

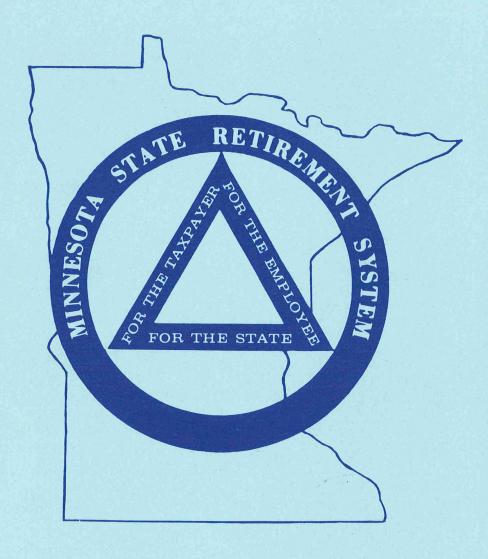
MINNESOTA

STATE

RETIREMENT

System

880503



COMPREHENSIVE ANNUAL REPORT July 1, 1986 — June 30, 1987

LEGISLATIVE REFERENCE LIBRARY 645 State Office Building Saint Paul, Minnesota 55155

COMPREHENSIVE ANNUAL FINANCIAL REPORT of the MINNESOTA STATE RETIREMENT SYSTEM

July 1, 1986 - June 30, 1987

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, 1987

TABLE OF CONTENTS

Section I — Introductory Section

PAGE	
3	Letter of Transmittal
5	Board of Directors
6	Chairman's Report
7	Summary of Plans
13	1987 Law Changes
15	Section II — Financial Section
17	Auditors Opinion
	Basic Financial Statements
18	Combining Balance Sheet
19	Combining Statement of Revenues, Expenses and Changes in Reserves
	Statement of Revenues, Expenses and Changes in Reserves
20	Combining Statement of Changes in Financial Position
21	State Employees Retirement Fund
22	State Patrol Retirement Fund
23	Judges Retirement Fund
24	Legislative Retirement Fund
25	Elective State Officers Retirement Fund
26	Statement of Changes in Assets, Liabilities and Reserves
27	Notes to the Financial Statements
30	Schedule of Administrative Expenses
31	Section III — Actuarial Section
33	Actuary's Certification Letter
35	Summary of Actuarial Assumptions and Methods
36	Required Reserves and Rate Comparison
37	Accrued Benefit Funding Ratio
38	Solvency Test — Funding Ratio
39	Unfunded Accrued Liability
41	Section IV — Statistical Section
43	Investment Results and Distribution of Investments
44	Revenue by Source
45	Revenue Ratios by Source
46	Expenses by Type
47	Summary Data
48	Active Employee Data
49	Employees Eligible to an Immediate Annuity
50	Refund Statistics Retired Members by Type of Reposit
51 55	Retired Members by Type of Benefit Annuity and Disability Deaths
	A DUBLIC AND LITERATURY LIPRING
56 58	Average Annuity and Disability Benefit Payments Deferred Compensation Plan



MINNESOTA STATE RETIREMENT SYSTEM

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

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, 1987. This report includes a summary of the System, financial statements, actuarial reports and statistical data. The information should be useful in understanding the System and its current status.

Accounting System and Reports

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

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

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

Revenues

Employee contributions, employer contributions, and investment income provide the funding for the System. Contributions and investment income for fiscal year 1987 were \$344.6 million. This represents a 14.7% increase from fiscal year 1986.

Expenses

The expenses of the System consist of annuity benefits, refunds of contributions, interest on refunds, and administrative expenses. Expenses for fiscal year 1987 were \$89.3 million, an increase of 15.9% from fiscal year 1986. Revenues exceeded expenses by \$255.3 million.

OFFICERS

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

BOARD OF DIRECTORS

Elected Members

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

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

Daniel Ernst General Plan Department of Natural Resources Natural Resources Building St. Paul, MN 55146

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

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

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

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

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

Appointed Members

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

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

Patsy Schmelzer FMC Corporation 4800 E. River Road Minneapolis, MN 55421

Investments

Investments contribute a substantial portion of the income to the System. Income from investments was \$228.3 million or 66.3% of total revenue. Of the total investment income, 65% is from the basic retirement funds and the remaining 35% is from the participation in the Minnesota Post Retirement Investment Fund.

Funding

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

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

Professional Services

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

Administration

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

Acknowledgments

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

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

Respectfully submitted,

Paul & Groschen

Paul L. Groschen Executive Director

MINNESOTA STATE RETIREMENT SYSTEM ADMINISTRATIVE ORGANIZATION JUNE 30, 1987

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

Michael McGrath State Treasurer 8421 — 22nd Avenue South, #112A Bloomington, Minnesota 55420 Telephone: 612/296-7091 Term: January 19, 1987-January 7, 1991 Appointed — Constitutional Officer Patsy Schmelzer 1729 Humboldt Avenue South Minneapolis, Minnesota 55403 Telephone 612/377-6539 Term: January 19, 1987-January 7-1991 Appointed — Public Member

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

Bernard Weber
Department of Transportation
126 Riverside Drive NorthEast
St. Cloud, Minnesota 56301
Telephone 612/255-4268
Term: March 4, 1984-March 7, 1988
Elected — State Employee

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 612/255-5000
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 10th ST. PAUL, MINNESOTA 55101 (612) 296-2761

OFFICERS

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

To All Minnesota State Retirement System Members

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

The Board is especially pleased with the post-retirement increase provision which, in recent years, has been able to keep retirment benefits ahead of inflation. Retirees received a 9.792% increase in January 1987, and will receive a 8.054% increase in January 1988. A commendation goes to the State Board of Investment for obtaining outstanding investment returns which are the basis for these increases.

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

In the past year, the Governor appointed two new members to the Minnesota State Retirement System Board of Directors. I welcome Michael McGrath, State Treasurer, and Patsy Schmelzer, Public Member.

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, Chairman Board of Directors

BOARD OF DIRECTORS

Elected Members

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

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

Daniel Ernst General Plan Department of Natural Resources Natural Resources Building St. Paul, MN 55146

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

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

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

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

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

Appointed Members

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

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

Patsy Schmelzer FMC Corporation 4800 E. River Road Minneapolis, MN 55421

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 specifically in other plans such as teachers.
- (b) Benefit Formula -1% of high five year average salary for first 10 years of service plus $1\frac{1}{2}\%$ 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 occurred by 12/31/86 no reduction if retirement occurred by 6/30/87.
 - Age 55 with 5 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 5 years service no reduction.
 - Formula as in (c) with no reduction.
- (e) Surviving Spouse Benefit
 - If employee was at least age 50 with 5 years of service at date of death, generally, the spouse is eligible for a 100% joint and survivor annuity starting when the employee would have attained age 55, or a refund of all contributions plus 5% interest compounded annually.
- (f) Refunds
 - Contributions with 5% interest.
- (g) Annuity and Disability Options
 - 100% joint and survivor with or without bounce back.
 - 50% joint and survivor with or without bounce back.
 - 15 year period certain and life thereafter.

SUMMARY OF RETIREMENT 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 5 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
 - $-2\frac{1}{2}$ % 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 5 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
 - 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
 - Contributions with 5% interest.

SUMMARY OF RETIREMENT SYSTEM PLANS (Contined)

- (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.

General Fund

Legislators Retirement Plan

- (a) Coverage
 - All legislators.
- (b) Benefit Formula
 - $-2\frac{1}{2}$ % of high five year average salary with a maximum of 20 years.
- (c) Retirement age and years of service
 - Age 62 with 6 years of service No reduction.
 - Age 60 with 6 years of service Reduced from age 62.
- (d) Survivor Benefits
 - Spouse gets 50% of benefit.
 - First child gets 25% of benefit and next two children get 12.5% for a family maximum of 100% of member benefit.
- (e) Refunds
 - 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
 - $-2\frac{1}{2}$ % 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
 - Contributions with 5% interest.
- (f) Contributions
 - -9% employee and payment of annuity benefits as they occur from the employer.

SUMMARY OF RETIREMENT SYSTEM PLANS (Contined)

Defined Contribution

Unclassified Employees Plan

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

Agency Fund

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 33¹/₃% 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.

1987 LAW CHANGES

GENERAL

Laws of 1987, Chapter 157

The act provides for a division of pension rights as marital property in a divorce. The present value of the accrued pension benefit is included in marital property and can be divided up by the court with other marital property. A pension fund must write separate annuity checks to a divorced spouse when the member retires if there are insufficient assets to divide.

Laws of 1987, Chapter 404

Section 52 provides lump sum retirement payments to "Pre 73" retirees for the State Employees Plan and the State Patrol Plan. Each retiree will receive \$20 for each full year of service on December 1, 1987 and December 1, 1988.

Laws of 1987, Chapter 372

Article 9 provides for 5 year vesting in all plans except the Judges Plan and Legislators Plan.

Laws of 1987, Chapter 284

Article 8 expands the existing combined service provisions to include disability and survivor benefits.

STATE EMPLOYEES RETIREMENT PLAN

Laws of 1987, Chapter 284

Article 4 provides for 5 percent a year interest on a refund upon the death of an inactive member.

Article 1 shifts retirement coverage for Military Affairs firefighters from MSRS to PERA.

CORRECTIONAL EMPLOYEES RETIREMENT PLAN

Section 20 and 81 establishes a separate fund for the Correctional Plan. Assets are to be allocated from the General Plan based on the June 30, 1987 actuarial valuation.

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, 1987 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, 1987, 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.

Legislative Auditor

November 20, 1987

John Asmussen, CPA Deputy Legislative Auditor

COMBINING BALANCE SHEET JUNE 30, 1987 (In Thousands)

	D	efined Benef	it Funds		Defined Contri- bution Fund	Agency Fund	Memoran	dum Only
	State Employees	State Patrol	Judges	General Fund Plans	Un- classified	Deferred Compensation	1987 Totals	1986 Totals
ASSETS								
Cash	\$ 137	\$ 65	\$ 36	\$ 0	\$ 58	\$ 33	\$ 329	\$ 1,121
Short term investments (at cost)	66,941	6,333	299	0	368	881	74,822	45,728
Accounts receivable:							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Member contributions	2,108	124	14	2	79	2,331	4,658	3,650
Employer contributions	2,065	276	0	0	117	0	2,458	2,302
Other	6	0	0	0	5	32	43	25
Accrued Interest	365	27	2	0	0	0	394	246
Due from other plans	163	0	0	0	0	0	163	248
Due from other funds	0	65	163	3,217	0	. 0	3,445	3,062
Fixed Investments (at cost)	242,447	17,859	999	0	0	0	261,305	243,361
Equity Investments (at cost)	627,834	46,871	2,938	0	0	0	677,643	595,437
Fixed Assets	66	0	0	0	0	0	66	75
Deposits with Insurance Companies	0	0	0	0	0	134,516	134,516	96,531
Restricted Assets	586,695	60,771	14,327	8,318	45,833	117,986	833,930	709,641
Total Assets	\$1,528,827	\$132,391	\$18,778	\$11,537	\$46,460	\$255,779	\$1,933,772	\$1,701,427
LIABILITIES								
Accounts Payable								
Annuitants	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4
Accrued expenses	300	1	0	0	0	6	307	274
Deferred Revenue	0	0	54	0	0	0	54	71
Due to MPRI Fund	1,501	0	0	97	0	0	1,598	1.005
Due to Other Funds	0	67	34	36	12	16	165	249
Due to General Fund	0	0	0	0	0	0	0	1,002
Security Purchases Payable	0	0	0	0	0	0	0	51
Total Liabilities	\$ 1,801	\$ 68	\$ 88	\$ 133	\$ 12	\$ 22	\$ 2,124	\$ 2,656
Iotai Liaonities	φ 1,001	Ψ 00	φ 00	φ 133	φ 12	Ψ 22	Φ 2,124	\$ 2,030
RESERVES	1							
Member reserve	\$ 271,658	\$ 16,856	\$ 3,829	\$ 3,181	\$46,448	\$255,757	\$ 597,729	\$ 510,338
Non MPRI Fund reserve	0	1,002	12,269	0	0	0	13,271	12,177
MPRI Fund reserve	586,695	60,771	14,327	8,318	0	0	670,111	568,450
State reserve	1,107,870	81,999	23,608	13,384	0	0	1,226,861	1,089,349
Total Required Reserves	\$1,966,223	\$160,628	\$54,033	\$24,883	\$45,448	\$255,757	\$2,507,972	\$2,180,314
Unfunded accrued liability (at cost)	(439,197)	(28,305)		(13,479)		0	(516,324)	(481,543)
Net Reserves	\$1,527,026	\$132,323	\$18,690	\$11,404	\$46,448	\$255,757	\$1,991,648	\$1,698,771
Total Liabilities and Reserves	\$1,528,827	\$132,391	\$18,778	\$11,537	\$46,460	\$255,779	\$1,993,772	\$1,701,427

