MINNESOTA
STATE POLICE OFFICERS
RETIREMENT FUND

ACTUARIAL AND
FINANCIAL REPORT

FISCAL YEAR ENDED
JUNE 30, 1965

CHAPTER 359 LAWS 1965

FILE COPY

November 24, 1965

INTRODUCTION

Name of Association Minnesota State Police Officers Retirement Association

In accordance with Chapter 359 of 1965 Minnesota Laws, an actuarial valuation as of June 30, 1965 has been made of this retirement association. The survey covers the membership of the fund as shown in the census of members and survivors of deceased members, which is included in this report. The details of the benefits under the plan, assets in the fund, income of the fund, and membership data were furnished by the Association.

This report covers the following items:

A. Benefits of the Plan and Contributions.

B. Assumptions in Actuarial Valuation.

C. Results of Valuation.

D. Discussion of Results.

E. Census of Membership and Annuitants.

F. Benefits Being Paid as of June 30, 1965.

G. Certification by Actuary.

STATE POLICE OFFICERS RETIREMENT FUND

A. BENEFITS OF PLAN AND CONTRIBUTIONS

The plan provides the following major benefits:

1. Retirement Benefit.

   a. Requirements for retirement:

      Age 58 and 10 years' allowable service credit. (Reduced early retirement benefit available at age 55 with 20 years' allowable service.)

   b. Monthly annuity when minimum requirements are met:

      2% of average monthly salary for each year of allowable service.

   c. Additional monthly annuity after minimum requirements are met:

      2% of average monthly salary for each additional year. No additional credit given for service after reaching age 60, except that participants hired before 7-1-1961 may count years of service past age 60, with a maximum of 30 years' service.

2. Disability Benefit (monthly annuity).

   In Line of Duty: 55% of average monthly salary.

   Not in Line of Duty: If ten years' service completed, 2% of average monthly salary for each year of service, plus following supplemental benefits for participants disabled before age 58:

Age When Disabled	Supplementary Benefits
Under 51	$ 50
51	44
52	38
53	32
54	26
55	20
56	12
57	6

3. Widow's and Orphan's Benefit (monthly annuity).

a. In case of participant's death before retirement, the surviving spouse may choose one of the following two benefits:

(1) $75 per month for surviving dependent spouse, plus $45 per month for each dependent child, plus $20 per month to be divided equally among the dependent children. Maximum of $250 for any one family.

(2) If member had completed 20 years of allowable service, a deferred annuity payable at age 62 of 75% of the member's normal annuity, with a maximum of $200. If the member was under 58 at the time of death, the benefit is reduced by 1/2% for each month before age 58.

b. In case of death after retirement:

No survivors benefit unless participant had elected an option.

4. Other Death Benefit (lump sum): None.

5. Termination of Employment Benefit:

Employee contributions returned without interest.

6. Salary Basis for Benefits:

$7,200 per year maximum.

7. Contributions (based on $7,200 annual salary limit):

Member:	6.0% of covered salary
Employer Regular:	9.0% of covered salary
Employer Additional:	3.5% of covered salary
Total	18.5% of covered salary

B. ASSUMPTIONS IN ACTUARIAL VALUATION

1.	Mortality:	United States Life Tables, 1959-61 (White Males and White Females). These tables were used for both active and retired members, and for survivors.
2.	Disability:	The rates of disability were adapted from experience of the New York State Employees' Retirement System, graduated and extrapolated as required for this valuation.
3.	Withdrawal:	A rate of withdrawal of .030 at age 20 decreasing uniformly to zero at age 50 with no withdrawals after that age.
4.	Salary Scale:	The current salary of the members was used to project the prospective retirement benefit.
5.	Retirement Age:	The assumed average age at retirement for this fund was 63.0.
6.	Interest:	3%, compounded annually.

It is felt that these assumptions are appropriate for the valuation of this fund on a realistic basis.

C. RESULTS OF VALUATION

1. Valuation

Normal Cost of Benefits	$ 127,969
Accrued Liability	3,293,669

2. Current Deficit from Full Funding.

Accrued Liability	$ 3,293,669
Assets in Fund *	1,069,695
Unfunded Accrued Liability	$ 2,223,974

3. Annual Payment to Achieve Full Funding by 1997.

Annual Deposit to retire deficit by 1997	$ 107,107
Total Normal Cost	127,969
Total Annual Payment	$ 235,076

4. Minimum Contribution to prevent increase in Deficit.

Interest on deficit at 3%	$ 66,719
Total Normal Cost	127,969
Minimum Contribution	$ 194,688

5. *Income of Fund during fiscal year ending June 30, 1965.

