

HIBBING FIREMEN'S RELIEF ASSOCIATION

ACTUARIAL CALCULATIONS PRELIMINARY
TO CONSOLIDATION

STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED

SEP 12 1988

Joel Anderson Howe
Secretary of State

138387

Revised August 10, 1988

THE *Wyatt* COMPANY

AN INDEPENDENT WORLDWIDE BENEFITS
AND COMPENSATION CONSULTING FIRM

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EMPLOYEE BENEFITS
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INSURANCE CONSULTING
HEALTH CARE CONSULTING

August 10, 1988

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

RE: HIBBING FIREMEN'S RELIEF ASSOCIATION

Commission Members:

We have revised our actuarial calculations in our April 20, 1988 report. This revision shows the financial impact of the new mortality table recently adopted by the PERA Board.

This change in mortality table increases the Additional Municipal Contribution (Table 1, line 6), assuming all elect the greater value, from \$283,299 to \$313,683.

If all current benefit recipients elect PERA Police and Fire benefits, the assets will be insufficient to cover the reserves that must be transferred to the MPRIF (Minnesota Post Retirement Investment Fund). Any insufficiency would have to be covered by immediate municipal contributions. The new mortality table increased the maximum insufficiency from \$609,200 to \$695,873. The payment of any insufficiency would increase the funding level of the plan and produce a smaller Additional Municipal Contribution than the amount shown above.

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,

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Minnesota Statutes, and the requirements of the Standards for Actuarial Work,
adopted by the Commission on August 26, 1987.

Respectfully submitted,

THE WYATT COMPANY

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Robert E. Perkins, FSA
Consulting Actuary

Michael C. Gunvalson
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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
Mark Pederson, Secretary of Hibbing Firemen's Relief Association
Patrick L. Garrity, City Clerk, City of Hibbing

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THE *Wyatt* COMPANY

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, 1986, 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 differences 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 \$2,312,445, which is \$695,873 more than the reported 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 \$313,683, 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.

HIBBING FIREMEN'S RELIEF ASSOCIATION
ACTUARIAL CALCULATIONS

TABLE 1

	<u>Prior Valuation</u>	<u>Election Of Benefits Under The Consolidation</u>		
	<u>Relief Association</u> (1)	<u>All Elect Relief Association</u> (2)	<u>All Elect PERA P&F</u> (3)	<u>All Elect Greater Value</u> (4)
Date of Calculations	12/31/86	1/1/88	1/1/88	1/1/88
Actuarial Present Value of Projected Benefits	\$ NA	\$6,532,723	\$5,687,475	\$6,623,635
Actuarial Accrued Liability	4,568,059	5,366,130	4,642,749	5,459,077
Normal Cost	90,834	94,790	91,965	95,266
<u>Determination of Municipality Contributions (Before Adjustment For State Aid)</u>				
1. Actuarial Present Value of Projected Benefits	\$ NA	\$6,532,723	\$5,687,475	\$6,623,635
2. Present Value of Future Member Contributions	NA	602,938	551,862	597,429
3. Present Value of Future Regular Municipal Contributions	NA	904,407	827,793	896,144
4. Market Value of Assets	1,542,912	1,616,572 *	2,312,445 **	1,616,572 *
5. Unfunded Amount to be Amortized (1-2-3-4)	3,048,072 ***	3,408,806	1,995,375	3,513,490
6. Additional Municipal Contribution (5 amortized by 2010)	220,506	304,337 ****	178,146 ****	313,683 ****
7. Regular Municipal Contribution	42,932 *****	72,169	72,169	72,169
8. Total Municipal Contribution (6+7)	263,438	376,506	250,315 **	385,852

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

** Under the assumption that all elect PERA P&F, the City of Hibbing must contribute \$695,873 to the existing assets in order to have sufficient cash for transfer to the Post Fund. This extra contribution reduces the unfunded amount to be amortized by the year 2010 (line 5) and produces a total municipal contribution (line 8) of \$250,315.

*** Based on the Actuarial Accrued Liability less the Current Assets of \$1,519,987.

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

***** Equals the Employer Normal Cost.

Revised August 10, 1988 - New Mortality Table

HIBBING FIREMEN'S 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	24	24	24
Deferred Former Members	0	0	0
Retired Members and Beneficiaries	32	29	29
Member Contribution			
Percentage	8.0%	8.0%	8.0%
Compensation Base	\$598,773	\$601,412	\$601,412
Contribution	47,902	48,113	48,113
Municipal Contribution			
Percentage	NA	12.0%	12.0%
Compensation Base	NA	\$601,412	\$601,412
Contribution	NA	72,169	72,169
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	62/20	62/20	60/5
Other Assumptions	per Hibbing Relief Association Report	per PERA P&F Report	per PERA P&F Report

James Anderson
Secretary of State
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