PUBLIC EMPLOYEES RETIREMENT ASSOCIATION

ACTUARIAL VALUATION REPORT

JULY 1, 1991



Actuaries and Consultants

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November 6, 1991

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

RE: Public Employees Retirement Association

Commission Members:

Pursuant to the terms of our Actuarial Services Contract, we have performed an actuarial valuation of the Fund as of July 1, 1991.

The results of our calculations are set forth in the following report, as are the actuarial assumptions upon which our calculations have been made. We have relied on the basic employee data and asset figures as submitted by the Public Employees Retirement Association.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with the requirements of Section 356.215, Minnesota Statutes, and the requirements of the Standards for Actuarial Work, adopted by the Commission on September 20, 1989.

Respectfully submitted,

Thomas K. Custis, F.S.A., M.A.A.A.

on, Klasto

Consulting Actuary

William V. Hogan, F.S.A., M.A.A.A.

Actuary

TKC/WVH/bh

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PUBLIC EMPLOYEES RETIREMENT ASSOCIATION

TABLE OF CONTENTS

	<u>PAGE</u>				
REPORT HIGHLIGHTS	1				
COMMENTARY					
Purpose	2				
Report Highlights	2				
Asset Information	2				
Actuarial Balance Sheet	3 4				
GASB Disclosure					
Actuarial Cost Method	5				
Contribution Sufficiency	6				
Changes in Actuarial Assumptions	6				
Changes in Plan Provisions	6				
ASSET INFORMATION					
Table 1 - Accounting Balance Sheet	7				
Table 2 - Changes in Assets Available for Benefits	8				
MEMBERSHIP DATA					
Table 3 - Active Members	9				
Table 4 - Service Retirements	10				
Table 5 - Survivors	11				
Table 6 - Disability Retirements	12				
Table 7 - Reconciliation of Members	13				

PUBLIC EMPLOYEES RETIREMENT ASSOCIATION

TABLE OF CONTENTS (Continued)

FUNDING STATUS		PAGE
	ctuarial Balance Sheet	14
	etermination of Unfunded Actuarial Accrued Liability	15
Table 10 - Ch	(UAAL) and Supplemental Contribution Rate nanges in Unfunded Actuarial Accrued Liability (UAAL)	16
Table 11 - De	etermination of Contribution Sufficiency	17
ACTUARIAL ASSUMPTION	<u>ons</u>	
Table 12 - Su	ummary of Actuarial Assumptions and Methods	18
BASIC		
Membership Dat	t <u>a</u>	
Table 3A - Ac	ctive Members as of June 30, 1991	22
Table 4A - Se	ervice Retirements as of June 30, 1991	23
Table 5A - Su	urvivors as of June 30, 1991	24
Table 6A - Di	isability Retirements as of June 30, 1991	25
Funding Status	i de la companya de	
Table 11A- De	etermination of Contribution Sufficiency	26
Plan Provision		
Table 13A- Su	ummary of Plan Provisions	27
COORDINATED		
<u>Membership Dat</u>	za .	
Table 3B - Ac	tive Members as of June 30, 1991	33
Table 4B - Se	ervice Retirements as of June 30, 1991	34
Table 5B - Su	urvivors as of June 30, 1991	35
Table 6B - Di	sability Retirements as of June 30, 1991	36

PUBLIC EMPLOYEES RETIREMENT ASSOCIATION

TABLE OF CONTENTS (Continued)

	<u>PAGE</u>
<u>Funding Status</u> Table 11B- Determination of Contribution Sufficiency	37
<u>Plan Provisions</u> Table 13B- Summary of Plan Provisions	38

REPORT HIGHLIGHTS (DOLLARS IN THOUSANDS)

			07/01/90 <u>Valuation</u>	07/01/91 <u>Valuation</u>
Α.	CONT 1.	RIBUTIONS (Table 11) Statutory Contributions - Chapter 353 % of Payroll	9.25%	9.17%
	2.	Required Contributions - Chapter 356 % of Payroll	10.04%	9.44%
	3.	Sufficiency (Deficiency): (A.1 A.2.)	-0.79%	-0.27%
В.	FUND 1.	ING RATIOS Accrued Benefit Funding Ratio a. Current Assets (Table 1) b. Current Benefit Obligations (Table 8) c. Funding Ratio: (a/b)	\$3,297,216 \$4,089,960 80.62%	\$3,570,304 \$4,458,010 80.09%
	2.	Accrued Liability Funding Ratio a. Current Assets (Table 1) b. Actuarial Accrued Liability (Table 9) c. Funding Ratio: (a/b)	\$3,297,216 \$4,560,469 72.30%	\$3,570,304 \$4,988,671 71.57%
	3.	Projected Benefit Funding Ratio (Table 8) a. Current and Expected Future Assets b. Current and Expected Future Benefit Obligations c. Funding Ratio: (a/b)	\$5,431,928 \$5,797,210 93.70%	\$6,092,063 \$6,231,179 97.77%
C.	PLAN 1.	PARTICIPANTS Active Members a. Number (Table 3) b. Projected Annual Earnings c. Average Annual Earnings (Actual \$) d. Average Age e. Average Service	102,664 \$2,074,092 \$20,203 42.6 8.3	107,025 \$2,286,179 \$21,361 42.6 8.5
	2.	Others a. Service Retirements (Table 4) b. Disability Retirements (Table 5) c. Survivors (Table 6) d. Deferred Retirements (Table 7) e. Terminated Other Non-vested (Table 7) f. Total	24,314 708 4,414 2,699 7,695 39,830	25,634 739 4,553 3,655 7,995 42,576

COMMENTARY

Purpose

The purpose of this valuation is to determine the financial status of the Plan. In order to achieve this purpose, an actuarial valuation is made at the beginning of each fiscal year as required by Section 356.215 of Minnesota Statutes.

Report Highlights

The financial status of the Plan can be measured by three different funding ratios:

The Accrued Benefit Funding Ratio is a measure of current funding status and, when viewed over a period of years, presents a view of the funding progress. It is based upon benefits which have been earned by service to the valuation date. This year's ratio is 80.09%. The corresponding ratio for the prior year was 80.62%.

The Accrued Liability Funding Ratio is also a measure of funding status and funding progress. It is based on the actuarial cost method that has historically been used by the State. For 1991 the ratio is 71.57%, which is an decrease from the 1990 value of 72.30%.

The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 97.77% shows that the current statutory contributions are inadequate.

Asset Information (Tables 1 and 2)

Minnesota Statutes require that the asset value used for actuarial purposes

recognize only a third of the unrealized gains and losses. This requirement exists because market values (which include all unrealized gain and losses) are typically volatile and can produce erratic changes in the contribution requirements from year to year.

The calculation of the Actuarial Value of Assets is shown in Table 1 on lines F1 to F6. It combines the cost value of the Assets Available for Benefits and one-third of the difference between the market value and cost value of those assets.

The term "Actuarial Value of Assets" is used to indicate that the value was determined for use in this actuarial valuation. Since Minnesota Statutes refer to this value as "Current Assets", the latter phrase will be used in the remainder of this report.

This Plan participates in the Minnesota Post Retirement Investment Fund (i.e. MPRIF). After the MPRIF liability has been calculated for each participating Plan, the State Board of Investments, (i.e. SBI), will determine each Plan's portion of the excess earnings for the January benefit increase as well as the Plan's allocated market share of MPRIF.

Actuarial Balance Sheet (Table 8)

An actuarial balance sheet provides a method for evaluating current and future levels of funding.

The Current Benefit Obligation used to measure current funding levels is calculated in accordance with Statement No. 5 of the Governmental Accounting Standards Board (GASB). Those requirements are:

For Active Members - salary and service are projected to retirement to determine benefits for each member and the ratio of credited service to total service establishes the portion of the projected benefit to be used in calculating the current funding level.

For Non-active Members - the discounted value of benefits, including augmentation in cases where benefits have not commenced.

GASB Disclosure

The Current Benefit Obligation amounts in Table 8 are required to be disclosed by Statement No. 5 of the Governmental Accounting Standards Board (GASB). However, Statement No. 5 uses the terms "Actuarial Present Value of Credited Projected Benefits" and "Pension Benefit Obligation" rather than "Current Benefit Obligation".

The July 1, 1991 Pension Benefit Obligation reported in Table 8 is reformatted for GASB reporting purposes in the following table:

	New Plan <u>Provisions</u>	Old Plan <u>Provisions</u>
Retirees and beneficiaries currently		
receiving benefits and terminated		
employees not yet receiving benefits	\$2,163,471,552	\$2,163,471,552
Current Employees		
Accumulated employee contributions	\$622,420,007	\$622,420,007
including allocated investment income		
Employer-financed vested	1,654,460,152	1,650,443,283
Employer-financed nonvested	17,658,018	\$17,658,018
Total Pension Benefit Obligation	\$4,458,009,729	\$4,453,992,860
Net Assets Available for Benefits at Cost	\$3,524,071,271	\$3,524,071,271
Total Benefit Obligation less Assets	\$933,938,458	\$929,921,589
Funded Ratio	79.05%	79.12%

Actuarial Cost Method (Table 9)

The approach used by the State of Minnesota to determine contribution sufficiency is the Entry Age Normal Actuarial Cost Method. The primary characteristic of this method is that it allocates costs as a level percentage of payroll.

A comparison of this actuarial method (Table 9) to the actuarial balance sheet (Table 8) illustrates the two techniques for allocating liabilities of active Members to past and future. As noted in the prior section, the balance sheet allocates benefits and the corresponding liabilities, on the basis of service. The method used in Table 9 allocates liabilities so that the cost each year will be a constant percentage of payroll. Both approaches, however, calculate the value of all future benefits the same way (see line F of Table 8 and line A6, column 1, of Table 9).

An Unfunded Actuarial Accrued Liability is computed under the Entry Age Normal Actuarial Cost Method by comparing the liabilities allocated to past service (Actuarial Accrued Liability) to the Current Assets. This amount, line B3, is funded over the remaining years to the amortization date by a series of payments that remain a constant percentage of payroll each year.

The payments will increase 6.5% each year because that is the assumed rate of increase in payroll. Although the payment schedule will be adequate to amortize the existing unfunded, the lower payments in the earlier years will not be sufficient to cover the interest on the unfunded liability. After a few years, the annual payment will cover the interest and also repay a portion of the unfunded.

Sources of Actuarial Gains and Losses (Table 10)

The assumptions used in making the calculations using the Entry Age Normal Actuarial Cost Method are based on long-term expectations. Each year the actual experience will deviate from the long-term expectation. For a detailed analysis of the major components, refer to Table 10.

Contribution Sufficiency (Table 11)

This report determines the adequacy of Statutory Contributions by comparing the Statutory Contributions to the Required Contributions.

The Required Contributions, set forth in Chapter 356, consist of:

Normal costs based on the Entry Age Normal Actuarial Cost Method.

A Supplemental Contribution for amortizing any Unfunded Actuarial Accrued Liability.

An Allowance for Expenses.

Table 11 shows the Plan has a contribution deficiency since the Statutory Contribution Rate is 9.17% compared to the Required Contribution Rate of 9.44%.

Changes in Actuarial Assumptions

The actuarial assumptions are the same as those used in the prior valuation.

Changes in Plan Provisions

The maximum family death benefit was increased from \$1,000 per month to 70% of average salary for Basic Members. In addition, the minimum benefit per family must not be less than 50% of the Basic Member's average monthly salary. If the children's benefit plus the 100 percent joint and survivor annuity exceeds the maximum permitted, the joint and survivor annuity must be reduced accordingly, but must be restored as the dependent children lose dependent status over time.

ACCOUNTING BALANCE SHEET (DOLLARS IN THOUSANDS)

JULY 1, 1991

Α.	ASSETS	<u>Market Value</u>	<u>Cost Value</u>
	 Cash, Equivalents, Short-term Securities Investments a. Fixed Income b. Equity c. Real Estate Equity in Minnesota Post-Retirement Investment Fund (MPRIF) Other 	\$52,409 453,760 1,131,882 102,806 1,943,989	\$52,409 453,308 1,004,882 91,560 1,943,989
В.	TOTAL ASSETS	\$3,685,836 ========	\$3,547,138
C.	AMOUNTS CURRENTLY PAYABLE	\$23,067	\$23,067
D.	ASSETS AVAILABLE FOR BENEFITS 1. Member Reserves 2. Employer Reserves 3. MPRIF Reserves 4. Non-MPRIF Reserves 5. Total Assets Available for Benefits TOTAL AMOUNTS CURRENTLY PAYABLE		\$649,046 931,036 1,943,989 0 \$3,524,071
•	AND ASSETS AVAILABLE FOR BENEFITS		
F.	DETERMINATION OF ACTUARIAL VALUE OF ASSETS		
	 Cost Value of Assets Available for Benefits (D5) Market Value (D5) Cost Value (D5) 	\$3,662,769 3,524,071	\$3,524,071
	4. Market Cover Cost: (F2-F3)5. 1/3 of Market Over Cost: (F4)/3	\$138,698	46,233
	Actuarial Value of Assets (F1+F5) (Same as "Current Assets")		\$3,570,304

CHANGE IN ASSETS AVAILABLE FOR BENEFITS (DOLLARS IN THOUSANDS)

YEAR ENDING JUNE 30, 1991

		<u>Market Value</u>	<u>Cost Value</u>
A.	ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$3,391,335	\$3,250,157
В.	OPERATING REVENUES		
	 Member Contributions Employer Contributions Investment Income MPRIF Income Net Realized Gain (Loss) Other Net Change in Unrealized Gain (Loss) 	\$94,413 101,907 117,635 175,212 0 1,039 (2,480)	\$94,413 101,907 117,635 175,212 0 1,039
	8. Total Revenue	\$487,726	\$490,206
c.	OPERATING EXPENSES		
	 Service Retirements Disability Benefits Survivor Benefits Refunds Expenses Other 	\$178,971 4,324 15,029 11,678 5,897 393	\$178,971 4,324 15,029 11,678 5,897 393
	7. Total Disbursements	\$216,292	\$216,292
D.	OTHER CHANGES IN RESERVES	0	0
Ε.	ASSETS AVAILABLE AT END OF PERIOD	\$3,662,769	\$3,524,071

TABLE 3

ACTIVE MEMBERS AS OF JUNE 30, 1991

				YEARS OF	SERVICE				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL
<25 25-29	1,857 2,675	1,139 3,851	87 1,954	137					3,083 8,617
30-34 35-39	3,564 2,881	5,244 5,111	3,968 4,614	2,400 3,742	155 1,751	89			15,331 18,188
40-44 45-49	2,290 1,355	4,479 2,689	4,767 3,528	3,654 3,029	2,481 2,026	935 1,351	40 359	18	18,646 14,355
50-54 55-59	796 489	1,709 1,127	2,269 1,588	2,496 1,784	1,925 1,699	1,339 1,531	623 656	265 458	11,422 9,332
60-64 65+	269 163	653 296	909 400	1,131 410	1,113 350	1,117 289	528 111	231 81	5,951 2,100
ALL	16,339	26,298	24,084	18,783	11,500	6,651	2,317	1,053	107,025
			AVEF	AGE ANNU	AL EARNI	NGS			
				YEARS OF	SEDVICE				
AGE	<u><1</u>	1-4	<u>5-9</u>	10-14	15-19	20-24	25-29	<u>30+</u>	ALL
<25 25-29	9,100 12,779	13,953 18,126	16,616 20,668	19,948					11,105 17,071
30-34 35-39	11,521 11,461	17,885 17,198	23,375 22,411	23,897 27,145	23,360 27,283	26,084			18,823 20,673
40-44 45-49	12,110 11,568	16,268 16,270	20,639 19,283	26,853 23,256	31,721 27,904	32,093 34,254	30,747 34,008	30,849	21,830 21,837
50-54 55-59	11,732 10,280	15,611 14,701	17,913 17,134	20,696 19,575	23,037 21,207	27,969 24,111	33,308 31,743	33,415 36,870	20,988 20,830
60-64 65+	9,163 7,011			19,328 14,757		22,042 16,717			19,623 13,951
ALL	11,417	16,671	20,372	23,676	25,724	27,428	30,886	34,634	20,057
	PR	IOR FISC	AL YEAR	EARNINGS	(IN MIL	LIONS) B	Y YEARS	OF SERVI	CE
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	15-19	20-24	25-29	30+	ALL
ALL	187	438	491	445	296	182	72	37	2,147

MILLIMAN & PROBERTSON, INC.

TABLE 4

SERVICE RETIREMENTS AS OF JUNE 30, 1991

YEARS RETIRED								
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54	4	8	2					14
55-59 60-64	411 1,194	463 1,439	7 913					881 3,546
65-69 70-74	991 144	3,085 627	2,826 4,193	87 1,204	25	1		6,989 6,194
75-79 80-84	18 3	61 15	781 83	3,203 237	361 1,797	5 95	2	4,429 2,232
85+	3	- 5	14	43	258	754	272	1,349
ALL	2,768	5,703	8,819	4,774	2,441	855	274	25,634
			AVERAGE	E ANNUAL E	BENEFIT			
405		1.4		EARS RETIF		20.24	25.	A1 1
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
<50 50-54	6,374	10,524	10,075					9,274
55-59 60-64	8,095 5,967	7,433 6,577	16,768 12,307					7,817 7,847
65-69 70-74	5,381 4,018	5,156 4,279	9,521 6,569	10,925 7,640	7,033	10,756		7,024 6,488
75-79 80-84	3,400 1,254	2,760 1,579	4,545 2,194	6,066 4,490	9,460 5,585	6,491 5,932	10,241	6,019 5,329
85+	1,880	2,280	1,800	4,419	4,662	4,941	5,767	4,988
ALL	5,946	5,573	7,890	6,459	6,075	5,067	5,800	6,609
	TO:	TAL ANNUAI	RENEET	(IN THOU	SANDS) RY	YEARS RE	TIRFD	
AGE	<u> </u>	1-4	<u>5-9</u>	10-14	15-19	20-24	<u>25+</u>	ALL
ALL	16,459	31,783	69,582	30,835	14,829	4,332	1,589	169,415

MILLIMAN-& LOBERTSON, INC.

TABLE 5

SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH								
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
<50 50-54	20 15	41 34	32 32	18 17	7 5	1	1	120 104
55-59 60-64	25 33	60 96	81 205	24 59	14 32	6 14	3 16	213 455
65-69 70-74	15 8	94 37	298 213	137 287	59 125	36 54	25 51	664 775
75-79 80-84	9 19	30 36	98 76	217 87	229 191	91 119	93 106	767 634
85+	19	49	98	114	171	162	208	821
ALL	163	477	1,133	960	833	484	503	4,553
			AVERAGI	E ANNUAL I	BENEFIT			
AGE	<u><1</u>	1-4	YEA! 5-9	RS SINCE I 10-14	DEATH 15-19	20-24	<u>25+</u>	ALL
								6,434
<50 50-54	8,270 5,652	5,053 6,848	7,330 8,398	6,305 7,194	6,379 6,444	3,953 5,057	2,876	7,173
55-59 60-64	4,964 5,577	6,128 4,960	7,865 8,731	7,880 7,387	6,331 6,312	3,423 3,916	3,448 2,991	6,749 7,012
65-69 70-74	2,481 6,086	5,413 4,351	7,312 6,415	6,474 6,370	6,336 5,658	3,448 2,810	2,378 2,623	6,279 5,674
75-79 80-84	3,357 3,818	4,227 4,411	5,020 4,884	5,450 4,847	5,232 5,607	3,036 4,529	2,760 2,819	4,645 4,626
85+	3,371	4,711	4,873	5,262	5,377	5,307	4,617	5,008
ALL	4,976	5,179	6,899	6,021	5,567	4,205	3,519	5,561
	TOTAL	ANNUAL	BENEFIT (IN THOUSA	NDS) BY Y	EARS SINCI	E DEATH	
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
ALL	811	2,470	7,817	5,780	4,637	2,035	1,770	25,319

- 11 - MILLIMAN & ROBERTSON, INC.

