

**BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION**

Actuarial Valuation as of January 1, 1993

March 17, 1993

Auditor



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Wyatt

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**BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION**

Actuarial Valuation as of January 1, 1993

PURPOSE AND SUMMARY

The purpose of this report is to present the results of our January 1, 1993 actuarial valuation of the Bloomington Fire Department Relief Association performed in accordance with the provisions of Chapter 356 of the Minnesota State Statutes. In summary, our valuation indicates a required contribution of \$1,768,200 as of January 1, 1993. The contribution must be increased with interest, at the rate of 5% per year until the date of payment. If payment is made as late as December 31, 1993, a contribution of \$1,856,600 is required. This contribution is in addition to estimated member contributions of \$21,200 for 1993. The results of the valuation are discussed in detail in later sections of the report.

The contribution is down slightly from last year's contribution of \$1,888,000. The decrease was the result of three factors:

- active membership decreased from 154 to 149 members,
- salary increases which determine the benefit level were 2.8% which is less than our 3.5% assumption, and
- investment performance of 8.9% was better than our 5% assumption.

We certify that this actuarial valuation has been prepared in accordance with Chapter 356 of the Minnesota State Statutes as it applies to the Bloomington Fire Department Relief Association.

EMPLOYEE DATA

The data provided by the Association is summarized in Table 2(a). The table sets forth a census reconciliation from January 1, 1992 to January 1, 1993. There are 149 active members in the Association as of the valuation date. They have an average attained age of 34.6 and an average entry age of 26.9. Table 2(b) sets forth the prospective benefit each member may expect to receive if he remains in the Association to the normal retirement date

assumed in the valuation, age 50 and completion of 20 years of service. These benefits assume 3-1/2% future pay increases per year.

The reported data includes 81 retired members, 8 surviving spouses, 4 disabled members, and 1 surviving child receiving monthly benefits as of January 1, 1993. There are 10 terminated members entitled to receive benefits at age 50.

Table 2(c) sets forth a list showing the benefit each inactive member is currently receiving or is entitled to receive upon attainment of age 50. No increase is assumed in benefits of terminated vested members for this listing.

Monthly benefits payable from the plan are based on the most recent three year average salary rates of the highest paid non-officer policeman in the City of Bloomington. Consequently, benefits to all inactive members are increased each year. January 1, 1993 benefit levels are determined as follows:

1.	Average Monthly Salary	
	(a) January 1, 1991	3,380
	(b) January 1, 1992	3,490
	(c) January 1, 1993	3,586
	(d) Average	3,485
2.	Monthly Benefits	
	(a) Retirees	
	(1(d) x 1/3)	1,162
	(b) Surviving Spouses	
	(2(a) x 75%)	871

For cost determinations, future benefits are assumed to increase in accordance with the assumed rate of salary increase, 3-1/2% per year.

ASSETS OF THE SPECIAL FUND

A statement of the assets of the Special Fund as of December 31, 1992 prepared by George Hayden was made available to us by the Association. Our valuation reflects the reported market value of the Special Fund as of December 31, 1992 of \$51,531,989 less salaries, pensions and other expenses of \$89,628 which were payable as of December 31, 1992 for a total of \$51,442,361 used as valuation assets.

PLAN PROVISIONS

Table 3 is a summary of the principal provisions of the plan. There have been no changes since the last valuation.

ACTUARIAL ASSUMPTIONS

Chapter 356 of the Minnesota Statutes requires that actuarial valuations of public plans be based on an assumed interest rate of 5% per annum and an assumed rate of annual salary increase of 3-1/2% per annum. Other assumptions pertaining to the rates of mortality, turnover, retirement, etc. are left to the discretion of the actuary. All of the valuation assumptions are the same as those used in the January 1, 1992 valuation of the plan. Table 4 is a summary of all of the actuarial assumptions.

ACTUARIAL METHOD

As required by law, the funding method used for the valuation is the entry age normal cost method. Under this method, the normal cost is computed as that percentage of pay which would fund all benefits if that percentage of pay was contributed every year from each fireman's entry into the plan until his retirement. The total normal cost for the plan is the sum of the normal costs for all active members. The normal cost is reduced by the members' contribution for the current year.

