HIGHWAY PATROLMEN VALUATION AS OF JUNE 30, 1966

The purpose of this memorandum is to discuss the valuation report of the Minnesota Highway Patrol Officers Retirement Association which was submitted to the Commission in accordance with Chapter 359 of Minnesota Laws 1965. The valuation was made by our office using the entry age normal cost method and assuming 3% interest.

This memorandum contains the following:

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

Reference can be made to our report of December 17, 1965 for a similar discussion of the actuarial valuation as of June 30, 1965.

1. Statistical and Valuation Data

Results of the valuation reports as of June 30, 1965 and June 30, 1966 are shown for comparative purposes. Figures are rounded where necessary for simplicity of presentation.

(1)	Membership	June 30, 1965	June 30, 1	966	
	Active Members	376	377 13 54 0 15		
	Deferred Annuitants	9			
	Retired Members	50			
	Disabled Members	2			
	Widows of Deceased Members	14			
	Children of Deceased Members	8			
(2)	Payroll and Annuities Payable	(Thousands of Dollars)			
	Total Payroll (no limit)	\$ 2,484	\$ 2,619		
	Covered Payroll (\$6,000 limit)	2,240	2, 258		
	Annuities (annual)	145	152		
(3)	Valuation Balance Sheet	(Thousands of Dollars			
	Accrued Liability	\$ 7,496	\$ 7,874		
	Assets	3,137	3,730		
	Unfunded Accrued Liability (Deficit)	\$ 4,359	\$ 4, 144		
	Funding Ratio (Assets/Acc. Liability)	42%	47%	0	

(4)	Normal Cost and Funding Costs		% of Covered Payroll		% of Covered Payroll
	Normal Cost	\$360,000	16.1%	\$387,000	17.1%
	Normal Cost Interest on Deficit Total (Minimum contribution) Normal Cost	\$360,000 131,000 \$491,000 \$360,000	$\frac{5.8}{21.9}\%$	\$511,000	17.1% 5.5 22.6% 17.1%
	Amortization by 1997 Total (Required Contribution)	210,000 \$570,000		197,000 \$584,000	8.7 25.8%
(5)	Statutory Contributions				
	Employee Employer Regular Employer Additional Total Contributions		7.4% 11.2 9.0 27.6%		$7.4\% \\ 11.2 \\ \underline{9.0} \\ 27.6\%$
(6)	Investment Yield*				
	Before Administrative Expense After Administrative Expenses		3.8% 3.6%		3.9% 3.7%

*Ratio of reported investment income to mean reported assets.

2. Discussion of Valuation Results

The 1966 valuation shows a normal cost of 17.1% of covered payroll compared with 16.1% in 1965. The 1965 valuation was the first one prepared by our office for the Association. After the 1965 report had been filed, additional communication with the Association revealed that the eligibility requirements for a disability benefit had been misunderstood and that the cost figures for this benefit were somewhat too low. The correction of this misunderstanding is the primary source of the apparent increase in the normal cost as a percentage of payroll.

The deficit has decreased from \$4,358,000 to \$4,144,000, a decrease of \$214,000 during the past year. This decrease in larger than that required to maintain the schedule of amortizing the deficit by 1997. As indicated in Section 1 above, the contribution during the past year was in excess of the required contribution. In addition, the investment yield has been in excess of the assumed rate of 3%.

The anticipated contributions during the current year of 27.6% of the covered payroll of \$2,258,000 will amount to \$623,000 which is \$236,000 in excess of the normal cost. If equal annual payments of \$236,000 were made toward the deficit of \$4,144,000, the deficit could be retired in about 24 years or by 1990.

3. Conclusion

In our opinion, the statutory contributions for this plan are sufficient to pay the normal cost each year and to retire the deficit before 1997. This opinion is based upon cost figures obtained by the entry age normal cost method and based upon our valuation assumptions and the benefits provided by the Plan as of June 30, 1966.

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GEORGE V. STENNES AND ASSOCIATES
Commission Actuaries