TABLE 6

DISABILITY RETIREMENTS AS OF JUNE 30, 1991

				RS DISABL				
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54	41 26	29 45	14 19	4	2			88 92
55-59 60-64	50 58	69 122	50 99	12 48	5 11	2	1	186 341
65-69 70-74	4	8	13	6	1			32
75-79 80-84								
85+								
ALL	179	273	195	70	19	2	1	739
				ANNUAL B				
AGE	<u><1</u>	1-4	YEA <u>5-9</u>	RS DISABL 10-14	ED 15-19	20-24	<u>25+</u>	ALL
<50 50-54	3,830 4,119	3,712 5,134	3,659 6,622	3,673	4,805			3,757 5,147
55-59 60-64	6,527 6,053	7,042 4,620	6,795 6,976	7,368 6,592	5,586 8,142	7,013	4,718	6,820 5,953
65-69 70-74	1,851	2,755	5,241	5,967	5,160			4,329
75-79 80-84								
85+								
ALL	5,301	5,166	6,541	6,505	6,961	7,013	4,718	5,739
	T0	TAL ANNUAL		(IN THOUS	SANDS) BY	YEARS DIS	ABLED	
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
ALL	949	1,410	1,276	455	132	14	5	4,241

- 12 - MILLIMAN & ROBERTSON, INC.

PUBLIC EMPLOYEES RETIREMENT FUND RECONCILIATION OF MEMBERS

			Terminated			
		<u>Actives</u>	Deferred Retirement	Other Non-Vested		
A.	ON JUNE 30, 1990	102,664	2,699	7,695		
В.	ADDITIONS	13,505	1,263	2,745		
c.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	(1,659) (130) (50) (43) (1,250) (3,964) (1,893) 0	(277) (17) (5) (5) 0 0 0	(75) (5) (2) (2) 0 (1,242) 0 (869)		
D.	DATA ADJUSTMENTS	(155)	(4)	(250)		
	Vested Non-Vested	76,103 30,922				
Ε.	TOTAL ON JUNE 30, 1991	107,025	3,655	7,995		
			Recipients			
		Retirement Annuitants	Disabled	Survivors		
Α.	ON JUNE 30, 1990	24,314	708	4,414		
В.	ADDITIONS	2,116	181	358		
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	(771) 0 0	(85) (61) 0 0	0 (194) 0 0		
D.	DATA ADJUSTMENTS	(25)	(4)	(25)		
E.	TOTAL ON JUNE 30, 1991	25,634	739	4,553		

- 13 - MILLIMAN & ROBERTSON, INC.

ACTUARIAL BALANCE SHEET (DOLLARS IN THOUSANDS)

JULY 1, 1991

Α.	CURREI	NT ASSETS (TABLE 1, F6)		\$3,570,304				
В.	1.	TED FUTURE ASSETS Present Value of Expected Fut Statutory Supplemental Contri		\$1,279,251				
	2.	Present Value of Future Norma	II COSTS		1,242,508			
	3.	Total Expected Future Assets			\$2,521,759			
С.	TOTAL		\$6,092,063					
D.		NT BENEFIT OBLIGATIONS	Non-Vested	<u>Vested</u>	Total			
	i	Benefit Recipients a. Retirement Annuities b. Disability Benefits c. Surviving Spouse and Child Benefits			\$1,823,523 41,291 238,389			
		Deferred Retirements With Future Augmentation		57,584	57,584			
		Former Members Without Vested Rights		2,685	2,685			
	4.	Active Members a. Retirement Annuities b. Disability Benefits c. Survivor's Benefits d. Deferred Retirements e. Refund Liability Due to Death or Withdrawal	9,665 104,870 79,537 7,993 0	1,671,570 0 0 387,725 33,178	1,681,235 104,870 79,537 395,718 33,178			
		Total Current Benefit Obligations	\$202,065	\$4,255,945	\$4,458,010			
Ε.	EXPEC	TED FUTURE BENEFIT OBLIGATION	IS		\$1,773,169			
F.	TOTAL	CURRENT AND EXPECTED FUTURE	BENEFIT OBLIGAT	TIONS	\$6,231,179			
G.	CURRE	NT UNFUNDED ACTUARIAL LIABILI	ITY (D5-A)		\$887,706			
н.	CURRE	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)						

DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) AND SUPPLEMENTAL CONTRIBUTION RATE (DOLLARS IN THOUSANDS)

JULY 1, 1991

			Actuarial Present Value of Projected	Actuarial Present Value of Future	Actuarial Accrued
	DETE	DMINATION OF ACTUADIAL	<u>Benefits</u>	Normal Costs	<u>Liability</u> (3)=(1)-(2)
Α.	DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)		(1)	(2)	(3)=(1)-(2)
	1.	Active Members a. Retirement Annuities b. Disability Benefits c. Survivor's Benefit d. Deferred Retirements e. Refunds Due to Death or Withdrawal	\$3,013,630 186,457 135,684 668,606 63,330	\$738,597 71,577 45,862 342,141 44,331	\$2,275,033 \$114,880 \$89,822 \$326,465 \$18,999
		f. Total	\$4,067,707	\$1,242,508	\$2,825,199
	2.	Deferred Retirements With Future Augmentation	57,584		57,584
	3.	Former Members Without Vested Rights	2,685		2,685
	4.	Annuitants in MPRIF	1,943,989		1,943,989
	5.	Recipients Not in MPRIF	159,214		159,214
	6.	Total	\$6,231,179	\$1,242,508	\$4,988,671
В.	DETI	ERMINATION OF UNFUNDED ACTUA	RIAL ACCRUED LIA	BILITY (UAAL)	\$4,988,671
	2.	Current Assets (Table 1, F	6)		3,570,304
	3.	UAAL (B1-B2)			\$1,418,367
C.	DETI 1.	ERMINATION OF SUPPLEMENTAL C Present Value of Future Pa the Amortization Date of J	yrolls Through		\$50,763,921
	2.	Supplemental Contribution	Rate (B3/C1)		2.79%

CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) (DOLLARS IN THOUSANDS)

YEAR ENDING JUNE 30, 1991

A.	UAAL AT BEGINNING OF YEAR	\$1,263,253
В.	CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
	 Normal Cost and Expenses Contribution Interest on A, B1 and B2 	\$151,438 (196,320) 105,469
	4. Total (B1+B2+B3)	\$60,587
C.	EXPECTED UAAL AT END OF YEAR (A+B4)	\$1,323,840
D.	INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
	 Salary Increases Investment Return MPRIF Mortality Mortality of Other Benefit Recipients Other Items 	(\$37,628) 37,842 21,809 (3,077) 71,637
	6. Total	\$90,583
Ε.	UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTION (C+D5)	\$1,414,423
F.	CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO PLAN AMENDMENTS	3,944
G.	CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS	0
н.	UAAL AT END OF YEAR (E+F+G)	\$1,418,367

DETERMINATION OF CONTRIBUTION SUFFICIENCY (DOLLARS IN THOUSANDS)

JULY 1, 1991

Α.	STAT	UTORY CONTRIBUTIONS - CHAPTER 353	Percent of Payroll	Dollar <u>Amount</u>
	1.	Employee Contributions	4.41%	\$100,800
	2.	Employer Contributions	4.76%	108,820
	3.	Total	9.17%	\$209,620
В.	REQU	IRED CONTRIBUTIONS - CHAPTER 356		
	1.	Normal Cost a. Retirement Benefits b. Disability benefits c. Survivors d. Deferred Retirement Benefits e. Refunds Due to Death or Withdrawal f. Total	3.87% 0.36% 0.25% 1.68% 0.22%	\$88,503 8,264 5,659 38,430 5,063 \$145,919
	2.	Supplemental Contribution Amortization by July 1, 2020 of UAAL	2.79%	63,784
	3.	Allowance for Expenses	0.27%	6,173
	4.	Total	9.44%	\$215,876
C.	CONT (A3-	RIBUTION SUFFICIENCY (DEFICIENCY) B4)	-0.27%	(\$6,256)

Note: Projected Annual Payroll for Fiscal Year Beginning on July 1, 1991 is \$2,286,179

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Interest:

Pre-Retirement:

8.5% per annum

Post-Retirement:

5.0% per annum

Salary Increases:

Reported Salary for prior fiscal year, with new hires annualized, increased 6.5% to current fiscal year and 6.5% annually for each future year.

Mortality:

Pre-Retirement:

1971 Group Annuity Mortality Table Male -

male rates projected to 1984 by

Scale D

Female -

1971 Group Annuity Mortality Table female rates projected to 1984 by

Scale D

Post-Retirement:

Male - Same as above Female - Same as above

Post-Disability:

Male - 1965 RRB rates Female - 1965 RRB rates

Retirement Age:

Age 64 or if over age 64, one year from valuation date. In addition, 50% of employees are assumed to retire under the Rule of 90 when first eligible.

Separation:

Graded rates based on experience as of June 30,

1990. Rates are shown in rate table.

Disability:

Rates as shown in rate table.

Administrative and Investment Expenses: Prior year expenses expressed as percentage of prior year payroll.

Return of

Contributions:

All employees withdrawing after becoming eligible for a deferred benefit take the larger of their contributions accumulated with interest or the value of their deferred benefit.

Family Composition:

85% of male Members and 65% of female Members are assumed to be married. Female is four years younger than male. Assume Members have no children.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Social Security:

N/A

Benefit Increases After Retirement: Payment of earnings on retired reserves in excess of 5% accounted for by 5% post-retirement assump-

tions.

Special Consideration:

Married Members assumed to elect subsidized joint

and survivor form of annuity as follows:

Males - 30% elect 50% J&S option 45% elect 100% J&S option

Females - 15% elect 50% J&S option

15% elect 100% J&S option

Actuarial Cost Method:

Entry Age Normal Actuarial Cost Method with normal costs expressed as a level percentage of earnings. Under this method, Actuarial Gains (Losses) reduce (increase) the Unfunded Actuarial Accrued Liabili-

ty.

Asset Valuation Method:

Cost Value plus one-third Unrealized Gains or

Losses.

Payment on the Unfunded Actuarial Accrued Liability:

A level percentage of payroll each year to the statutory amortization date assuming payroll

increases of 6.5% per annum.

PUBLIC EMPLOYEES RETIREMENT FUND SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Separations Expressed as the Number of Occurrences per 10,000:

<u>Age</u>	<u>De</u> <u>Male</u>	<u>eath</u> <u>Female</u>	<u>Witho</u> Male	irawal Female	<u>Disab</u> <u>Male</u>	oility Female	<u>Retir</u> <u>Male</u>	<u>ement</u> <u>Female</u>
20 21 22 23 24	5 5 5 5	2 2 2 3 3	2,542 2,277 2,050 1,854 1,684	2,913 2,666 2,450 2,259 2,091	9 9 9 10 10	9 9 9 10 10	0 0 0 0	0 0 0 0
25 26 27 28 29	6 6 7 7	3 3 3 4	1,536 1,406 1,291 1,189 1,099	1,942 1,808 1,688 1,580 1,482	10 10 10 11	10 10 10 11	0 0 0 0	0 0 0 0
30 31 32 33 34	7 8 8 9 10	4 4 4 5 5	1,018 945 880 821 767	1,394 1,313 1,239 1,172 1,110	11 11 11 12 12	11 11 11 12 12	0 0 0 0	0 0 0 0
35 36 37 38 39	10 11 12 13 14	5 6 6 7 7	719 675 634 597 563	1,053 1,000 952 907 865	12 12 13 13 14	12 12 13 13	0 0 0 0	0 0 0 0
40 41 42 43 44	15 16 18 21 24	8 9 9 10 11	532 503 476 452 429	826 790 756 724 695	15 16 17 18 20	15 16 17 18 20	0 0 0 0	0 0 0 0
45 46 47 48 49	27 30 34 39 44	12 13 14 15 17	408 388 370 352 336	667 641 616 593 571	22 23 25 27 30	22 23 25 27 30	0 0 0 0	0 0 0 0

PUBLIC EMPLOYEES RETIREMENT FUND SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Separations Expressed as the Number of Occurrences per 10,000:

	De	<u>eath</u>		<u>lrawal</u>		oility	Retire	
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>emale</u>
50	49	18	321	550	33	33	0	0
51	54	20	316	531	36	36	0	0
52	60	21	310	513	40	40	0	0
53	65	23	270	495	45	45	0	0
54	72	25	230	487	51	51	0	0
55	78	27	195	478	58	58	0	0
56	85	30	150	410	66	66	0	0
57	92	33	100	362	76	76	0	0
58	100	37	50	210	88	88	0	0
59	110	41	20	50	102	102	0	0
60	121	46	0	0	118	118	0	0
61	133	52	0	0	136	136	0	0
62	146	58	0	0	157	157	0	0
63	160	65	0	0	181	181	0	0
64	176	73	0	0	208	208	10,000	10,000
65	195	81	0	0	0	0	0	0
66	219	90	0	0	0	0	0	0
67	243	99	0	0	0	0	0	0
68	270	109	0	0	0	0	0	0
69	300	123	0	0	0	0	0	0
70	334	140	0	0	0	0	0	0

TABLE 3A BASIC

ACTIVE MEMBERS AS OF JUNE 30, 1991

	YEARS OF SERVICE									
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL	
<25 25-29										
30-34 35-39						1			1	
40-44 45-49					1	47 134	34 274	18	82 426	
50-54 55-59	1		1	1	2 1	142 154	447 497	237 340	829 995	
60-64 65+		1				120 37	388 93	162 65	670 196	
ALL	1	1	1	2	4	635	1,733	822	3,199	
	AVERAGE ANNUAL EARNINGS									
					SERVICE					
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL	
<25 25-29										
30-34 35-39						3,349			3,349	
40-44 45-49					12,480	28,607 35,361	31,693 33,770	30,849	29,690 34,147	
50-54 55-59	24,419		30,311	29,855 48,316	46,081 38,564	30,100 26,665	32,005 29,985	33,131 34,850	32,032 31,156	
60-64 65+		9,824				21,316 15,136	25,211 20,609	31,314 26,054	25,989 21,326	
ALL	24,419	9,824	30,311	39,085	35,801	27,693	29,566	32,874	30,050	
	PRIC	OR FISCA						OF SERVI	CE	
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL	
ALL	24	10	30	78	143	17,585	51,239	27,023	96,133	

MILLIMAN &28 OBERTSON, INC.

TABLE 4A BASIC

SERVICE RETIREMENTS AS OF JUNE 30, 1991

YEARS RETIRED									
AGE	<1	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL	
<50 50-54	2	6	2					10	
55-59 60-64	142 278	190 487	7 588					339 1,353	
65-69 70-74	220 22	837 143	1,572 1,936	82 799	20	1		2,711 2,921	
75-79 80-84	2	7 3	259 16	1,991 113	309 1,261	5 87	2	2,573 1,482	
85+	1	1	3	25	193	577	272	1,072	
ALL	667	1,674	4,383	3,010	1,783	670	274	12,461	
AVERAGE ANNUAL BENEFIT									
				ARS RETIF	RED	00.04	<u>25+</u>	ALL	
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u> 25T</u>	ALL	
<50 50-54	3,533	11,193	10,075					9,437	
55-59 60-64	17,538 12,551	14,417 13,111	16,768 17,012					15,773 14,691	
65-69 70-74	10,460 9,999	10,719 10,817	14,084 10,462	11,001 9,883	7,775	10,756		12,658 10,299	
75-79 80-84	20,113	8,464 4,618	9,566 5,888	7,893 7,288	10,040 6,459	6,491 6,105	10,241	8,328 6,497	
85+	3,192	7,309	5,409	6,805	5,154	5,527	5,767	5,550	
ALL	12,820	11,822	12,577	8,474	6,953	5,617	5,800	10,170	
	T0	TAL ANNUAL			SANDS) BY	YEARS RE	TIRED	ALL	
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>		
ALL	8,551	19,790	55,125	25,507	12,397	3,763	1,589	126,728	

- 23 - MILLIMAN & ROBERTSON, INC.

SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH									
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>	
<50 50-54	8 5	15 14	16 24	14 14	6 5	1	1	61 63	
55-59 60-64	7 15	25 35	45 132	21 48	14 30	6 14	3 16	121 290	
65-69 70-74	4 5	43 17	184 137	109 221	54 105	36 54	25 51	455 590	
75-79 80-84	9 19	28 36	74 69	160 72	185 151	89 114	93 106	638 567	
85+	18	49	98	110	164	153	208	800	
ALL	90	262	779	769	714	468	503	3,585	
AVERAGE ANNUAL BENEFIT									
				S SINCE D					
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL	
<50 50-54	12,364 9,781	10,058 12,861	10,835 10,260	7,335 8,307	7,308 6,444	3,953 5,057	2,876	9,451 9,981	
55-59 60-64	9,543 7,795	10,520 8,864	11,605 11,762	8,588 8,302	6,331 6,498	3,423 3,916	3,448 2,991	9,520 9,227	
65-69 70-74	3,922 6,627	8,597 6,362	9,550 8,203	7,513 7,361	6,745 6,086	3,448 2,810	2,378 2,623	7,713 6,469	
75-79 80-84	3,357 3,818	4,478 4,411	5,970 4,926	6,369 5,326	5,771 6,444	3,078 4,525	2,760 2,819	5,039 4,837	
85+	3,436	4,711	4,873	5,373	5,473	5,453	4,617	5,067	
ALL	6,055	7,241	8,517	6,810	6,024	4,240	3,519	6,240	
			BENEFIT (IN THOUSAN	NDS) BY YE	ARS SINCE	DEATH	ALL	
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>		
ALL	545	1,897	6,635	5,237	4,301	1,984	1,770	22,370	

- 24 - MILLIMAN & ROBERTSON, INC.