The present value of all future benefits payable from the plan for all active and inactive members less the present value of all future normal costs is defined as the accrued liability. The accrued liability is the amount that would have accumulated in the Special Fund if all the actuarial assumptions had been exactly realized in all prior years and if funding for all members, based on current plan benefits, had commenced immediately upon their date of joining the Association.

The total accrued liability is compared to the valuation assets of the Special Fund to determine the status of the plan. Any excess, known as the unfunded accrued liability, is to be funded over a number of years specified by law.

There is currently no unfunded accrued liability. State law does not permit recognizing an amortization credit for over-funded plans.

Any changes in the unfunded accrued liability due to changes in benefits or actuarial assumptions must be paid over a new 30 year period. The total annual contribution due as of the valuation date is the sum of the normal cost, the amortization payment and a \$73,600 provision for administrative expenses. The provision for expected expenses is necessary because administrative expenses are paid from the Special Fund. The \$73,600 amount is estimated from actual expenses paid from the Special Fund during 1992. Interest must be added to the contribution at the rate of 5% from the valuation date to the date of payment. Thus, if payment were made as of December 31, 1993, the January 1 contribution amount must be multiplied by 1.05.

VALUATION RESULTS

A contribution of \$1,888,000 was reported in the January 1, 1992 valuation. This contribution was expected to increase to \$1,952,500 as of January 1, 1993 because the normal cost is expected to increase 3-1/2% each year in accordance with our valuation method.

Table 1(a) sets forth the principal results of this year's valuation. A contribution of \$1,856,600 is required.

The annual contribution is the sum of the normal cost, the amortization payment, and administrative expenses. The normal cost is computed to be a level percentage of pay assuming each fireman earns the same as a Bloomington policeman, \$43,032 per year. Under this assumption, there is a total covered payroll of \$6,411,800 (149 x \$43,032) and the net normal cost of \$1,694,600 is 26.4% of payroll. The total contribution of \$1,856,600 is 29.0% of payroll.

CHANGE IN THE UNFUNDED ACCRUED LIABILITY

Chapter 356 requires a reconciliation of the unfunded accrued liability from one valuation to the next valuation. As of January 1, 1992 there was an unfunded accrued liability of (\$3,677,200). As of January 1, 1993, there is an unfunded accrued liability of (\$5,566,500).

This decrease of \$1,889,300 is accountable as follows:

1.	Unfunded accrued liability as of January 1, 1992	(3,677,200)
2.	Decrease due to:	
	(a) Salary increase lower than assumed	(246,600)
	(b) Contributions higher than expected	(77,300)
	(c) Investment earnings higher than expected	(1,812,500)
	(d) Total decrease	(2,136,400)
3.	Increase due to miscellaneous actuarial losses	247,100
4.	Unfunded accrued liability as of January 1, 1993 (1 + 2.d. + 3)	(5,566,500)

Investment earnings were 8.9% for 1992 versus our assumption of 5%.

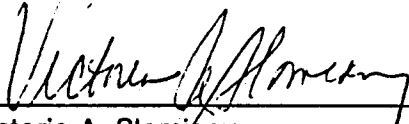
FINANCIAL DISCLOSURE

Government Accounting Standards Board Statement No. 5 requires governmental plans to disclose certain information in their financial statement. Table 1(b) presents this information. The Pension Benefit Obligation represents the value of benefits earned to date. Future benefit increases are assumed. The vested obligation includes a liability only for members with 20 or more years of service. The total obligation includes a liability for all members.

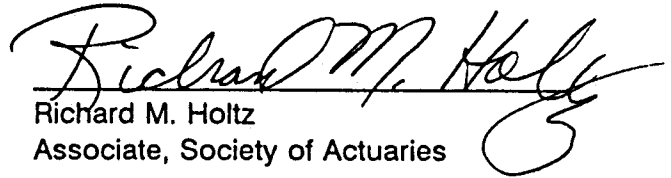
If you have any questions, please let us know. We would be happy to meet with you to discuss further the results of our valuation.