COMBINING STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1987 (In Thousands)

					Defined Contribu- tion		
	D	efined Benef	it Funds		Fund	Memorand	lum Only
	State Employees	State Patrol	Judges	General Fund Plans	Un- classified	1987 Totals	1986 Totals
Operating Revenues							
Member contributions	\$ 40,625	\$ 2,164	\$ 563	\$ 461	\$ 0	\$ 43,813	\$ 41,398
Employer contributions	42,911	4,777	0	0	0	47,688	45,163
General Fund appropriations	1,242	64	2,405	1,978	0	5,689	4,613
Investment income	101,960	7,504	484	0	30	109,978	107,990
MPRI Fund income	70,114	7,283	1,530	979	0	79,906	59,659
Gain (Loss) on Investments	20,104	1,675	685	0	0	22,464	10,711
Realized and unrealized gains	0	0	0	0	5,085	5,085	4,841
Other income	3	0	62	0	0	65	177
Total Operating Revenues	\$ 276,959	\$ 23,467	\$ 5,729	\$ 3,418	\$ 5,115	\$ 314,688	\$ 274,552
Operating Expenses							
Annuity benefits	\$ 54,593	\$ 5,357	\$ 2,048	\$ 987	\$ 0	\$ 62,985	\$ 54,422
Disability benefits	2,464	57	85	0	0	2,606	2,370
Survivor benefits	0	18	593	147	0	758	661
Refunds	6,944	83	0	132	2	7,161	6,809
Interest on refunds	1,052	15	0	16	0	1,083	977
Administrative expenses	1,449	73	34	36	156	1,748	1,615
Investment fees	1,475	94	7	0	0	1,576	1,467
Total Operating Expenses	\$ 69,977	\$ 5,697	\$ 2,767	\$ 1,318	\$ 158	\$ 77,917	\$ 68,321
Other Changes in Reserves							
Member contributions	0	0	0	0	2,474	2,474	1,960
Employer contributions	0	0	0	(462)	,	2,709	2,541
Member withdrawals	0	0	0	0	(2,833)	(2,833)	(2,178)
Plan transfers	(350)	0	0	0	350	0	64
Total Other Changes	\$ (350)	\$ 0	\$ 0	\$ (462)		\$ 2,350	\$ 2,387
Net Reserve Additions	208,632	17,770	2,962	1,638	8,119	239,121	208,618
Reserve Balance at June 30, 1986	\$1,318,394	\$114,553	\$15,728	\$ 9,766	\$38,329	\$1,496,770	\$1,288,152
Reserve Balance at June 30, 1987	\$1,527,026	\$132,323	\$18,690	\$11,404	\$46,448	\$1,735,891	\$1,496,770
reserve Bulance at June 30, 1707	Ψ1,521,020	9132,323	Ψ10,070	Ψ11, 404	Ψ+0,++0	Ψ1,733,071	Ψ1, 770, 170

COMBINING STATEMENT OF CHANGES IN FINANCIAL POSITION YEAR ENDED JUNE 30, 1987 (In Thousands)

			it Funds		Fund	Memorano	dum Only
	State Employees	State Patrol	Judges	General Fund Plans	Un- classified	1987 Totals	1986 Totals
Resources provided by: Net reserve additions Items not requiring resources currently:	\$208,632	\$17,770	\$2,962	\$1,638	\$8,119	\$239,121	\$208,490
Depreciation Total resources provided	\$208,654	\$17,770	<u>0</u> \$2,962	\$1,638	\$8,119	\$239,143	23 \$208,513
Resources used by: Equipment purchased Total resources used Net Increase in Working Capital	(13) \$ (13) \$208,641	0 \$ 0 \$17,770	0 \$ 0 \$2,962	0 \$ 0 \$1,638	0 \$ 0 \$8,119	(13) \$ (13) \$239,130	(3) \$ (3) \$208,510
Elements of Net Increase (Decrease) in Working Capital Current Assets: Cash Accounts receivable Accrued interest and dividends	\$ 123 179 155	\$ 65 37 (1)	\$ 13 (25) (6)	\$(1,033) (1) 0	\$ 5 35 0	\$ (827) 225 148	\$ (176) (12) (172)
Due from other funds Due from other plans Short term investments Fixed income investments Equity investments Restricted investments	2 28,506 16,518 75,184 89,350	65 0 1,298 1,532 6,766 7,236	163 0 (1,053) (108) 256 3,707	246 0 0 0 0 0 1,368	0 (86) (12) 0 0 8,174	474 (84) 28,739 17,942 82,206 109,835	(723) 44 (23,811) 44,542 93,459 92,439
Liabilities Accrued expenses Payable to annuitants Deferred revenue Due to Other Plans Due to MPRIF Due to State Working Capital Change	(31) 4 0 86 (1,435) 0 \$208,641	$ \begin{array}{c} (1) \\ 0 \\ (8) \\ 781 \\ \hline 0 \\ \hline $17,770 \end{array} $	0 0 17 (2) 0 0 \$2,962	0 0 0 (5) 61 1,002 \$1,638	0 0 0 3 0 0 \$8,119	(32) 4 17 74 (593) 1,002 \$239,130	(5) 0 (34) 2,666 293 \$208,510

STATE EMPLOYEES RETIREMENT FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1987 (In Thousands)

	To	otal	Member Reserve	MPRI Fund Reserve	State Reserve
Operating Revenues:					
Member Contributions	\$	40,625	\$ 40,187	\$ 0	\$ 438
Employer Contributions		42,911	0	0	42,911
General Fund appropriations		1,242	0	0	1,242
Investment Income	1	01,960	0	0	101,960
MPRI Fund Income		70,114	0	70,114	0
Gain (Loss) on Investments		20,104	0	0	20,104
Other income		3	0	0	3
Total Operating Revenues	\$ 2	76,959	\$ 40,187	\$ 70,114	\$166,658
Operating Expenses:					
Annuity Benefits		54,593	0	53,351	1,242
Disability Benefits		2,464	0	2,464	0
Refunds		6,944	6,944	0	0
Interest on Refunds		1,052	0	0	1,052
Administrative Expenses		1,449	0	0	1,449
Investment Fees		1,475	0	0	1,475
Total Operating Expenses	\$	67,977	\$ 6,944	\$ 55,815	\$ 5,218
Other Changes in Reserves:					
Actuarial Transfers		0	0	1,496	(1,496)
Inactive Employee Transfers		0	(51)	0	51
New Annuity Transfers		0	(9,290)	73,555	(64, 265)
Plan Transfers		(350)	(249)	0	(101)
Total Other Changes	\$	(350)	\$ (9,590)	\$ 75,051	\$ (65,811)
Net Reserve Additions		208,632	\$ 23,653	\$ 89,350	\$ 95,629
Balance June 30, 1986	\$1,3	318,394	\$248,006	\$497,345	\$573,043
Balance June 30, 1987		527,026	\$271,659	\$586,695	\$668,672

STATE PATROL RETIREMENT FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1987 (In Thousands)

	Total	Member Reserve	Non MPRI Fund Reserve	MPRI Fund Reserve	State Reserve
Operating Revenues:					
Member Contributions	\$ 2,164	\$ 2,156	\$ 0	\$ 0	\$ 8
Employer Contributions	4,777	0	0	0	4,777
General Fund Appropriations	64	0	0	0	64
Investment Income	7,504	0	0	0	7,504
MPRI Fund Income	7,283	0	0	7,283	0
Gain (Loss) on Investments	1,675	0	0	0	1,675
Total Operating Revenues	\$ 23,467	\$ 2,156	\$ 0	\$ 7,283	\$14,028
Operating Expenses:					
Annuity Benefits	5,357	0	0	5,100	257
Disability Benefits	57	0	57	0	0
Survivor Benefits	17	0	17	0	0
Refunds	83	83	0	0	. 0
Interest on Refunds	15	0	0	0	15
Administrative Expenses	74	0	0	0	74
Investment Fees	94	0	0	0	94
Total Operating Expenses	\$ 5,697	\$ 83	\$ 74	\$ 5,100	\$ 440
Other Changes in Reserves:					
Actuarial Adjustments	0	0	346	(65)	(281)
New Annuity Transfers	0	(578)	<u>(161)</u>	5,117	(4,378)
Total Other Changes	\$ 0	\$ (578)	\$ 185	\$ 5,052	\$ (4,659)
Net Reserve Additions	\$ 17,770	\$ 1,495	\$ 111	\$ 7,235	\$ 8,929
Balance June 30, 1986	\$114,553	\$15,361	\$ 891	\$53,535	\$44,766
Balance June 30, 1987	\$132,323	\$16,856	\$1,002	\$60,770	\$53,695

JUDGES RETIREMENT FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1987 (In Thousands)

•	Total	Member Reserve	Non MPRI Fund Reserve	MPRI Fund Reserve	State Reserve
Operating Revenues:					ile
Member Contributions	\$ 563	\$ 563	\$ 0	\$ 0	\$ M 0
General Fund Appropriations	2,405	0	0	0	2,405
Investment Income	484	0	0	- 0	484
MPRI Fund Income	1,530	0	0	1,530	0
Gain (Loss) on Investments	685	0	0	0	685
Other Income	62	. 0	0	0	62
Total Operating Revenues	\$ 5,729	\$ 563	\$ 0	\$ 1,530	\$ 3,636
Operating Expenses:					
Annuity Benefits	2,047	0	662	1,385	0
Disability Benefits	85	0	0	85	. 0
Survivor Benefits	594	0	594	0	0
Administrative Expenses	34	0	0	0	34
Investment Fees	7	0	0	0	7
Total Operating Expenses	\$ 2,767	\$ 0	\$ 1,256	\$ 1,470	\$ 41
Other Changes in Reserves:					
Actuarial Adjustments	0	0	1,671	(163)	(1,508)
Inactive Transfers	0	13	0	0	(13)
New Annuity Transfers	0	(418)	689	3,810	(4,081)
Total Other Changes	\$ 0	\$ (405)	\$ 2,360	\$ 3,647	\$ (5,602)
Net Reserve Additions	\$ 2,962	\$ 158	\$ 1,104	\$ 3,707	\$ (2,007)
Balance June 30, 1986	\$15,728	\$3,670	\$11,165	\$10,620	\$(9,727)
Balance June 30, 1987	\$18,690	\$3,828	\$12,269	\$14,327	\$(11,734)

LEGISLATIVE RETIREMENT FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1987 (In Thousands)

	Total	Member Reserve	MPRI Fund Reserve	State Reserve
Operating Revenues:				
Member Contributions	\$ 430	\$ 430	\$ 0	\$ 0
General Fund Appropriations	1,846	0	0	1,846
MPRI Fund Income	979	0	979	0
Total Revenues	\$ 3,255	\$ 430	\$ 979	\$ 1,846
Operating Expenses:				
Annuity Benefits	921	0	921	0
Survivor Benefits	116	0	0	116
Member Withdrawals	112	112	0	0
Refunds Upon Death	4	4	0	0
Interest on Refunds	15	0	0	15
Administrative Expenses	34	0	0	34
Total Expenses	\$ 1,202	\$ 116	\$ 921	\$ 165
Other Changes in Reserves:				
Actuarial Transfers	0	0	97	(97)
New Annuity Transfers	0	(119)	1,213	(1,094)
Transfers to General Fund	(431)	0	0	(431)
Total Other Changes	\$ (431)	\$ (119)	\$1,310	\$(1,622)
Net Reserve Additions	\$ 1,622	\$ 195	\$1,368	\$ 59
Balance June 30, 1986	\$ 9,535	\$2,742	\$6,950	\$ (157)
Balance June 30, 1987	\$11,157	\$2,937	\$8,318	<u>\$ (98)</u>

ELECTIVE STATE OFFICERS RETIREMENT FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RESERVES YEAR ENDED JUNE 30, 1987 (In Thousands)