TABLE 6A BASIC

DISABILITY RETIREMENTS AS OF JUNE 30, 1991

YEARS DISABLED									
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL	
<50 50-54	3 2	1 8	1 5	2	1			7 16	
55-59 60-64	9 13	22 24	18 37	8 28	5 10	1	1	62 114	
65-69 70-74			5	3				8	
75-79 80-84						·			
85+									
ALL	27	55	66	41	16	1	1	207	
AVERAGE ANNUAL BENEFIT									
				RS DISABL	.ED	00.04	OF -	ALL	
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL	
<50 50-54	15,162 19,528	9,378 14,885	14,696 14,027	5,041	6,955			11,377 14,702	
55-59 60-64	13,361 12,163	15,913 10,986	14,118 14,030	9,736 9,839	5,586 8,538	11,235	4,718	13,392 11,559	
65-69 70-74			10,261	9,942				10,141	
75-79 80-84									
85+									
ALL	13,441	13,495	13,778	9,592	7,517	11,235	4,718	1_,290	
	TO	TAL ANNUAL	BENEFIT	(IN THOUS	SANDS) BY	YEARS DIS	ABLED		
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL	
ALL	363	742	909	393	120	11	5	2,544	

MILLIMAN & ROBERTSON, INC.

DETERMINATION OF CONTRIBUTION SUFFICIENCY (DOLLARS IN THOUSANDS)

JULY 1, 1991

Α.	STA	TUTORY CONTRIBUTIONS - CHAPTER 353	Percent of Payroll	Dollar <u>Amount</u>
	1.	Employee Contributions	8.23%	\$8,426
	2.	Employer Contributions	10.73%	10,986
В.	3. REQU	Total JIRED CONTRIBUTIONS - CHAPTER 356	18.96%	\$19,412
	1.	Normal Cost a. Retirement Benefits b. Disability benefits c. Survivors d. Deferred Retirement Benefits e. Refunds Due to Death or Withdrawal f. Total	4.97% 0.75% 1.35% 2.96% 0.01%	\$5,087 768 1,377 3,026 5

Note: Projected Annual Payroll for Fiscal Year Beginning on July 1, 1991 is \$102,381

SUMMARY OF PLAN PROVISIONS

Eligibility:

A public employee who is not covered under the Social Security Act. General exceptions are employees covered by other public funds and certain part-time employees.

Contributions

Member:

8.23% of Salary.

Employer:

10.73% of Salary.

Allowable Service:

Service during which Member contributions were deducted. May also include certain leaves of absence and military service.

Salary:

Includes amounts deducted for deferred compensation or supplemental retirement plans, net income from fees and sick leave payments funded by the employer. Excludes lump sum annual leave and sick leave payments and Workers' Compensation benefits.

Average Salary:

Average of the five highest successive years of Salary. Average salary is based on all Allowable Service if less than five years.

RETIREMENT

Normal Retirement Benefit

Eligibility:

Age 65 and three years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.

Amount:

2.5% of Average Salary for each year of Allowable Service.

SUMMARY OF PLAN PROVISIONS

Early Retirement Benefit

Eligibility:

Age 55 and three years of Allowable Service.
Any age with 30 years of Allowable Service.
Rule of 90: Age plus Allowable Service totals 90.

Amount:

The greater of

2% of Average Salary for each of the first 10 years of Allowable Service and 2.5% of Average Salary for each subsequent year with reduction of 0.25% for each month the Member is under age 65 at time of retirement or age 62 if 30 years of Allowable Service. No reduction if age plus years of Allowable Service totals 90;

OR

2.5% of Average Salary for each year of Allowable Service assuming augmentation to age 65 at 3% per year and actuarial reduction for each month the Member is under age 65.

Form of Payment:

Life annuity with return on death of any balance of contributions over aggregate monthly payments. Actuarially equivalent options are:

50% or 100% joint and survivor with bounce back feature without additional reduction (option canceled if Member is pre-deceased by beneficiary).

TABLE 13A BASIC (Continued)

PUBLIC EMPLOYEES RETIREMENT FUND

SUMMARY OF PLAN PROVISIONS

Benefit Increases:

Benefits may be increased each January 1 depending on the investment performance of the Minnesota Post Retirement Investment Fund (MPRIF). A benefit recipient who has been receiving a benefit for at least 12 full months as of June 30 will receive a full increase. Members receiving benefits for at least one full month but less than 12 full months will receive a partial increase.

Members retired under laws in effect before July 1, 1973 receive an additional lump sum payment each year. In 1989, this lump sum payment is the greater of \$25 times each full year of Allowable Service or the difference between \$400 times each full year of Allowable Service and the sum of the benefits paid from any Minnesota public pension plan plus cash payments from the Social Security Administration for the preceding fiscal year July 1, 1988 through June 30, 1989. In each following year, the lump sum payment will increase by the same percentage increase that is applied to regular annuities paid from MPRIF.

DISABILITY

Disability Benefit

Eligibility:

Total and permanent disability before normal retirement age with three years of Allowable Service.

SUMMARY OF PLAN PROVISIONS

Amount:

Normal Retirement Benefit based on Allowable Service and Average Salary at disability without reduction for commencement before normal retirement age. Supplemental benefit of \$5 per month for each year under normal retirement age at commencement of disability (maximum of \$50 per month). The disability benefit is reduced to that amount which, when added to Workers' Compensation, does not exceed the salary the disabled Member received as of the date of the disability or the salary currently payable for the same employment position substantially similar to the one the person held as of the date of the disability, whichever is greater.

Payments stop if disability ceases or death occurs. Payments change to a retirement annuity at normal retirement age. Benefits may be reduced on resumption of partial employment.

Form of Payment:

Same as for retirement.

Benefit Increases:

Adjusted by PERA to provide same increase as

MPRIF.

Retirement After Disability

Eliqibility:

Normal retirement age.

Amount:

Any optional annuity continues. Otherwise, the larger of the disability benefit paid before normal retirement age or the normal retirement benefit available at normal retirement age, or an actuarially equivalent optional annuity.

Benefit Increases:

Same as for retirement.

DEATH

Surviving Spouse Benefit

Eligibility:

Active Member with 18 months of Allowable Service or Member receiving a disability benefit.

TABLE 13A BASIC (Continued)

PUBLIC EMPLOYEES RETIREMENT FUND

SUMMARY OF PLAN PROVISIONS

Amount:

50% of Salary averaged over last six months. Family benefit is maximum of 70% and minimum of 50% of average salary. Benefit paid until spouse's death but no payments while spouse is remarried prior to July 1, 1991.

Surviving spouse optional annuity may be elected in lieu of this benefit.

Surviving Dependent Child Benefit

Eligibility:

Active Member with 18 months of Allowable Service or Member receiving a disability benefit.

Amount:

10% of Salary averaged over last six months for each child. Family benefit minimum (including spouse's benefit) of 50% of Salary and maximum of 70% of average salary. Benefits paid until child marries, dies, or attains age 18 (age 23 if full-time student.)

Surviving Spouse Optional Annuity

Eliqibility:

Member or former Member who dies before retirement or disability benefits commence, if age 50 with three years of Allowable Service or any age with 30 years of Allowable Service. If the Member dies before age 55, benefits commence when Member would have qualified for early retirement.

Amount:

Survivor's payment of the 100% joint and survivor benefit the Member could have elected if terminated.

Benefit Increases:

Adjusted by PERA to provide same increase as MPRIF.

SUMMARY OF PLAN PROVISIONS

Refund of Contributions

Eligibility:

Member dies before receiving any retirement benefits and survivor benefits are not payable.

Amount:

The excess of the Member's contributions with 6% interest over any disability or survivor bene-

fits paid.

TERMINATION

Refund of Contributions

Eligibility:

Termination of public service.

Amount:

Member's contributions with 5% interest compounded annually if termination occurred before May 16, 1989 and 6% interest if termination occurred on or after May 16, 1989. A deferred annuity may be elected in lieu of a refund if three or more years of Allowable Service.

Deferred Benefit

Eligibility:

Three years of Allowable Service.

Amount:

Benefit computed under law in effect at termination and increased by the following annual percentage, compounded annually: 0% before 7/1/71; 5% from 7/1/71 to 1/1/81; and 3% thereafter until January 1 of the year following attainment of age 55 and 5% thereafter until the annuity begins. Amount is payable as a normal or early retirement.

SIGNIFICANT CHANGES

Maximum family death benefit increased from \$1,000 per month to 70% of average salary.

ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE									
<u>AGE</u>	<1	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL
<25	1,857	1,139	87						3,083
25-29	2,675	3,851	1,954	137					8,617
30-34	3,564	5,244	3,968	2,400	155				15,331
35-39	2,881	5,111	4,614	3,742	1,751	88			18,187
40-44	2,290	4,479	4,767	3,654	2,480	888	6		18,564
45-49	1,355	2,689	3,528	3,029	2,026	1,217	85		13,929
50-54	796	1,709	2,269	2,495	1,923	1,197	176	28	10,593
55-59	488	1,127	1,587	1,783	1,698	1,377	159	118	8,337
60-64	269	653	909	1,131	1,113	997	140	69	5,281
65+	163	295	400	410	350	252	18	16	1,904
ALL	16,338	26,297	24,083	18,781	11,496	6,016	584	231	103,826
			AVER	AGE ANNU	AL EARNI	NGS			
				YEARS OF	SERVICE	,			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL
<25	9,100	13,953	16,616						11,105
25-29	12,779	18,126	20,668	19,948					17,071
30-34	11,521	17,885	23,375	23,897	23,360				18,823
35-39	11,461	17,198	22,411	27,145	27,283	26,343			20,674
40-44	12,110	16,268	20,639	26,853	31,729	32,277	25,389		21,795
45-49	11,568	16,270	19,283	23,256	27,904	34,132	34,775		21,461
50-54	11,732	15,611	17,913	20,692	23,013	27,717	36,617	35,816	20,124
55-59	10,251	14,701	17,126	19,559	21,197	23,826	37,237	42,689	19,597
60-64	9,163			19,328		22,130			18,815
65+	7,011	8,902	11,190	14,757	15,738	16,949	22,383	40,014	13,192
ALL	11,416	16,671	20,372	23,675	25,721	27,400	34,802	40,896	19,749
	PR	IOR FISC	AL YEAR	EARNINGS	(IN MIL	LIONS) B	Y YEARS	OF SERVI	
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL
ALL	187	438	491	445	296	165	20	9	2,051

MILLIMAN & ROBERTSON, INC.

SERVICE RETIREMENTS AS OF JUNE 30, 1991

YEARS RETIRED										
AGE	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
<50 50-54	2	2						4		
55-59 60-64	269 916	273 952	325					542 2,193		
65-69 70-74	771 122	2,248 484	1,254 2,257	5 405	5			4,278 3,273		
75-79 80-84	16 3	54 12	522 67	1,212 124	52 536	8		1,856 750		
85+	2	4	11	18	65	177		277		
ALL	2,101	4,029	4,436	1,764	658	185		13,173		
AVERAGE ANNUAL BENEFIT										
			YE	ARS RETIR						
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
<50 50-54	9,215	8,518						8,867		
55-59 60-64	3,111 3,970	2,574 3,235	3,797					2,841 3,625		
65-69 70-74	3,932 2,940	3,085 2,348	3,801 3,230	9,687 3,216	4,068			3,455 3,088		
75-79 80-84	1,311 1,254	2,021 820	2,054 1,312	3,067 1,942	6,019 3,530	4,059		2,819 3,023		
85+	1,224	1,023	816	1,106	3,203	3,032		2,817		
ALL	3,765	2,977	3,260	3,021	3,699	3,076		3,241		
	T01	TAL ANNUAL								
<u>AGE</u>	<1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
ALL	7,910	11,994	14,461	5,329	2,434	569		42,694		

TABLE 5B COORDINATED

PUBLIC EMPLOYEES RETIREMENT FUND

SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH											
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>			
<50 50-54	12 10	26 20	16 8	4 3	1			59 41			
55-59 60-64	18 18	35 61	36 73	3 11	2			92 165			
65-69 70-74	11 3	51 20	114 76	28 66	5 20			209 185			
75-79 80-84		2	24 7	57 15	44 40	2 5		129 67			
85+	1			4	7	9		21			
ALL	73	215	354	191	119	16		968			
AVERAGE ANNUAL BENEFIT											
				RS SINCE							
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54	5,542 3,588	2,166 2,640	3,826 2,814	2,704 2,004	810			3,316 2,859			
55-59 60-64	3,184 3,729	2,991 2,721	3,190 3,252	2,926 3,397	3,530			3,105 3,121			
65-69 70-74	1,958 5,185	2,730 2,642	3,702 3,194	2,431 3,055	1,920 3,411			3,160 3,141			
75-79 80-84		721	2,091 4,479	2,871 2,550	2,969 2,452	1,185 4,625		2,700 2,848			
85+	2,217			2,220	3,135	2,825		2,784			
ALL	3,646	2,667	3,340	2,845	2,827	3,183		3,050			
	TOTAL	ANNUAL	BENEFIT (IN THOUSA	NDS) BY Y	EARS SINC	E DEATH				
AGE	<u> </u>	1-4	<u>5-9</u>	10-14	15-19	20-24	<u>25+</u>	ALL			
ALL	266	573	1,182	543	336	51		2,952			

MILLIMAN & ROBERTSON, INC.

TABLE 6B COORDINATED

DISABILITY RETIREMENTS AS OF JUNE 30, 1991

			YEA	RS DISABL				
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54	38 24	28 37	13 14	2	1			81 76
55-59 60-64	41 45	47 98	32 62	4 20	1	1		124 227
65-69 70-74	4	8	8	3	1			24
75-79 80-84					·			
85+								
ALL	152	218	129	29	3	1		532
			AVERAGE	ANNUAL B	ENEFIT			
				RS DISABL		20.24	25.	ALL
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50 50-54	2,936 2,835	3,510 3,026	2,810 3,978	2,306	2,655			3,099 3,136
55-59 60-64	5,028 4,289	2,891 3,061	2,677 2,767	2,634 2,048	4,183	2,792		3,534 3,139
65-69 70-74	1,851	2,755	2,104	1,993	5,160			2,392
75-79 80-84								
85+								
ALL	3,856	3,065	2,839	2,141	3,999	2,792		3,191
	ТОТ	AL ANNUAL	BENEFIT	(IN THOUS	SANDS) BY	YEARS DISA	BLED	
AGE	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL	586	668	366	62	12	3		1,698

- 36 - MILLIMAN & ROBERTSON, INC.

DETERMINATION OF CONTRIBUTION SUFFICIENCY (DOLLARS IN THOUSANDS)

JULY 1, 1991

Α.	STA ⁻	TUTORY CONTRIBUTIONS - CHAPTER 353	Percent of Payroll	Dollar <u>Amount</u>
	1.	Employee Contributions	4.23%	\$ 92,375
	1.	Limproyee contributions	112070	432,070
	2.	Employer Contributions	4.48%	97,834
	3.	Total	8.71%	\$190,209
В.	REQ	JIRED CONTRIBUTIONS - CHAPTER 356	2223222222	
	1.	Normal Cost a. Retirement Benefits b. Disability benefits c. Survivors d. Deferred Retirement Benefits e. Refunds Due to Death or Withdrawal	3.82% 0.34% 0.20% 1.62% 0.23%	\$83,416 7,496 4,282 35,404 5,058
		f. Total	6.21%	\$135,656

Note: Projected Annual Payroll for Fiscal Year Beginning on July 1, 1991 is \$2,183,797

SUMMARY OF PLAN PROVISIONS

Eligibility:

A public employee who is covered under the Social Security Act. General exceptions are employees covered by other public funds and certain part-time employees. City managers and persons holding elective office may choose to become Members.

Contributions

Member:

4.23% of Salary.

Employer:

4.48% of Salary.

Allowable Service:

Service during which Member contributions were deducted. May also include certain leaves of absence and military service.

Salary:

Includes amounts deducted for deferred compensation or supplemental retirement plans, net income from fees and sick leave payments funded by the employer. Excludes lump sum annual leave and sick leave payments and Workers' Compensation benefits.

Average Salary:

Average of the five highest successive years of Salary. Average Salary is based on all Allowable Service if less than five years.

RETIREMENT

Normal Retirement Benefit

Eligibility:

First hired before July 1, 1989:

Age 65 and three years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.

First hired after June 30, 1989:

The greater of age 65 or the age eligible for full Social Security retirement benefits and three years of Allowable Service. Proportionate Retirement Annuity is available at normal retirement age and one year of Allowable Service.

Amount:

1.5% of Average Salary for each year of Allowable Service.

SUMMARY OF PLAN PROVISIONS

Early Retirement Benefit

Eligibility:

First hired before July 1, 1989:

Age 55 and three years of Allowable Service. Any age with 30 years of Allowable Service. Rule of 90: Age plus Allowable Service totals 90.

First hired after June 30, 1989:
Age 55 with three years of Allowable Service.

Amount:

First hired before July 1, 1989:

The greater of 1% of Average

1% of Average Salary for each of the first 10 years of Allowable Service and 1.5% of Average Salary for each subsequent year with reduction of 0.25% for each month the Member is under age 65 at time of retirement or age 62 if 30 years of Allowable Service. No reduction if age plus years of Allowable Service totals 90;

OR

1.5% of Average Salary for each year of Allowable Service assuming augmentation to age 65 at 3% per year and actuarial reduction for each month the Member is under age 65.

First hired after June 30, 1989:

1.5% of Average salary for each year of allowable Service assuming augmentation to the age eligible for full Social Security retirement benefit at 3% per year and actuarial reduction for each month the Member is under the Social Security retirement age.

Form of Payment:

Life annuity with return on death of any balance of contributions over aggregate monthly payments. Actuarially equivalent options are:

50% or 100% joint and survivor with bounce back feature without additional reduction (option canceled if Member is pre-deceased by beneficiary).

TABLE 13B COORDINATED (Continued)

PUBLIC EMPLOYEES RETIREMENT FUND

SUMMARY OF PLAN PROVISIONS

Benefit Increases:

Benefits may be increased each January 1 depending on the investment performance of the Minnesota Post Retirement Investment Fund (MPRIF). A benefit recipient who has been receiving a benefit for at least 12 full months as of June 30 will receive a full increase. Benefit recipients receiving benefits for at least one full month but less than 12 full months will receive a partial increase.

Members retired under laws in effect before July 1, 1973 receive an additional lump sum payment each year. In 1989, this lump sum payment is \$25 times each full year of Allowable Service. In each following year, the lump sum payment will increase by the same percentage increase that is applied to regular annuities paid from MPRIF.

DISABILITY

Disability Benefit

Eligibility:

Total and permanent disability before normal retirement age with three years of Allowable Service.

Amount:

Normal Retirement Benefit based on Allowable Service and Average Salary at disability without reduction for commencement before normal retirement age. The disability benefit is reduced to that amount which, when added to Workers' Compensation, does not exceed the salary the disabled Member received as of the date of the disability or the salary currently payable for the same employment position substantially similar to the one the person held as of the date of the disability, whichever is greater.

Payments stop if disability ceases or death occurs. Payments change to a retirement annuity at normal retirement age. Benefits may be reduced on resumption of partial employment.

Form of Payment:

Same as for retirement.

Benefit Increases:

Adjusted by PERA to provide same increase as MPRIF.

SUMMARY OF PLAN PROVISIONS

Retirement After Disability

Eligibility:

Normal retirement age.

Amount:

Any optional annuity continues. Otherwise, the larger of the disability benefit paid before normal retirement age or the normal retirement benefit available at normal retirement age, or an actuarially equivalent optional annuity.

