WINONA FIRE DEPARTMENT RELIEF ASSOCIATION

ACTUARIAL CALCULATIONS PRELIMINARY

TO CONSOLIDATION

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> Jean Chebran Neaves Secretary of State

THE Wyatt COMPANY

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June 17, 1988

Legislative Commission on Pensions and Retirement 55 State Office Building St. Paul, Minnesota 55155

RE: WINONA FIRE DEPARTMENT RELIEF ASSOCIATION

Commission Members:

We have performed actuarial calculations for the Relief Association as of January 1, 1988 based on membership and financial data supplied by the Relief Association.

We certify that to the best of our knowledge and belief this actuarial work was performed in accordance with the requirements of Sections 353A.05 and 356.215, Minnesota Statutes, and the requirements of the Standards for Actuarial Work, adopted by the Commission on August 26, 1987.

Respectfully submitted,

THE WYATT COMPANY

Robert E. Perkins, FSA Consulting Actuary

Michael C. Gunvalson, ASA Associate Actuary

Michael C. Tunvakon

cc: The Honorable Arne Carlson, State Auditor
The Honorable Joan Anderson Growe, Secretary of State
Howard Bicker, State Board of Investment
James Hacking, Public Employees Retirement Association
James Noble, Legislative Auditor
Thomas J. Triplett, Commissioner of Finance
Charles Anderson, Treasurer, Winona Fire Department Relief Association
Eric B. Sorenson, City Manager, City of Winona

REPORT PRELIMINARY TO CONSOLIDATION

The purpose of this report is to estimate the cost of consolidating the Relief Association with PERA Police and Fire (P&F) as specified in Minnesota Statutes, Chapter 353A prior to potential final municipal approval of the consolidation question.

The consolidation process provides the Relief Association members and their beneficiaries an opportunity to change their retirement benefit plan coverage by electing between Relief Association and P&F benefits. In order to evaluate the financial aspects of consolidation, the costs in Table 1 have been determined under three possible outcomes - all individuals elect Relief Association benefits (column 2), all individuals elect P&F benefits (column 3) and each individual elects the benefit plan which has the greater total benefit plan actuarial value (column 4).

Table 1 also compares the consolidation calculations to those found in the actuarial valuation of the Relief Association as of December 31, 1987, prepared by Gabriel, Roeder, Smith & Company. Since the Relief Association benefits are identical for columns 1 and 2, the differences in liabilities and costs are due primarily to the use of different actuarial assumptions as required by statute. Table 2 shows the data and lists the major assumptions.

Whenever a retired member or the retired member's surviving spouse elects P&F benefits, the reserve for that benefit must be transferred to the Minnesota Post Retirement Investment Fund (MPRIF). The amount to be transferred if all benefit recipients who are eligible for MPRIF elect P&F benefits is \$4,290,315, which is

less than the current market value of assets. This amount includes an estimated increase of 6.000% for those who meet the MPRIF eligibility rules for a January 1, 1989 benefit adjustment.

Current benefit recipients who are not eligible for MPRIF will be paid directly by PERA. Their benefits will be escalated by the same percentage that applies to MPRIF annuitants, however no funds are required to be transferred to MPRIF.

Although the costs shown in Table 1 represent an appropriate range of estimates available today, the costs are subject to change in future years following the consolidation. The true cost of any pension plan is not completely determined until the last benefit payment has been made to the last benefit recipient. Prior to that date, annual budgets are determined by making assumptions regarding future experience.

Each year in the future following consolidation, municipal costs will be redetermined based on the elections made by members and beneficiaries and will consist of the following components:

- Regular contributions (line 7) a variable cost which will depend on the compensation of members still active.
- Additional contributions (line 6) a fixed cost which is an annual amount of \$663,776, the amount required to amortize the initial unfunded consolidation actuarial liability shown in column 4 of Table 1 by the year 2010.

Additional contributions (undeterminable at this time) - a variable cost which will depend on actual experience. Any actuarial gains (for example, investment results in excess of 8%) will reduce future contributions and actuarial losses (for example, salary increases in excess of 6.5%) will increase future contributions.

WINONA FIRE DEPARTMENT RELIEF ASSOCIATION ACTUARIAL CALCULATIONS

	Prior Valuation	Election Of Benefits Under The Consolidation		
	Relief	All Elect	All Elect	All Elect
	<u>Association</u>	Relief Association	PERA P&F	<u>Greater Value</u>
	(1)	(2)	(3)	(4)
Date of Calculations	12/31/87	1/1/88	1/1/88	1/1/88
Actuarial Present Value of Projected Benefits	\$13,232,991	\$13,293,054	\$9,717,614	\$13,295,036
Actuarial Accrued Liability	11,429,909	11,978,739	8,617,459	11,975,152
Normal Cost	221,824	178,947	129,669	179,511
Determination of Municipality Contributions (Before Adjustment For	State Aid)			
1. Actuarial Present Value of Projected Benefits	\$ NA	\$13,293,054	\$9,717,614	\$13,295,036
2. Present Value of Future Member Contributions	NA	528,748	597,428	531,761
3. Present Value of Future Regular Municipal Contributions	NA	793,122	896,142	797,641
4. Market Value of Assets	4,530,849	4,530,849 *	4,530,849 *	4,530,849 *
5. Unfunded Amount to be Amortized (1-2-3-4)	7,000,079 **	7,440,335	3,693,195	7,434,785
6. Additional Municipal Contribution (5 amortized by 2010)	518,932	664,272 ***	329,728 ***	663,776 ***
7. Regular Municipal Contribution	154,782 ****	104,520	103,172	104,520
8. Total Municipal Contribution (6+7)	673,714	768,792	432,900	768,296

 $[\]star$ Equal to market value reported by Winona and assuming no changes by the State Board of Investments.

^{**} Based on the Actuarial Accrued Liability less the Current Assets of \$4,429,830.

^{***} An increase (decrease) in Market Value of \$100,000 will decrease (increase) the municipal contribution by \$8,928.

^{****} Equals the Employer Normal Cost.

WINONA FIRE DEPARTMENT RELIEF ASSOCIATION DATA AND ASSUMPTIONS

	Prior Valuation	Consolidation Calculation		
	Relief	All Elect	All Elect	
	Association (1)	Relief Association	<u>PERA_P&F</u> (3)	
		(2)		
Number in Plan				
Active Members	30	30	30	
Deferred Former Members	0	0	0	
Retired Members and Beneficiaries	44	43	43	
Member Contribution				
Percentage	8.0%	8.0%	8.0%	
Compensation Base	\$838,020	\$871,004	\$859,764	
Contribution	67,041	69,680	68,781	
Municipal Contribution				
Percentage	NA	12.0%	12.0%	
Compensation Base	NA	\$871,004	\$859,764	
Contribution	NA	104,520	103,172	
Interest - Before Retirement	5.0%	8.0%	8.0%	
After Retirement	5.0%	8.0%	5.0%	
Salary Increase	3.5%	6.5%	6.5%	
Post Retirement Benefit Increase	3.5%	6.5%	NA	
Retirement Age/Service	58/20	58/20	60/5	
Other Assumptions	per Winona Relief	per PERA P&F	per PERA P&F	
	Association Report	Report	Report	

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