	_ Total _	Member Reserve	State Reserve
Operating Revenues:			
Member Contributions	\$ 32	\$ 32	\$ 0
General Fund Appropriations	132	0	132
Total Revenues	_\$164	\$ 32	\$132
Operating Expenses:			
Annuity Benefits	66	0	66
Disability Benefits	31	0	31
Refunds	16	16	0
Interest on Refunds	1	0	1
Administrative Expenses	2	0	2
Total Expenses	\$116	\$ 16	\$100
Other Changes in Reserves:			
Transfers to General Fund	(32)	0	(32)
Total Other Changes	\$ (32)	\$ 0	\$ (32)
Net Reserve Additions	\$ 16	\$ 16	\$ 0
Balance June 30, 1986	\$230	229	\$ 1
Balance June 30, 1987	\$246	\$245	\$ 1

DEFERRED COMPENSATION FUND STATEMENT OF CHANGES IN ASSETS, LIABILITIES AND RESERVES YEAR ENDED JUNE 30, 1987 (In Thousands)

	Balance July 1, 1986	Increases	Decreases	Balance June 30, 1987
ASSETS				
Cash	\$ 0	\$ 94,373	\$ 94,340	\$ 33
Short term investments (at cost)	524	69,356	68,999	881
Accounts Receivable:				
Member Contributions	1,587	2,331	1,587	2,331
Other	0	32	0	32
Deposits with Insurance Companies	96,531	47,797	9,812	134,516
Restricted Assets	103,533	31,261	16,808	117,986
Total Assets	\$202,175	\$245,150	\$191,546	\$255,779
LIABILITIES AND RESERVES				
Accounts Payable — Accrued Expenses	\$ 5	\$ 6	\$ 5	\$ 6
Due to Other Funds	26	16	26	16
Security Purchases Payable	51	0	51	0
Member Reserves	202,093	82,280	28,616	255,757
Total Liabilities and Reserves	\$202,175	\$ 82,302	\$ 28,698	\$255,779

NOTES TO THE FINANCIAL STATEMENTS

1. DESCRIPTION OF THE SYSTEM

The Minnesota State Retirement System is composed of four defined benefit funds, one defined contribution fund and one agency fund. These funds are administered in accordance with related statutes, administrative rules and Internal Revenue Service regulations.

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 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. The Member Reserve represents employee contributions less amounts refunded or transferred to retirement reserves.

(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 funds necessary for the administration of the Judges Retirement Fund are appropriated from the State General Fund as needed.

(c) MPRI Fund and Non-MPRI Fund Reserves

These 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 Reserve

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

(e) Cash Deposits

All cash received is deposited daily into a state depository account. In total, this account was only partially collateralized or insured at June 30, 1987. However, the deposit balance attributable to MSRS funds were not a significant portion of this account.

(f) Investments

Short term and equity investments are reported at cost. Fixed income securities are reported at amortized cost. Market value at June 30, 1987 was \$1.20 billion. At June 30, 1986 the market value of all investments was \$1.05 billion. 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) Risk Categories

Except for certain short-term investments, all MSRS investments held at June 30, 1987 were insured, registered, or held by the state or its agent in the state's name. Of a total uninsured amount, approximately \$200 million, held by the state in the short-term investment pools, \$42.6 million was attributable to MSRS funds.

(h) Deposits with Insurance Companies

Deposits with Insurance Companies is the Deferred Compensation Fund combined participant account balances held by contracting insurance companies.

(i) Restricted Assets

Restricted assets are the MSRS funds' participation in various investment trust funds. For the defined benefit funds, these amounts are invested in the MPRI Fund. For the defined contribution and agency funds, these amounts are invested in the MSI Fund.

(j) 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.

(k) Basis of Accounting

The basic financial statements were prepared using the accrual basis of accounting in accordance with the National Council of Governmental Accounting, Statement No. 1, "Governmental Accounting and Financial Reporting Principles."

3. Investments (in thousands):

	Total	State Employees Fund	State Patrol Fund	Judges Fund
At Cost				
Short Term	\$ 73,573	\$ 66,941	\$ 6,333	\$ 299
Debt Security	261,305	242,447	17,859	999
Pooled Equity	677,643	627,834	46,871	2,938
Total	\$1,012,521	\$ 937,222	\$71,063	\$4,236
At Market				
Short Term	\$ 73,573	\$ 66,941	\$ 6,333	\$ 299
Debt Security	253,698	235,455	17,302	941
Pooled Equity	874,574	811,661	59,648	3,265
Total	\$1,201,845	\$1,114,057	\$83,283	\$4,505

4. Capital Equipment

Cost of Equipment and Fixtures	\$221,302
Less: Accumulated depreciation	155,638
Depreciated Cost	\$ 65,664

NOTES TO FINANCIAL STATEMENTS (Continued)

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 1987 plus the 1986 income used to pay the January 1987 benefit increase. Income in excess of 5% was used to increase annuity benefits by 8.054% effective January 1, 1988. Benefits were increased 9.792% effective January 1, 1987.

6. Actuarial Valuation

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

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

Unfunded Liability (In Thousands)

	Cost Basis		Actuarial Basis	
	1987	1986	1987	1986
State Employees Fund	\$439,197	\$420,503	\$380,252	\$345,853
State Patrol Fund	28,305	33,970	24,231	30,890
Judges Fund	35,343	35,373	35,253	35,378

7. Leases

The office facilities and twenty parking spaces are leased by an agreement through September 30, 1987, requiring an annual rent payment of \$74,782.

8. Deferred Compensation Fund

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

9.

SCHEDULE OF ADMINISTRATIVE EXPENSES YEAR ENDED JUNE 30, 1987

	1987	1986
Personal Services		
Staff salaries	\$1,057,235	\$1,048,925
Social Security	73,083	70,711
Retirement	41,919	41,095
Insurance	66,144	68,528
Unemployment Compensation	299	694
Total Personal Services	\$1,238,680	\$1,229,953
Professional Services		
Actuarial	\$ 52,443	\$ 51,730
Data processing	228,518	179,602
Audit	17,445	15,119
Disability examinations	8,779	9,025
Legal counsel	5,884	9,426
Other professional services	103,186	76,526
Total Professional Services	\$ 416,255	\$ 341,428
Communication	w man bank	
Printing	\$ 27,586	\$ 48,367
Telephone	7,895	9,657
Postage	78,436	72,951
Travel	3,057	13,648
Subscriptions and memberships	2,280	1,431
Total Communication	\$ 119,254	\$ 146,054
Rentals	Φ 71.024	¢ (7,070
Office Space	\$ 71,834	\$ 67,972
Total Rentals	\$ 71,834	\$ 67,972
Miscellaneous		
Utilities	\$ 11,026	\$ 12,513
Supplies	16,837	20,345
Repairs and maintenance agreements	16,869	16,538
Department head and board member expense	11,140	1,770
Depreciation Settlements	21,666	22,737 10,000
Other purchased services	16,918	16,061
Total Miscellaneous	94,456	99,964
Total Operating Expenses	<u>\$1,940,479</u>	\$1,885,371
Expenses distributed by Fund:		
State General Retirement	\$1,449,369	\$1,356,916
State Patrol Fund	73,656	59,415
Judges Retirement Fund	34,117	31,835
Unclassified Employees	155,728	136,228
Deferred Compensation	192,258	270,339
Legislators Elected Officials	33,820	29,088
Elected Officials	1,531	1,550
Total Distribution	<u>\$1,940,479</u>	\$1,885,371

MINNESOTA STATE RETIREMENT SYSTEM

SECTION III

ACTUARIAL SECTION

ACTUARIES AND CONSULTANTS

EMPLOYEE BENEFITS
COMPENSATION PROGRAMS
EMPLOYEE COMMUNICATIONS
ADMINISTRATIVE SYSTEMS
RISK MANAGEMENT
INTERNATIONAL SERVICES

SUITE 1525
8400 NORMANDALE LAKE BOULEVARD
MINNEAPOLIS, MINNESOTA 55437
(612) 921-8700

OFFICES IN PRINCIPAL CITIES

AROUND THE WORLD

February 9, 1988

PERSONAL AND CONFIDENTIAL

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

Members of the Board:

We have performed an actuarial valuation as of July 1, 1987 for the following four funds:

- State Employees Retirement Fund (General)
- . State Employees Retirement Fund (Correctional)
- . State Patrol Retirement Fund
- Judges Retirement Fund

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

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

The pension laws were amended to reduce vesting eligibility from 10 years to 5 years. This change applies to all benefits granted from the General, Correctional and State Patrol Funds. Benefits for the Judges were not changed. Coincident with this eligibility change, a different calculation technique was adopted. This new technique assumes that the terminating vested member takes the larger of contributions with interest or a deferred annuity. The impact of these two changes are as follows:

Board of Directors February 9, 1988 Page 2

	Actuarial Acc	Actuarial Accrued Liability	
	Benefit	Technique	
	Change	Change	
General	\$ 4,923,000	\$84,993,000	
Correctional	305,000	5,785,000	
State Patrol	-148,000	0	

Other administrative amendments to the pension laws were made during the year.

The valuation indicates that the present assets and expected future contributions required by Statute with investment earnings thereon are sufficient to provide the benefits to be paid in the future for the four Funds. However, the funding for the Judges Fund does not require employer Statutory contributions as do the General, Correctional and State Patrol Funds. Instead, the Judges Fund requires employer contributions at the time of retirement.

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

General	80%
Correctional	94%
State Patrol	85%
Judges	35%

The low percentage for Judges reflects the deferral of employer contributions to the time of retirement.

We certify that to the best of our knowledge and belief, this actuarial valuation was performed in accordance with the requirements of Section 356.215 Minnesota Statutes and the requirements of the Standards for Actuarial Work in effect on August 26, 1987. We certify that the valuation was performed using the entry age normal cost method with normal costs expressed as a level percentage of earnings. The financial information and employee data used in the actuarial valuation are those submitted to us by the Minnesota State Retirement System.

Very truly yours,

Robert E. Perkins

Robert & Parking

Fellow, Society of Actuaries

REP/sh



SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

	State Employees Retirement Fund	State Patrol Retirement Fund	Judges Retirement Fund
1. Mortality:	 1971 Group Annuity Mortality Table with ages set back eight years for females. Adopted 1980. 	1. Same	1. Same
2. Post-Disablement Mortality:	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 Adopted 1974.	9. a. Primary amount: \$789 per month, increasing with salary scale. Adopted 1974. b. Level contribution rate: 7.15% for 1987, 7.51% for 1988-89 and 7.65% thereafter.
			c. Covered annual wages: \$43,800 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. Effective July 1, 1987, all employees withdrawing after becoming eligible for a deferred benefit were assumed to take the larger of a refund or a deferred benefit.	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. Effective July 1, 1987, all employees withdrawing after becoming eligible for a deferred benefit were assumed to take the larger of a refund or a deferred benefit.	11. N/A

REQUIRED RESERVES July 1, 1987 (In Thousands)

	STATE EMPLOYEES FUND	STATE PATROL FUND	JUDGES FUND
Active Members			
Retirement Annuities	\$1,010,498	\$ 77,008	\$23,116
Disability Benefits	68,260	5,966	1,151
Survivors Benefits	84,913	2,075	2,221
Deferred Retirements	219,783	5,757	0
Refunds	(25,209)	(180)	100
Total	\$1,358,245	\$ 90,626	\$26,588
Deferred Retirements with Future Augmentation	\$ 18,618	\$ 1,499	\$ 846
Former Members Without Vested Rights	2,665	46	5
Annuitants in MPRIF	586,695	60,771	14,327
Annuitants Not in MPRIF	0	7,686	12,268
Total Required Reserves	\$1,966,223	\$160,628	\$54,034

ACTUAL COMPARED TO RECOMMENDED RATES

	Actual Contribution Rates			Recommended
	Employee	Employer	Total	Rate
State Employees Fund				
General Plan	3.73%	3.9%	7.63%	7.30%
Correctional Plan	4.90%	8.7%	13.60%	10.08%
Military Affairs Plan	5.33%	5.5%	10.83%	7.21%
State Patrol Fund	8.50%	18.9%	27.40%	23.39%
Judges Fund	3.76% (1)	-0- (2)	3.76%	25.96%

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

Portion of

ACCRUED BENEFIT FUNDING RATIO (In Thousands)

The accrued benefit funding ratio is a measure of current funding status of benefits earned to date.