Benefit Increases:

Same as for retirement.

DEATH

Surviving Spouse Optional Annuity

Eligibility:

Member or former Member who dies before retirement or disability benefits commence, if age 50 with three years of Allowable Service or any age with 30 years of Allowable Service. If the Member dies before age 55, benefits commence when Member would have qualified for early retirement.

Amount:

Survivor's payment of the 100% joint and survivor benefit the Member could have elected if terminated.

Benefit Increases:

Adjusted by PERA to provide same increase as

MPRIF.

Refund of Contributions

Eligibility:

Member dies before receiving any retirement benefits and survivor benefits are not payable.

Amount:

The excess of the Member's contributions with 6% interest over any disability or survivor bene-

fits paid.

PUBLIC EMPLOYEES RETIREMENT FUND SUMMARY OF PLAN PROVISIONS

TERMINATION

Refund of Contributions

Eligibility:

Termination of public service.

Amount:

Member's contributions with 5% interest compounded annually if termination occurred before May 16, 1989 and 6% interest if termination occurred on or after May 16, 1989. A deferred annuity may be elected in lieu of a refund if three or more years of Allowable Service.

Deferred Benefit

Eligibility:

Three years of Allowable Service.

Amount:

Benefit computed under law in effect at termination and increased by the following annual percentage, compunded annually: 0% before 7/1/71; 5% from 7/1/71 to 1/1/81; and 3% thereafter until January 1 of the year following attainment of age 55 and 5% thereafter until the annuity begins. Amount is payable as a normal or early retirement.

PUBLIC EMPLOYEES POLICE AND FIRE FUND

ACTUARIAL VALUATION REPORT

JULY 1, 1991





MILLIMAN & ROBERTSON, INC.

Actuaries and Consultants

Suite 400 15700 Bluemound Road Brookfield, Wisconsin 53005 Telephone: 414/784-2250 Fax: 414/784-6388 Wendell Milliman, F.S.A. (1976) Stuart A. Robertson, F.S.A. Chairman Emeritus

November 6, 1991

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Mark J. Cain, A.C.A.S.

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

RE: <u>Public Employees Police and Fire Fund</u>

Commission Members:

Pursuant to the terms of our Actuarial Services Contract, we have performed an actuarial valuation of the Fund as of July 1, 1991.

The results of our calculations are set forth in the following report, as are the actuarial assumptions upon which our calculations have been made. We have relied on the basic employee data and asset figures as submitted by the Public Employees Retirement Association.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with the requirements of Section 356.215, Minnesota Statutes, and the requirements of the Standards for Actuarial Work, adopted by the Commission on September 20, 1989.

Respectfully submitted,

Thomas K. Custis, F.S.A., M.A.A.A.

Consulting Actuary

William V. Hogan, F.S.A., M.A.A.A.

Actuary

TKC/WVH/bh

PUBLIC EMPLOYEES POLICE AND FIRE FUND TABLE OF CONTENTS

	<u>PAGE</u>
REPORT HIGHLIGHTS	1
COMMENTARY	
Purpose	2
Report Highlights	2
Asset Information	2
Actuarial Balance Sheet	3
GASB Disclosure	4
Actuarial Cost Method	5
Contribution Sufficiency	6
Changes in Actuarial Assumptions	6
Changes in Plan Provisions	6
ASSET INFORMATION	
Table 1 - Accounting Balance Sheet	7
Table 2 - Changes in Assets Available for Benefits	8
MEMBERSHIP DATA	
Table 3 - Active Members	9
Table 4 - Service Retirements	10
Table 5 - Survivors	11
Table 6 - Disability Retirements	12
Table 7 - Reconciliation of Members	13

TABLE OF CONTENTS (Continued)

	PAGE
FUNDING STATUS	
Table 8 - Actuarial Balance Sheet Table 9 - Determination of Unfunded Actuarial Accrued Liability (UAAL) and Supplemental Contribution Rate	14 15
Table 10 - Changes in Unfunded Actuarial Accrued Liability (UAAL) Table 11 - Determination of Contribution Sufficiency	16 17
ACTUARIAL ASSUMPTIONS	
Table 12 - Summary of Actuarial Assumptions and Methods	18
PLAN PROVISIONS	
Table 13 - Summary of Plan Provisions	22

REPORT HIGHLIGHTS (DOLLARS IN THOUSANDS)

_			07/01/90 <u>Valuation</u>	07/01/91 <u>Valuation</u>
Α.	CONT 1.	RIBUTIONS (Table 11) Statutory Contributions - Chapter 353 % of Payroll	20.00%	20.00%
	2.	Required Contributions - Chapter 356 % of Payroll	17.56%	17.54%
	3.	Sufficiency (Deficiency): (A.1 A.2.)	2.44%	2.46%
В.	FUND 1.	ING RATIOS Accrued Benefit Funding Ratio a. Current Assets (Table 1) b. Current Benefit Obligations (Table 8) c. Funding Ratio: (a/b)	\$755,204 \$657,453 114.87%	\$839,560 \$732,911 114.55%
	2.	Accrued Liability Funding Ratio a. Current Assets (Table 1) b. Actuarial Accrued Liability (Table 9) c. Funding Ratio: (a/b)	\$755,204 \$715,963 105.48%	\$839,560 \$794,295 105.70%
	3.	Projected Benefit Funding Ratio (Table 8) a. Current and Expected Future Assets b. Current and Expected Future Benefit Obligations c. Funding Ratio: (a/b)	\$1,386,324 \$1,230,055 112.70%	\$1,529,005 \$1,355,807 112.77%
C.	PLAN 1.	PARTICIPANTS Active Members a. Number (Table 3) b. Projected Annual Earnings c. Average Annual Earnings (Actual \$) d. Average Age e. Average Service	6,136 \$216,022 \$35,206 37.6 10.1	6,309 \$234,208 \$37,123 37.8 10.4
	2.	Others a. Service Retirements (Table 4) b. Disability Retirements (Table 5) c. Survivors (Table 6) d. Deferred Retirements (Table 7) e. Terminated Other Non-vested (Table 7) f. Total	1,057 89 347 128 121 1,742	1,130 93 359 165 112 1,859

COMMENTARY

Purpose

The purpose of this valuation is to determine the financial status of the Plan. In order to achieve this purpose, an actuarial valuation is made at the beginning of each fiscal year as required by Section 356.215 of Minnesota Statutes.

Report Highlights

The financial status of the Plan can be measured by three different funding ratios:

The Accrued Benefit Funding Ratio is a measure of current funding status and, when viewed over a period of years, presents a view of the funding progress. It is based upon benefits which have been earned by service to the valuation date. This year's ratio is 114.55%. The corresponding ratio for the prior year was 114.87%.

The Accrued Liability Funding Ratio is also a measure of funding status and funding progress. It is based on the actuarial cost method that has historically been used by the State. For 1991 the ratio is 105.70%, which is an increase from the 1990 value of 105.48%.

The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 112.77% verifies that the current statutory contributions are sufficient.

Asset Information (Tables 1 and 2)

Minnesota Statutes require that the asset value used for actuarial purposes

recognize only a third of the unrealized gains and losses. This requirement exists because market values (which include all unrealized gain and losses) are typically volatile and can produce erratic changes in the contribution requirements from year to year.

The calculation of the Actuarial Value of Assets is shown in Table 1 on lines F1 to F6. It combines the cost value of the Assets Available for Benefits and one-third of the difference between the market value and cost value of those assets.

The term "Actuarial Value of Assets" is used to indicate that the value was determined for use in this actuarial valuation. Since Minnesota Statutes refer to this value as "Current Assets", the latter phrase will be used in the remainder of this report.

This Plan participates in the Minnesota Post Retirement Investment Fund (i.e. MPRIF). After the MPRIF liability has been calculated for each participating Plan, the State Board of Investments, (i.e. SBI), will determine each Plan's portion of the excess earnings for the January benefit increase as well as the Plan's allocated market share of MPRIF.

Actuarial Balance Sheet (Table 8)

An actuarial balance sheet provides a method for evaluating current and future levels of funding.

The Current Benefit Obligation used to measure current funding levels is calculated in accordance with Statement No. 5 of the Governmental Accounting Standards Board (GASB). Those requirements are:

For Active Members - salary and service are projected to retirement to determine benefits for each member and the ratio of credited service to total service establishes the portion of the projected benefit to be used in calculating the current funding level.

For Non-active Members - the discounted value of benefits, including augmentation in cases where benefits have not commenced.

GASB Disclosure

The Current Benefit Obligation amounts in Table 8 are required to be disclosed by Statement No. 5 of the Governmental Accounting Standards Board (GASB). However, Statement No. 5 uses the terms "Actuarial Present Value of Credited Projected Benefits" and "Pension Benefit Obligation" rather than "Current Benefit Obligation".

The July 1, 1991 Pension Benefit Obligation reported in Table 8 is reformatted for GASB reporting purposes in the following table:

Retirees and beneficiaries currently	
receiving benefits and terminated	
employees not yet receiving benefits	\$249,779,651
Current Employees	
Accumulated employee contributions	\$129,681,495
including allocated investment income	
Employer-financed vested	349,988,656
Employer-financed nonvested	3,460,951
Total Pension Benefit Obligation	\$732,910,753
Net Assets Available for Benefits at Cost	\$823,124,827
Tabal Bass 6th Oblive than Jass A and	(600 014 074)
Total Benefit Obligation less Assets	(\$90,214,074)
Funded Ratio	112.31%
	22310270

Actuarial Cost Method (Table 9)

The approach used by the State of Minnesota to determine contribution sufficiency is the Entry Age Normal Actuarial Cost Method. The primary characteristic of this method is that it allocates costs as a level percentage of payroll.

A comparison of this actuarial method (Table 9) to the actuarial balance sheet (Table 8) illustrates the two techniques for allocating liabilities of active Members to past and future. As noted in the prior section, the balance sheet allocates benefits and the corresponding liabilities, on the basis of service. The method used in Table 9 allocates liabilities so that the cost each year will be a constant percentage of payroll. Both approaches, however, calculate the value of all future benefits the same way (see line F of Table 8 and line A6, column 1, of Table 9).

An Unfunded Actuarial Accrued Liability is computed under the Entry Age Normal Actuarial Cost Method by comparing the liabilities allocated to past service (Actuarial Accrued Liability) to the Current Assets. This amount, line B3, is funded over the remaining years to the amortization date by a series of payments that remain a constant percentage of payroll each year.

The payments will increase 6.5% each year because that is the assumed rate of increase in payroll. Although the payment schedule will be adequate to amortize the existing unfunded, the lower payments in the earlier years will not be sufficient to cover the interest on the unfunded liability. After a few years, the annual payment will cover the interest and also repay a portion of the unfunded.

Sources of Actuarial Gains and Losses (Table 10)

The assumptions used in making the calculations using the Entry Age Normal Actuarial Cost Method are based on long-term expectations. Each year the actual experience will deviate from the long-term expectation. For a detailed analysis of the major components, refer to Table 10.

Contribution Sufficiency (Table 11)

This report determines the adequacy of Statutory Contributions by comparing the Statutory Contributions to the Required Contributions.

The Required Contributions, set forth in Chapter 356, consist of:

Normal costs based on the Entry Age Normal Actuarial Cost Method.

A Supplemental Contribution for amortizing any Unfunded Actuarial Accrued Liability.

An Allowance for Expenses.

Table 11 shows the Plan has a contribution sufficiency since the Statutory Contribution Rate is 20.00% compared to the Required Contribution Rate of 17.54%.

<u>Changes in Actuarial Assumptions</u>

The actuarial assumptions are the same as those used in the prior valuation.

Changes in Plan Provisions

There were no changes in plan provisions since the prior valuation which impacted funding costs.

ACCOUNTING BALANCE SHEET (DOLLARS IN THOUSANDS)

JULY 1, 1991

Α.	ASSETS	Market Value	<u>Cost Value</u>
	 Cash, Equivalents, Short-term Securities Investments 	\$20,533	\$20,533
	a. Fixed Income	173,788	173,184
	b. Equity	433,508	388,334
	c. Real Estate3. Equity in Minnesota Post-Retirement	39,375 207,781	35,848 207,781
	Investment Fund (MPRIF)	207,761	207,761
	4. Other	147	147
В.	TOTAL ASSETS	\$875,132	\$825,827
C.	AMOUNTS CURRENTLY PAYABLE	\$2,702	\$2,702
D.	ASSETS AVAILABLE FOR BENEFITS		
	1. Member Reserves	\$133,299	\$133,299
	2. Employer Reserves3. MPRIF Reserves	531,350	482.045
	3. MPRIF Reserves	207,781	207,781
	4. Non-MPRIF Reserves	0	0
	5. Total Assets Available for Benefits	\$872,430	\$823,125
Ε.	TOTAL AMOUNTS CURRENTLY PAYABLE AND ASSETS AVAILABLE FOR BENEFITS	\$875,132 	\$825,827
F.	DETERMINATION OF ACTUARIAL VALUE OF ASSETS	<u>, , , , , , , , , , , , , , , , , , , </u>	
	1. Cost Value of Assets Available		\$823,125
	for Benefits (D5) 2. Market Value (D5)	\$872,430	
	3. Cost Value (D5)	823,125	
	o. Jose varue (55)		
	4. Market Cover Cost: (F2-F3)	\$49,305	
	5. 1/3 of Market Over Cost: (F4)/3		16,435
	Actuarial Value of Assets (F1+F5) (Same as "Current Assets")		\$839,560

CHANGE IN ASSETS AVAILABLE FOR BENEFITS (DOLLARS IN THOUSANDS)

YEAR ENDING JUNE 30, 1991

		Market Value	Cost Value
Α.	ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$787,476	\$739,068
В.	OPERATING REVENUES		
	 Member Contributions Employer Contributions Investment Income MPRIF Income Net Realized Gain (Loss) Other Net Change in Unrealized Gain (Loss) 	\$17,636 26,440 43,796 18,112 0 1,548 897	\$17,636 26,440 43,796 18,112 0 1,548
	8. Total Revenue	\$108,429	\$107,532
C.	OPERATING EXPENSES		
	 Service Retirements Disability Benefits Survivor Benefits Refunds Expenses Other 	\$16,750 1,311 1,611 1,203 1,065 1,535	\$16,750 1,311 1,611 1,203 1,065 1,535
	7. Total Disbursements	\$23,475	\$23,475
D.	OTHER CHANGES IN RESERVES	0	0
E.	ASSETS AVAILABLE AT END OF PERIOD	\$872,430	\$823,125

TABLE 3

ACTIVE MEMBERS AS OF JUNE 30, 1991

		· · · · · · · · · · · · · · · · · · ·				YEARS OF SERVICE								
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL					
<25 25-29	151 200	78 524	264	1					229 989					
30-34 35-39	104 51	350 160	558 320	275 544	1 222	1			1,288 1,298					
40-44 45-49	23 10	61 30	136 62	287 107	469 178	138 266	37		1,114 690					
50-54 55-59	11 3	13 7	23 22	35 20	63 31	165 53	108 43	13 22	431 201					
60-64 65+	2	3 1	6	9	16 1	11 1	10 2	6 1	63 6					
ALL	555	1,227	1,391	1,278	981	635	200	42	6,309					
			AVER	AGE ANNU	AL EARNI	NGS								
				YEARS OF	SERVICE									
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>ALL</u>					
<25 25-29	19,448 21,988	26,996 30,390	33,854	23,701					22,019 29,609					
30-34 35-39	21,803 21,926	31,510 30,373	37,026 36,425	37,395 38,530	27,108 37,276	46,906			34,369 36,145					
40-44 45-49	21,034 29,397	28,165 22,091	35,461 29,025	38,788 34,648	39,728 38,789	40,398 41,634	44,201		38,029 37,795					
50-54 55-59	21,443 16,425	29,534 19,690	26,075 29,247	31,459 26,790	38,756 30,421	40,487 41,013	43,712 40,310	40,946 42,532	38,737 35,583					
60-64 65+	10,484	22,278 36,974	14,310	28,294	27,720 26,147	32,565 29,335	42,962 27,419	45,896 28,945	30,715 29,373					
ALL	21,268	30,093	35,374	37,558	38,424	40,848	42,870	42,198	34,857					
	PRI	OR FISCA	L YEAR E	ARNINGS	(IN THOU	SANDS) B	Y YEARS	OF SERVI	CE					
AGE	<1	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL					
ALL	11,804	36,925	49,206	47,999	37,694	25,939	8,574	1,772	219,913					

PUBLIC EMPLOYEES POLICE AND FIRE FUND

TABLE 4

SERVICE RETIREMENTS AS OF JUNE 30, 1991

YEARS RETIRED												
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54	16	3						19				
55-59 60-64	70 35	113 71	161					183 267				
65-69 70-74	17 1	54 6	112 73	87 82	26			270 188				
75-79 80-84		2	8 5	63 6	48 35	6 6	1	127 53				
85+						18	5	23				
ALL	139	249	359	238	109	30	6	1,130				
	AVERAGE ANNUAL BENEFIT											
				ARS RETIF								
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54	15,075	10,444						14,344				
55-59 60-64	16,281 15,148	17,871 17,621	17,871					17,263 17,448				
65-69 70-74	12,748 18,571	13,079 15,305	15,941 11,670	15,668 13,935	11,458			15,080 12,781				
75-79 80-84		12,919	6,631 4,447	12,142 7,922	10,223 8,823	6,458 8,789	4,723	10,813 8,227				
85+						7,237	4,603	6,664				
ALL	15,441	16,569	15,571	13,942	10,068	7,392	4,623	14,626				
	T0	TAL ANNUAL			SANDS) BY		TIRED					
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
ALL	2,146	4,126	5,590	3,318	1,097	222	28	16,527				

- 10 - MILLIMAN & ROBERTSON, INC.

TABLE 5

SURVIVORS AS OF JUNE 30, 1991

			YEAR	S SINCE D	EATH			
AGE	<1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54	4	13 4	15 8	9 2	1 1	1		42 17
55-59 60-64	2 2	6	6 16	14 7	3 7	1 3	1	32 39
65-69 70-74	1	2 2	16 4	21 20	12 16	5 4	1 6	57 53
75-79 80-84	1 1	1	7 3	13 8	16 11	5 8	4 7	47 38
85+	2	1	8	5	8	3	7	34
ALL	14	32	83	99	75	30	26	359
			AVERAGE	E ANNUAL	BENEFIT			
			YEAR	RS SINCE	DEATH			
<u>AGE</u>	<1	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54	16,527 5,591	13,481 22,972	13,004 12,374	10,134 9,819	8,285 3,838	2,277		12,760 13,072
55-59 60-64	21,909 4,557	14,392 11,998	15,173 11,236	9,343 6,988	7,614 6,513	2,152 2,636	2,251	11,781 8,450
65-69 70-74	3,780	14,859 8,595	8,598 7,200	9,077 7,920	7,034 6,660	2,651 4,506	2,232 3,203	8,032 6,641
75-79 80-84	3,720 3,966	6,585	5,171 7,230	6,149 7,351	6,603 4,161	2,260 3,422	3,999 2,356	5,519 4,582
85+	3,725	3,435	5,248	3,570	4,234	4,868	2,900	4,103
ALL	10,253	13,951	10,013	8,042	6,091	3,230	2,942	7,932
	TOTAL	L ANNUAL	BENEFIT (IN THOUSA	NDS) BY Y	EARS SINC	E DEATH	
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
ALL	144	446	831	796	457	97	77	2,848

- 11 - MILLIMAN & ROBERTSON, INC.

