Option I — Joint & Survivor
- II — Death while eligible and old law survivor

Not included in this table are average benefits of \$190 for each of 9 children surviving 6 former members.

**JUDGES RETIREMENT FUND**

Amount of Monthly Benefit	Deferred	Number of Retirees	Type Of Retirement*										Option Selected #			
			1	2	3	4	5	6	7	8	9	Life	I	II	III	
\$ - \$ 200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
201 - 400	0	4	0	0	1	0	0	0	3	0	0	0	0	4	0	
401 - 600	2	12	2	0	2	0	0	5	2	0	1	0	1	11	0	
601 - 800	1	10	1	0	4	0	0	0	2	0	3	0	1	9	0	
801 - 1000	0	10	5	0	1	0	0	1	0	0	3	0	2	8	0	
1001 - 1200	0	28	4	1	4	0	0	19	0	0	0	1	2	25	0	
1201 - 1400	0	13	6	1	0	0	0	2	0	1	3	0	4	9	0	
1401 - 1600	0	11	5	1	1	0	1	0	1	2	0	0	1	9	1	
1601 - 1800	0	12	11	0	0	1	0	0	0	0	0	1	5	6	0	
1801 - 2000	2	6	5	0	0	0	0	1	0	0	0	0	2	3	1	
Over 2000	2	32	17	1	0	8	0	0	0	6	0	6	6	19	1	
	7	138	56	4	13	9	1	28	8	9	10	8	24	103	3	
Average Benefit(\$)	1,408	1,455	1,728	1,746	849	2,830	1,493	976	382	2,125	953	2,104	1,611	1,357	1,848	

Deferred — Former member with deferred future benefit.

**\* Type of Retirement****Benefits provided under laws effective January 1, 1975**

- 1 — Judges Plan — Service (MPRIF)
- 2 — Judges Plan — Disability (MPRIF)
- 3 — Judges Plan — Survivor

**# Option Selected**

- Life
- Option I — Joint & Survivor
- Option II — Life plus 50% Survivor
- Option III — Period Certain

Benefits provided under laws in effect prior to January 1, 1975

- 4 — Supreme and District Court Judges Plan — Service
- 5 — Supreme and District Court Judges Plan — Disability
- 6 — Survivor of Supreme and District Court Judges Plan
- 7 — Survivors of County Court Judges Plan
- 8 — Judges Plan — Service 9 — County Paid Judges Plan — Service

## LEGISLATIVE AND CONSTITUTIONAL OFFICERS PLAN

Amount of Monthly Benefit	Deferred		Type of Retirement*			
	Cons.	Legi.	1	2	3	4
\$ 1-\$200	1	8	0	0	10	16
201- 400	2	17	0	1	31	13
401- 600	0	30	0	2	33	2
601- 800	1	12	0	0	15	1
801-1000	0	8	1	0	9	0
1001-1200	0	14	2	1	6	0
1201-1400	0	5	0	0	6	0
1401-1600	0	6	0	0	3	0
1601-1800	1	0	0	0	2	0
1801-2000	0	0	0	0	0	0
Over 2000	0	0	1	0	0	0
Totals	5	100	4	4	115	32
Average Benefit(\$)	674	667	1423	565	591	244

**\*Type of Retirement**

- 1 — Constitutional Officers
- 2 — Survivors of Constitutional Officers
- 3 — Legislative Members (Participate in the MPRIF)
- 4 — Survivors of Legislative Members

Not included in this table  
are benefits averaging \$117  
for each of 9 children  
surviving 5 former legislators.