STATE EMPLOYEES RETIREMENT FUND

Prese	ent Value of Accrued I	Benefits		Benefits Earned
Active, Deferred Inactive	Retirees and Beneficiaries	Total	Reported Assets	To Date Covered By Reported Assets
\$ 314,299	\$151,519	\$ 465,818	\$ 408,756	87.8%
384,816	179,315	564,131	482,466	85.5
448,336	205,333	653,668	569,166	87.1
508,877	230,625	739,502	675,227	91.3
580,683	282,185	862,868	783,650	90.8
660,127	313,795	973,922	902,506	92.7
712,480	356,599	1,069,079	996,003	93.2
810,691	424,798	1,235,490	1,158,383	93.8
941,789	497,345	1,439,134	1,370,049	95.2
1,064,298	586,695	1,650,993	1,585,971	96.1
	Active, Deferred Inactive \$ 314,299 384,816 448,336 508,877 580,683 660,127 712,480 810,691 941,789	Active, Deferred InactiveRetirees and Beneficiaries\$ 314,299\$151,519384,816179,315448,336205,333508,877230,625580,683282,185660,127313,795712,480356,599810,691424,798941,789497,345	Deferred Inactive and Beneficiaries Total \$ 314,299 \$151,519 \$ 465,818 384,816 179,315 564,131 448,336 205,333 653,668 508,877 230,625 739,502 580,683 282,185 862,868 660,127 313,795 973,922 712,480 356,599 1,069,079 810,691 424,798 1,235,490 941,789 497,345 1,439,134	Active, Deferred Inactive Retirees and Beneficiaries Total Assets \$ 314,299 \$151,519 \$ 465,818 \$ 408,756 384,816 179,315 564,131 482,466 448,336 205,333 653,668 569,166 508,877 230,625 739,502 675,227 580,683 282,185 862,868 783,650 660,127 313,795 973,922 902,506 712,480 356,599 1,069,079 996,003 810,691 424,798 1,235,490 1,158,383 941,789 497,345 1,439,134 1,370,049

STATE PATROL RETIREMENT FUND

	Present Value of Accrued Benefits				Portion Benefits Ea			
Valuation Date	D	Active, eferred nactive		etirees and eficiaries	Total	eported Assets	To Date Co By Repor Assets	rted
6-30-80	\$	61,489	\$	17,210	\$ 78,699	\$ 49,620	63.	1%
6-30-81		71,272		20,256	91,528	58,720	64.2	2
6-30-82		76,463		25,504	101,967	68,183	66.9	9
6-30-83		84,049		36,112	120,161	78,775	65.0	6
6-30-84		78,100		41,150	119,250	86,785	72.	8
6-30-85		83,911		50,657	134,568	100,486	74.	7
6-30-86		86,827		61,006	147,833	118,175	79.9	9
6-30-87		84,650		68,457	153,107	136,397	89.	1

	Prese	ent Value of Accrued E		Portion of Benefits Earned	
Valuation Date	Active, Deferred Inactive	Retirees and Beneficiaries	Total	Reported Assets	To Date Covered By Reported Assets
6-30-78	\$ 13,422	\$ 3,845	\$ 17,267	\$ 4,933	28.6%
6-30-79	17,665	10,649	28,314	6,845	24.2(1)
6-30-80	20,699	11,925	32,624	7,641	23.4
6-30-81	24,231	13,156	37,387	8,514	22.8
6-30-82	24,868	14,817	39,685	8,740	22.0
6-30-83	27,812	16,973	44,785	11,049	24.7
6-30-84	29,198	18,181	47,380	11,792	24.9
6-30-85	32,407	20,218	52,625	13,784	26.2
6-30-86	35,754	21,786	57,540	15,983	27.8
6-30-87	27,082	26,595	53,677	18,781	35.0

⁽¹⁾ This is the first valuation for all of the various Judges plans which were consolidated into one fund.

SOLVENCY TEST — FUNDING RATIO (In Thousands)

One of the tests of financial solvency is to determine what portion of the accrued liabilities are covered by current assets. 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).

STATE EMPLOYEES RETIREMENT FUND

STATE FIA	I LOI LES KEI							
	Aggregat	te Accrued Liabili	ities For					
			(3)		P	ortion o	of	
			Active			Accrue		
	(1)	(2)	Members		L	iabiliti	es	
	Active	Retirees	(Employer			vered	•	Funding
Valuation	Member	and	Financed	Reported	Repo	orted A	ssets	Ratio
Date	Contributions	Beneficiaries	Portion)	Assets	_(1)_	<u>(2)</u>	<u>(3)</u>	(1) + (2) + (3)
6-30-78	\$100,279	\$151,519	\$ 343,729	\$ 408,756	100	100	45.7	68.6
6-30-79	121,816	179,315	365,970	482,466	100	100	49.6	72.3
6-30-80	136,370	205,333	425,544	569,166	100	100	53.5	74.2
6-30-81	153,318	230,625	477,716	675,227	100	100	61.0	78.4
6-30-82	165,800	282,185	590,922	783,650	100	100	56.8	75.4
6-30-83	192,707	313,795	660,622	902,506	100	100	59.9	77.3
6-30-84	205,711	356,599	749,240	966,003	100	100	57.9	75.9
6-30-85	225,879	424,798	868,262	1,158,383	100	100	58.5	76.3
6-30-86	248,006	497,345	993,546	1,370,049	100	100	62.9	78.8
6-30-87	271,658	586,695	1,107,870	1,585,971	100	100	69.9	80.7

STATE PATROL RETIREMENT FUND

	Aggrega	<u>te Accrued Liabili</u>	ties for			*		
Valuation	(1) Active Member	(2) Retirees and	(3) Active Members (Employer Financed	Reported	L Co Repo	ortion of Accrueous interest in the Accureous interest in the Accureou	d es By ssets	Funding Ratio
Date	Contributions	Beneficiaries	Portion)	Assets	_(1)_	<u>(2)</u>	_(3)_	(1) + (2) + (3)
6-30-78	\$ 7,747	\$ 12,619	\$ 39,278	\$ 36,348	100	100	40.7	60.9
6-30-79	8,505	14,229	46,064	41,713	100	100	42.1	61.5
6-30-80	9,433	17,210	59,188	49,620	100	100	38.8	57.8
6-30-81	10,252	20,256	70,010	58,720	100	100	40.3	58.4
6-30-82	10,955	25,504	74,997	68,183	100	100	42.3	61.2
6-30-83	12,172	31,992	88,010	78,775	100	100	39.3	59.6
6-30-84	12,762	41,150	65,770	86,785	100	100	50.0	72.5
6-30-85	14,213	50,657	69,569	100,486	100	100	51.2	74.7
6-30-86	15,361	61,006	72,157	118,175	100	100	57.9	79.6
6-30-87	16,856	68,457	75,315	136,397	100	100	68.8	84.9

	Aggregat	ities For						
		(2)	(3) Active		I	ortion o		
	(1) Active	(2) Retirees	Members (Employer			iabilitie overed I		Funding
Valuation	Member	and	Financed	Reported		orted As	sets	Ratio
<u>Date</u>	Contributions	Beneficiaries	Portion)	Assets	(1)	(2)	(3)	(1) + (2) + (3)
6-30-78	\$ 1,264	\$ 3,845	\$ 15,276	\$ 4,933	100	95.4	0	24.2
6-30-79	1,554	10,649	16,976	6,845	100	49.7	0	23.5(1)
6-30-80	1,868	11,925	17,574	7,641	100	48.4	0	24.4
6-30-81	2,178	13,156	17,282	8,514	100	48.2	0	26.1
6-30-82	2,535	14,817	17,865	8,740	100	41.9	0	24.8
6-30-83	2,858	16,973	20,725	11,049	100	48.3	0	27.2
6-30-84	3,063	18,181	21,134	11,792	100	52.0	0	27.8
6-30-85	3,310	20,218	23,315	13,784	100	51.8	0	29.4
6-30-86	3,670	21,786	25,645	15,983	100	56.5	0	31.3
6-30-87	3,829	26,595	23,610	18,781	100	56.2	0	34.8

⁽¹⁾ This is the first valuation for all of the various Judges plans which were consolidated into one fund.

UNFUNDED ACCRUED LIABILITY (UAL) (In Thousands)

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.

STATE EMPLOYEES RETIREMENT FUND

Valuation Date	Aggregate Accrued Liabilities	Reported Assets	UAL	Active Member Payroll	UAL As A % of Active Member Payroll
6-30-78	\$ 595,527	\$ 408,756	\$186,771	\$ 569,301	32.8
6-30-79	667,101	482,466	184,635	637,593	29.0
6-30-80	767,247	569,166	198,081	703,470	28.2
6-30-81	861,658	675,227	186,431	796,297	23.4
6-30-82	1,038,907	783,650	255,258	830,395	30.7
6-30-83	1,167,124	902,506	264,618	893,430	29.6
6-30-84	1,311,550	996,003	315,547	949,951	33.2
6-30-85	1,518,939	1,158,383	360,556	1,079,715	33.4
6-30-86	1,738,897	1,370,049	368,848	1,169,240	31.5
6-30-87	1,966,223	1,585,971	380,252	1,243,198	30.6

STATE PATROL RETIREMENT FUND

Valuation Date	Aggregate Accrued Liabilities	Reported Assets	UAL	Active Member Payroll	UAL As A % of Active Member Payroll
6-30-78	\$ 59,643	\$ 36,348	\$ 23,295	\$ 13,772	169.2
6-30-79	67,798	41,713	26,085	16,429	158.8
6-30-80	85,830	49,620	36,210	18,004	201.1
6-30-81	100,518	58,720	41,798	19,967	209.3
6-30-82	111,456	68,183	43,272	20,923	206.8
6-30-83	132,175	78,775	53,400	23,067	231.5
6-30-84	119,682	86,785	32,898	23,016	142.9
6-30-85	134,440	100,486	33,953	25,876	131.2
6-30-86	148,524	118,175	30,349	27,474	110.5
6-30-87	160,628	136,397	24.231	28.583	84.8

	Aggregate			Active	UAL As A
Valuation	Accrued	Reported		Member	% of Active
Date	Liabilities	Assets	UAL	Payroll	Member Payroll
6-30-78	\$ 20,385	\$ 4,933	\$ 15,451	\$ 9,090	170.0
6-30-79	29,179	6,845	22,334	9,606	232.5(2)
6-30-80	31,367	7,641	23,726	10,278	230.8
6-30-81	32,615	8,514	24,101	10,619	227.0
6-30-82	35,217	8,740	26,477	10,616	249.4
6-30-83	40,556	11,049	29,507	12,685	232.6
6-30-84	42,378	11,792	30,586	14,083	217.2
6-30-85	46,843	13,784	33,058	15,146	218.3
6-30-86	51,102	15,983	35,119	16,616	211.4
6-30-87	54,034	18,781	35,253	15,999	220.3

⁽¹⁾ This is the first valuation for all of the various Judges plans which were consolidated into one fund.