TABLE 6

DISABILITY RETIREMENTS AS OF JUNE 30, 1991

	YEARS DISABLED									
<u>AGE</u>	<1	1-4	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
<50 50-54	9 4	31 13	7 9	8 5	2			57 31		
55-59 60-64		3	1		1			5		
65-69 70-74										
75-79 80-84										
85+										
ALL	13	47	17	13	3			93		
			AVERAGE	ANNUAL	BENEFIT					
			YEA	RS DISA	BLED					
AGE	<u><1</u>	1-4	5-9	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54	12,926 17,134	12,379 18,551	13,510 13,406	13,569 15,399	8,620			12,639 16,366		
55-59 60-64		18,599	21,655		7,435			16,977		
65-69 70-74										
75-79 80-84										
85+										
ALL	14,221	14,483	13,934	14,273	8,225			14,115		
		TAL ANNUAL		(IN THOU		YEARS DIS	ABLED			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
ALL	185	681	237	186	25			1,313		

- 12 - MILLIMAN & ROBERTSON, INC.

PUBLIC EMPLOYEES POLICE AND FIRE FUND RECONCILIATION OF MEMBERS

				erminated		
		<u>Actives</u>	Deferred <u>Retirement</u>	Other <u>Non-Vested</u>		
A.	ON JUNE 30, 1990	6,136	128	121		
В.	ADDITIONS	401	47	45		
c.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	(78) (10) (2) (2) (47) (59) (29)	(13) (1) (1) 0 0 0 0 (3)	(4) (1) 0 0 0 (35) 0 (11)		
D.	DATA ADJUSTMENTS	(1)	8	(3)		
	Vested Non-Vested	5,118 1,191				
Ε.	TOTAL ON JUNE 30, 1991	6,309	165	112		
		Datinament	Recipients			
		Retirement Annuitants	Disabled	Survivors		
A.	ON JUNE 30, 1990	1,057	89	347		
В.	ADDITIONS	103	14	25		
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (30) 0 0	(6) (1) 0	0 (8) 0 0		
D.	DATA ADJUSTMENTS	0	(3)	(5)		
Ε.	TOTAL ON JUNE 30, 1991	1,130	93	359		

- 13 - MILLIMAN & ROBERTSON, INC.

ACTUARIAL BALANCE SHEET (DOLLARS IN THOUSANDS)

JULY 1, 1991

Α.	CURREN	\$839,560			
В.	EXPECTI 1. Pi	\$127,933			
	2. Pi	561,512			
	3. To	otal Expected Future Assets			\$689,445
С.	TOTAL (CURRENT AND EXPECTED FUTURE	ASSETS		\$1,529,005
D.	CURREN ⁻	Total			
	a b	enefit Recipients . Retirement Annuities . Disability Benefits . Surviving Spouse and Child Benefits		\$193,265 14,832 32,753	\$193,265 14,832 32,753
		eferred Retirements ith Future Augmentation		8,756	8,756
		ormer Members Without ested Rights		174	174
	a b c d	ctive Members . Retirement Annuities . Disability Benefits . Survivor's Benefits . Deferred Retirements . Refund Liability Due to Death or Withdrawal	2,704 47,273 49,259 757 0	351,502 0 0 31,561 75	354,206 47,273 49,259 32,318 75
		otal Current Benefit bligations	\$99,993	\$632,918	\$732,911
Ε.	EXPECT	ED FUTURE BENEFIT OBLIGATIO	NS		\$622,896
F.	TOTAL	CURRENT AND EXPECTED FUTURE	BENEFIT OBLIGA	TIONS	\$1,355,807
G.	CURREN	T UNFUNDED ACTUARIAL LIABIL	.ITY (D5-A)		(\$106,649)
Н.	CURREN	(\$173,198)			

- 14 - MILLIMAN & ROBERTSON, INC.

DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) AND SUPPLEMENTAL CONTRIBUTION RATE (DOLLARS IN THOUSANDS)

JULY 1, 1991

				Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued _Liability		
Α.		RUED L	TION OF ACTUARIAL IABILITY (AAL) ve Members	(1)	(2)	(3)=(1)-(2)		
	•	a. b. c. d.	Retirement Annuities Disability Benefits Survivor's Benefit Deferred Retirements Refunds Due to Death or Withdrawal	\$844,383 100,015 101,274 60,212 143	\$388,224 62,245 63,510 47,169 364	\$456,159 37,770 37,764 13,043 (221)		
		f.	Total	\$1,106,027	\$561,512	\$544,515		
	2.	Deferred Retirements With Future Augmentation Former Members Without Vested Rights		8,756		8,756		
	3.			174		174		
	4.	Annu	itants in MPRIF	207,781	•	207,781		
	5.	Reci	pients Not in MPRIF	33,069		33,069		
	6.	Tota	1	\$1,355,807	\$561,512	\$794,295		
В.	DETE	DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) 1. AAL (A6)						
	2.	Curr	ent Assets (Table 1, F6	5)		839,560		
	3.	UAAL	(B1-B2)			(\$45,265)		
С.	DETE 1.	Pres	TION OF SUPPLEMENTAL CO ent Value of Future Pay Amortization Date of Ju	rolls Through		\$5,200,513		
	2.	Supp	lemental Contribution R	ate (B3/C1)		0.00%		

CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) (DOLLARS IN THOUSANDS)

YEAR ENDING JUNE 30, 1991

A.	UAAL AT BEGINNING OF YEAR	(\$39,241)
В.	CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
	 Normal Cost and Expenses Contribution Interest on A, B1 and B2 	\$36,671 (44,076) (3,650)
	4. Total (B1+B2+B3)	(\$11,055)
С.	EXPECTED UAAL AT END OF YEAR (A+B4)	(\$50,296)
D.	INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
	 Salary Increases Investment Return MPRIF Mortality Mortality of Other Benefit Recipients Other Items 	(\$8,431) 10,036 2,252 (953) 2,127
	6. Total	\$5,031
Ε.	UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTION (C+D5)	(\$45,265)
F.	CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO PLAN AMENDMENTS	0
G.	CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS	0
н.	UAAL AT END OF YEAR (E+F+G)	(\$45,265)

DETERMINATION OF CONTRIBUTION SUFFICIENCY (DOLLARS IN THOUSANDS)

JULY 1, 1991

Α.	STAT	TUTORY CONTRIBUTIONS - CHAPTER 353	Percent of Payroll	Dollar <u>Amount</u>
	1.	Employee Contributions	8.00%	\$18,737
	2.	Employer Contributions	12.00%	28,105
В.	3. REQU	Total UIRED CONTRIBUTIONS - CHAPTER 356	20.00%	\$46,842
	1.	Normal Cost a. Retirement Benefits b. Disability benefits c. Survivors d. Deferred Retirement Benefits e. Refunds Due to Death or Withdrawal	11.87% 1.89% 1.95% 1.36% 0.01%	\$27,801 4,431 4,576 3,178 23
		f. Total	17.08%	\$40,009
	2.	Supplemental Contribution Amortization by July 1, 2020 of UAAL	0.00%	0
	3.	Allowance for Expenses	0.46%	1,077
	4.	Total	17.54%	\$41,086
С.	CONT (A3-	TRIBUTION SUFFICIENCY (DEFICIENCY) -B4)	2.46%	\$5,756

Note: Projected Annual Payroll for Fiscal Year Beginning on July 1, 1991 is \$234,208

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Interest: Pre-Retirement: 8.5% per annum

Post-Retirement: 5% per annum

Salary Increases: Reported salary for prior fiscal year, with new hires

annualized, increased 6.5% to current fiscal year and

6.5% annually for each future year.

Mortality: Pre-Retirement:

Male - 1971 Group Annuity Mortality Table male

rates projected to 1984 by Scale D

1971 Group Annuity Mortality Table female Female -

rates projected to 1984 by Scale D

Post-Retirement:

Male - Same as above Female - Same as above

Post-Disability:

Male - 1965 RRB rates Female - 1965 RRB rates

Retirement Age: Age 60, or if over age 60, one year from the valuation

date.

Separation: Graded rates based on plan experience as of June 30,

1989. Rates are shown in rate table.

Disability: Rates as shown in rate table.

Expenses: Prior year expenses expressed as percentage of prior

year payroll.

Return of

All employees withdrawing after becoming eligible for Contributions: a deferred benefit were assumed to take the larger of

their contributions accumulated with interest or the

value of their deferred benefit.

Family Composition: 85% of male Members and 65% of female Members are

assumed to be married. Female is four years younger

than male. Assume Members have no children.

Social Security: N/A

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Benefit Increases
After Retirement:

Payment of earnings on retired reserves in excess of 5% accounted for by 5% post-retirement assumption.

Special Consideration:

Married Members assumed to elect subsidized joint and survivor form of annuity as follows:

Male - 40% elect 50% J&S option 45% elect 100% J&S option 15% elect 50% J&S option 15% elect 100% J&S option

Actuarial Cost Method:

Entry Age Normal Actuarial Cost Method with normal costs expressed as a level percentage of earnings. Under this method, Actuarial Gains (Losses) reduce (increase) the Unfunded Actuarial Accrued Liability.

Asset Valuation Method: Cost Value plus one-third Unrealized Gains or Losses.

Payment on the Unfunded Actuarial Accrued Liability:

A level percentage of payroll each year to the statutory amortization date assuming payroll increases of 6.5% per annum.

PUBLIC EMPLOYEES POLICE AND FIRE FUND SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Separations Expressed as the Number of Occurrences per 10,000:

		<u>eath</u>		<u>irawal</u>	Disab			<u>rement</u>
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
20 21 22 23 24	5 5 5 5	2 2 2 3 3	859 750 660 583 519	859 750 660 583 519	11 11 12 12 13	11 11 12 12 13	0 0 0 0	0 0 0 0
25 26 27 28 29	6 6 7 7	3 3 3 4	463 416 374 339 307	463 416 374 339 307	13 14 14 14 15	13 14 14 14 15	0 0 0 0	0 0 0 0
30 31 32 33 34	7 8 8 9 10	4 4 4 5 5	280 256 234 215 198	280 256 234 215 198	16 16 17 17 18	16 16 17 17 18	0 0 0 0	0 0 0 0
35 36 37 38 39	10 11 12 13 14	5 6 6 7 7	183 169 157 146 135	183 169 157 146 135	19 20 22 23 24	19 20 22 23 24	0 0 0 0	0 0 0 0
40 41 42 43 44	15 16 18 21 24	8 9 9 10 11	126 118 110 103 97	126 118 110 103 97	26 28 29 31 34	26 28 29 31 34	0 0 0 0	0 0 0 0
45 46 47 48 49	27 30 34 39 44	12 13 14 15 17	91 86 81 69 59	91 86 81 69 59	36 41 46 52 60	36 41 46 52 60	0 0 0 0	0 0 0 0

PUBLIC EMPLOYEES POLICE AND FIRE FUND SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Separations Expressed as the Number of Occurrences per 10,000:

	<u>D</u> e	<u>eath</u>		<u>Irawal</u>		oility	<u>Retire</u>	
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
50	49	18	50	50	69	69	0	0
51	54	20	39	39	80	80	0	0
52	60	21	29	29	91	91	0	0
53	65	23	22	22	104	104	0	0
54	72	25	15	15	119	119	0	0
55	78	27	11	11	135	135	0	0
56	85	30	7	7	152	152	Ō	Ō
57	92	33	5		171	171	Ŏ	Ö
58	100	37	3	3	192	192	Ö	Ŏ
59	110	41	i ·	5 3 1	215	215	ŏ	Ŏ
	110	7.	•	•	210	210	· ·	•
60	121	46	0	0	0	0	10,000	10,000
61	133	52	0	0	0	0	0	0
62	146	58	0	0	0	0	0	0
63	160	65	0	0	0	0	0	0
64	176	73	0	0	0	0	0	0
65	195	81	0	0	0	0	0	0
66	219	90	Ŏ	Ŏ	Ŏ	Ŏ	Ö	Ŏ
67	243	99	Ŏ	Ŏ	Ö	Ŏ	ŏ	Ŏ
68	270	109	Ö	Ö	Ŏ	Ŏ	Ö	Ö
69	300	123	0	0	Ŏ	Ŏ	0	Ö
UJ	300	123	U	U	U	U	U	U
70	334	140	0	0	0	0	0	0

SUMMARY OF PLAN PROVISIONS

Eligibility:

All full-time and certain part-time, police officers and fire fighters, who are not contributing to any other local retirement fund.

Contributions

Member:

8% of salary.

Employer:

12% of salary.

Allowable Service:

Police and fire service during which Member contributions were deducted. May also include certain leaves of absence and military service.

Salary:

Includes amounts deducted for deferred compensation or supplemental retirement plans, net income from fees and sick leave payments funded by the employer. Excludes lump sum annual leave and sick leave payments and Workers' Compensation benefits.

Average Salary:

Average of the five highest successive years of salary. Average Salary is based on all Allowable Service if less than five years.

RETIREMENT

Normal Retirement Benefit

Eligibility:

Age 55 and three years of Allowable Service. Proportionate Retirement Annuity is available at age

65 and one year of Allowable Service.

Amount:

2.5% of Average Salary for each year of Allowable

Service.

Early Retirement Benefit

Eligibility:

Age 50 and three years of Allowable Service.

Amount:

Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date assuming augmentation to age 55 at 3% per year and actuarial reduction for each month the Member is under age 55.

SUMMARY OF PLAN PROVISIONS

Form of Payment:

Life annuity with return on death of any balance of contributions over aggregate monthly payments. Actuarially equivalent options are:

50% or 100% joint and survivor with bounce back feature without additional reduction (option canceled if Member is pre-deceased by beneficiary).

Benefit Increases:

Benefits may be increased each January 1 depending on the investment performance of the Minnesota Post Retirement Investment Fund (MPRIF). A benefit recipient who has been receiving a benefit for at least 12 full months as of June 30 will receive a full increase. Benefit recipients receiving benefits for at least one full month but less than 12 full months will receive a partial increase.

Members retired under law in effect before July 1, 1973 receive an additional lump sum payment each year. In 1989, this lump sum payment is the greater of \$25 times each full year of Allowable Service or the difference between \$400 times each full year of Allowable Service and the sum of the benefits paid from any Minnesota public pension plan plus cash payments from the Social Security Administration for the preceding fiscal year July 1, 1988 through June 30, 1989. In each following year, the lump sum payment will increase by the same percentage increase that is applied to regular annuities paid from MPRIF.

DISABILITY

Duty Disability Benefit

Eligibility:

Under age 55 and physically or mentally unable to perform duties as a police officer or fire fighter as a direct result of an act of duty.

SUMMARY OF PLAN PROVISIONS

Amount:

50% of Average Salary plus 2.5% of average salary for each year in excess of 20 years of Allowable Service. The disability benefit is reduced to that amount which when added to Workers' Compensation, does not exceed salary. Payments change to retirement annuity at age 55.

Non-Duty Disability Benefits

Eligibility: Under age 55 and physically or mentally unable

to perform duties as a police officer or fire fighter with one year of Allowable Service.

Amount: Normal Retirement benefit based on Allowable

Service (minimum of 15 years) and Average Salary at disability without reduction for commencement before age 55. Payments change to retirement

annuity at age 55.

Form of Payment: Same as for retirement.

Benefit Increases: Adjusted by PERA to provide same increase as

MPRIF.

Retirement Benefits

Eligibility: Age 55

Amount: Any optional annuity continues. Otherwise, the

larger of the disability benefit paid before age 55 or the normal retirement benefit available at age 55, or an actuarially equivalent optional

annuity.

Benefit Increases: Same as for retirement.

DEATH

Surviving Spouse Benefit

Eligibility: Active Member with surviving spouse, married for

at least one year unless death in the line of

duty.

SUMMARY OF PLAN PROVISIONS

Amount:

50% of Salary averaged over last six months. Benefit paid until spouse's death but no payments while spouse is remarried prior to July 1, 1991.

Surviving Dependent Child Benefit

Eligibility:

Active Member with dependent child.

Amount:

10% of Salary averaged over last six months for each child. Family benefit minimum (including spouse's benefit) of 50% of salary and maximum of 70% of salary. Benefits paid until child marries, dies, or attains age 18 (age 23 if full-time student.)

Surviving Spouse Optional Annuity

Eligibility:

Member who dies before termination if age 50 with three years of Allowable Service or any age with 30 years of Allowable Service. If the Member dies before age 55, benefits commence when Member would have been age 55 or as early as age 50 if qualified for early retirement, except that benefits commence immediately if member had 30 years of service.

Amount:

Survivor's payment of the 100% joint and survivor benefit the Member could have elected if terminated. Alternatively, spouse may elect refund of deceased's contributions with interest if there are no dependent children.

Benefit Increases:

Adjusted by PERA to provide same increase as MPRIF.

PUBLIC EMPLOYEES POLICE AND FIRE FUND SUMMARY OF PLAN PROVISIONS

TERMINATION

Refund of Contributions

Eligibility:

Termination of public service.

Amount:

Member's contributions with 5% interest compounded annually if termination occurred before May 16, 1989 and 6% interest if termination occurred on or after May 16, 1989. A deferred annuity may be elected in lieu of a refund if three or more years of Allowable Service.

Deferred Annuity

Eligibility:

Three years of Allowable Service.

Amount:

Benefit computed under law in effect at termination and increased by the following annual percentage, compunded annually: 0% before 7/1/71; 5% from 7/1/71 to 1/1/81; and 3% thereafter until January of the year following attainment of age 55 and 5% thereafter until the annuity begins. Amount is payable as a normal or early retirement.

POLICE AND FIRE CONSOLIDATION FUND

ACTUARIAL VALUATION REPORT

JULY 1, 1991





MILLIMAN & ROBERTSON, INC.

Actuaries and Consultants

Suite 400 15700 Bluemound Road Brookfield, Wisconsin 53005 Telephone: 414/784-2250 Fax: 414/784-6388 Wendell Milliman, F.S.A. (1976) Stuart A. Robertson, F.S.A. Chairman Emeritus

November 20, 1991

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David J. Kershner, A.S.A. David W. Koch, A.S.A. Frank Kopenski, Jr., A.S.A. Legislative Commission on Pensions and Retirement 55 State Office Building St. Paul, Minnesota 55155

RE: Police and Fire Consolidation Fund

Commission Members:

Pursuant to your request, we have performed an actuarial valuation of the Fund as of July 1, 1991.

The results of our calculations are set forth in the following report, as are the actuarial assumptions upon which our calculations have been made. We have relied on the basic employee data and asset figures as submitted by the Public Employees Retirement Association.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with the requirements of Section 356.215, Minnesota Statutes, and the requirements of the Standards for Actuarial Work, adopted by the Commission on September 20, 1989.

