GVS Minnesota Memo #5
December 17, 1965

STATE POLICE OFFICERS VALUATION AS OF JUNE 30, 1965

The purpose of this memorandum is to discuss the valuation report of the Minnesota State Police Officers Retirement Association which was submitted to the Commission in accordance with Chapter 359 of Minnesota Laws 1965. The valuation was made on the basis of the entry age normal cost method and assuming 3% interest. Our office completed both valuations.

This memo contains the following:

1. Statistical and Valuation Data
2. Discussion of Valuation Results
3. Conclusion

(Reference can be made to our report of June 19, 1964 for a similar discussion of the actuarial survey as of January 1, 1964.)

1. Statistical and Valuation Data

Results of the valuation reports as of January 1, 1964 and June 30, 1965 are shown for comparative purposes. Figures are rounded where necessary for simplicity of presentation.

(1) Membership	As of January 1, 1964	As of June 30, 1965
Active Members	164	168
Deferred Annuitants	3	3
Retired Members	33	31
Disabled Members	0	2
Widows of Deceased Members	16	19
Children of Deceased Members	10	9

(2) Payroll and Annuities Payable	(Thousands of Dollars)	
Total Payroll (no limit)	$ 1,010	$ 1,070
Covered Payroll (subject to $4,800 limit in 1964 valuation; $7,200 in 1965 valuation)	787	1,042
Annuities (Annual)	94	96

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(3) Valuation Balance Sheet

	As of January 1, 1964	As of June 30, 1965
	(Thousands of Dollars)	
Accrued Liability	$ 2,618	$ 3,294
Assets	963	1,070
Unfunded Accrued Liability (Deficit)	$ 1,654	$ 2,224
Funding Ratio (ratio of Assets to Accrued Liability)	37%	33%

(4) Normal Cost and Funding Costs

		% of Covered Payroll		% of Covered Payroll
Normal Cost	$107,000	13.6%	$128,000	12.3%
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Interest on Deficit	50,000	6.3	67,000	6.4
Total ("Minimum Contribution")	$157,000	19.9%	$195,000	18.7%
Normal Cost	$107,000	13.6%	$128,000	12.3%
Amortization by 1997	78,000	10.0	107,000	10.3
Total ("Required Contribution")	$185,000	23.6%	$235,000	22.6%

(5) Statutory Contributions

Employee	6.0%	6.0%
Employer Regular	9.0	9.0
Employer Additional	2.0	3.5
Total Contributions	17.0%	18.5%

(6) Estimated Investment Yield (A) (Not Available) 3.9%

(A) Ratio of reported investment income to estimated mean assets for fiscal year.

2. Discussion of Valuation Results

(1) Changes in Plan:

The 1965 Legislature enacted some significant amendments (Chapter 890) to the law governing the State Police Officers' Plan. These are outlined below:

(a) Covered Payroll: Increased from $4,800 limit to $7,200 limit.

(b) Retirement Benefit: The average salary used as a basis for this benefit is to be based on a $7,200 limit after June 30, 1965, instead of $4,800.

(c) Disability Benefit: Same type of increase as Retirement Benefit.

(d) Widow's and Orphan's Benefit:

Before Retirement: The widow's benefit was increased from $65 to $75 per month. There was no change in the orphan's benefit ($45 per month for each orphan plus $20 prorated among them, subject to $250 per month maximum for any family).

After Retirement: No change (retirant may elect optional joint and survivor annuity instead of life annuity).

(e) Options: Game warden members of the State Police Officers' Association who had 20 or more years of service as of July 1, 1965, may elect an option (within one year) to have his benefits computed under the 1957 law. Members who had already elected such an option under previous law are now able to revoke this option if they choose to do so (before July 1, 1966). No account was taken of these options in the 1965 valuation since members have until July 1, 1966, to make elections.

(2) Analysis of Normal Cost:

The 1965 valuation produced a normal cost of 12.3% of covered payroll compared to 13.6% in 1964. The increase in covered payroll in going from a $4,800 limit to a $7,200 limit was about 32%. The normal cost has not increased proportionately as much as covered payroll. One reason is that the retirement benefits of active members increase only as to future service, with prior service still restricted to a $4,800 salary limit.

(3) Analysis of Change in Deficit:

The deficit has increased from $1,654,000 to $2,224,000, an increase of $570,000 in the 18-month period.

This increase can be explained primarily by a combination of changes in the plan.

This increase is the net result of several factors. The following factors have added to the deficit:

(a) More liberal Retirement and Disability Benefits.

(b) More liberal Widow's Benefits.

(c) A 1964 contribution rate which was far short of the "Minimum Contribution" rate.

The following factor partially offsets the increases produced by the above:

Investment earnings in excess of the assumed rate of 3%.

The net effect has been an increase in deficit as shown.

(4) Analysis of Contributions and Funding Costs

As indicated in the 1964 valuation report, actual contributions were being made short of requirements to fund the plan. Actual contributions of 17% were being made. The minimum contribution (normal cost plus interest on the deficit) was 19.9%; and the total required contribution necessary to amortize the deficit by 1997 was 23.6%.

The 1965 valuation report shows future statutory contributions to be 18.5%, as against a "minimum contribution" of 18.7% and a total "required contribution" of 22.6%.

3. Conclusion

In our opinion, the statutory contributions for this plan are for practical purposes sufficient to prevent an increase in the deficit, based upon our valuation assumptions and the benefits provided by the plan as of June 30, 1965.

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