

1983 ACTUARIAL REPORT AND  
EXPERIENCE STUDY

for

BUHL POLICEMEN'S RELIEF  
ASSOCIATION



**Hewitt Associates**

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Section 1. A Brief Summary of the Census Data

The data on which this actuarial valuation is based is summarized below.

Members Not Yet Receiving Benefits

	<u>Number</u>	<u>Prospective Retirement Annuities</u>
Active Members	2	\$23,534.00
Deferred Annuitant Members	0	--

Members Currently Receiving Benefits

	<u>Number</u>	<u>Annual Annuity Payments</u>
Retired Members	1	\$10,060.80
Disabled Members	0	--
Widows of Deceased Members	0	--
Children of Deceased Members	0	--

## Section 2. The Actuarial Valuation

The results of the valuation on January 1, 1983, are shown below.

1. Actuarial Liability	\$263,499
2. Special Fund Assets	<u>309,588</u>
3. Unfunded Actuarial Liability (Prior Service Deficit)	\$(46,089)
4. Normal Cost for Current Year	\$ 7,441
5. Normal Cost as a Level Percentage of Current and Projected Future Participating Payroll	20.066%
6. Current Participating Payroll used for Valuation	\$ 36,358

The actuarial assumptions used in determining these results will be found in Appendix A.

### Explanation of Actuarial Terminology

Actuarial Liability: The present value of benefits earned for service prior to the valuation date under the actuarial method used. The actuarial method used spreads the cost of total expected benefits equally over each member's anticipated period of active membership. The dollar amount shown as the Actuarial Liability represents the number of dollars that should be in the Special Fund to provide for benefits already earned.

Unfunded Actuarial Liability (Prior Service Deficit): This amount is the difference between the Actuarial Liability (the amount that should be in the Special Fund to fully provide for benefits already earned) and the actual amount of Special Fund assets.

Section 2. The Actuarial Valuation (Continued)

Normal Cost: The amount necessary, according to the actuarial method used, to pay for benefits earned in 1983 (and each future year until another actuarial valuation is completed).

Section 3. Contributions

The Police and Firefighters' Relief Association Guidelines Act of 1969, as amended by Chapter 224 of Minnesota Statutes 1981, specifies minimum support rates required on an annual basis.

The minimum support rates from the municipality and state aid are determined as the amounts required to meet the Normal Cost plus amortize the unfunded actuarial liability by December 31, 2010.

This total financial requirement is shown below.

The contribution required by the municipality for any year is determined by taking Item 3 below, and subtracting one year's estimated state aid expected from the state pursuant to Minnesota Statutes, Chapter 69.

Contribution to Amortize Unfunded Actuarial Liability (Prior Service Deficit) by December 31, 2010

1. Normal Cost	\$7,441
2. Amortization Payment on Unfunded Actuarial Liability (Prior Service Deficit)	<u>0</u>
3. Total Financial Requirement (including State Aid)	\$7,441

Section 4. Income of Fund During 1982

Members' Contributions	\$ 4,334.53
Contributions by Municipality	12,968.79
State Aid	7,697.66
Other	<u>0</u>
Total Contributions	\$25,000.98
Investment Income	\$92,915.52

Section 5. Experience of the Plan

Since the previous valuation of the plan, the Unfunded Actuarial Liability has changed as follows:

Unfunded Actuarial Liability, 1/1/81	\$(26,984)
Decrease due to amortization payment, 1981	\$(19,866)
Decrease due to amortization payment, 1982	(20,860)
Increase due to actuarial losses since 1/1/81	<u>21,621</u>
Net decrease in Unfunded Actuarial Liability	\$(19,105)
Unfunded Actuarial Liability, 1/1/83	\$(46,089)

The average entry age of all active employees is 28.5.

The average age at retirement of current retirees is 65.5.

Section 6. The Preparation of the Report

This report has been prepared in accordance with generally accepted actuarial principles and practices. This actuarial survey was made in accordance with our understanding of the requirements of the Police and Firefighters' Relief Association Guidelines Act of 1969, as amended by Chapter 224, Laws of Minnesota 1981. The usual care has been exercised in making the calculations and presenting the results. The contents of this report are, therefore, believed to be a correct appraisal of the state of affairs of the Plan.

Respectfully submitted,

HEWITT ASSOCIATES

*Eric R. Cerling*

Eric R. Cerling  
Fellow, Society of Actuaries

APPENDIX A  
ACTUARIAL ASSUMPTIONS



## ACTUARIAL ASSUMPTIONS

Mortality Rates	The mortality rates used are based on the United States Life Table, 1959-61, White Males and White Females. These tables were used for active members, retired members and for survivors.
Withdrawal Rates	The rate of withdrawal is .060 at age 20 decreasing uniformly to zero at age 45 with no withdrawal after that age.
Disability Rates	The expected Normal Cost of any disability benefit has been determined using claim statistics based on rates developed by the New York State Employees' Retirement System, and the resulting cost has been included in the Normal Cost shown on page 2.
Retirement Age	Members are assumed to retire after attaining age 58 and 20 years of service.
Salary Scale	A 3-1/2% annual increase in the salary on which retirement benefits are based has been assumed.
Interest Rate	Five percent compounded annually.
Actuarial Method	The Entry Age Normal Cost Method has been used to determine the Unfunded Actuarial Liability. The Normal Cost has been determined as a level percentage of current and future participating payroll on which the retirement benefits are based.

APPENDIX B  
SUMMARY OF PLAN PROVISIONS



SUMMARY OF PLAN PROVISIONS

Requirements for Benefits

Retirement Twenty years service and age 50.

Disability In Line of Duty: None.

Not in Line of Duty: None.

Vesting Twenty years service. Benefit is deferred to the attainment of age 50.

Amount of Benefit

Retirement Benefit When Minimum Requirements are Met: 50% of final pay.

Additional Benefits for Service Beyond Minimum Requirements:  
\$10.00 per month for each additional year of service in excess of 20 years but not to exceed \$50.00.

Disability

Short Term \$8.00 per day to a maximum of 26 weeks.

Total and Permanent In Line of Duty: 50% of final pay.

Not in Line of Duty: 50% of final pay.

Vesting Same as Retirement benefit.

Widow's Benefit 50% of member's pension benefit based on 50% of final pay.

Children of Deceased Members If both parents are deceased, 50% of member's pension. If member dies before retirement, \$125.00 per month per child to age 18 or 22 if in school.

Other Death Benefits None.

Salary Basis for Benefits Current compensation.

Unit Value Not applicable.

Member Contribution 8% of compensation.



APPENDIX C

CENSUS DATA



BUHL POLICEMEN'S RELIEF ASSOCIATION

Active Members

<u>Number</u>	<u>Age Nearest Birthday</u>	<u>Completed Years of Service</u>	<u>Current Salary</u>	<u>Projected Annual Annuity</u>
1	53	26	\$18,923	\$11,237
2	48	17	\$17,435	\$12,297

Retired Members

<u>Number</u>	<u>Age Nearest Birthday</u>	<u>Annual Benefit</u>
1	66	\$10,060





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