Respectfully submitted,

Thomas K. Custis, F.S.A., M.A.A.A.

Consulting Actuary

William V. Hogan, F.S.A., M.A.A.A.

Actuary

TKC/WVH/bh

TABLE OF CONTENTS

	<u>PAGE</u>
REPORT HIGHLIGHTS	1
COMMENTARY	
Purpose	2
Report Highlights	2
Asset Information	2
Actuarial Balance Sheet	3
GASB Disclosure	4
Actuarial Cost Method and Actuarial Gains and Losses	5
Changes in Actuarial Assumptions	6
Changes in Plan Provisions	6
ASSET INFORMATION	
Table 1 - Accounting Balance Sheet	7
Table 2 - Changes in Assets Available for Benefits	8
MEMBERSHIP DATA	
Table 3 - Active Members	9
Table 4 - Service Retirements	10
Table 5 - Survivors	11
Table 6 - Disability Retirements	12
Table 7 - Reconciliation of Members	13
FUNDING STATUS	
Table 8 - Actuarial Balance Sheet	14
Table 9 - Entry Age Normal Cost Calculations	15
Table 10 - Net Actuarial Loss (Gain)	16
Table 11 - Determination of Statutory Contributions	17

					PAGE
<u>ACTUA</u>	RIAL A	SSUN	IPT.	<u>IONS</u>	
	Table	12	-	Summary of Actuarial Assumptions and Methods	18
PLAN	PROVIS	IONS	ì		
				Summary of PERA Police and Fire Plan Provisions	24
·	Table	14	-	Summary of Local Police and Firefighter Plan Provisions	29
BUHL	POLICE	COL	150	LIDATION ACCOUNT	
MEMBE	<u>RSHIP</u>	DATA	4		
	Table	ЗА	_	Active Members	45
•	Table	4A	-	Service Retirements	46
•	Table	5A	-	Survivors	47
	Table	6A	-	Disability Retirements	48
	Table	7A	-	Reconciliation of Members	49
<u>FUNDI</u>	NG STA	ATUS			
	Table	8A	-	Actuarial Balance Sheet	50
	Table	9A	-	Entry Age Normal Cost Calculations	51
	Table	10A	-	Net Actuarial Loss (Gain)	52
	Table	11A	_	Determination of Statutory Contributions	53

DULUT	H POLI	CE C	ON:	SOLIDATION ACCOUNT	PAGE
MEMBE	RSHIP	DAT <i>A</i>	1		
•	Table	3B	_	Active Members	54
•	Table	4B	-	Service Retirements	55
•	Table	5B	-	Survivor	56
•	Table	6B	-	Disability Retirement	57
•	Table	7B	-	Reconciliation of Members	58
FUNDI	NG STA	ATUS			
-	Table	8B	-	Actuarial Balance Sheet	59
•	Table	9B	-	Entry Age Normal Cost Calculations	60
				Net Actuarial Loss (Gain)	61
•	Table	11B	-	Determination of Statutory Contributions	62
WEST :	ST. P/	VUL F	IR	E CONSOLIDATION ACCOUNT	
MEMBE	RSHIP	DAT/	3		
	Table	3C	_	Active Members	63
•	Table	4C	-	Service Retirements	64
	Table	5C	-	Survivors	65
,	Table	6C	-	Disability Retirements	66
,	Table	7C	-	Reconciliation of Members	67
<u>FUNDI</u>	NG ST/	<u>atus</u>			
				Actuarial Balance Sheet	68
•	Table	9 C	-	Entry Age Normal Cost Calculations	69
	Table	10C	-	Net Actuarial Loss (Gain)	70
•	Table	110	-	Determination of Statutory Contributions	71

RED WING FIRE CONS	SOLIDATION ACCOUNT	PAGE
MEMBERSHIP DATA		
Table 3D -	Active Members	72
Table 4D -	Service Retirements	73
Table 5D -	Survivors	74
Table 6D -	Disability Retirements	75
Table 7D -	Reconciliation of Members	76
FUNDING STATUS		
Table 8D -	Actuarial Balance Sheet	77
Table 9D -	Entry Age Normal Cost Calculations	78
Table 10D -	Net Actuarial Loss (Gain)	79
Table 11D -	Determination of Statutory Contributions	80
ROCHESTER POLICE C	CONSOLIDATION ACCOUNT	
MEMBERSHIP DATA		
Table 3E -	Active Members	81
Table 4E -	Service Retirements	82
Table 5E -	Survivors	83
Table 6E -	Disability Retirements	84
Table 7E -	Reconciliation of Members	85
FUNDING STATUS		
Table 8E -	Actuarial Balance Sheet	86
	Entry Age Normal Cost Calculation	87
Table 10E -	Net Actuarial Loss (Gain)	88
Tahle 11F -	Determination of Statutory Contributions	99

WINONA FIRE CONSOLIDATION ACCOUNT	<u>PAGE</u>
MEMBERSHIP DATA	
Table 3F - Active Members	90
Table 4F - Service Retirements	91
Table 5F - Survivors	92
Table 6F - Disability Retirements	93
Table 7F - Reconciliation of Members	94
FUNDING STATUS	
Table 8F - Actuarial Balance Sheet	95
Table 9F - Entry Age Normal Cost Calculations	96
Table 10F - Net Actuarial Loss (Gain)	97
Table 11F - Determination of Statutory Contributions	98
ST. CLOUD FIRE CONSOLIDATION ACCOUNT	
MEMBERSHIP DATA	
Table 3G - Active Members	99
Table 4G - Service Retirements	100
Table 5G - Survivors	101
Table 6G - Disability Retirements	102
Table 7G - Reconciliation of Members	103
FUNDING STATUS	
Table 8G - Actuarial Balance Sheet	104
Table 9G - Entry Age Normal Cost Calculations	105
Table 10G - Net Actuarial Loss (Gain)	106
Table 11G - Determination of Statutory Contributions	107

HIBBIN	IG POL	ICE	CO	NSOLIDATION ACCOUNT	<u>PAGE</u>
MEMBER	RSHIP	DAT <i>A</i>	1		
1	「able	3H	-	Active Members	108
1	[ab]e	4H	-	Service Retirements	109
1	「able	5H	-	Survivors	110
1	Table	6Н	-	Disability Retirements	111
1	Table	7H	-	Reconciliation of Members	112
FUNDIN	NG STA	TUS			
1	[ab]e	8H	-	Actuarial Balance Sheet	113
1	「able	9H	-	Entry Age Normal Cost Calculations	114
7	ſable	10H	-	Net Actuarial Loss (Gain)	115
1	「able	11H	-	Determination of Statutory Contributions	116
HIBBIN	NG FIR	E CC)NS	OLIDATION ACCOUNT	
MEMBER	RSHIP	DATA	1		
1	[ab]e	31	-	Active Members	117
1	Table	4 I	-	Service Retirements	118
1	Table	51	-	Survivors	119
1	Table	6I	-	Disability Retirements	120
1	Table	71	-	Reconciliation of Members	121
FUNDIN	NG STA	TUS			
1	[ab]e	81	-	Actuarial Balance Sheet	122
1	「able	91	•	Entry Age Normal Cost Calculations	123
1	Table	101	-	Net Actuarial Loss (Gain)	124
1	[ab]e	111	_	Determination of Statutory Contributions	125

ST. L	OUIS F	PARK	FI	RE CONSOLIDATION ACCOUNT	PAGE
MEMBE	RSHIP	DATA	4		
	T.13 .			A.A.L. Maritana	100
				Active Members	126
				Service Retirements	127
				Survivors	128
				Disability Retirements	129
	Table	7J	•	Reconciliation of Members	130
<u>FUNDI</u>	NG ST/	<u>ATUS</u>			
	Table	8J	-	Actuarial Balance Sheet	131
	Table	9J	-	Entry Age Normal Cost Calculations	132
				Net Actuarial Loss (Gain)	133
				Determination of Statutory Contributions	134
ANOKA	POLIC	CE CO)NS	OLIDATION ACCOUNT	
MEMBE	RSHIP	DATA	4		
	Table	3K	-	Active Members	135
	Table	4K	_	Service Retirements	136
	Table	5K	-	Survivors	137
	Table	6K	_	Disability Retirements	138
	Table	7K	-	Reconciliation of Members	139
<u>FUNDI</u>	NG ST/	<u>ATUS</u>			
	Table	8K	-	Actuarial Balance Sheet	140
	Table	9K	-	Entry Age Normal Cost Calculations	141
	Table	10K	-	Net Actuarial Loss (Gain)	142
	Table	11K	_	Determination of Statutory Contributions	143

RED W	ING PO	LICE	<u>C</u>	ONSOLIDATION ACCOUNT	<u>PAGE</u>
MEMBE	RSHIP	DATA	1		
-	Table	3L	_	Active Members	144
•	Table	4L	-	Service Retirements	145
•	Table	5L	-	Survivors	146
•	Table	6L	-	Disability Retirements	147
•	Table	7L	-	Reconciliation of Members	148
<u>FUNDI</u>	NG STA	<u>ATUS</u>			
•	Table	8L	-	Actuarial Balance Sheet	149
•	Table	9L	-	Entry Age Normal Cost Calculations	150
•	Table	10L	-	Net Actuarial Loss (Gain)	151
•	Table	11L	•	Determination of Statutory Contributions	152
MANKA	TO FI	RE CO)NS	OLIDATION ACCOUNT	
MEMBE	RSHIP	DAT/	1		
	Table	3M	_	Active Members	153
•	Table	4M	-	Service Retirements	154
,	Table	5M	-	Survivors	155
•	Table	6M	-	Disability Retirements	156
	Table	7M	-	Reconciliation of Members	157
<u>FUNDI</u>	NG ST	<u>atus</u>			
		_		Actuarial Balance Sheet	158
				Entry Age Normal Cost Calculations	159
	Table	10M	-	Net Actuarial Loss (Gain)	160
	Tahla	11M	_	Determination of Statutory Contributions	161

CHISHOLM F	IRE (CON	SOLIDATION ACCOUNT	PAGE
MEMBERSHIP	DAT	A		
Table	3N	_	Active Members	162
Table	4N	-	Service Retirements	163
Table	5N	-	Survivors	164
Table	6N	-	Disability Retirements	165
Table	7N	-	Reconciliation of Members	166
FUNDING ST	ATUS			
Table	8N	_	Actuarial Balance Sheet	167
Table	9N	-	Entry Age Normal Cost Calculations	168
Table	10N	-	Net Actuarial Loss (Gain)	169
Table	11N	-	Determination of Statutory Contributions	170
CHISHOLM F	OLIC	E_C	ONSOLIDATION ACCOUNT	
MEMBERSHIF	DAT	A		
Table	30	_	Active Members	171
Table	40	-	Service Retirements	172
Table	50	-	Survivors	173
Table	60	-	Disability Retirements	174
Table	70	-	Reconciliation of Members	175
FUNDING S	ATUS		•	
Table	80	-	Actuarial Balance Sheet	176
Table	90	-	Entry Age Normal Cost Calculations	177
Table	100	-	Net Actuarial Loss (Gain)	178
Table	110		Determination of Statutory Contributions	170

CROOKSTON FIRE CON	NSOLIDATION ACCOUNT	PAGE
MEMBERSHIP DATA		
Table 3P -	Active Members	180
Table 4P -	Service Retirements	181
Table 5P -	Survivors	182
Table 6P -	Disability Retirements	183
Table 7P -	Reconciliation of Members	184
FUNDING STATUS		
Table 8P -	Actuarial Balance Sheet	185
Table 9P -	Entry Age Normal Cost Calculations	186
Table 10P -	Net Actuarial Loss (Gain)	187
Table 11P -	Determination of Statutory Contributions	188
ROCHESTER FIRE CON	NSOLIDATION ACCOUNT	
MEMBERSHIP DATA		
Table 3Q -	Active Members	189
Table 4Q -	Service Retirements	190
Table 5Q -	Survivors	191
Table 6Q -	Disability Retirements	192
Table 7Q -	Reconciliation of Members	193
FUNDING STATUS		
Table 8Q -	Actuarial Balance Sheet	194
-	Entry Age Normal Cost Calculations	195
Table 10Q -	Net Actuarial Loss (Gain)	196
Table 110 -	Determination of Statutory Contributions	197

	PAGE
WINONA POLICE CONSOLIDATION ACCOUNT	
MEMBERSHIP DATA	
ILLIBERONIAL DIVITA	
Table 3R - Active Members	198
Table 4R - Service Retirements	199
Table 5R - Survivors	200
Table 6R - Disability Retirements	201
Table 7R - Reconciliation of Members	202
FUNDING STATUS	
Table 8R - Actuarial Balance Sheet	203
Table 9R - Entry Age Normal Cost Calculations	204
Table 10R - Net Actuarial Loss (Gain)	205
Table 11R - Determination of Statutory Contributions	206
ST. LOUIS PARK POLICE CONSOLIDATION ACCOUNT	
31. LOUIS PARK POLICE CONSOCIDATION ACCOUNT	
MEMBERSHIP DATA	
Table 3S - Active Members	207
Table 4S - Service Retirements	208
Table 5S - Survivors	209
Table 6S - Disability Retirements	210
Table 7S - Reconciliation of Members	211
FUNDING STATUS	
Table 8S - Actuarial Balance Sheet	212
Table 9S - Entry Age Normal Cost Calculations	213
Table 10S - Net Actuarial Loss (Gain)	214
Table 11S - Determination of Statutory Contributions	215

<u>FARIBA</u>	ULT F	IRE	COI	NSOLIDATION ACCOUNT	<u>PAGE</u>
MEMBER	SHIP	DATA	1		
T	able	3T	_	Active Members	216
T	able	4T	-	Service Retirements	217
T	able	5T	-	Survivors	218
T	able	6T	-	Disability Retirements	219
T	able	7 T	-	Reconciliation of Members	220
FUNDIN	G STA	<u>TUS</u>			
. Т	able	8T	-	Actuarial Balance Sheet	221
T	able	9T	-	Entry Age Normal Cost Calculations	222
Ŧ	able	10T	-	Net Actuarial Loss (Gain)	223
T	able	11T	-	Determination of Statutory Contributions	224

REPORT HIGHLIGHTS (ACTUAL DOLLARS)

			07/01/90 Valuation	07/01/91 <u>Valuation</u>
A.	CON	TRIBUTIONS (Table 11)		
	1.	Employee Contribution	8.00%	8.00%
	2.	Required Municipal Contribution	12.00%	12.00%
	3.	Additional Municipal Contribtuion	\$3,056,618	\$5,833,305
В.	FUN 1.	DING RATIOS Accrued Benefit Funding Ratio a. Current Assets (Table 1) b. Current Benefit Obligations (Table 8) c. Funding Ratio: (a/b)	\$86,702,305 \$117,386,244 73.86%	\$143,369,657 \$209,012,117 68.59%
	2.	Accrued Liability Funding Ratio a. Current Assets (Table 1) b. Actuarial Accrued Liability (Table 9) c. Funding Ratio: (a/b)	\$86,702,305 \$122,044,941 71.04%	\$143,369,657 \$201,882,085 71.02%
	3.	Projected Benefit Funding Ratio (Table 8) a. Current and Expected Future Assets b. Current and Expected Future Benefit Obligations c. Funding Ratio: (a/b)	\$142,306,566 \$142,306,566 100.00%	\$232,305,820 \$232,305,820 100.00%
C.	PLA 1.	N PARTICIPANTS Active Members a. Number (Table 3) b. Projected Annual Earnings c. Average Annual Earnings (Actual \$) d. Average Age e. Average Service	288 \$10,885,238 \$37,796 45.9 19.7	394 \$16,138,794 \$40,961 47.0 20.9
	2.	Others a. Service Retirements (Table 4) b. Disability Retirements (Table 5) c. Survivors (Table 6) d. Deferred Retirements (Table 7) e. Terminated Other Non-vested (Table 7) f. Total	248 16 129 3 1	421 26 185 6 1 639
D.	NUN	BER OF CONSOLIDATION ACCOUNTS	12	20

COMMENTARY

<u>Purpose</u>

The purpose of this valuation is to determine the financial status of the Plan. In order to achieve this purpose, an actuarial valuation is made at the beginning of each fiscal year as required by Section 356.215 of Minnesota Statutes.

Report Highlights

The financial status of the Plan can be measured by three different funding ratios:

- The Accrued Benefit Funding Ratio is a measure of current funding status and, when viewed over a period of years, presents a view of the funding progress. It is based upon benefits which have been earned by service to the valuation date. This year's ratio is 68.59%. The corresponding ratio for the prior year was 73.86%.
- The Accrued Liability Funding Ratio is also a measure of funding status and funding progress. It is based on the actuarial cost method that has historically been used by the State. For 1991 the ratio is 71.02%, which is an decrease from the 1990 value of 71.04%.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 100.00% verifies that the current statutory contributions are sufficient.

Asset Information (Tables 1 and 2)

Minnesota Statutes require that the asset value used for actuarial purposes

recognize only a third of the unrealized gains and losses. This requirement exists because market values (which include all unrealized gain and losses) are typically volatile and can produce erratic changes in the contribution requirements from year to year.

The calculation of the Actuarial Value of Assets is shown in Table 1 on lines F1 to F6. It combines the cost value of the Assets Available for Benefits and one-third of the difference between the market value and cost value of those assets.

The term "Actuarial Value of Assets" is used to indicate that the value was determined for use in this actuarial valuation. Since Minnesota Statutes refer to this value as "Current Assets", the latter phrase will be used in the remainder of this report.

This Plan participates in the Minnesota Post Retirement Investment Fund (i.e. MPRIF). After the MPRIF liability has been calculated for each participating Plan, the State Board of Investments, (i.e. SBI), will determine each Plan's portion of the excess earnings for the January benefit increase as well as the Plan's allocated market share of MPRIF.

Actuarial Balance Sheet (Table 8)

An actuarial balance sheet provides a method for evaluating current and future levels of funding.

The Current Benefit Obligation used to measure current funding levels is calculated in accordance with Statement No. 5 of the Governmental Accounting Standards Board (GASB). Those requirements are:

- For Active Members - salary and service are projected to retirement to determine benefits for each member and the ratio of credited service to total service establishes the portion of the projected benefit to be used in calculating the current funding level.

- For Non-active Members - the discounted value of benefits, including augmentation in cases where benefits have not commenced.

GASB Disclosure

The Current Benefit Obligation amounts in Table 8 are required to be disclosed by Statement No. 5 of the Governmental Accounting Standards Board (GASB). However, Statement No. 5 uses the terms "Actuarial Present Value of Credited Projected Benefits" and "Pension Benefit Obligation" rather than "Current Benefit Obligation".

The July 1, 1991 Pension Benefit Obligation reported in Table 8 is reformatted for GASB reporting purposes in the following table:

Retirees and beneficiaries currently	
receiving benefits and terminated	
employees not yet receiving benefits	\$120,317,880
Current Employees	
•	#10 000 0FC
Accumulated employee contributions	\$12,023,056
including allocated investment income	
Employer-financed vested	63,967,181
Employer-financed nonvested	12,704,000
Total Pension Benefit Obligation	\$209,012,117
Net Assets Available for Benefits at Cost	\$143,507,657
Total Benefit Obligation less Assets	\$65,504,460
Funded Ratio	68.66%

Actuarial Cost Method and Actuarial Gains and Losses (Table 9. 10 and 11)
The approach used by the State of Minnesota to determine contribution sufficiency is the Entry Age Normal Actuarial Cost Method. The primary characteristic of this method is that it allocates costs as a level percentage of payroll.