Minnesota State Retirement System

SECTION IV

STATISTICAL SECTION

INVESTMENT RESULTS COMPARED TO SELECTED PERFORMANCE STANDARDS

		FIS	ANNUALIZED				
	1983	1984	1985	1986	1987	3 YR.	5 YR.
Rate of Return — Time Weighted							
Basic Retirement Funds							
Including alternative assets ¹	40.5	(5.5)	26.8	26.2	14.5	22.4	19.5
Excluding alternative assets	42.1	(6.3)	28.4	29.0	15.8	24.3	20.6
Comparison Standards							
Median Balance Fund ²	41.3	(2.1)	26.3	25.1	13.1	22.8	20.6
Stock/Bond Composite ³	50.3	(4.7)	29.8	29.2	15.4	24.6	22.6
Inflation	2.6	4.2	3.7	1.7	3.7	3.1	3.2

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

	1983	1984	1985	1986	1987
STATE EMPLOYEES RETIREMENT FUND					
Debt Security	30.4%	28.4%	24.3%	23.3%	21.1%
Short Term	5.1%	6.7%	7.8%	4.0%	6.0%
Pooled Equity	64.5%	64.9%	67.9%	72.7%	72.9%
Total Portfolio (%)	100.0%	100.0%	100.0%	100.0%	100.0%
Total Portfolio (Millions \$)	\$620.5	\$653.5	\$774.6	\$973.0	\$1,114.1
STATE PATROL RETIREMENT FUND					
Debt. Security	25.7%	27.1%	24.5%	22.6%	20.7%
Short Term	11.7%	5.7%	11.9%	7.0%	7.6%
Pooled Equity	62.6%	67.2%	63.6%	70.4%	71.7%
Total Portfolio (%)	100.0%	100.0%	100.0%	100.0%	100.0%
Total Portfolio (Millions \$)	\$45.9	\$47.3	\$58.4	\$72.4	\$83.3
JUDGES RETIREMENT FUND					
Debt. Security	23.2%	24.8%	23.2%	18.7%	20.9%
Short Term	16.1%	7.7%	16.3%	22.9%	5.4%
Pooled Equity	60.7%	67.5%	60.5%	58.4%	73.7%
Total Portfolio (%)	100.0%	100.0%	100.0%	100.0%	100.0%
Total Portfolio (Millions \$)	\$3.4	\$4.3	\$4.3	\$5.9	\$4.5

SCHEDULE OF REVENUE BY SOURCE (In Thousands)

STATE EMPLOYEES RETIREMENT FUND

Year Ending	Employee Contributions	Employer Contributions	Investment Income	Miscellaneous	Total
6-30-78	\$20,450	\$31,426	\$22,312	\$ 1	\$ 74,190
6-30-79	23,229	36,967	29,339	21,246	110,781
6-30-80	25,442	40,651	40,424	2,746	109,263
6-30-81	28,317	45,027	65,934	220	139,498
6-30-82	28,388	45,335	71,972	1,823	147,518
6-30-83	37,306	29,137	91,100	1,952	159,496
6-30-84	33,343	50,640	83,322	1,355	168,659
6-30-85	35,220	37,625	108,531	1,331	182,707
6-30-86	38,356	40,565	161,728	1,299	241,948
6-30-87	40,625	42,911	192,178	1,245	276,959

STATE PATROL RETIREMENT FUND

Year	Employee	Employer	Investment		
Ending	Contributions	Contributions	Income	Miscellaneous	Total
6-30-78	\$1,204	\$3,307	\$ 2,046	\$	\$ 6,556
6-30-79	1,067	3,173	2,615		6,855
6-30-80	1,203	3,608	3,752	118	8,682
6-30-81	1,283	3,842	5,795	4	10,923
6-30-82	1,341	4,009	6,260	63	11,673
6-30-83	1,961	3,909	7,585	70	13,525
6-30-84	1,877	4,638	6,776	59	13,350
6-30-85	1,964	4,362	9,145	63	15,533
6-30-86	2,062	4,598	13,686	62	20,409
6-30-87	2,164	4,778	16,462	63	23,467

Year Ending	Employee Contributions			Miscellaneous	Total	
6-30-78	\$ 424	\$ 1,319	\$ 319	\$	\$ 2,062	
6-30-79	403	2,041	450	0	2,894	
6-30-80	416	1,181	496	. 7	2,101	
6-30-81	490	1,164	742		2,397	
6-30-82	469	525	858	*	1,852	
6-30-83	527	2,624	976		4,127	
6-30-84	466	1,671	951	86	3,173	
6-30-85	501	2,226	1,219	84	4,029	
6-30-86	562	2,173	1,661	81	4,477	
6-30-87	563	2,405	2,699	62	5,729	

REVENUE RATIOS BY SOURCE

STATE EMPLOYEES RETIREMENT FUND

Year	Employee	Employer	Investment		TD 4 3
Ending	Contributions	Contributions	Income	Miscellaneous	Total
6-30-78	27.6%	42.4%	30.1%		100%
6-30-79	21.0	33.4	26.5	19.2%	100
6-30-80	23.3	37.2	37.0	2.5	100
6-30-81	20.3	32.3	47.3	0.2	100
6-30-82	19.2	30.7	48.8	1.2	100
6-30-83	23.4	18.3	57.1	1.2	100
6-30-84	19.8	30.0	49.4	0.8	100
6-30-85	19.3	20.6	59.4	0.7	100
6-30-86	15.9	16.8	66.8	0.5	100
6-30-87	14.7	15.5	69.4	0.4	100

STATE PATROL RETIREMENT FUND

Year Ending	Employee Contributions	Employer Contributions	Investment Income	Miscellaneous	Total
6-30-78	18.4%	50.4%	31.2%		100%
6-30-79	15.6	46.3	38.1		100
6-30-80	13.9	41.6	43.2	1.4%	100
6-30-81	11.7	35.2	53.1		100
6-30-82	11.5	34.3	53.6	0.5	100
6-30-83	14.5	28.9	56.1	0.5	100
6-30-84	14.1	34.7	50.8	0.4	100
6-30-85	12.6	28.1	58.9	0.4	100
6-30-86	10.1	22.5	67.0	0.4	100
6-30-87	9.2	20.4	70.1	0.3	100

Year Ending	Employee Contributions	Employer Contributions	Investment Income	Miscellaneous	Total
6-30-78	20.5%	64.0%	15.5%		100%
6-30-79	13.9	70.5	15.5		100
6-30-80	19.8	56.2	23.6	0.3%	100
6-30-81	20.4	48.6	31.0		100
6-30-82	25.3	28.4	46.3		100
6-30-83	12.8	63.6	23.6		100
6-30-84	14.7	52.7	30.0	2.7	100
6-30-85	12.4	55.2	30.3	2.1	100
6-30-86	12.6	48.5	37.1	1.8	100
6-30-87	9.8	42.0	47.1	1.1	100

SCHEDULE OF EXPENSES BY TYPE (In Thousands)

STATE EMPLOYEES RETIREMENT FUND

	Aggreg	gate Benefit Pay	ments			
Year				Admin.		
Ending	Annuities	Disabilities	Refunds	Expense	Miscellaneous	Total
6-30-78	\$15,942	\$ 747	\$ 4,435	\$ 911		\$22,035
6-30-79	19,143	1,201	6,098	1,041		27,484
6-30-80	21,797	1,286	7,273	1,063	\$ 20	31,440
6-30-81	23,649	1,451	6,886	1,335	126	33,446
6-30-82	27,114	1,669	9,310	955	1	39,048
6-30-83	31,636	1,784	6,048	933	227	40,628
6-30-84	35,210	1,957	14,800	1,406	11,563(1)	64,935
6-30-85	40,835	2,122	7,500	1,372	1,226	53,054
6-30-86	47,166	2,266	7,724	1,357	1,374	59,887
6-30-87	54,593	2,464	7,996	1,449	1,475	67,977

STATE PATROL RETIREMENT FUND

	Aggreg	gate Benefit Pay					
Year Ending	Annuities	Disabilities	Refunds	Admin. Expense	Miscellaneous	Total	
6-30-78	\$ 1,155	\$ 62	\$ 39	\$ 34		\$ 1,290	
6-30-79	1,364	64	26	37		1,491	
6-30-80	1,491	62	54	32	\$ 16	1,655	
6-30-81	1,666	58	41	53	5	1,824	
6-30-82	2,013	69	87	41		2,209	
6-30-83	2,789	37	49	41	17	2,934	
6-30-84	3,373	58	279	47	802(1)	4,559	
6-30-85	3,901	69	6	54	80	4,110	
6-30-86	4,589	57	52	59	88	4,845	
6-30-87	5,375	56	99	74	93	5,697	

	Aggreg	gate Benefit Pay	ments			
Year Ending	Annuities	Disabilities Refunds		Admin. Expense	Miscellaneous	Total
6-30-78	\$ 1,020	\$ 12	\$ 2	\$ 14		\$ 1,047
6-30-79	1,253	26	4	15		1,299
6-30-80	1,322	17	7	11		1,357
6-30-81	1,426	17	47	34		1,524
6-30-82	1,556	18	26	26		1,625
6-30-83	1,752	17	23	26	\$ 1	1,819
6-30-84	1,968	11	108	28	262(1)	2,377
6-30-85	2,113	45	1	29	6	2,194
6-30-86	2,344	47	0	32	6	2,429
6-30-87	2,641	85		34	7	2,767

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

SUMMARY DATA FOR THE FISCAL YEAR ENDED JUNE 30, 1987

								34	2 7 7 70	U I U WALL	Average
Number	Increases			Decreases			Net	Num	ber At En	d Of Year	Accumulated
Beg. of Yr.	New	Refunds	Annuities	Disabilities	Inactive	Death	Transfers	Total	Vested	Non-Vested	Contributions
45,171	5,325	2,616	753	37	1,188	65	(137)	45,700	17,430	28,270	\$ 5,527
1,220	106	54	13	0	12	1	(23)	1,223	388	835	7,526
8	0	0	0	0	0	0	(1)	7	2	5	10,171
769	28	8	17	0	1	0	0	771	488	283	21,321
242	14	0	16	0	1	1	0	238	131	107	15,713
	45,171 1,220 8 769	Beg. of Yr. New 45,171 5,325 1,220 106 8 0 769 28	Beg. of Yr. New Refunds 45,171 5,325 2,616 1,220 106 54 8 0 0 769 28 8	Beg. of Yr. New Refunds Annuities 45,171 5,325 2,616 753 1,220 106 54 13 8 0 0 0 769 28 8 17	Beg. of Yr. New Refunds Annuities Disabilities 45,171 5,325 2,616 753 37 1,220 106 54 13 0 8 0 0 0 0 769 28 8 17 0	Beg. of Yr. New Refunds Annuities Disabilities Inactive 45,171 5,325 2,616 753 37 1,188 1,220 106 54 13 0 12 8 0 0 0 0 769 28 8 17 0 1	Beg. of Yr. New Refunds Annuities Disabilities Inactive Death 45,171 5,325 2,616 753 37 1,188 65 1,220 106 54 13 0 12 1 8 0 0 0 0 0 0 769 28 8 17 0 1 0	Beg. of Yr. New Refunds Annuities Disabilities Inactive Death Transfers 45,171 5,325 2,616 753 37 1,188 65 (137) 1,220 106 54 13 0 12 1 (23) 8 0 0 0 0 0 (1) 769 28 8 17 0 1 0 0	Beg. of Yr. New Refunds Annuities Disabilities Inactive Death Transfers Total 45,171 5,325 2,616 753 37 1,188 65 (137) 45,700 1,220 106 54 13 0 12 1 (23) 1,223 8 0 0 0 0 0 (1) 7 769 28 8 17 0 1 0 0 771	Beg. of Yr. New Refunds Annuities Disabilities Inactive Death Transfers Total Vested 45,171 5,325 2,616 753 37 1,188 65 (137) 45,700 17,430 1,220 106 54 13 0 12 1 (23) 1,223 388 8 0 0 0 0 0 (1) 7 2 769 28 8 17 0 1 0 0 771 488	Beg. of Yr. New Refunds Annuities Disabilities Inactive Death Transfers Total Vested Non-Vested 45,171 5,325 2,616 753 37 1,188 65 (137) 45,700 17,430 28,270 1,220 106 54 13 0 12 1 (23) 1,223 388 835 8 0 0 0 0 (1) 7 2 5 769 28 8 17 0 1 0 0 771 488 283

		Inc	reases			Decreases					Average
INACTIVE	Number	From		То	To	To	To	Nu	mber At En	d of Year	Accumulated
EMPLOYEES	Beg. of Yr.	Active	Transfer	Active	Annuity	Refunds	Retirement Fund	Total	Vested	Non-Vested	Contributions
General Plan	5,343	1,188	472	240	98	456	688	5,521	1,014	4,507	\$1,208
Correctional Plan	118	12	16	1	2	8	6	129	43	86	3,365
Mil. Aff. Plan	1	0	0	0	0	0	0	1	0	1	5,324
State Patrol	26	1	0	0	3	0	0	24	16	8	10,231
Judges Plan	7	1	0	0	1	0	0	7	6	1	12,559

										Avera	ages (Surviv	or Not	Included)	
	Number .	Incr	eases	Decreases		Numb	er End of Ye	ar	All A	nnuitants o	n June 30	N	ew in Fisca	l Year
ANNUI- TANTS	Beg. of Yr.	New Member	New Survivor	Deaths	Net Transfers	Members	Survivor	Total	Age	Service	Monthly Benefit	Age	Service	Monthly Benefit
General Plan	11,190	851	86	463	(11)	10,983	670	11,653	72.7	21.0	\$ 394	63.2	20.9	\$ 515
Correctional														
Plan	317	15	1	11	(0)	313	9	322	66.5	19.9	616	57.4	18.6	918
Mil. Aff. Plan	3	0	0	0	0	3	0	3	67.9	26.4	1,144	_		_
State Patrol	403	21	2	16	1	318	93	411	66.5	26.1	1,219	56.7	25.1	1,457
Judges Plan	133	12	12	11	1	87	60	147	73.0	21.7	1,951	67.6	20.9	1,754