## ANNUITY &amp; DISABILITY DEATHS

## STATE EMPLOYEES RETIREMENT FUND

## General Employees Retirement Plan

Year Ending	Average										Percent of Members Who Received More in Annuity Payments Than They Had Contributed		Ratio of Annuity Payments/ Contributions For Deceased Service Annuitants*
	Average Age at Death				Years of Retirement				Number of Deaths				
	Annuity		Disability		Annuity		Disability						
	Male	Female	Male	Female	Male	Female	Male	Female	Annuity	Disability	Annuity	Disability	
6-30-77	76.8	77.5	63.4	60.5	10.7	11.0	4.4	3.7	255	36	91.4%	52.8%	4.3
6-30-78	77.3	78.6	59.8	66.1	11.3	12.2	3.2	5.4	255	31	93.5	54.8	5.0
6-30-79	77.3	77.8	66.9	65.1	12.0	12.3	9.6	6.4	350	44	87.1	72.7	4.6
6-30-80	77.9	79.2	66.3	61.2	12.5	13.8	9.9	5.1	350	49	91.5	61.2	5.2
6-30-81	76.7	80.9	64.7	60.8	11.8	13.9	8.0	5.7	378	43	94.2	74.4	5.4
6-30-82	76.7	77.8	65.3	67.4	12.1	13.9	9.2	9.5	375	35	93.9	85.7	6.1
6-30-83	77.7	79.4	67.6	67.8	13.0	13.6	9.7	8.3	417	44	93.5	93.2	5.8
6-30-84	77.5	80.0	57.3	58.5	12.5	14.0	3.0	2.9	410	17	95.8	52.9	7.4
6-30-85	77.5	79.4	63.0	69.4	13.1	14.1	6.8	10.7	444	55	95.7	69.1	8.0
6-30-86	78.4	81.0	68.4	66.5	13.8	13.8	10.2	9.8	420	52	92.8	78.8	85

## Correctional Officers Retirement Plan

6-30-77	64.0	-	-	-	2.4	-	-	-	3	0	100%	N/A	2.5
6-30-78	61.5	-	-	-	3.2	-	-	-	2	0	100	N/A	3.3
6-30-79	58.0	-	-	-	3.7	-	-	-	6	0	100	N/A	4.0
6-30-80	64.8	-	-	-	4.1	-	-	-	9	0	100	N/A	4.2
6-30-81	64.4	-	53.0	-	5.1	-	1.8	-	7	1	100	0%	4.1
6-30-82	66.3	67.0	44.0	-	7.3	7.7	0.9	-	7	1	100	0%	6.0
6-30-83	65.7	-	-	-	7.3	-	-	-	6	0	100	N/A	6.8
6-30-84	61.5	64.5	-	-	5.2	8.3	-	-	6	1	71	N/A	4.4
6-30-85	66.4	-	53.0	-	7.8	-	3.5	-	13	1	100	100	5.9
6-30-86	67.8	77.0	69.0	-	8.8	11.2	11.9	-	9	1	100	100	7.8

## STATE PATROL RETIREMENT FUND

6-30-78	79.0	83.7	-	-	16.0	6.8	-	-	9	0	100%	N/A	3.4
6-30-79	72.0	78.5	-	-	10.2	5.8	-	-	6	0	100	N/A	1.7
6-30-80	75.9	78.0	-	-	13.4	4.7	-	-	17	0	100	N/A	2.8
6-30-81	74.4	76.0	-	-	15.0	13.6	-	-	12	0	100	N/A	3.1
6-30-82	72.0	70.0	-	-	13.2	4.9	-	-	6	0	83.3	N/A	3.3
6-30-83	73.6	80.0	-	-	11.5	12.1	-	-	15	0	86.6	N/A	4.8
6-30-84	76.7	70.4	-	-	16.0	8.6	-	-	8	0	93.9	N/A	9.1
6-30-85	70.3	88.1	-	-	9.7	18.8	-	-	9	0	100	N/A	6.1
6-30-86	78.0	-	-	-	-	18.4	-	-	7	-	100	N/A	13.5

## JUDGES RETIREMENT FUND

6-30-81	85.8	86.5	-	-	11.0	4.0	-	-	8	0			
6-30-82	79.5	90.0	-	-	10.5	19.7	-	-	6	0			
6-30-83	75.7	71.6	80.3	-	3.8	5.7	6.0	-	4	1			
6-30-84	80.6	75.1	-	-	11.2	6.5	-	-	9	0			
6-30-85	89.5	77.7	-	-	19.7	11.1	-	-	5	0			
6-30-86	85.0	-	-	-	6.7	-	-	-	2	0			