Respectfully submitted,

THE WYATT COMPANY



Victoria A. Slomiany
Fellow, Society of Actuaries



Richard M. Holtz
Associate, Society of Actuaries

Minneapolis/St. Paul
March 17, 1993

Table 1(a)

BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION

Results of Actuarial Valuation as of January 1, 1993

A. BASIC VALUATION RESULTS

1.	Accrued liability	
	a. Active members	15,470,900
	b. Inactive members	
	i. Retired members	24,116,300
	ii. Disabled members	1,705,700
	iii. Surviving spouses	1,051,800
	iv. Surviving children	9,900
	v. Terminated members entitled to deferred benefits	3,521,300
	vi. Total	30,405,000
	c. Total accrued liability	45,875,900
2.	Market value of special fund as of January 1, 1993	51,442,400
3.	Unfunded accrued liability (1 - 2)	(5,566,500)
4.	Annual normal cost	
	a. Total	1,715,800
	b. Estimated member contributions	21,200
	c. Net normal cost (a-b)	1,694,600

B. ANNUAL CONTRIBUTION

1.	Payable as of January 1, 1993	
	a. Normal cost	1,694,600
	b. Amortization payment for unfunded accrued liability	0
	c. Administrative expenses	73,600
	d. Total	1,768,200
2.	Payable as of December 31, 1993 (1.d x 1.05)	1,856,600

Table 1(b)

BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION

Financial Disclosure Information
as of January 1, 1993¹

Pension Benefit Obligation:

Retirees and beneficiaries currently receiving benefits and terminated members not yet receiving benefits	\$ 30,405,000
Current members -	
Accumulated member contributions including allocated investment earnings ²	0
Vested benefits	800,900
Non-vested benefits	13,985,200
Total Pension Benefit Obligation	\$ 45,191,100

¹ Assumes future rate of return on plan assets of 5% and 3-1/2% future benefit increases.

² Member contributions are not separately accounted since there are no refund of contribution provisions under the plan.

Table 2(a)

BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION

Summary of Membership as of January 1, 1993

A. ACTIVE MEMBERS

1.	January 1, 1992	154
2.	New Entrants	5
3.	Transfers from Disabled Status	0
4.	Separations	
	(a) Vested terminations	2
	(b) Non-vested terminations	4
	(c) Disabilities	1
	(d) Deaths	0
	(e) Retirements	3
	(f) Total separations	10
5.	January 1, 1993	149

B. RETIRED MEMBERS

1.	January 1, 1992	71
2.	New Retirees	3
3.	Transfers from Deferred Vested Status	7
4.	Transfers from Disabled Status	0
5.	Deaths	0
6.	January 1, 1993	81

C. SURVIVING SPOUSES

1.	January 1, 1992	9
2.	New Beneficiaries	0
3.	Deaths	1
4.	Remarriage	0
5.	January 1, 1993	8

Table 2(a) cont.

BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION

Summary of Membership as of January 1, 1993

D. DISABLED MEMBERS

1.	January 1, 1992	3
2.	New Disabilities	1
3.	Deaths	0
4.	Recoveries to Active Status	0
5.	Transfers to Retired Status	0
6.	January 1, 1993	4

E. SURVIVING CHILDREN

1.	January 1, 1992	2
2.	New Recipients	0
3.	Benefits Expired	1
4.	January 1, 1993	1

F. DEFERRED VESTED MEMBERS

1.	January 1, 1992	15
2.	New Vested Terminations	2
3.	Transfers to Retiree Status	7
4.	Transfers from Disabled Status	0
5.	January 1, 1993	10

Table 2(b)

BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION

Projected Benefits for Active Members as of January 1, 1993

<u>Name</u>	<u>Birth Date</u>	<u>Entry Date</u>	<u>Annual Projected Benefit</u>
S ADELMANN	12/56	07/91	22,442
W AHMAN	09/53	05/78	20,242
L ANDERSON	02/48	11/77	16,467
S ANDERSON	08/66	01/86	31,657
T ARBUCKLE	02/60	01/84	24,882
B ASKE	12/56	10/83	22,442
J BACH	08/68	12/86	33,912
J BARNES	01/53	09/79	19,557
D BATTEN	08/64	05/91	29,552
J BAYARD	02/60	07/91	26,654
J BELL	08/57	05/89	24,882
L BERGQUIST	11/42	11/77	16,467
S BLODGETTS	10/43	07/78	17,043
C BLUE	06/68	08/91	32,765
R BORST	06/42	04/73	14,383
D BUJOLD	08/57	04/90	25,753
B CARLSON	06/70	08/88	35,099
T CARLSON	10/66	11/91	31,657
D CARNEY	09/53	07/88	24,041
P COLLINS	04/54	12/84	20,950
D CONGDON	05/38	01/88	20,242
L DALY	10/52	01/88	24,041
D DELONG	07/54	03/85	21,683
J DEUTSCH	11/71	05/91	37,599
R DONNELLY	08/64	11/91	29,552
M DOYLE	03/49	06/82	19,557
C DUERKOP	11/72	09/91	38,914
J DUERKOP	01/53	04/83	20,242
G DUGAL	01/48	08/79	17,639
B DUNHAM	03/55	07/80	20,950
D DVORAK	10/46	11/73	15,910
D ELLINGS	08/59	03/82	24,882

Table 2(b)

BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION

Projected Benefits for Active Members as of January 1, 1993

<u>Name</u>	<u>Birth Date</u>	<u>Entry Date</u>	<u>Annual Projected Benefit</u>
C EMEKA	07/71	06/92	37,599
T ERICKSON	10/58	11/88	24,041
P FERRY	05/48	02/83	20,242
J FINNEGAN	10/45	05/79	17,639
J FORSTER	05/73	06/92	38,914
S FRITCHMAN	06/59	01/88	24,041
K FROSIG	02/65	10/91	29,552
J GALE	09/53	11/75	20,242
C GERDES	12/48	06/74	17,043
D GILLUM	08/54	10/88	24,041
P GOODWIN	10/61	03/91	26,654
L GROTH	08/70	09/91	36,327
W GUENTHER	07/53	06/88	24,041
T GUSTAFSON	10/48	12/75	17,043
C GUTH	09/55	11/80	21,683
D HAAG	12/69	12/91	35,099
J HAEG	02/70	01/91	35,099
L HAUGAN	08/52	03/77	19,557
K HECHT	10/42	10/74	14,852
W HECHT	12/52	10/71	19,557
D HEDIN	10/54	12/74	20,950
P HEGER	10/53	12/74	20,242
B HENRY	05/63	11/89	27,587
J HOGAN	07/66	03/90	31,657
M HOY	07/68	07/89	33,912
R HUFFMAN	05/56	01/88	24,041
A HUNDT	06/57	05/81	22,442
M HURLEY	03/52	02/80	18,896
J HUTTER	02/64	11/90	28,553
W JEFFERS	11/47	04/81	18,896
G JESSEN	05/48	03/75	16,467
N JOHNSON	01/59	08/91	26,654

Table 2(b)

**BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION**

Projected Benefits for Active Members as of January 1, 1993

<u>Name</u>	<u>Birth Date</u>	<u>Entry Date</u>	<u>Annual Projected Benefit</u>
J JUDY	10/46	04/81	18,896
J KABEITZ	03/55	01/88	24,041
K KAISER	06/54	08/80	20,242
B KALINA	10/49	01/75	17,639
W KALINA	02/43	01/75	15,372
T KEELER	10/68	09/87	33,912
P KELLER	05/44	02/76	15,910
P LANGER	06/66	07/91	30,586
J LANNENBERG	04/66	07/84	30,586
R LARKIN	09/64	02/88	29,552
B LARSON	09/52	08/84	20,950
L LARSON	08/51	01/88	24,041
P LARSON	09/70	09/91	36,327
S LEEDER	10/51	10/80	18,896
G LEMBECK	12/64	01/88	29,552
M LESSARD	09/66	06/89	31,657
M LOISELLE	08/48	10/71	17,043
K MAHONEY	10/62	10/90	27,587
S MALONEY	01/60	10/81	24,882
D MANSKE	10/48	01/78	17,043
D MATLON	11/61	08/88	26,654
P MCCABE	12/57	11/91	26,654
S MCCARTHY	07/61	04/88	26,654
K MCDEVITT	04/53	12/84	20,950
B MCDONALD	03/64	07/91	28,553
S MCWILLIAMS	04/65	11/91	29,552
J MEUWISSEN	12/53	01/88	24,041
C MEYER	07/64	06/89	29,552
G MOORE	07/69	03/90	35,099
C MORRISON	01/69	09/92	33,912
J MORTELL	10/68	09/91	33,912
J NANOFF	10/53	12/87	23,228