Members' Contributions	$ 47,494.63
Taxes or Public Funds	87,073.44
Other	0.00
Total Contributions	$ 134,568.07
Investment Income	$ 40,556.69

6. Annual Payroll.

1964-65 Fiscal Year Payroll ($4,800 limit) on which Member Contributions Were Based	$ 791,577
Covered Payroll ($7,200 limit) as of 6-30-65 (approximate)	$ 1,042,000
Total Payroll (no limit) as of 6-30-65 (approximate)	$ 1,070,000

* Data furnished by Association.

D. DISCUSSION OF RESULTS

The valuation was made by a method known as the entry age normal cost method. Under this method, the normal cost is determined based on the age at hire of each member. This normal cost is the annual deposit required (using the assumptions outlined in Section B above) to pay for the cost of each member's prospective benefits over the period from his date of hire to his date of retirement.

The elements of normal cost for this plan are:

Type of Benefit	Normal Cost
Service Retirement Benefit	$ 85,846
Disability Benefit	21,731
Withdrawal Benefit	785
Survivor's Benefit	19,605
Total Normal Cost	$127,969

This total normal cost is 12.3% of the total covered payroll as of June 30, 1965.

When a retirement plan is fully funded, the fund contains an amount equal to the accumulation (under the actuarial assumptions made) of the normal cost for each member from his date of hire to the date of the valuation. This accumulation is called the accrued liability or the required reserve.

The elements of accrued liability for this plan are:

Type of Benefit	Accrued Liability
1. Active Members	
Retirement Benefit	$ 2,004,579
Disability Benefit	136,364
Withdrawal Benefit	6,028
Survivor's Benefit	106,383
Total for Active Members	$ 2,253,354
2. Inactive Members	
Retired	$ 635,453
Deferred Retired	32,310
Widows	228,530
Orphans	26,186
Survivor's Benefit	117,836
Total for Inactive Members	$ 1,040,315
Total Accrued Liability	$ 3,293,669

A retirement plan which is fully funded requires future contributions no larger than the sum of the normal cost of all active members to pay for the prospective benefits (if the assumptions made are realized exactly). To the extent that normal costs have not been paid in the past, a plan is not fully funded. The amount by which the plan is short of full funding is called the unfunded accrued liability of the fund. In other words, the unfunded accrued liability is the excess of the accrued liability over the actual assets of the fund.

The amount of annual contribution which would be required to pay each year's normal cost and eliminate the deficit by 1997 is the "total annual payment" shown in Section C of this report.

The deficit in the fund will increase unless at least 3% interest on the deficit is paid each year in addition to the normal cost. The sum of these two amounts should be regarded as the minimum annual contribution to the fund in order to keep the deficit at its present size. This "minimum contribution" is shown in Section C of this report.

E. CENSUS OF MEMBERSHIP AND ANNUITANTS

Following is a summary of membership and survivors of deceased members as of June 30, 1965:

Status	Number
Active Members	168
Deferred Annuitants	3
Service Retirements	31
Disabled Members	2
Widows of Deceased Members	19
Children of Deceased Members	9

F. BENEFITS BEING PAID AS OF JUNE 30, 1965.

	Number	Monthly Benefit
Service Retirements	31	$ 5,919.22
Disabled Members	2	205.00
Widows of Deceased Members	19	1,460.00
Children of Deceased Members	9	390.00
Total		$ 7,974.22
(Equivalent Total Annual Benefit		$ 95,690.64)

G. CERTIFICATION BY ACTUARY

Name of Association Minnesota State Police Officers Retirement Association

We hereby certify that this actuarial survey of the above named Association was made as of June 30, 1965, on the basis of accepted actuarial methods and procedures. The survey was completed in accordance with the requirements of Chapter 359 of Minnesota Laws 1965.