							All A	nnuitants o	n June 30	N	lew in Fiscal	Year
	Number	Increases	Dec	reases	Net	Number			Monthly			Monthly
DISABILITANTS	Beg. of Yr.	New	Deaths	Rescinded	Adjustments	End of Yr.	Age	Service	Benefit	Age	Service	Benefit
General Plan	665	48	38	0	(4)	671	66.4	17.5	\$ 285	56.3	15.8	\$321
Correctional Plan	11	0	0	0	0	11	57.0	17.0	593	_	_	_
State Patrol	13	0	0	0 -	0	13	47.6	22.9	993	_	_	
Judges Plan	5	0	0	0	0	5	70.0	19.4	1,862	_	_	_

						Average	e Years of	
	N	umber of Refund	ds	Average Ag	ge of Member	Service	Forfeited	Number of Members
REFUNDS	Male	Female	Total	Male	Female	Male	Female	Forfeiting Vested Rights
General Plan	1,230	2,584	3,814	35.1	33.4	3.3	2.9	184
Correctional Plan	56	15	71	32.3	31.6	3.8	2.4	2
State Patrol	8	0	8	34.0	_	5.8	_	1
Judges Plan	0	0	0	_	_	_	_	0

ACTIVE EMPLOYEES

	Averag	e Entry A										
Year		w Membe			Entry Age			ttained A		Se	rvice Cre	dit
Ending	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
STATE EN	MPLOYI	EES RET	IREME	NT FU	ND							
					al Employ	oog Dot	nomont	Dlon				
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
6/30/87	32.4	31.9	32.1	30.5	30.5	30.5	41.9	38.5	40.1	11.2	7.6	9.3
				Correct	ional Offi	icers Re	tiremen	t 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
6/30/87	30.0	30.0	30.0	29.1	30.8	29.3	37.3	35.9	37.1	8.2	5.2	7.8
STATE PA	TROLI	RETIREN	MENT I	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
6/30/87	26.0	36.7	26.4	26.8	25.5	26.7	40.7	34.1	40.5	14.0	8.6	13.8
JUDGES	RETIRE	EMENT F	UND									
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
6/30/87	45.6	48.6	46.4	41.7	42.8	41.8	54.0	48.1	53.4	12.2	5.2	11.5

EMPLOYEES ELIGIBLE TO AN IMMEDIATE ANNUITY ON JUNE 30, 1987

STATE EMPLOYEES RETIREMENT FUND

General Employees Retirement Plan

	Male	Female	Total
Full Benefit	433	311	784
Reduced Benefit Due To Early Retirement	2,757	1,691	4,448
Proportional Benefit (Age Equal To Or Greater Than 65, Service Less Than 10 Years)		123	199
Subtotal	3,266	2,125	5,391
Employees Not Eligible to Immediate Benefit	17,976	22,333	40,309
Totals	21,242	24,458	45,700
Correctional Officers Retirement Plan			
Full Benefit	36	4	40
Employees Not Eligible to Immediate Benefit	1,028	165	1,193
Totals	1,064	169	1,233
Military Affairs Retirement Plan			
Full Benefit	0	0	0
Employees Not Eligible to Immediate Benefit	8 8	0	8
Totals	8	0	8
STATE PATROL RETIREMENT FUND			
Full Benefit	65	1	66
Employees Not Eligible to Immediate Benefit	678	27	705
Totals	743	28	771
JUDGES RETIREMENT FUND			
Judges Plan			
Reduced Benefit	28	0	28
Full Benefit	17	0	17
Judges Not Eligible to Immediate Benefit	166	25	191
Totals	211	25	236
Supreme Court Judges			
Full Benefit	2	0	2
Judges Not Eligible to Immediate Benefit			2
Totals	0	0	$\frac{0}{2}$

REFUND STATISTICS

STATE EMPLOYEES RETIREMENT FUND

			Gener	ral Emplo	yees Retiren		***	
				Averag	ge Age of		e Years of rvice	Number of Members
Year	Num	ber of Ref	unds		mber		feited	Number of Members Forfeiting Vested
Ending	Male	Female	Total	Male	Female	Male	Female	Rights
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
6-30-87	1,230	2,584	3,814	35.1	33.4	3.3	2.9	184
			Correc	tional Of	ficers Retire	ement Plan	ı	
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	
6-30-86	66	20	86	31.5	31.6	3.5	2.2	$\frac{1}{2}$
6-30-87	56	15	71	32.3	31.6	3.8	2.4	2 2 2
STATE PA	TROL RE	TIREME	NT FUND					
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
6-30-80	10	1	11	30.0	22.0	2.6	1.3	$\overset{2}{0}$
6-30-82	10	0	10	34.0		7.4	1.3	4
6-30-82	12	0	10	31.8		2.0	_	1
6-30-84	6	2.	8	36.7	27.7	9.5	0.5	$\frac{1}{2}$
6-30-85	5	2	7	29.6	28.7	0.4	0.4	$\overset{2}{0}$
6-30-86	5	1	6	32.6	33.8	4.5	5.1	1
6-30-87	8	0	8	34.0	_	5.8	_	1
JUDGES F	FTIREN	TENT FIIN	ID.					
6-30-81	ETIKEIV 5	DENT FOR		53.6		6.4		0
6-30-82	2	1	5 3	49.5	<u>-</u> 47.0	6.5	8.0	0
6-30-82	3	0	3	49.3	47.0	5.7	0.0	0
6-30-84	3	0	1	42.2	_	1.4	-	
6-30-84	0	0	-	42.2	_	1.4	_	0
6-30-86	0	0	0					0
6-30-87	0	0	0				_	0
0 00 01	U		U					U

SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT **JUNE 30, 1987**

STATE EMPLOYEES RETIREMENT FUND

Amount of	Defe	rred	Number				Type	of Retire	ement*					option S	elected	<u> </u>
Monthly Benefit	GERP	CERP	of Retirees	1_		3	4		6		8	9	Life	<u> </u>	<u>II</u>	Ш
\$ 1-\$100	241	2	1,486	549	478	354	91	13	0	0	0	1	1,225	247	13	1
101- 200	171	2	3,088	1,436	1,231	165	204	29	1	0	13	9	2,542	483	58	5
201- 300	144	6	2,148	933	1,003	11	169	31	0	0	0	1	1,699	417	31	1
301-400	105	4	1,581	721	698	0	115	44	1	0	1	2	1,235	325	18	3
401-500	103	5	1,045	484	451	0	64	45	0	0	0	1	802	229	13	1
501-600	67	3	784	402	307	0	39	33	3	0	0	0	566	200	7	11
601- 700	58	1	607	367	198	0	17	25	1	0	0	0	415	180	4	8
701-800	37	4	450	272	147	0	8	22	1	0	0	0	285	161	1	3
801-900	31	3	363	197	139	0	7	19	1	0	0	0	215	147	0	1
901-1000	9	6	278	173	92	0	3	9	0	1	0	0	159	119	0	0
Over 1000	48	7	844	525	253	0	8	56	0	2	0	0	159	119	0	0
Totals Average	1,014	43	12,674	6,059	4,997	530	725	326	7	3	13	14	9,561	2,929	150	34
Benefit(\$)	365	661	389	432	369	85	281	617	529	1,114	150	193	347	527	281	491

*Type of Retirement

- 1-Normal retirement for age & service
- 2-Early retirement
- 3-Proportionate annuity
- 4-Disability retirement
- 5-Correctional Annuity
- 6-Correctional Disability
- 7-Military Affairs
- 8-Survivors of Deceased Former Members
- 9-Unclassified Retirement Plan

Option Selected

Life

Option I — Joint & Survivor
Option II — Death while eligible and "Old Law" survivors
Option III — Period Certain

STATE PATROL RETIREMENT FUND

Amount of Monthly		Number of	T Ref	t*	Option Selected #					
Benefit	Deferred	Retirees	1	2	3		Life	I	II	
\$ 1-\$200	1	3	3	0	0		1	2	0	
201- 400	2	70	52	0	18		6	46	18	
401- 600	2	45	43	1	1		8	36	1	
601-800	4	34	28	5	1		12	21	1	
801-1000	4	39	34	2	3		17	19	3	
1001-1200	1	50	45	2	3		16	31	3	
1201-1400	0	55	53	1	1		21	33	1	
1401-1600	0	49	46	0	3		12	34	3	
1601-1800	0	34	33	1	0		23	11	0	
1801-2000	2	26	25	1	0		16	10	0	
Over 2000	0	19	19	0	0		15	4	0	
Totals	16	424	381	13	30		147	247	30	
Average										
Benefit(\$)	834	1,064	1,102	993	610	*	1,329	960	610	

*Type of Retirement

Option Selected

1 — Normal retirement for age & service

2 — Disability3 — Survivor

Life

Option I — Joint & Survivor

II — Death while eligible and old law survivor

Not included in this table are average benefits of \$198 for each of 6 children surviving 5 former members.

JUDGES RETIREMENT FUND

Amount of			Type Of Retirement*								Option Selected #				
Monthly		Number of						, 69							*
Benefit	Deferred	Retirees	1_	2	3	4	5	6	7	8	9	Life	I	II	III
\$ -\$ 200	0	0	0	0	0	Ó	0	0	0	0	0	0	0	0	0
201 - 400	0	3	0	0	0	0	0	0	3	0	0	0	0	9 3	0
401 - 600	2	12	2	0	2	0	0	5	2	0	1	0	1	11	0
601 - 800	1	8	1	0	3	0	0	0	1	0	3	1	0	9	0
801 - 1000	0	12	5	0	2	0	0	1	2	0	2	2	3	7	0
1001 - 1200	0	29	5	0	5	0	0	18	0	0	1	1	2	26	0
1201 - 1400	0	12	6	1	3	0	0	0	0	1	1	0	3	9	0
1401 - 1600	0	14	6	1	1	0	1	2	1	1	1	2	3	9	0
1601 - 1800	0	8	6	1	0	0	0	1	0	0	0	2	2	3	1
1801 - 2000	2	12	12	0	0	0	0	0	0	0	0	1	6	5	0
Over 2000	2	41	24	1	1	8	0	1	0	6	0	5	10	23	3
	7	151	67	4	17	8	1	28	9	8	9	14	30	103	4
Average															
Benefit(\$)	1,511	1,587	1,849	1,917	1,0353	3,069	1,640	1,086	653	2,417	976	1,859	1,801	1,454	2,069

Deferred — Former member with deferred future benefit.

* Type of Retirement Benefits provided under laws effective January 1, 1977

- 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, 1977

- 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 PLANS

Amount of						
Monthly	Defer	red		Type of Re	tirement*	
Benefit	Cons.	Legi.	1_	2	3	4
\$ 1-\$200	. 1	4	0	0	10	16
201- 400	2	17	0	1	31	14
401- 600	0	25	0	2	31	3
601- 800	1	14	0	0	14	2
801-1000	0	13	1	1	13	0
1001-1200	0	17	1	1	10	0
1201-1400	0	5	0	0	6	0
1401-1600	0	6	0	0	5	0
1601-1800	1	0	0	0	3	0
1801-2000	0	1	0	0	0	0
Over 2000	0	0	1	0	1	0
Totals	5	100	3	5	124	35
Average Benefit(\$)	674	736	1,457	684	661	266

*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 \$127 for each of 7 children surviving 4 former leigslators.