## SCHEDULE OF AVERAGE ANNUITY AND DISABILITY BENEFIT PAYMENTS AUTHORIZED WITHIN A FISCAL YEAR

### STATE EMPLOYEES RETIREMENT FUND

#### General Employees Retirement Plan

Retirement Effective Dates	YEARS OF CREDITED SERVICE									Totals
	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40 +	
Period 7/1/81 - 6/30/82										
Average Monthly Benefit	39.6	79.3	139.28	220.28	315.55	404.01	606.30	750.65	925.20	349.01
Average Final Salary	1508.42	1030.38	1088.37	1143.98	1169.96	1219.50	1406.65	1668.43	1678.66	1242.93
Average Age At Retirement	63.6	64.2	63.8	63.2	62.5	62.8	62.3	62.4	64.1	63.0
Number Retired	24	45	196	153	170	107	166	66	19	946
Period 7/1/82 - 6/30/83										
Average Monthly Benefit	37.46	100.44	153.14	249.59	335.38	488.57	696.60	804.96	1052.96	320.46
Average Final Salary	1390.00	1302.95	1228.35	1371.51	1352.89	1576.29	1773.13	1788.84	1811.07	1415.66
Average Age At Retirement	64.0	64.2	63.3	63.6	62.4	62.9	62.0	62.9	65.4	63.3
Number Retired	41	57	164	148	85	64	53	41	14	667
Period 7/1/83 - 6/30/84										
Average Monthly Benefit	35.08	107.49	168.97	295.57	384.95	536.13	758.63	932.83	1056.30	359.34
Average Final Salary	1019.72	1132.08	1098.44	1190.00	1283.36	1186.44	1562.22	1588.21	1986.21	1235.84
Average Age At Retirement	65.0	63.7	63.1	62.9	63.0	62.9	62.1	62.3	63.2	63.0
Number Retired	42	64	193	167	94	66	83	40	10	759
Period 7/1/84 - 6/30/85										
Average Monthly Benefit	40.20	117.02	177.66	298.02	402.93	592.39	771.34	996.00	1092.85	442.89
Average Final Salary	1740.52	1532.58	1290.82	1464.23	1523.61	1658.93	1936.92	2103.57	1876.94	1613.32
Average Age At Retirement	61.7	63.4	63.0	63.3	62.8	62.2	61.1	61.4	64.0	62.5
Number Retired	51	58	169	169	130	122	125	80	16	920
Period 7/1/85 - 6/30/86										
Average Monthly Benefit	40.54	121.11	176.88	295.55	465.48	663.56	879.52	1151.59		476
Average Final Salary	2022.68	1510.29	1441.99	1603.81	1769.80	1933.96	2170.15	2516.74		1818.52
Average Age At Retirement	61.7	63.7	62.7	62.9	63.3	61.8	60.9	61.1		62.4
Number Retired	47	57	163	136	133	113	87	88		824

#### Correctional Officers Retirement Plan

Retirement Effective Dates	YEARS OF CREDITED SERVICE								Totals
	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35 +	
Period 7/1/81 — 6/30/82									
Average Monthly Benefit	0.00	0.00	437.37	671.82	737.60	1125.06	993.21	0.00	797.92
Average Final Salary	0.00	0.00	1415.99	1603.58	1251.68	1542.48	940.61	0.00	1406.89
Average Age At Retirement	0.0	0.0	56.4	57.1	56.8	56.1	55.2	0.0	56.4
Number Retired	0	0	5	6	5	7	3	0	26
Period 7/1/82 — 6/30/83									
Average Monthly Benefit	0.00	0.00	464.08	602.30	790.19	0.00	971.02	0.00	700.69
Average Final Salary	0.00	0.00	1343.88	1581.20	1563.65	0.00	1530.64	0.00	1536.70
Average Age At Retirement	0.00	0.00	55.0	56.25	55.0	0.00	55.0	0.00	55.6
Number Retired	0	0	1	4	5	0	2	0	8
Period 7/1/83 — 5/30/84									
Average Monthly Benefit	0.00	267.30	536.45	697.57	925.68	966.72	1569.73	0.00	833.42
Average Final Salary	0.00	1483.11	1547.72	1773.24	1823.92	1666.90	2254.10	0.00	1763.65
Average Age At Retirement	0.00	58.5	54.4	58.6	57.2	57.6	57.8	0.00	57.5
Number Retired	0	2	5	12	4	7	4	0	34
Period 7/1/84 — 6/30/85									
Average Monthly Benefit	0.00	0.00	469.16	727.58	1016.58	1336.35	1530.44	0.00	1013.80
Average Final Salary	0.00	0.00	1328.42	1869.28	1813.99	2197.70	2239.38	0.00	1937.75
Average Age At Retirement	0.00	0.00	58.0	56.3	55.0	55.0	55.0	0.00	55.9
Number Retired	0	0	2	5	1	3	3	0	14
Period 7/1/85 — 6/30/86									
Average Monthly Benefit	0.00	0.00	517.07	940.93	1163.28	0.00	1524.12	0.00	1025.75
Average Final Salary	0.00	0.00	1944.24	2102.37	2225.39	0.00	2264.25	0.00	2130.32
Average Age At Retirement	0.0	0.0	55.0	55.0	57.0	0.0	55.0	0.00	55.4
Number Retired	0	0	2	3	2	0	2	0	9