Gerald G. Toy

Gerald G. Toy
Fellow, Society of Actuaries
GEORGE V. STENNES AND ASSOCIATES

December 20, 1965

STATE POLICE OFFICERS RETIREMENT FUND

Introduction

In accordance with Chapter 359 of 1965 Minnesota Laws, a statement of the financial condition as of year ending June 30, 1965 of the State Police Officers Retirement Fund is herewith submitted. This statement contains the following items:

1. Introduction
2. Exhibit A, Balance Sheet
3. Exhibit B, Income Statement
4. Exhibit C, Census of Membership and Annuitants
5. Schedule 1, Statement of Unfunded Accrued Liability
6. Schedule 2, Statement of Estimated Total Reserve Required
7. Certification of Actuary

Submitted by: S/ Charles J. Reiter
President

S/ Edward W. Reed
Secretary

Prepared by: S/ Donald J. Mc Mahon
Accountant

Exhibit A

STATE POLICE OFFICERS RETIREMENT FUND

Balance Sheet

Year ending June 30, 1965

Assets

Cash:		
In office	$ -	
On deposit with State Treasurer	15,390.99	
		$ 15,390.99
Accounts receivable:		
Members contributions	$ 2,743.26	
Employer contributions	5,029.30	
Other	-	
		7,772.56
Accrued interest on investments	$ 189.50	
Dividends on stocks declared but not received	-	
		189.50
Investments:		
Bonds at amortized cost	$864,000.00	
Stocks at cost	190,303.79	
Real estate	-	
		$1,054,303.79
Equipment at cost less depreciation		-
Other		-
Total assets		$1,077,656.84
Unfunded accrued liabilities (Schedule 1)		2,216,012.16
		$3,293,669.00

Liabilities and Reserve

Current:		
Accounts payable	-	
Annuity payments	-	
Survivor benefit payments	-	
Refundments	-	
Accrued expenses	-	
Total current liabilities		-
Suspense items		-
Total reserves required (Schedule 2)		$3,293,669.00
Total liabilities and reserves		$3,293,669.00

Exhibit B

STATE POLICE OFFICERS RETIREMENT FUND

INCOME STATEMENT

Year ending June 30, 1965

INCOME:			
Employee contributions			$50,367.52
Employer contributions:			
Regular 9%		$75,551.24	
Additional 2%		16,789.24	92,340.48
Investment income			40,746.19
Profit from sale of investments			32.30
Other			354.84
Total income			$183,841.33
DEDUCTIONS FROM INCOME:			
Benefit payments:			
Retirement annuity		$71,076.41	
Disability		168.00	
Widows		16,586.78	
Surviving children		5,200.00	$93,031.19
Refundments:			
Employment termination		$ 2,518.93	
Member deaths		-	
Annuitant deaths		751.46	$ 3,270.39
Increase in total reserve required			*
General expense:			
Non state employee services		$ 1,830.00	
Salaries		1,200.00	
Communications and travel		578.12	
Office supplies		111.84	
Data processing		91.29	
Equipment repair		15.00	$ 3,826.25
Loss on sale of investments			-
Total deductions from income (exclusive of increase in total reserve required)			$100,127.83

*Not available for year ending June 30, 1965.

This income statement is prepared exclusive of the increase of total reserve required which is not available at this time.

Exhibit C

STATE POLICE OFFICERS RETIREMENT FUND

Census of Membership and Annuitants

The following is a summary of membership and survivors of deceased members as of June 30, 1965:

Status	Number
Active Members	168
Deferred Annuitants	3
Service Retirements	31
Disabled Members	2
Widows of Deceased Members	19
Children of Deceased Members	9

Schedule 1

STATE POLICE OFFICERS RETIREMENT FUND

Unfunded Accrued Liability

Year ending June 30, 1965

Accrued liability (Schedule 2)		$3,293,669.00
Assets in fund:		
Total Assets* (Exhibit A)	$1,077,656.84	
Total Current Liabilities (Exhibit A)	-	
Net Assets		1,077,656.84
Unfunded accrued liability (Exhibit A)		$2,216,012.16

*Include accumulated member contributions of $558,939.43 without interest.

Schedule 2

STATE POLICE OFFICERS RETIREMENT FUND

Total Reserves Required

Year ending June 30, 1965

Active members:		
Retirement benefits	$2,004,579.00	
Disability benefits	136,364.00	
Refundments	6,028.00	
Survivors benefits	106,383.00	
		$2,253,354.00
Deferred Annuitants		32,310.00
Former members without vested rights		-
Annuitants:		
Retirement	$ 635,453.00	
Disability annuities	-	
Widows	228,530.00	
Surviving children	117,836.00	
Other survivors	26,186.00	
		1,008,005.00
Total accrued liability (Exhibit A)		$3,293,669.00

G. CERTIFICATION BY ACTUARY

Name of Association Minnesota State Police Officers Retirement Association

We hereby certify that this actuarial survey of the above named Association was made as of June 30, 1965, on the basis of accepted actuarial methods and procedures. The survey was completed in accordance with the requirements of Chapter 359 of Minnesota Laws 1965.

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