ANNUITY & DISABILITY DEATHS

STATE EMPLOYEES RETIREMENT FUND

General Employees Retirement Plan

		Average A			Average Years of Retirement bility Annuity Disability Number Female Male Female Male Female Annuity		Percent of Members Who Received More in Annuity Payments Than	Ratio of Annuity Payments/ Contributions For Deceased Service				
Year		nuity		-							They Had Contributed	Annuitants*
Ending	Male	Female	Male	Female	Male	Female	Male	Female	Annuity	Disability	Annuity	
6-30-78	77.3	78.6	59.8	66.1	11.3	12.2	3.2	5.4	255	31	93.5%	5.0
6-30-79	77.3	77.8	66.9	65.1	12.0	12.3	9.6	6.4	350	44	93.3 <i>%</i> 87.1	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	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	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	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	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	7.4
6-30-85	77.5	79.4	63.0	69.4	13.1	14.0	6.8	10.7	444	55	95.7	8.0
6-30-86	78.4	81.0	68.4	66.5	13.1	13.8	10.2	9.8	420	52	92.8	85
		79.4	62.4	66.2			8.3	7.3	469	38	96.6	8.7
6-30-87	77.7	79.4	62.4	66.2	13.4	15.1	8.3	1.3	469	38	90.0	8.7
					Corr	ectional	Offic	ers Ret	irement	Plan		
6-30-78	61.5	_	_	_	3.2	-	_	-	2	0	100%	3.3
6-30-79	58.0	_	_	_	3.7	_	-	_	6	0	100	4.0
6-30-80	64.8	_	_	-	4.1	2		-	9	0	100	4.2
6-30-81	64.4	-	53.0	_	5.1	_	1.8	_	7	1	100	4.1
6-30-82	66.3	67.0	44.0		7.3	7.7	0.9	_	7	1	100	6.0
6-30-83	65.7	-	-	12	7.3	-	-	_	6	0	100	6.8
6-30-84	61.5	64.5	_	-	5.2	8.3	_	-	6	1	71	4.4
6-30-85	66.4	-	53.0		7.8	-	3.5	_	13	1	100	5.9
6-30-86	67.8	77.0	69.0	_	8.8	11.2	11.9	_	9	1	100	7.8
6-30-87	69.1	_	_	_	10.2	_	_	_	11	0	100	8.4
~						_						
STATI	E PATI	ROL RI	CTIRE	EMENT	FUNI	D						
6-30-79	72.0	78.5	_	7.2	10.2	5.8	-	-	6	0	100%	1.7
6-30-80	75.9	78.0	-	2	13.4	4.7	-	-	17	0	100	2.8
6-30-81	74.4	76.0	-	-	15.0	13.6	<u>=</u>	-	12	0	100	3.1
6-30-82	72.0	70.0	-	-	13.2	4.9	-	-	6	0	83.3	3.3
6-30-83	73.6	80.0	-	-	11.5	12.1	-	-	15	0	86.6	4.8
6-30-84	76.7	70.4	-	-	16.0	8.6	-	-	8	0	93.9	9.1
6-30-85	70.3	88.1	_	2	9.7	18.8	_	-	9	0	100	6.1
6-30-86	78.0	-	-	-	-	18.4	_	-	7	0	100	13.5
6-30-87	66.4	_	_	_	7.6	_	_	_	8	0	75	5.4
HIDG	FCDE	TIREN	/FNT	FUND								
6-30-81	85.8	86.5	=	-	11.0	4.0	-	(4)	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	8	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	1.5	- 5	-	6.7	-	-	-	2	0		
6-30-87	81.2	_	_	_	11.4	_	_	_	9	0		

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

STATE EMPLOYEES RETIREMENT FUND

General	Emi	olov	ees	Retir	ement	Plan

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 Average Final Salary 1390.00 1302.95 1228.35 1371.51 1352.89 1576.29 1773.13 1788.84 1811.07 1413 Average Age At Retirement 64.0 64.2 63.3 63.6 62.4 62.9 62.0 62.9 65.4 66 Number Retired 41 57 164 148 85 64 53 41 14 66 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 1056.30 355 Average Final Salary 1019.72 1132.08 1098.44 1190.00 1283.36 1186.44 1562.22 1588.21 1986.21 1233 Average Age At Retirement 65.0 63.7 63.1 62.9 63.0 62.9 62.1 62.3 63.2 66 Average Age At Retirement 40.20 117.02 177.66 298.02 402.93 592.39 771.34 996.00 1092.85 443 Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 64.0 Average Age Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0		YEARS OF CREDITED SERVICE									
Average Monthly Benefit 37.46 100.44 153.14 249.59 335.38 488.57 696.60 804.96 1052.96 320 Average Final Salary 1390.00 1302.95 1228.35 1371.51 1352.89 1576.29 1773.13 1788.84 1811.07 141: Average Age At Retirement 64.0 64.2 63.3 63.6 62.4 62.9 62.0 62.9 65.4 66: Number Retired 41 57 164 148 85 64 53 41 14 66: 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: Average Final Salary 1019.72 1132.08 1098.44 1190.00 1283.36 1186.44 1562.22 1588.21 1986.21 123: Average Age At Retirement 65.0 63.7 63.1 62.9 63.0 62.9 62.1 62.3 63.2 66: Number Retired 42 64 193 167 94 66 83 40 10 75: Average Monthly Benefit 40.20 117.02 177.66 298.02 402.93 592.39 771.34 996.00 1092.85 44: Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 161: Average Age At Retirement 61.7 63.4 63.0 63.0 62.8 62.2 61.1 61.1 61.4 64.0 66: Number Retired 51 58 169 169 130 122 125 80 16 92: 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 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 61.1 61.4 64.0 66: Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 61.1 61.4 64.0 66: Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 61.1 61.4 64.0 66: Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 61.1 61.4 64.0 66: Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 61.1 61.4 64.0 66: Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 61.1 61.4 64.0 64.0 66: Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 61.1 61.4 64.0 64.0 66: Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 61.1 61.4 64.0 64.0 66: Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 61.1 61.4 64.0 64.0 66: Average Age At Retirement 64.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 62.0 61.1 62.0 61.1 62.0 61.1 62.0 61.1 62.0 61.1 62.0 61.1 62.0 61.1 62.0 61.1 62.0 61.1 62.0 61.1 62.0 61.1 62.0 61.1 62	Retirement Effective Dates	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40 +	Totals
Average Final Salary 1390.00 1302.95 1228.35 1371.51 1352.89 1576.29 1773.13 1788.84 1811.07 1411. Average Age At Retirement 64.0 64.2 63.3 63.6 62.4 62.9 62.0 62.9 65.4 66.0 Number Retired 41 57 164 148 85 64 53 41 14 66.0 eriod 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 1056.30 354.0 Average Final Salary 1019.72 1132.08 1098.44 1190.00 1283.36 1186.44 1562.22 1588.21 1986.21 123.0 Average Age At Retirement 65.0 63.7 63.1 62.9 63.0 62.9 62.1 62.3 63.2 65.0 62.9 62.0 62.0 62.9 62.0 62.0 62.9 62.0 62.9 62.0 62.9 62.0 62.9 62.0 62.9 62.0 62.9 62.0 62.0 62.9 62.0 62.9 62.0 62.9 62.0 62.9 62.0 62.9 62.0 62.9 62.0 62.0 62.9 62.0 62.9 62.0 62.0 62.9 62.0 62.0 62.9 62.0 62.0 62.9 62.0 62.0 62.9 62.0 62.0 62.9 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0	Period 7/1/82 - 6/30/83										
Average Age At Retirement 64.0 64.2 63.3 63.6 62.4 62.9 62.0 62.9 65.4 66. Number Retired 41 57 164 148 85 64 53 41 14 66 66 67.0 Average Monthly Benefit 35.08 107.49 168.97 295.57 384.95 536.13 758.63 932.83 1056.30 359. Average Final Salary 1019.72 1132.08 1098.44 1190.00 1283.36 1186.44 1562.22 1588.21 1986.21 1233. Average Age At Retirement 65.0 63.7 63.1 62.9 63.0 62.9 62.1 62.3 63.2 66. Number Retired 42 64 193 167 94 66 83 40 10 75. Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 161. Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 66. Number Retired 51 58 169 169 130 122 125 80 16 44.0 66. Period 71/185 - 6/30/86 Average Monthly Benefit 40.54 121.11 176.88 295.55 465.48 663.56 879.52 1151.59 Average Monthly Benefit 40.54 121.11 176.88 295.55 465.48 663.56 879.52 1151.59 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181. Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 66. Number Retired 47 57 163 136 133 113 87 88 82. Period 71/186 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.	Average Monthly Benefit	37.46	100.44	153.14	249.59	335.38	488.57	696.60	804.96	1052.96	320.46
Number Retired 41 57 164 148 85 64 53 41 14 666 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 Average Final Salary 1019.72 1132.08 1098.44 1190.00 1283.36 1186.44 1562.22 1588.21 1986.21 1233 Average Age At Retirement 65.0 63.7 63.1 62.9 63.0 62.9 62.1 62.3 63.2 66 Number Retired 42 64 193 167 94 66 83 40 10 75 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 44 Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 1613 Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 66 Number Retired 51 58 169 169 130 122 125 80 16 92 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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 66.9 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 66.9 Period 7/1/86 - 6/30/87 Average Monthly Benefit 47.7 57 163 136 133 113 87 88 82 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Average Final Salary	1390.00	1302.95	1228.35	1371.51	1352.89	1576.29	1773.13	1788.84	1811.07	1415.66
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 Average Final Salary 1019.72 1132.08 1098.44 1190.00 1283.36 1186.44 1562.22 1588.21 1986.21 1233 Average Age At Retirement 65.0 63.7 63.1 62.9 63.0 62.9 62.1 62.3 63.2 66 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 1092.85 443 Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 1613 Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 66 Number Retired 51 58 169 169 130 122 125 80 16 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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 1813 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 66 Number Retired 47 57 163 136 133 113 87 88 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Average Age At Retirement	64.0	64.2	63.3	63.6	62.4	62.9	62.0	62.9	65.4	63.3
Average Monthly Benefit Average Final Salary Average Final Salary 1019.72 1132.08 1098.44 1190.00 1283.36 1186.44 1562.22 1588.21 1986.21 1233 Average Age At Retirement 65.0 63.7 63.1 62.9 63.0 62.9 62.1 62.3 63.2 63.2 63.1 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 1092.85 443 Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 1613 Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 66 Number Retired 51 58 169 169 130 122 125 80 16 92 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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 66.9 100 100 100 100 100 100 100 100 100 10	Number Retired	41	57	164	148	85	64	53	41	14	667
Average Final Salary 1019.72 1132.08 1098.44 1190.00 1283.36 1186.44 1562.22 1588.21 1986.21 1233.4 Average Age At Retirement 65.0 63.7 63.1 62.9 63.0 62.9 62.1 62.3 63.2 66. Number Retired 42 64 193 167 94 66 83 40 10 75.0 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 44.0 Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 161.0 Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 66.0 Number Retired 51 58 169 169 130 122 125 80 16 92.0 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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181.0 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 61.0 61.1 61.0 Number Retired 47 57 163 136 133 113 87 88 82.0 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50.0 Average Month	Period 7/1/83 - 6/30/84										
Average Age At Retirement 65.0 63.7 63.1 62.9 63.0 62.9 62.1 62.3 63.2 66. Number Retired 42 64 193 167 94 66 83 40 10 75. 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 44. Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 161. Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 6. Number Retired 51 58 169 169 130 122 125 80 16 92. 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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181. Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 6. Number Retired 47 57 163 136 133 113 87 88 82. Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50. Ave	Average Monthly Benefit	35.08	107.49	168.97	295.57	384.95	536.13	758.63	932.83	1056.30	359.34
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 1092.85 445 Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 1613 Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 66 Number Retired 51 58 169 169 130 122 125 80 16 92 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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 1813 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 66 Number Retired 47 57 163 136 133 113 87 88 82 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Average Final Salary	1019.72	1132.08	1098.44	1190.00	1283.36	1186.44	1562.22	1588.21	1986.21	1235.84
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 1092.85 443 Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 1613 Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 63 Number Retired 51 58 169 169 130 122 125 80 16 92 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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 1813 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 63 Number Retired 47 57 163 136 133 113 87 88 82 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Average Age At Retirement	65.0	63.7	63.1	62.9	63.0	62.9	62.1	62.3	63.2	63.0
Average Monthly Benefit 40.20 117.02 177.66 298.02 402.93 592.39 771.34 996.00 1092.85 447.24 Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 161.2 Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 66 Number Retired 51 58 169 169 130 122 125 80 16 92 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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 6 Number Retired 47 57 163 136 133 113 87 88 <	Number Retired	42	64	193	167	94	66	83	40	10	759
Average Final Salary 1740.52 1532.58 1290.82 1464.23 1523.61 1658.93 1936.92 2103.57 1876.94 1617 Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 66 Number Retired 51 58 169 169 130 122 125 80 16 92 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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 66 Number Retired 47 57 163 136 133 113 87 88 82 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Period 7/1/84 - 6/30/85										
Average Age At Retirement 61.7 63.4 63.0 63.3 62.8 62.2 61.1 61.4 64.0 66. Number Retired 51 58 169 169 130 122 125 80 16 92. 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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181. Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 66. Number Retired 47 57 163 136 133 113 87 88 82. Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Average Monthly Benefit	40.20	117.02	177.66	298.02	402.93	592.39	771.34	996.00	1092.85	442.89
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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 6 Number Retired 47 57 163 136 133 113 87 88 82 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Average Final Salary	1740.52	1532.58	1290.82	1464.23	1523.61	1658.93	1936.92	2103.57	1876.94	1613.32
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 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 6 Number Retired 47 57 163 136 133 113 87 88 82 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Average Age At Retirement	61.7	63.4	63.0	63.3	62.8	62.2	61.1	61.4	64.0	62.5
Average Monthly Benefit 40.54 121.11 176.88 295.55 465.48 663.56 879.52 1151.59 Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 6 Number Retired 47 57 163 136 133 113 87 88 82 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Number Retired	51	58	169	169	130	122	125	80	16	920
Average Final Salary 2022.68 1510.29 1441.99 1603.81 1769.80 1933.96 2170.15 2516.74 181 Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 6 Number Retired 47 57 163 136 133 113 87 88 82 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Period 7/1/85 - 6/30/86										
Average Age At Retirement 61.7 63.7 62.7 62.9 63.3 61.8 60.9 61.1 60.9	Average Monthly Benefit	40.54	121.11	176.88	295.55	465.48	663.56	879.52	1151.59		476
Number Retired 47 57 163 136 133 113 87 88 82 Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Average Final Salary	2022.68	1510.29	1441.99	1603.81	1769.80	1933.96	2170.15	2516.74		1818.52
Period 7/1/86 - 6/30/87 Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Average Age At Retirement	61.7	63.7	62.7	62.9	63.3	61.8	60.9	61.1		62.4
Average Monthly Benefit 45.43 117.39 207.26 359.92 480.41 680.73 939.93 1152.36 1227.71 50	Number Retired	47	57	163	136	133	113	87	88		824
	Period 7/1/86 - 6/30/87										
Average Final Salary 2196.97 1622.49 1686.68 1883.67 1908.73 2075.28 2295.35 2511.30 2426.81 199	Average Monthly Benefit	45.43	117.39	207.26	359.92	480.41	680.73	939.93	1152.36	1227.71	505.35
	Average Final Salary	2196.97	1622.49	1686.68	1883.67	1908.73	2075.28	2295.35	2511.30	2426.81	1993.19
Average Age At Retirement 61.7 63.4 62.8 62.6 62.9 61.8 60.6 60.9 63.5 6	Average Age At Retirement	61.7	63.4	62.8	62.6	62.9	61.8	60.6	60.9	63.5	62.2
Number Retired 60 48 161 167 140 102 105 75 14 87	Number Retired	60	48	161	167	140	102	105	75	14	872