Table 2(b)

**BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION**

Projected Benefits for Active Members as of January 1, 1993

<u>Name</u>	<u>Birth Date</u>	<u>Entry Date</u>	<u>Annual Projected Benefit</u>
K NELSON	10/60	07/88	25,753
R NELSON	02/57	04/89	24,882
R NELSON	06/59	05/86	24,041
D NOEL	02/57	04/89	24,882
B OCONNOR	07/64	03/85	29,552
C ODASH	05/61	05/89	25,753
B OLSON	05/57	11/84	22,442
R OLSON	07/54	01/79	20,950
K PAHL	06/48	08/68	16,467
E PALMSTEN	07/48	02/83	20,242
R PETERSON	03/43	08/75	15,372
S PETERSON	10/70	06/89	36,327
J POWERS	11/67	10/90	32,765
J REILY	08/50	07/85	21,683
C REYNOLDS	08/63	11/83	28,553
J REZAC	11/61	12/82	26,654
R ROASE	09/57	02/85	23,228
W ROASE	12/58	12/83	24,041
R ROEHL	04/52	09/78	18,896
J RUZICKA	04/63	04/91	27,587
M SCHERER	07/67	07/88	32,765
J SCHOENBORN	02/67	11/90	31,657
T SCHWARTZ	06/54	01/88	24,041
U SEAL	10/57	06/76	23,228
R SHAW	04/54	02/84	20,950
T SHEFLET	09/66	01/89	31,657
G SHIELDS	01/47	10/81	18,896
D SMITH	04/47	02/81	18,896
M SMITH	06/68	04/91	32,765
R SMITH	05/52	06/78	18,896
D SORENSEN	07/66	11/87	31,657
J ST. PIERRE	11/64	03/91	29,552

Table 2(b)

BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION

Projected Benefits for Active Members as of January 1, 1993

<u>Name</u>	<u>Birth Date</u>	<u>Entry Date</u>	<u>Annual Projected Benefit</u>
W SUTCLIFFE	02/59	02/82	24,041
B SVEUM	01/52	06/73	18,896
A SVOBODNY	07/55	04/83	21,683
B TANNER	04/69	02/88	33,912
L THAYER	01/67	03/91	31,657
S THAYER	02/71	11/91	36,327
V TRAETOW	04/52	01/88	24,041
L TRISCO	11/66	11/89	31,657
R TROUSDALE	08/52	05/83	20,242
K TSCHIMPERLE	12/65	06/84	30,586
J TUMBERG	03/64	11/84	28,553
S VERBA	12/58	03/91	26,654
J VOIGT	10/69	12/91	35,099
T VOLK	01/54	10/87	23,228
B VOLKMEIER	01/54	10/87	23,228
D WALKER	12/46	06/74	15,910
B WARD	09/62	06/83	27,587
D WENSHAU	12/72	06/91	38,914
C WILLIAMS	03/43	04/74	14,852
M YOUNGGREN	12/53	01/88	24,041
J ZASTERA	03/74	11/92	40,276

Table 2(c)

BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION

Monthly Benefits for Inactive Members as of January 1, 1993

<u>Name</u>	<u>Type</u>	<u>Monthly Benefits</u>
B ANDERSON	RETIRED	1,162
B ANDERSON	DEFERRED	1,162
L ANDERSON	RETIRED	1,162
R ANDERSON	RETIRED	1,162
R BOESER	RETIRED	1,162
J BRENING	RETIRED	1,162
D CARLSON	RETIRED	1,162
G CHAPLIN	RETIRED	1,162
C CHRISTENSEN	WIDOW	871
E CHRISTIAN	RETIRED	1,162
D CIARDELLI	RETIRED	1,162
R CLEMENSEN	RETIRED	1,162
J COLEHOUR	DISABLED	1,162
D CRUIKSHANK	DEFERRED	1,162
D DODDS	RETIRED	1,162
G DOUCETTE	RETIRED	1,162
R EGLAND	RETIRED	1,162
D ELFTMANN	RETIRED	1,162
J ELLRICH	WIDOW	871
R ELM	RETIRED	1,162
D ENGBERG	RETIRED	1,162
J ENGBERG	RETIRED	1,162
W FABER	RETIRED	1,162
R FALK	DEFERRED	1,162
I FINN	RETIRED	1,162
N FISCHER	RETIRED	1,162
M FREEMARK	RETIRED	1,162
A FRIENDSHUH	RETIRED	1,162
F FUECKER	RETIRED	1,162
A FURULI	RETIRED	1,162
N GABRIEL	RETIRED	1,162
R GABRIEL	RETIRED	1,162

Table 2(c)

**BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION**

Monthly Benefits for Inactive Members as of January 1, 1993

<u>Name</u>	<u>Type</u>	<u>Monthly Benefits</u>
J GASTERLAND	DEFERRED	1,162
G GERHARDT	DISABLED	1,162
J GJEVRE	RETIRED	1,162
P GOETTSCHE	CHILD	174
G HAEG	DISABLED	1,162
J HAEG	RETIRED	1,162
W HAEG	RETIRED	1,162
P HALL	RETIRED	1,162
J HARRINGER	DEFERRED	1,162
G HAYDEN	DEFERRED	1,162
C HECHT	RETIRED	1,162
C HEDIN	RETIRED	1,162
R HEDIN	RETIRED	1,162
K HAGER	RETIRED	1,162
B HOAGLUND	WIDOW	871
P HUBER	RETIRED	1,162
M KAISER	RETIRED	1,162
E KEITH	RETIRED	1,162
C KELLEY	RETIRED	1,162
W KETTLEKAMP	RETIRED	1,162
R KIMBLER	RETIRED	1,162
G KRISTJANSON	RETIRED	1,162
H LANNENBERG	RETIRED	1,162
W LEMBECK	RETIRED	1,162
O LUND	WIDOW	871
R MACALLISTER	RETIRED	1,162
T MANSKE	DEFERRED	1,162
D MARTENSON	RETIRED	1,162
D MATTSON	RETIRED	1,162
R MCDONALD	RETIRED	1,162
R MCKENZIE	RETIRED	1,162
J MCWILLIAMS	RETIRED	1,162

Table 2(c)

BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION

Monthly Benefits for Inactive Members as of January 1, 1993

<u>Name</u>	<u>Type</u>	<u>Monthly Benefits</u>
G MELONY	DEFERRED	1,162
G MILLER	RETIRED	1,162
S MINION	RETIRED	1,162
D NAPIER	RETIRED	1,162
D NICHOLS	RETIRED	1,162
W NOLEEN	RETIRED	1,162
D OLSON	RETIRED	1,162
W PAGET	RETIRED	1,162
M PAHL	RETIRED	1,162
E PETERSON	RETIRED	1,162
D PETERSON	RETIRED	1,162
D PETERSON	RETIRED	1,162
S PETERSON	RETIRED	1,162
T PRESSLER	RETIRED	1,162
K ROBERTS	DEFERRED	1,162
M ROUEN	RETIRED	1,162
M RUEGER	WIDOW	871
J SAVAGE	WIDOW	871
R SAVAGE	WIDOW	871
R SCHOENBORN	RETIRED	1,162
V SEGERSTROM	RETIRED	1,162
G SELINSKY	RETIRED	1,162
D SHEFLET	RETIRED	1,162
B SMITH	RETIRED	1,162
W SNYDER	RETIRED	1,162
M STERN	RETIRED	1,162
R SWANSON	RETIRED	1,162
E SWIVEN	RETIRED	1,162
J THOMA	RETIRED	1,162
R THOMA	RETIRED	1,162
D TRAVERS	RETIRED	1,162
L TSCHIMPERL	RETIRED	1,162

