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RED WING POLICE RELIEF ASSOCIATION

ACTUARIAL CALCULATIONS PRELIMINARY  
TO CONSOLIDATION

This report incorporates the Laws of Minnesota 1989 Chapter 319.

39821

THE *Wyatt* COMPANY

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December 8, 1989

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

RE: RED WING POLICE RELIEF ASSOCIATION

Commission Members:

We have performed actuarial calculations preliminary to consolidation for the Relief Association as of October 1, 1989 based on membership and financial data supplied by the Relief Association.

This report incorporates the Laws of Minnesota 1989 Chapter 319 which provides for:

- o A level benefit for PERA Police and Fire of 2.5% for all years of service.
- o An increase in the pre-retirement interest rate from 8.0% to 8.5% for PERA Police and Fire, and an increase in both the pre-retirement interest rate and the post-retirement interest rate from 8.0% to 8.5% for the Relief Association. (The new amortization date of 2020 does not apply to a consolidated relief association)
- o A partial post retirement adjustment for individuals in the Minnesota Post Retirement Investment Fund who have received benefits for less than twelve full months.

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 September 20, 1989.

Legislative Commission on  
Pensions and Retirement  
December 8, 1989  
Page Two

Respectfully submitted,

THE WYATT COMPANY

*Robert E. Perkins*

Robert E. Perkins, FSA  
Consulting Actuary

*Michael C. Gunvalson*

Michael C. Gunvalson, FSA  
Actuary

cc: The Honorable Arne Carlson, State Auditor  
The Honorable Joan Anderson Grove, 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  
James Kulstad, Red Wing Police Relief Association  
B. C. Will, City Clerk-Treasurer, City of Red Wing

## 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, 1988, 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 \$2,443,198, which is less than the current market value of assets. This amount includes an increase of 4.04% 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 \$193,055, 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 8.5%) will reduce future contributions and actuarial losses (for example, salary increases in excess of 6.5%) will increase future contributions.

RED WING POLICE RELIEF ASSOCIATION  
ACTUARIAL CALCULATIONS

TABLE 1

	Prior Valuation Relief Association (1) 12/31/88	Election Of Benefits Under The Consolidation		
		All Elect Relief Association (2) 11/1/89	All Elect PERA P&F (3) 11/1/89	All Elect Greater Value (4) 11/1/89
Date of Calculations				
Actuarial Present Value of Projected Benefits	\$7,493,792	\$7,272,118	\$4,894,077	\$7,430,244
Actuarial Accrued Liability	6,677,552	6,752,241	4,402,351	6,910,367
Normal Cost	108,486	76,511	42,630	76,511
<u>Determination of Municipality Contributions (Before Adjustment For State Aid)</u>				
1. Actuarial Present Value of Projected Benefits	\$7,493,792	\$7,272,118	\$4,894,077	\$7,430,244
2. Present Value of Future Member Contributions	NA	160,202	268,383	160,202
3. Present Value of Future Regular Municipal Contributions	NA	240,303	402,574	240,303
4. Market Value of Assets	4,270,857	5,003,725 *	5,003,725 *	5,003,725 *
5. Unfunded Amount to be Amortized (1-2-3-4) (Not less than 0)	2,480,688 **	1,867,888	0	2,026,014
6. Additional Municipal Contribution (5 amortized by 2010)	188,802	177,988 ***	0 ***	193,055 ***
7. Regular Municipal Contribution	85,318 ****	34,796	34,796	34,796
8. Total Municipal Contribution (6+7)	274,120	212,784	34,796	227,851

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

\*\* Based on the Actuarial Accrued Liability less the Current Assets of \$4,196,864.

\*\*\* An increase (decrease) in Market Value of \$100,000 will decrease (increase) the municipal contribution by \$9,529.

\*\*\*\* Equals the Employer Normal Cost.

RED WING POLICE 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&amp;F</u> (3)
Number in Plan			
Active Members	8	8	8
Deferred Former Members	0	0	0
Retired Members and Beneficiaries	19	18	18
Member Contribution			
Percentage	8.0%	8.0%	8.0%
Compensation Base	\$289,606	\$289,968	\$289,968
Contribution	23,168	23,197	23,197
Municipal Contribution			
Percentage	NA	12.0%	12.0%
Compensation Base	NA	\$289,968	\$289,968
Contribution	NA	34,796	34,796
Interest - Before Retirement	5.0%	8.5%	8.5%
After Retirement	5.0%	8.5%	5.0%
Salary Increase	3.5%	6.5%	6.5%
Post Retirement Benefit Increase	3.5%	6.5%	NA
Retirement Age/Service	53/20	53/20	60/3
Other Assumptions		per Red Wing Police Relief Association Report	per PERA P&F Report

THE  
Ogden  
COMPANY

139821  
Secretary of State  
Paul Anderson  
DEC 20 1989  
STATE OF MINNESOTA  
DEPARTMENT OF STATE  
FILED