Correctional Officers Retirement Plan

	YEARS OF CREDITED SERVICE						
Retirement Effective Dates	5-10	10-15	15-20	20-25	25-30	30-35	Totals
Period 7/1/82 — 6/30/83							
Average Monthly Benefit	*	464.08	602.30	790.19		971.02	700.69
Average Final Salary		1343.88	1581.20	1563.65		1530.64	1536.70
Average Age At Retirement		55.0	56.25	55.0		55.0	55.6
Number Retired		1	4	5		2	8
Period 7/1/83 — 5/30/84							
Average Monthly Benefit	267.30	536.45	697.57	925.68	966.72	1569.73	833.42
Average Final Salary	1483.11	1547.72	1773.24	1823.92	1666.90	2254.10	1763.65
Average Age At Retirement	58.5	54.4	58.6	57.2	57.6	57.8	57.5
Number Retired	2	5	12	4	7	4	34
Period 7/1/84 — 6/30/85							
Average Monthly Benefit		469.16	727.58	1016.58	1336.35	1530.44	1013.80
Average Final Salary		1328.42	1869.28	1813.99	2197.70	2239.38	1937.75
Average Age At Retirement		58.0	56.3	55.0	55.0	55.0	55.9
Number Retired		2	5	1	3	3	14
Period 7/1/85 — 6/30/86							
Average Monthly Benefit		517.07	940.93	1163.28		1524.12	1025.75
Average Final Salary		1944.24	2102.37	2225.39		2264.25	2130.32
Average Age At Retirement		55.0	55.0	57.0		55.0	55.4
Number Retired		2	3	2		2	9
Period 7/1/86 — 6/30/87							
Average Monthly Benefit		425.33	805.55	1243.71	1451.22		918.30
Average Final Salary		1223.39	2268.30	2398.54	2094.92		2030.55
Average Age At Retirement		55.0	58.5	57.5	55.0		56.9
Number Retired		3	5	3	2		13

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

STATE PATROL RETIREMENT FUND

	YEARS OF CREDITED SERVICE								
Retirement Effective Dates	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35 +	Totals
Period 7/1/82 - 6/30/83									
Average Monthly Benefit			366.73		946.54	1091.24	1403.01	1392.86	1148.22
Average Final Salary			1164.30		1570.66	1863.57	2038.02	2006.31	1808.84
Average Age At Retirement			58.2		56.7	58.9	58.3	57.8	57.9
Number Retired			2		11	5	15	1	34
Period 7/1/83 - 6/30/84									
Average Monthly Benefit			495.25		980.05	1246.66	1542.75	1425.95	1236.33
Average Final Salary			1980.98		1789.43	2149.03	2218.99	2215.50	2082.89
Average Age At Retirement			64.9		55.8	58.3	58.6	62.4	58.2
Number Retired			1		9	21	8	2	41
Period 7/1/84 - 6/30/85									
Average Monthly Benefit	114.96		372.44	1237.81		1510.21	1693.10		1250.93
Average Final Salary	1894.73		1270.05	2285.73		2077.22	2246.92		2054.17
Average Age At Retirement	58.7		59.4	56.3		56.1	55.4		56.6
Number Retired	1		2	5		8	2		18
7/1/85 - 6/30/86									
Average Monthly Benefit			338.66	942.06	1175.02	1583.33	1800.47	1656.41	1516.39
Average Final Salary			606.57	1836.75	2083.02	2434.56	2517.35	2605.58	2311.22
Average Age At Retirement			55.0	55.0	58.4	58.4	57.7	65.4	58.1
Number Retired			1	1	6	8	11	1	28
7/1/86 - 6/30/87									
Average Monthly Benefit			1045.15	1055.82	1157.45	1588.50	1884.20		1473.69
Average Final Salary			3257.72	2826.75	2143.50	2530.64	2695.05		2553.47
Average Age At Retirement			55.4	55.0	55.2	55.3	57.1		55.7
Number Retired			2	1	5	7	5		20

_	YEARS OF CREDITED SERVICE									
Retirement Effective Dates	10-15	15-20	20-25	25-30	30-35	Totals				
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		2600.00	1715.20				
Average Final Salary	4000.00	4000.00	4000.00		4000.00	4000.00				
Average Age At Retirement	62.2	72.7	70.0		70.0	69.5				
Number Retired	1	2	1		1	5				
Period 7/1/84 - 6/30/85										
Average Monthly Benefit		1624.12	1961.62	2407.17		1923.38				
Average Final Salary		4377.82	4465.46	4148.78		4383.46				
Average Age At Retirement		67.6	67.7	65.6		67.3				
Number Retired		2	3	1		6				
Period 7/1/85 - 6/30/86										
Average Monthly Benefit		1458.41		2244.87	2922.19	2077.41				
Average Final Salary		1467.19		4385.00	2171.96	2188.41				
Average Age At Retirement		68.9		70.0	70.0	69.4				
Number Retired		3		1	2	6				
Period 7/1/86 - 6/30/87										
Average Monthly Benefit	786.43	1563.76	1971.35	2464.72	2236.49	1754.27				
Average Final Salary	4668.23	4664.58	3339.23	4635.98	4889.47	4258.50				
Average Age At Retirement	66.6	67.4	68.0	65.0	65.7	67.0				
Number Retired	2	3	4	1	2	12				

DEFERRED COMPENSATION PLAN

These statistics include only participants in the Minnesota Supplemental Investment Fund and not the insurance company participants. On June 30, 1987, there were 7,352 participants; 4,266 active, 2,499 inactive and 587 in withdrawal status.

INVESTMENT PERFORMANCE

HIVE DIMENTIFIED		TO TAKE THE C	DATE	DECLIDA
	PER SHAR	RE VALUES	RAIE O	FRETURN
	June 30, 1986	June 30, 1987	FY 1987	5 Year Average
Income Shares	\$23.04	\$26.20	13.7%	17.7%
Growth Shares	16.44	19.27	17.2%	18.3%
Common Stock Index	_	12.79	20.3%	26.3%*
	Average In	terest Rates		
	FY 1986	FY 1987	5 Year Average	
Money market	7.3%	6.4%	8.5%	
		Contract Interest		
2	1986	1987		
Guaranteed Investment	7.72%	8.45%		

^{*}Wilshire 5000 Index (July 1983 — June 1986)

INVESTMENT DISTRIBUTION

	Current In	vestments for	June 1987	Total Investments as of June 30, 1987			
	% of Participants	% of Dollars	Average Invested	% of Participants	% of Dollars	Average Invested	
Income Shares	31.9%	32.8%	\$190	26.3%	23.8%	\$ 8,514	
Growth Shares	19.1	15.1	146	20.3	16.2	7,521	
Money Market Common Stock	36.7	38.9	196	46.0	54.9	11,252	
Index Guaranteed	6.8	5.7	157	3.6	1.3	3,217	
Investment	5.5	7.5	248	3.8	3.8	9,407	
	100.0%	100.0%		100.0%	100.0%		

PARTICIPANT DISTRIBUTION

	Monthly Investment Per Option									
	Under \$50	\$50- \$99	\$100- \$199	\$200- \$299	\$300- \$399	\$400- \$499	\$500- \$599	Over \$600		
Age 24 and under	24	8	3	1	0	0	1	0		
Age 25 thru 34	392	199	103	34	9	3	13	4		
Age 35 thru 44	642	449	360	99	36	30	46	19		
Age 45 thru 54	372	354	372	164	77	56	97	36		
Age 55 thru 64	223	272	323	175	105	61	128	98		
Age 65 and over	16	12	27	20	6	2	17	12		

PARTICIPANT WITHDRAWALS

		Number	Average Dollar
Lump sum withdrawals:			
Partial Withdrawal		58	\$ 3,231
Full Withdrawal		168	\$ 5,950
Transfer to Insurance Co.		116	\$30,137
Survivor's Refund		8	\$ 3,444
Ongoing Withdrawals — June 30, 1987	58	587	\$ 416 per month

UNCLASSIFIED EMPLOYEES RETIREMENT PLAN

On June 30, 1987, there were 1,658 participants; 1,244 active and 414 inactive.

INVESTMENT PERFORMANCE

	SHARE	VALUES	RATE OF RETURN		
	June 30, 1986	June 30, 1987	FY 1987	5 Year Average	
Income Shares	\$23.04	\$26.20	13.7%	17.7%	
Growth Shares	16.44	19.27	17.2%	18.3%	
Common Stock Index	_	12.79	20.3%	26.3%*	
Bond Market	_	10.67	7.9%	17.3**	
	Average In	terest Rates			
	FY 1986	FY 1987	5 Year Average	e	
Money Market	7.3%	6.4%	8.5%		

INVESTMENT DISTRIBUTION

	Current In	vestments for	June 1987	Total Investments as of June 30, 1987			
	% of Participants	% of Dollars	Average Invested	% of Participants	% of Dollars	Average Invested	
Income Shares	48.2%	58.1%	\$267	46.8%	56.2%	\$15,551	
Growth Shares	25.7	16.1	140	27.6	20.9	9,817	
Money Market	15.5	18.0	259	18.8	20.0	13,858	
Bond market	5.9	4.0	150	3.8	1.8	6,051	
Common Stock							
Index	4.7	3.8	184	3.0	1.1	4,788	
	100.0%	100.0%		100.0%	100.0%		

PARTICIPANT DISTRIBUTION

		Monthly Investment Per Option									
	Under \$50	\$50- \$99	\$100- \$199	\$200- \$299	\$300- \$399	\$400- \$499	\$500- \$599	Over \$600			
Age 24 and under	15	30	35	9	1	0	0	0			
Age 25 thru 34	37	118	203	110	43	12	4	3			
Age 35 thru 44	16	106	228	202	112	69	19	14			
Age 45 thru 54	9	45	106	93	50	29	9	6			
Age 55 thru 64	5	26	66	50	27	16	2	2			
Age 65 and over	0	4	3	3	3	0	0	0			

PARTICIPANT WITHDRAWALS

Number	Average Dollar
161	\$17,529
5	\$ 2,028
14	\$ 193 per month
	161 5

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