Table 2(c)

BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION

Monthly Benefits for Inactive Members as of January 1, 1993

<u>Name</u>	<u>Type</u>	<u>Monthly Benefits</u>
D TSCHIMPERLE	DISABLED	1,162
M VOBER	DEFERRED	1,162
A WELTER	RETIRED	1,162
E WENSHAU	RETIRED	1162
C WILSON	RETIRED	1162
G WILSON	RETIRED	1162
L WISE	RETIRED	1162
M ZOCHERT	WIDOW	871

Table 3

**BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION**

Summary of Current Plan Provisions

1. **Basic Benefit:** One-third of the final average salary of a policeman of the highest grade, not including officers of the City of Bloomington. Final average earnings is the average of the monthly pay for such a policeman over the past three years. All benefits under the plan increase each time a pay increase is granted to the Bloomington Police Department.

2. **Normal Retirement Benefit:** Basic benefit is payable at retirement after attainment of age 50 and completion of 20 years of service.

3. **Deferred Vested Benefits:** On termination after completion of 20 years of service, the basic benefit is payable after attainment of age 50.

4. **Disability Benefits:**
 - Duty Related - Basic benefit is payable at time of disability. This benefit is payable while the member remains disabled. After attainment of age 50, no evidence of disability is required for continued payment of the same benefit. Disability is defined as inability to perform the duties of a fireman.

 - Non-Duty Related - The basic benefit is multiplied by 5% for every year of service earned up to the time of disability; maximum 20 years. This benefit is payable while the member remains disabled. After attainment of age 50, no evidence of disability is required for continued payment of the same benefit. Disability is defined as inability to perform the duties of a fireman.

5. Spouse's Benefit:

Duty Related -

75% of the basic benefit is payable to the surviving spouse for his or her remaining lifetime. Benefits cease on remarriage of the surviving spouse.

Non-Duty Related -

75% of the accrued benefit at time of death is payable to the surviving spouse for his or her remaining lifetime. The accrued benefit is 5% of the basic benefit multiplied by the number of years of service at time of death; maximum 20 years.

Inactive Member -

On the death of any inactive member, 75% of the basic benefit is payable to the surviving spouse for his or her remaining lifetime.

6. Children's Benefit:

On the death of an active member, 12% of the basic benefit is payable to each surviving child until attainment of age 18. Maximum family benefit is 100% of the basic benefit. On the remarriage or death of the surviving spouse, surviving children may receive benefits which in total equal no more than the basic benefit.

7. Lump Sum Death Benefit:

On the death of any active or inactive member \$500 is payable.

8. Membership Dues:

Each member contributes \$144.00 per year payable semi-annually on January 1 and July 1.

Table 4

**BLOOMINGTON FIRE DEPARTMENT
RELIEF ASSOCIATION**

Actuarial Method and Assumptions

1. Interest Rate: 5% per annum.
2. Mortality: The mortality rates used are based on the 1971 Group Annuity Mortality Table, without margins, projected to 1976 by Scale E. The table is used for all rates of mortality.
3. Withdrawal: The rate of withdrawal is .030 at age 20 decreasing uniformly to zero at age 50 with no withdrawal after that age.
4. Disability: The Railroad Retirement Board 12th Valuation rates of disablement loaded for the nature of the group.
5. Duty/Non-Duty: 75% of all disabilities and deaths are assumed to be duty-related and 25% non-duty-related.
6. Retirement Age: Members are assumed to retire after attaining age 50 and completing 20 years of service.
7. Salary Scale: 3-1/2% per annum.
8. Valuation Assets: Market value.
9. Funding Method: The entry age normal cost method has been used with the normal cost determined as a level of percentage of pay each year from the date of joining the Association to the assumed retirement age. Each fireman is assumed to earn the same as a Bloomington policeman.

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