

RED WING FIRE DEPARTMENT RELIEF ASSOCIATION

ACTUARIAL CALCULATIONS PRELIMINARY
TO CONSOLIDATION

RECEIVED

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SECRETARY OF STATE

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O.D.

March 29, 1989

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

RE: RED WING FIRE DEPARTMENT RELIEF ASSOCIATION

Commission Members:

We have performed actuarial calculations for the Relief Association as of January 1, 1989 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 22, 1988.

Respectfully submitted,

THE WYATT COMPANY

Robert E. Perkins

Robert E. Perkins, FSA
Consulting Actuary

Michael C. Gunvalson

Michael C. Gunvalson, FSA
Consulting Actuary

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
Tom Danielson, Secretary, Red Wing Fire Department Relief Association
Burton Will, Red Wing City Clerk/Administrator

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 and to a lesser extent, to the differences in data and the date of the calculation. 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 \$1,529,622, which is less than the current market value of assets. This amount includes an estimated increase of 4.0% for those who meet the MPRIF eligibility rules for a January 1, 1990 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 \$185,912, 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.

RED WING FIRE DEPARTMENT RELIEF ASSOCIATION
ACTUARIAL CALCULATIONS

TABLE 1

	Prior Valuation	Election Of Benefits Under The Consolidation		
	Relief Association (1)	All Elect Relief Association (2)	All Elect PERA P&F (3)	All Elect Greater Value (4)
Date of Calculations	12/31/87	1/1/89	1/1/89	1/1/89
Actuarial Present Value of Projected Benefits	\$5,599,619	\$6,236,725	\$4,336,657	\$6,236,725
Actuarial Accrued Liability	4,767,676	5,578,085	3,765,953	5,578,085
Normal Cost	131,776	123,147	81,506	123,147
<u>Determination of Municipality Contributions (Before Adjustment For State Aid)</u>				
1. Actuarial Present Value of Projected Benefits	\$5,599,619	\$6,236,725	\$4,336,657	\$6,236,725
2. Present Value of Future Member Contributions	NA	211,117	271,624	211,117
3. Present Value of Future Regular Municipal Contributions	NA	316,675	407,436	316,675
4. Market Value of Assets	3,347,473	3,660,762 *	3,660,762 *	3,660,762 *
5. Unfunded Amount to be Amortized (1-2-3-4) (not less than \$0)	1,393,394 **	2,048,171	0	2,048,171
6. Additional Municipal Contribution (5 amortized by 2010)	103,295	185,912 ***	0 ***	185,912 ***
7. Regular Municipal Contribution	94,812 ****	57,319	57,319	57,319
8. Total Municipal Contribution (6+7)	198,107	243,231	57,319	243,231

* Equal to market value reported by Red Wing and assuming no changes by the State Board of Investments.

** Based on the Actuarial Accrued Liability less the Current Assets of \$3,374,282.

*** An increase (decrease) in Market Value of \$100,000 will decrease (increase) the municipal contribution by \$9,077 whenever the unfunded amount is \$100,000 or greater.

**** Equals the Employer Normal Cost.

RED WING FIRE DEPARTMENT RELIEF ASSOCIATION
DATA AND ASSUMPTIONS

TABLE 2

	<u>Prior Valuation</u>	<u>Consolidation Calculation</u>	
	<u>Relief Association</u> (1)	<u>All Elect Relief Association</u> (2)	<u>All Elect PERA P&F</u> (3)
Number in Plan			
Active Members	15	15	15
Deferred Former Members	0	0	0
Retired Members and Beneficiaries	15	15	15
Member Contribution			
Percentage	8.0%	8.0%	8.0%
Compensation Base	\$462,047	\$477,660	\$477,660
Contribution	36,964	38,213	38,213
Municipal Contribution			
Percentage	NA	12.0%	12.0%
Compensation Base	NA	\$477,660	\$477,660
Contribution	NA	57,319	57,319
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 Red Wing Relief Association Report	per PERA P&F Report	per PERA P&F Report

STATE OF MINNESOTA
 DEPARTMENT OF STATE
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 APR 3 1989
For Robert Howe
 Secretary of State
 138997
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