## SCHEDULE OF AVERAGE ANNUITY AND DISABILITY BENEFIT PAYMENTS AUTHORIZED WITHIN A FISCAL YEAR

### STATE PATROL RETIREMENT FUND

Retirement Effective Dates	YEARS OF CREDITED SERVICE								Totals
	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35 +	
Period 7/1/81 - 6/30/82									
Average Monthly Benefit	0.00	289.49	483.33	0.00	875.39	931.93	1284.5	0.00	1067.42
Average Final Salary	0.00	1694.58	1867.05	0.00	1163.93	1334.35	1955.31	0.00	1721.21
Average Age At Retirement	0.0	55.0	59.1	0.0	56.4	54.6	58.5	0.0	57.5
Number Retired	0	1	2	0	4	4	15	0	26
Period 7/1/82 - 6/30/83									
Average Monthly Benefit	0.00	0.00	366.73	0.00	946.54	1091.24	1403.01	1392.86	1148.22
Average Final Salary	0.00	0.00	1164.30	0.00	1570.66	1863.57	2038.02	2006.31	1808.84
Average Age At Retirement	0.0	0.0	58.2	0.0	56.7	58.9	58.3	57.8	57.9
Number Retired	0	0	2	0	11	5	15	1	34
Period 7/1/83 - 6/30/84									
Average Monthly Benefit	0.00	0.00	495.25	0.00	980.05	1246.66	1542.75	1425.95	1236.33
Average Final Salary	0.00	0.00	1980.98	0.00	1789.43	2149.03	2218.99	2215.50	2082.89
Average Age At Retirement	0.0	0.0	64.9	0.0	55.8	58.3	58.6	62.4	58.2
Number Retired	0	0	1	0	9	21	8	2	41
Period 7/1/84 - 6/30/85									
Average Monthly Benefit	114.96	0.00	372.44	1237.81	0.00	1510.21	1693.10	0.00	1250.93
Average Final Salary	1894.73	0.00	1270.05	2285.73	0.00	2077.22	2246.92	0.00	2054.17
Average Age At Retirement	58.7	0.00	59.4	56.3	0.0	56.1	55.4	0.0	56.6
Number Retired	1	0	2	5	0	8	2	0	18
7/1/85 - 6/30/86									
Average Monthly Benefit	0.00	0.00	338.66	942.06	1175.02	1583.33	1800.47	1656.41	1516.39
Average Final Salary	0.00	0.00	606.57	1836.75	2083.02	2434.56	2517.35	2605.58	2311.22
Average Age At Retirement	0.0	0.0	55.0	55.0	58.4	58.4	57.7	65.4	58.1
Number Retired	0	0	1	1	6	8	11	1	28

### JUDGES RETIREMENT FUND

	YEARS OF CREDITED SERVICE					
Retirement Effective Dates	10-15	15-20	20-25	25-30	30-35	Totals
Period 7/1/81 - 6/30/82						
Average Monthly Benefit	0.00	2827.09	1369.75	1504.58	2244.58	1968.50
Average Final Salary	0.00	4916.66	4000.00	4000.00	4000.00	4229.16
Average Age At Retirement	0.0	65.9	64.0	65.1	65.1	65.2
Number Retired	0	1	1	1	1	4
Period 7/1/82 - 6/30/83						
Average Monthly Benefit	391.34	1514.23	1605.71	2423.38	2600.00	1974.81
Average Final Salary	4000.00	4000.00	4000.00	4333.33	4000.00	4083.33
Average Age At Retirement	72.7	68.3	66.6	66.2	70.8	68.0
Number Retired	1	1	3	2	1	8
Period 7/1/83 - 6/30/84						
Average Monthly Benefit	415.26	1897.28	1766.17	0.00	2600.00	1715.20
Average Final Salary	4000.00	4000.00	4000.00	0.00	4000.00	4000.00
Average Age At Retirement	62.2	72.7	70.0	0.0	70.0	69.5
Number Retired	1	2	1	0	1	5
Period 7/1/84 - 6/30/85						
Average Monthly Benefit	0.00	1624.12	1961.62	2407.17	0.00	1923.38
Average Final Salary	0.00	4377.82	4465.46	4148.78	0.00	4383.46
Average Age At Retirement	0.00	67.6	67.7	65.6	0.0	67.3
Number Retired	0	2	3	1	0	6
Period 7/1/85 - 6/30/86						
Average Monthly Benefit	0.00	1458.41	0.00	2244.87	2922.19	2077.41
Average Final Salary	0.00	1467.19	0.00	4385.00	2171.96	2188.41
Average Age At Retirement	0.00	68.9	0.00	70.0	70.0	69.4
Number Retired	0	3	0	1	2	6