A comparison of this actuarial method (Table 9) to the actuarial balance sheet (Table 8) illustrates the two techniques for allocating liabilities of active Members to past and future. As noted in the prior section, the balance sheet allocates benefits and the corresponding liabilities, on the basis of service. The method used in Table 9 allocates liabilities so that the cost each year will be a constant percentage of payroll. Both approaches, however, calculate the value of all future benefits the same way (see line F of Table 8 and line A6, column 1, of Table 9). These items are disclosed here as required by Subdivision 7 of Section 353A.09 of Minnesota Statutes, however they are not used in calculating contributions.

The contributions required to be paid are equal to the sum of the employee contributions plus the regular municipal contributions plus the additional municipal contributions as displayed in Table 11. The additional municipal contributions are equal to the amortization of the initial unfunded liability plus each year's gain or loss over a 15 year period. The current year (gain) or loss is determined as:

Actuarial Value of Projected Benefits,

less the present value of Future Employee Contributions, less the present value of future Regular Municipal Contributions, less the Valuation Assets,

less the current balance of the amortization bases from the prior year.

This calculation is outlined in Table 10.

Changes in Actuarial Assumptions

The actuarial assumptions are the same as those used in the prior valuation.

Changes in Plan Provisions

The following Accounts were added:

- Chisolm Fire

- Chisolm Police

- Crookston Fire

- Faribault Fire

- Mankato Fire

- Rochester Fire

- St. Louis Park Police

- Winona Police

ACCOUNTING BALANCE SHEET (ACTUAL DOLLARS)

Α.	ASSETS	<u>Market Value</u>	<u>Cost Value</u>
	 Cash, Equivalents, Short-term Securities Investments a. Fixed Income b. Equity c. Real Estate Equity in Minnesota Post-Retirement Investment Fund (MPRIF) Other 	\$2,377,318 19,311,486 52,167,502 4,961,804 66,806,482 22,143	\$2,377,318 20,081,789 51,527,728 5,245,274 66,806,482 22,143
В.	TOTAL ASSETS	\$145,646,735	\$146,060,734
C.	AMOUNTS CURRENTLY PAYABLE	\$2,553,077	\$2,553,077
D.	ASSETS AVAILABLE FOR BENEFITS 1. Member Reserves 2. Employer Reserves 3. MPRIF Reserves 4. Non-MPRIF Reserves	\$12,428,232 63,858,944 66,806,482 0	\$12,428,232 64,272,943 66,806,482 0
	5. Total Assets Available for Benefits	\$143,093,658	\$143,507,657
E.	TOTAL AMOUNTS CURRENTLY PAYABLE AND ASSETS AVAILABLE FOR BENEFITS	\$145,646,735	\$146,060,734
F.	DETERMINATION OF ACTUARIAL VALUE OF ASSETS		· · · · · · · · · · · · · · · · · · ·
	 Cost Value of Assets Available for Benefits (D5) Market Value (D5) Cost Value (D5) 	\$143,093,658 143,507,657	\$143,507,657
	4. Market Cover Cost: (F2-F3)5. 1/3 of Market Over Cost: (F4)/3	(\$413,999)	(138,000)
	Actuarial Value of Assets (F1+F5) (Same as "Current Assets")		\$143,369,657

CHANGE IN ASSETS AVAILABLE FOR BENEFITS (ACTUAL DOLLARS)

YEAR ENDING JUNE 30, 1991

		Market Value	Cost Value
A.	ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$87,361,341	\$86,372,787
В.	OPERATING REVENUES		
	 Member Contributions Employer Contributions Investment Income MPRIF Income Net Realized Gain (Loss) Other Net Change in Unrealized Gain (Loss) 	\$1,065,532 9,847,124 6,406,930 4,308,236 0 43,648,183 (1,339,719)	\$1,065,532 9,847,124 6,406,930 4,308,236 0 43,648,183
٠	8. Total Revenue	\$63,936,286	\$65,276,005
C.	OPERATING EXPENSES		
	 Service Retirements Disability Benefits Survivor Benefits Refunds Expenses Other 	\$6,822,249 351,884 450,327 34,999 103,461 378,215	\$6,822,249 351,884 450,327 34,999 103,461 378,215
	7. Total Disbursements	\$8,141,135	\$8,141,135
D.	OTHER CHANGES IN RESERVES	0	0
E.	ASSETS AVAILABLE AT END OF PERIOD	\$143,156,492	\$143,507,657

POLICE AND FIRE CONSOLIDATION FUND ACTIVE MEMBERS AS OF JUNE 30, 1991

	YEARS OF SERVICE								
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u> 15-19</u>	<u>20-24</u>	<u>25-29</u>	<u> 30+</u>	ALL
<25 25-29									
30-34 35-39			1	5 49	10				5 60
40-44 45-49				27 8	40 20	21 70	13		88 111
50-54 55-59				1	5 2	37 4	31 19	3 13	77 38
60-64 65+							3	12	15
ALL			1	90	77	132	66	28	394
	·		AVER	AGE ANNU	AL EARNI	NGS			
405		1.4			SERVICE		25 20	20:	ALL
<u>age</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL
<25 25-29									
30-34 35-39			23,816	35,424 37,688	36,048				35,424 37,184
40-44 45-49				41,010 36,666	38,321 37,030	39,639 38,156	42,947		39,461 38,407
50-54 55-59				23,762	34,456 33,657	37,228 39,901	38,728 38,683	43,486 43,479	37,721 40,187
60-64 65+							40,064	38,165	38,545
ALL			23,816	38,314	37,318	38,185	39,607	41,202	38,461
	PRIO	R FISCAL		ARNINGS			Y YEARS	OF SERVI	CE
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u> 30+</u>	ALL
ALL			24	3,448	2,874	5,040	2,614	1,154	15,154

POLICE AND FIRE CONSOLIDATION FUND SERVICE RETIREMENTS AS OF JUNE 30, 1991

			YE	ARS RETIF	RED			
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54	1 14	18	2	1	1			1 36
55-59 60-64	6 3	18 13	24 56	4 33	1 4			53 109
65-69 70-74	3	8	17 8	28 19	28 17	5 7	7	89 58
75-79 80-84				10	10 6	10 3	10 11	40 20
85+	2				3	4	6	15
ALL	29	57	107	95	70	29	34	421
			AVERAGE	ANNUAL 1	BENEFIT			
ACE				ARS RETII		20.24	25.	ALI
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
<50 50-54	17,137 17,206	15,830	15,389	14,997	14,997			17,137 16,294
55-59 60-64	22,272 23,671	17,764 22,149	17,317 18,992	14,891 17,333	19,169 16,488			17,882 18,903
65-69 70-74	26,127	22,250	18,967 19,024	18,256 18,304	16,904 17,273	11,442 18,030	15,932	18,208 17,782
75-79 80-84				17,005	16,144 17,945	17,493 17,271	12,452 17,144	15,773 17,403
85+	25,069				16,136	8,868	16,516	15,541
ALL	20,385	18,783	18,547	17,637	16,923	15,367	15,404	17,757
		TAL ANNUAL						
AGE	<1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
ALL	591	1,071	1,985	1,676	1,185	446	524	7,476

- 10 -

POLICE AND FIRE CONSOLIDATION FUND SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH								
<u>AGE</u>	<1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u> 15-19</u>	20-24	<u>25+</u>	<u>ALL</u>
<50 50-54	1	5 3	3 1	4 2		1		13 7
55-59 60-64	·	2	5 4	1 4	2	2	1	11 17
65-69 70-74	1 2	3 1	4 6	2 5	4 5	2 2	2 4	18 25
75-79 80-84		2 3	2 4	2	6 4	7 3	10 13	27 29
85+		2	2	3	7	6	18	38
ALL	4	24	31	23	31	23	49	185
				E ANNUAL				
ACE		1_4	YEA <u>5-9</u>	RS SINCE 10-14	DEATH 15-19	20-24	<u>25+</u>	ALL
AGE	<u><1</u>	<u>1-4</u>	<u>3-3</u>	10-14	10-19	20-24	<u>EUT</u>	VEF
<50 50-54	12,271	12,064 11,035	5,265 8,448	6,268 8,578		15,073		8,727 10,540
55-59 60-64		7,898 10,122	12,303 11,011	10,899 9,854	9,549 7,995	7,335	3,280 9,482	10,053 9,527
65-69	8,076	12,864	8,877	9,497	10,208	4,952	9,497	9,494
70-74	8,820	7,712	9,085	10,249	6,985	5,670	5,051	7,903
75-79 80-84		8,578 11,006	9,478 8,840	8,852	6,709 7,934	8,051 10,743	6,658 7,600	7,381 8,581
85+	•	9,033	8,859	6,699	6,514	7,568	6,661	7,021
ALL	9,497	10,589	9,414	8,721	7,626	8,042	6,882	8,341
	TOTAL	ANNUAL B				YEARS SIN		
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
ALL	37,988	254,136	291,834	200,583	236,406	184,966	337,218	1,543,085

POLICE AND FIRE CONSOLIDATION FUND DISABILITY RETIREMENTS AS OF JUNE 30, 1991

	YEARS DISABLED								
AGE	<1	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL	
<50 50-54	6 1	3 4	5	4	2			20 5	
55-59 60-64	1							1	
65-69 70-74									
75-79 8 0- 84									
85+									
ALL	8	7	5	4	2			26	
			AVERAGE	ANNUAL	BENEFIT				
			YEA	RS DISA	BLED				
<u>age</u>	≤1	1-4	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL	
<50 50-54	17,731 21,251	15,760 15,995	16,035	17,071	14,893			16,595 17,046	
55-59 60-64	15,183							15,183	
65-69 70-74									
75-79 80-84									
85+									
ALL	17,852	15,894	16,035	17,071	14,893			16,627	
ACE		AL ANNUAL 1-4	BENEFIT (ACTUAL I		Y YEARS DI		417	
<u>AGE</u>	<1		<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL	
ALL	142,816	111,258	80,175	68,284	29,786			432,302	

POLICE AND FIRE CONSOLIDATION FUND RECONCILIATION OF MEMBERS

			Term	inated
		Actives	Deferred Retirement	Other Non-Vested
A.	ON JUNE 30, 1990	288	3	1
В.	ADDITIONS	128	3	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	(11) (6) 0 0 (2) 0 0	0 0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	(3)	0	0
	Vested Non-Vested	347 47		
Ε.	TOTAL ON JUNE 30, 1991	394	6	1
		Retirement	Recipients	
		Annuitants	<u>Disabled</u>	Survivors
A.	ON JUNE 30, 1990	248	16	129
В.	ADDITIONS	187	14	67
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (14) 0 0	(6) 0 0	(10) 0 0
D.	DATA ADJUSTMENTS	0	2	(1)
E.	TOTAL ON JUNE 30, 1991	421	26	185

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

Α.	CURRENT ASSETS (100.00% of Table 1, F6)	\$143,369,657
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$11,595,153 17,392,730 59,948,280
	4. Total Expected Future Assets	\$88,936,163
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$232,305,820
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$120,317,880
	2. Current Employees	
	a. Accumulated Employee Contributions Including Allocated Investment Income* b. Employer-Financed Vested c. Employer-Financed Nonvested d. Total \$12,023,056 63,967,181 12,704,000	\$88,694,237
	3. Total Pension Benefit Obligation	\$209,012,117
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$23,293,703
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$232,305,820
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$65,642,460
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	(\$0)

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	195 199	\$50,744,223 61,243,717	\$38,588,493 42,975,712
c. Total	394	\$111,987,940	\$81,564,205
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0 7	\$ 0 600,831	\$0 600,831
c. Total	7	\$600,831	\$600,831
 Benefit Recipients a. Elected PERA Police and Fires b. Elected Relief Association 	451 181	\$74,047,647 45,669,402	\$74,047,647 45,669,402
c. Total	632	\$119,717,049	\$119,717,049
 4. Total a. Elected PERA Police and Fires b. Elected Relief Association c. No Election (Greater Value) d. Total 	646 181 206 1,033	\$124,791,870 45,669,402 61,844,548 	\$112,636,140 45,669,402 43,576,543 \$201,882,085
B. DETERMINATION OF UNFUNDED ACTUARIA		-	
1. AAL (A4) 2. Current Assets (100.00% of Table		,	\$201,882,085 143,369,657
3. UAAL (B1-B2)			\$58,512,428
C. NORMAL COST			\$3,176,747

^{*} Includes MPRIF Reserves of \$66,806,482

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

A.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$124,791,870 45,669,402 61,844,548
	4. Total	\$232,305,820
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$5,171,043 6,424,110
	3. Total	\$11,595,153
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$7,756,565 9,636,165
	3. Total	\$17,392,730
D.	CURRENT VALUE OF TOTAL ASSETS (100.00% of Table 1, F6)	\$143,369,657
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11, B.2.b + B.2.c + B.2.d) 3. Total	\$51,150,575 (17,653,084) \$33,497,491
F.	LOSS (GAIN) [A-B-C-D-E]	\$26,450,789
6.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$2,490,242 (2,822,049) 26,782,596
	4. Total	\$26,450,789
H.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$3,057,905

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

			Percent of Payroll	Dollar <u>Amount</u>
A.	EMPLOYEE CONTRIBUTIONS		8.00%	\$1,291,104 *
В.	EMPLOYER CONTRIBUTIONS (Before Adjustment For State Aid)			
	 Regular municipal contribution Additional municipal contribution 		12.00%	\$1,936,655 *
	<u>Establishe</u>	Current d <u>Balance</u>	Last Payment	Payment Amount **
	a. Initial b. 7/1/88 c. 7/1/89 d. 7/1/90 e. 7/1/91	\$71,010,992 181,637 (3,755,747) (14,078,974) 6,590,371	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$7,203,885 23,742 (468,815) (1,687,401) 761,894
	f. Total	\$59,948,279		\$5,833,305
с.	ESTIMATED TOTAL STATUTORY	CONTRIBUTION		\$9,061,064

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Interest:

Pre-Retirement:

8.5% per annum

Post-Retirement:

PERA Police and Fire

5.0% per annum

Relief Association

8.5% per annum

Salary Increases:

Reported Salary for prior fiscal year, increased 6.5% to current fiscal year and 6.5% annually for

each future year.

Mortality:

Pre-Retirement:

Male -1971 Group Annuity Mortality Table

male rates projected to 1984 by

Scale D

Female -

1971 Group Annuity Mortality Table

female rates projected to 1984 by

Scale D

Post-Retirement:

Male - Same as above Female - Same as above

Post-Disability:

Male - 1965 RRB rates Female - 1965 RRB rates

Retirement Age:

PERA Police and Fire

Age 60, or if over age 60, one year from the valua-

tion date.

Anoka Police

Age 58 and 20 years of service, or if over 58, one

year from the valuation date.

Buhl Police

Age 58 and 20 years of service, or if over 58, one

year from the valuation date.

Chisolm Fire

Age 58 and 20 years of service, or if over 58, one

year from the valuation date.

Chisolm Police

Age 58 and 20 years of service, or if over 58, one

year from the valuation date.

Crookston Fire

Age 60 and 20 years of service, or if over 60, one

year from the valuation date.

POLICE AND FIRE CONSOLIDATION FUND SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Retirement Age: (Continued)

Recircing Age. (continues)	
Duluth Police	Age 58 and 5 years of service, or if over 58, one year from the valuation date.
Faribault Fire	Age 50 and 20 years of service, or if over 50, one year from the valuation date.
Hibbing Fire	Age 58 and 20 years of service, or if over 58, one year from the valuation date.
Hibbing Police	Age 58 and 20 years of service, or if over 58, one year from the valuation date.
Mankato Fire	Age 50 and 20 years of service, or if over 50, one year from the valuation date.
Red Wing Fire	Age 58 and 20 years of service, or if over 58, one year from the valuation date.
Red Wing Police	Age 53 and 20 years of service, or if over 53, one year from the valuation date.
Rochester Fire	Age 60 and 20 years of service, or if over 60, one year from the valuation date.
Rochester Police	Age 60 and 20 years of service, or if over 60, one year from the valuation date.
St. Cloud Fire	Age 60 and 20 years of service, or if over 60, one year from the valuation date.
St. Louis Park Fire	Age 62 and 20 years of service, or if over 62, one year from the valuation date.
St. Louis Park Police	Age 50 and 10 years of service, or if over 50, one year from the valuation date.
West St. Paul Fire	Age 58 and 20 years of service, or if over 58, one year from the valuation date.
Winona Fire	Age 58 and 20 years of service, or if over 58, one year from the valuation date.

POLICE AND FIRE CONSOLIDATION FUND SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Retirement Age: (Continued)

Winona Police Age 50 and 20 years of service, or if over 50, one

year from the valuation date.

Separation: Graded rates based on PERA Police and Fire Fund

experience as of June 30, 1990. Rates are shown in

rate table.

Disability: Rates as shown in rate table.

Return of Contributions:

PERA Police and Fire All employees withdrawing after becoming eligible

for a deferred benefit were assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit.

Relief Association If a relief association allows for the return of

contributions, the contributions are returned to the Member if the Member is not eligible for any

other benefit.

Family Composition: 85% of male Members and 65% of female Members are

assumed to be married. Female is four years youn-

ger than male. Assume Members have no children.

Social Security: N/A

Benefit Increases After Retirement:

PERA Police and Fire Payment of earnings on retired reserves in excess

of 5% accounted for by 5% post-retirement interest.

Relief Association 6.5% per annum. The following are exceptions:

Buhl Police - 3.5% per annum

Chisolm Police - 3% per annum

Chisolm Fire - 3% per annum

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Relief Association (Continued)

Red Wing Police - 6.5% per annum; increased in accordance with CPI increase if on active duty as of January 1, 1974 or later.

Rochester Police - If hired before July 1, 1969, 6.5% per annum. If hired after June 30, 1969, 3.25% per annum.

Rochester Fire - If hired before July 1, 1969, 6.5% per annum. If hired after June 30, 1969, 3.25% per annum.

Special Consideration:

PERA Police and Fire

Married Members assumed to elect subsidized joint and survivor form of annuity as follows:

Males - 40% elect 50% J&S option 45% elect 100% J&S option Females - 15% elect 50% J&S option 15% elect 100% J&S option

Relief Association

N/A

Actuarial Cost Method:

Calculations of the Actuarial Accrued Liability and Normal Cost under the Entry Age Normal Actuarial Cost Method are disclosed in the report.

The Additional Municipal Contribution is derived by subtracting the following items from the Actuarial Present Value of Projected Benefits:

- Present Value of Future Employee Contributions
- Present Value of Future Regular Municipal Contributions
- Current Value of Assets
- Present Value of Additional Municipal Contributions (amount determined in the prior year)

Any excess (deficit) is a loss (gain) to be funded over 15 years and is added to the prior year Additional Municipal Contributions.