**UNCLASSIFIED PLAN**

Certain employees in the Unclassified State service who are eligible for coverage under the General Employees Retirement Plan may elect to participate in the Unclassified Employees Retirement Plan. Both employee and employer contributions are used to purchase shares in the Supplemental Retirement Fund. The following provides information on the activity within this plan during the fiscal year ending June 30, 1986.

**CURRENT PARTICIPANTS**

On June 30, 1986, there were 1,545 participants in the Unclassified Employees Retirement Plan with shares to their credit, 1,144 were active and 401 were inactive. The distribution of participants selecting the various investment options follows:

	June 30, 1983	June 30, 1984	June 30, 1985	June 30, 1986
100% Income shares	37.0%	39.6%	35.1%	35.3%
75% Income shares, 25% Growth shares	9.6%	8.9%	9.9%	9.7%
50% Income shares, 50% Growth shares	26.5%	29.8%	26.4%	26.5%
100% Fixed return	19.4%	15.3%	19.9%	19.3%
75% Fixed return, 25% Growth shares	7.5%	6.4%	8.7%	9.2%

**WITHDRAWALS**

During fiscal year 1986, there were 168 participants who withdrew employee and employer shares to their credit in the Unclassified Employees Retirement Plan, compared to 132 in fiscal 1985.

**ANNUITANTS**

Twelve former participants are receiving monthly benefits from the Unclassified Employees Retirement Plan as of June 30, 1986. Their average service credit at retirement was 5.9 years, their average age at retirement was 63.0, their average age is 67.7 years, and their average monthly benefit is \$171.93. One elected a 15 year period certain annuity, one a joint and last survivor annuity and ten elected straight life annuities.

**DEFERRED COMPENSATION PLAN**

The information provided below pertains only to participation in the Minnesota Supplemental Investment Fund and does not include any data from member participation with any of the insurance companies. We have an obligation to audit certain information provided by the insurance companies and do perform this function.

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

On June 30, 1986 there were 4,155 active contributing participants in the Deferred Compensation Plan and 509 in withdrawal status.

**Distribution of Amounts Deferred in the Month of June 1986**

Dollars Deferred Per Month	Growth & Fix-RT	Income & Fix-RT	Income & Growth	Fixed Return	Growth Shares	Income Shares	Income, Growth & Fixed Return	Totals
\$10-\$99	55	57	71	866	140	227	20	1436
100-199	80	86	98	428	58	148	30	928
200-299	50	74	63	267	30	86	23	593
300-399	32	39	41	124	9	19	15	279
400-499	33	33	40	135	2	17	16	276
500-599	61	45	60	141	2	48	26	383
Over 600	27	21	23	149	7	22	11	260
	338	355	396	2110	248	567	141	4155

**Distribution by Age Group of Members in Withdrawal Status at June 30, 1986**

Ages	Number of Members	Average Monthly Dollar Value Withdrawn			
		Income	Growth	Fixed	Total
Over 75	6	\$ 23.04	\$186.32	\$196.67	\$406.03
74-75	15	330.24	52.61	5.78	388.63
72-73	43	202.00	70.73	174.53	447.26
70-71	64	101.88	105.83	142.50	350.21
68-69	96	100.56	50.35	232.14	383.05
66-67	83	99.93	51.70	240.30	391.93
64-65	70	69.78	34.05	290.07	393.90
62-63	48	110.40	63.36	328.85	502.61
60-61	38	67.91	61.87	312.38	442.16
55-59	36	72.96	17.35	329.03	419.34
50-54	6	0.00	27.04	390.00	417.40
Under 50	4	46.08	0.00	273.75	319.83
	509	\$105.74	\$ 57.78	\$242.36	\$405.88