Asset Valuation Method:

Cost Value plus one-third Unrealized Gains or Losses.

POLICE AND FIRE CONSOLIDATION FUND SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Separations Expressed as the Number of Occurrences per 10,000:

		<u>leath</u>		<u>drawal</u>		<u>bility</u>		rement
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
20	5	2	859	859	11	11	0	0
21	5	2	750	750	11	11	0	0
22	5 5 5 5	2 2 2 3 3	660	660	12	12	0	0
23	5	3	583	583	12	12	0	0
24	5	3	519	519	13	13	0	0
25	6	3 3 3 3	463	463	13	13	0	0
26	6	3	416	416	14	14	0	0
27	6	3	374	374	14	14	0	0
28	7	3	339	339	14	14	0	0
29	7	4	307	307	15	15	0	0
30	7	4	280	280	16	16	0	0
31	8	4	256	256	16	16	Ö	0
32	8	4	234	234	17	17	0	0
33	9	5 5	215	215	17	17	0	0
34	10	5	198	198	18	18	0	Ö
35	10	5	183	183	19	19	0	0
36	11	6	169	169	20	20	0	0
37	12	6 6 7 7	157	157	22	22	0	0
38	13	7	146	146	23	23	0	0
39	14	7	135	135	24	24	0	0
40	15	8	126	126	26	26	0	0
41	16	9 9	118	118	28	28	0	0
42	18		110	110	29	29	0	0
43	21	10	103	103	31	31	0	0
44	24	11	97	97	34	34	0	0
45	27	12	91	91	36	36	0	0
46	30	13	86	86	41	41	0	0
47	34	14	81	81	46	46	Ō	0
48	39	15	69	69	52	52	0	0
49	44	17	59	59	60	60	0	0

- 22 - MILLIMAN & ROBERTSON, INC.

POLICE AND FIRE CONSOLIDATION FUND SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Separations Expressed as the Number of Occurrences per 10,000:

		<u>eath</u>		<u>drawal</u>		<u>bility</u>		rement
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
50	49	18	50	50	69	69	0	0
51	54	20	39	39	80	80	0	0
52	60	21	2 9	29	91	91	0	0
53	65	23	22	22	104	104	0	0
54	72	25	15	15	119	119	0	0
55	78	27	11	11	135	135	0	0
56	85	30	7	7	152	152	0	0
57	92	33	5	5	171	171	0	0
58	100	37	3	5 3	192	192	0	0
59	110	41	ì	ì	215	215	0	0
60	121	46	0	0	0	0	10,000	10,000
61	133	52	0	0	0	0	. 0	0
62	146	58	Ō	Ō	Ó	0	0	0
63	160	65	0	0	Ó	0	0	0
64	176	73	Ō	0	0	0	0	0
65	195	81	0	0	0	0	0	0
66	219	90	Ŏ	Ō	Ö	Ö	0	0
67	243	99	Ö	Ö	Ō	Ö	0	0
68	270	109	Ŏ	Ō	Ö	Ö	Ö	Ö
69	300	123	Ŏ	Ö	Ö	Ö	Ō	0
70	334	140	0	0	0	0	0	0

SUMMARY OF PERA POLICE AND FIRE PLAN PROVISIONS

Eligibility: All full-time and certain part-time police officers

and fire fighters, who are not contributing to any

other local retirement fund.

Contributions

Member: 8% of Salary.

Employer: 12% of Salary.

Allowable Service: Police and fire service during which Member contri-

butions were deducted. May also include certain

leaves of absence and military service.

Salary: Includes amounts deducted for deferred compensation

or supplemental retirement plans, net income from fees and sick leave payments funded by the employer.

Excludes lump sum payments at separation and

Workers' Compensation benefits.

Average Salary: Average of the five highest successive years of

Salary. Average salary is based on all Allowable

Service if less than five years.

RETIREMENT

Normal Retirement Benefit

Eligibility: Age 55 and three years of Allowable Service. Pro-

portionate Retirement Annuity is available at age 65

and one year of Allowable Service.

Amount: 2.5% of Average Salary for each year of Allowable

Service.

Early Retirement Benefit

Eligibility: Age 50 and three years of Allowable Service.

Amount: Normal Retirement Benefit based on Allowable Service

and Average Salary at retirement date assuming augmentation to age 55 at 3% per year and actuarial reduction for each month the Member is under age 55.

SUMMARY OF PERA POLICE AND FIRE PLAN PROVISIONS

Form of Payment:

Life annuity with return on death of any balance of contributions over aggregate monthly payments. Actuarially equivalent options are:

50% or 100% joint and survivor with bounce back feature without additional reduction (option canceled if Member is pre-deceased by beneficiary).

Benefit Increases:

Benefits may be increased each January 1 depending on the investment performance of the Minnesota Post Retirement Investment Fund (MPRIF). A benefit recipient who has been receiving a benefit for at least 12 full months as of June 30 will receive a full increase. Benefit recipients receiving benefits for at least one full month but less than 12 full months will receive a partial increase.

Members retired under law in effect before July 1, 1973 receive an additional lump sum payment each year. In 1989, this lump sum payment is the greater of \$25 times each full year of Allowable Service or the difference between \$400 times each full year of Allowable Service and the sum of the benefits paid from any Minnesota public pension plan plus cash payments from the Social Security Administration for the preceding fiscal year July 1, 1988 through June 30, 1989. In each following year, the lump sum payment will increase by the same percentage increase that is applied to regular annuities paid from MPRIF.

DISABILITY

Duty Disability Benefit

Eligibility:

Under age 55 and physically or mentally unable to perform duties as a police officer or fire fighter as a direct result of an act of duty.

SUMMARY OF PERA POLICE AND FIRE PLAN PROVISIONS

Amount:

50% of Average Salary plus 2.5% of Average Salary for each year in excess of 20 years of Allowable Service. The disability benefit is reduced to that amount which when added to Workers' Compensation, does not exceed Salary. Payments revert to retirement annuity at age 55.

Non-Duty Disability Benefits

Eligibility:

Under age 55 and physically or mentally unable to perform duties as a police officer or fire fighter with one year of Allowable Service.

Amount:

Normal Retirement Benefit based on Allowable Service (minimum of 15 years) and Average Salary at disability without reduction for commencement before age 55. Payments revert to retirement annuity at age 55.

Form of Payment:

Same as for retirement.

Benefit Increases:

Adjusted by PERA to provide same increase as

MPRIF.

Retirement Benefits

Eligibility:

Age 55

Amount:

Any optional annuity continues. Otherwise, the larger of the disability benefit paid before age 55 or the normal retirement benefit available at age 55, or an actuarially equivalent optional

annuity.

Benefit Increases:

Same as for retirement.

DEATH

Surviving Spouse Benefit

Eligibility:

Active member with surviving spouse, married for at least one year unless death in the line of

duty.

SUMMARY OF PERA POLICE AND FIRE PLAN PROVISIONS

Amount:

50% of Salary averaged over last six months. Benefit paid until spouse's death but no payments while spouse is remarried.

Surviving Dependent Child Benefit

Eligibility:

Active Member with dependent child.

Amount:

10% of Salary averaged over last six months for each child. Family benefit minimum (including spouse's benefit) of 50% of Salary and maximum of 70% of Salary. Benefits paid until child marries, dies, or attains age 18 (age 23 if full-time student.)

Surviving Spouse Optional Annuity

Eligibility:

Member who dies before termination if age 50 with three years of allowable Service or any age with 30 years of Allowable Service. If the Member dies before age 55, benefits commence when Member would have been age 55 or as early as age 50 if qualified for early retirement.

Amount:

Survivor's payment of the 100% joint and survivor benefit the Member could have elected if terminated. Alternatively, spouse may elect refund of deceased contributions with interest if there are no dependent children.

Benefit Increases:

Adjusted by PERA to provide same increase as MPRIF.

POLICE AND FIRE CONSOLIDATION FUND SUMMARY OF PERA POLICE AND FIRE PLAN PROVISIONS

TERMINATION

Refund of Contributions

Eligibility:

Termination of public service.

Amount:

Member's contributions with 5% interest compounded annually if termination occurred before May 16, 1989 and 6% interest if termination occurred on or after May 16, 1989. A deferred annuity may be elected in lieu of a refund if three or more years

of Allowable Service.

Deferred Annuity

Eligibility:

Three years of Allowable Service.

Amount:

Benefit computed under law in effect at termination and increased by the following annual percentage: 0% before 7/1/71; 5% from 7/1/71 to 1/1/81; and 3% thereafter until January 1 of the year following attainment of age 55 and 5% thereafter until the annuity begins. Amount is

payable as a normal or early retirement.

Eligibility:

A Member of a local relief association consolidating with PERA Police and Fire Fund who elects to retain benefit coverage in the local relief association benefit plan.

Contributions

Member:

8% of Contribution Salary.

Employer:

12% of Contribution Salary.

Allowable Service:

Any service rendered in the municipality in which the Local relief association is located before the effective date of consolidation and any service rendered by a covered employee as a police officer or firefighter in the municipality in which the local relief association is located.

Salary

Benefit Salary:

Anoka Police

Salary of a First Grade Patrol Officer.

Buhl Police

Final salary.

Chisolm Fire

Average Salary for final six months.

Chisolm Police

Average Salary for final six months.

Crookston Fire

Final Salary.

Duluth Police

Salary of a First Grade Patrol Officer with 16 years

of service.

Faribault Fire

Salary of First Class Firefighter.

Hibbing Fire

Average Salary for final six months of employment.

Hibbing Police

Average Salary for final six months of employment.

Mankato Fire

Base pay of a First Class Firefighter.

Red Wing Fire

Average Annual Salary for highest three paid years.

Benefit Salary: (Continued)

Red Wing Police

Final Salary.

Rochester Fire

Base pay of a First Class Firefighter.

Rochester Police

Salary of a First Grade Patrol Officer.

St. Cloud Fire

Salary of a First Grade Firefighter with 25 or more

years of service.

St. Louis Park Fire

Salary of the highest grade full-time firefighter.

St. Louis Park Police

Base pay of First Grade Patrolman during the second

month of previous fiscal year.

West St. Paul Fire

Salary of a First Grade Firefighter.

Winona Fire

Salary of a First Grade Firefighter.

Winona Police

Base pay of First Grade Patrolman during the second

month of previous fiscal year.

Contribution Salary:

Greater of Benefit Salary or actual salary. The

following are exceptions:

Buhl Police - Benefit Salary.

Hibbing Fire - Benefit Salary.

Hibbing Police - Benefit Salary.

Red Wing Fire - Actual Salary.

Red Wing Police - Benefit Salary.

TERMINATION

Normal Retirement Benefit

Eligibility:

Anoka Police	Age 50 and 20 years of Allowable Service.
Buhl Police	Age 50 and 20 years of Allowable Service.
Chisolm Fire	Age 55 and 20 years of Allowable Service.
Chisolm Police	Age 55 and 20 years of Allowable Service.
Crookston Fire	Age 60 and 20 years of Allowable Service.
Duluth Police	Age 50 and 5 years of Allowable Service.
Faribault Fire	Age 50 and 20 years of Allowable Service.
Hibbing Fire	Age 55 and 20 years of Allowable Service.
Hibbing Police	Age 55 and 20 years of Allowable Service.
Mankato Fire	Age 50 and 20 years of Allowable Service.
Red Wing Fire	Age 50 and 20 years of Allowable Service.
Red Wing Police	Age 50 and 20 years of Allowable Service.
Rochester Fire	Age 55 and 20 years of Allowable Service or, if hired prior to July 1, 1969, Age 50 and 20 years of Allowable Service.
Rochester Police	Age 55 and 20 years of Allowable Service or, if hired prior to July 1, 1969, Age 50 and 20 years of Allowable Service.
St. Cloud Fire	Age 50 and 20 years of Allowable Service.
St. Louis Park Fire	Age 50 and 20 years of Allowable Service.
St. Louis Park Police	Age 50 and 20 years of Allowable Service.

SUMMARY OF LOCAL POLICE OR FIREFIGHTER PLAN PROVISIONS

Eligibility: (Continued)

West St. Paul Fire Age 55 and 20 years of Allowable Service.

Winona Fire Age 50 and 20 years of Allowable Service.

Winona Police Age 50 and 20 years of Allowable Service.

Amount:

Anoka Police 2.5% of Benefit Salary for each of the first 20

years of Allowable Service.

Buhl Police 4.25% of Benefit Salary for each of the first 20

years of Allowable Service and \$120 per year for each year of Allowable Service in excess of 20 years of Allowable Service but no more than 25 years of

Allowable Service.

Chisolm Fire 50% of Benefit Salary, plus \$60 per year for each

year of service in excess of 20, not to exceed \$300, plus 1/2% of Benefit Salary for each year of

service in excess of 25 years.

Chisolm Police 50% of Benefit Salary, plus \$60 per year for each

year of service in excess of 20, not to exceed \$300, plus 1/2% of Benefit Salary for each year of

service in excess of 25 years.

Crookston Fire 50% of Benefit Salary plus 1.5% of Benefit Salary

for each year of service after age 60.

Duluth Police 1.9875% of Benefit Salary for each of the first 20

years of Allowable Service, 1.25% of Benefit Salary for the 21st year of Allowable Service, and 2.5% of Benefit Salary for each year of Allowable Service in

excess of 21 years but not more than 25 years of

Allowable Service.

Faribault Fire 51.4% of Benefit Salary.

SUMMARY OF LOCAL POLICE OR FIREFIGHTER PLAN PROVISIONS

Amount: ((Continued)

Hibbing Fire 2.65% of Benefit Salary for each of the first 20 years of Allowable Service and \$120 per year for

each year of Allowable Service in excess of 20 years

but no more than 25 years.

Hibbing Police 2.65% of Benefit Salary for each of the first 20

years of Allowable Service and \$120 per year for each of allowable Service in excess of 20 years but

no more than 25 years.

Mankato Fire 50% of Benefit Salary, plus \$30 per year for each

year of service in excess of 20 years, not to

exceed \$300.

Red Wing Fire 2.0% of Benefit Salary for each of the first 25

years of Allowable Service and 1.5% of Benefit Salary for each year of Allowable Service in excess

of 25 years.

Red Wing Police 2.5% of Benefit Salary for each of the first 20

years of Allowable Service.

Rochester Fire 46.67% of Benefit Salary plus 1.33% of Benefit

Salary for each year of service in excess of 20 up to seven years plus .5% of Benefit Salary for each

year of service in excess of 25.

Rochester Police 2.333% of Benefit Salary for each of the first 20

years of Allowable Service, 1.333% of Benefit Salary for each year of Allowable Service in excess of 20 years but not in excess of 27 years and 0.5% of Benefit Salary for each year of Allowable Service in

excess of 25 years.

St. Cloud Fire 2.333% of Benefit Salary for each of the first 20 years of Allowable Service, 1.333% of Benefit Salary

for each year of Allowable Service in excess of 20 years but not in excess of 27 years and 0.5% of Benefit Salary for each year of Allowable Service in

excess of 25 years.

SUMMARY OF LOCAL POLICE OR FIREFIGHTER PLAN PROVISIONS

Amount: (Continued)

St. Louis Park Fire 2.

2.6% of Benefit Salary for each of the first 20 years of Allowable Service and 1.0% of Benefit Service for each year of Allowable Service in excess of 20 years but not more than 30 years. If members had 20 or more years of Allowable Service on June 16, 1985, the 2.6% in the above formula is replaced by 2.6175%.

St. Louis Park Police

23.34% of Benefit Salary plus 1.33% of Benefit Salary for each year of service in excess of 10, up to 27 years.

West St. Paul Fire

2% of Benefit Salary for each of the first 20 years of Allowable Service; 1% of Allowable Service in excess of 20 years but not more than 24 years of Allowable Service; 3% of Benefit Salary for the 25th year of Allowable Service; and 1% of Benefit Salary for each year of Allowable Service in excess of 25 but not more than 30 years of Allowable Service.

Winona Fire

2.333% of Benefit Salary for each of the first 20 years of Allowable Service, 1.333% of Benefit Salary for each year of Allowable Service in excess of 20 years but not more than 28 years and 0.5% of Benefit Salary for each year of Allowable Service in excess of 25 years.

Winona Police

46.67% of Benefit Salary plus 1.33% of Benefit Salary for each year of service in excess of 20 up to seven years plus .5% of Benefit Salary for each year of service in excess of 25.

Form of Payment:

Life annuity.

Benefit Increases:

Anoka Police

Same increase that Benefit Salary is increased.

Buhl Police

3.5% if there is any increase in the salary base.

Chisolm Fire

3% per annum. if there is any increase in the salary

base.

SUMMARY OF LOCAL POLICE OR FIREFIGHTER PLAN PROVISIONS

Benefit Increases: (Continued)

Chisolm Police 3% per annum.

Faribault Fire Same increase that Benefit Salary is increased.

Duluth Police Same increase that Benefit Salary is increased.

Hibbing Fire One-half of the dollar amount that Benefit Salary

is increased.

Hibbing Police One-half of the dollar amount that Benefit Salary

is increased.

Mankato Fire Same increase that Benefit Salary is increased.

Red Wing Fire Same increase as the Consumer Price Index has

increased over the preceding year.

Red Wing Police Same increase as the Consumer Price Index has

increased over the preceding year.

Rochester Fire Same increase that Benefit Salary is increased

unless employed after July 1, 1969; then increase is one-half of the dollar increase granted to members employed prior to July 1, 1969. The additional benefit of 0.5% of Benefit Salary for each year of Allowable Service in excess of 25 years is

not increased.

Rochester Police Same increase that Benefit Salary is increased

unless employed after July 1, 1969; then increase is one-half of the dollar increase granted to members employed prior to July 1, 1969. The additional benefit of 0.5% of Benefit Salary for each year of Allowable Service in excess of 25 years is

not increased.

St. Cloud Fire Same increase that Benefit Salary is increased.

St. Louis Park Fire Same increase that Benefit Salary is increased.

St. Louis Park Police Same increase that Benefit Salary is increased.

West St. Paul Fire Same increase that Benefit Salary is increased.

SUMMARY OF LOCAL POLICE OR FIREFIGHTER PLAN PROVISIONS

Benefit Increases: (Continued)

Winona Fire Same increase that Benefit Salary is increased.

The additional benefit of 0.5% of Benefit Salary for each year of Allowable Service in excess of 25

years is not increased.

Winona Police Same increase that Benefit Salary is increased.

The additional benefit of 0.5% of Benefit Salary for each year of Allowable Service in excess of 25

years is not increased.

DISABILITY

Duty Disability Benefit

Eligibility: Not eligible for a retirement benefit and

physically unfit to perform duties as a police officer or firefighter as a direct result of an

act of duty.

Amount:

Anoka Police The retirement benefit calculated using the Bene-

fit Salary as of the date of disability and the Allowable Service as of the date of disability with a minimum of 20 years of Allowable Service.

Payments cease at age 50.

Buhl Police The retirement benefit calculated using the Bene-

fit Salary as of the date of disability and the Allowable Service as of the date of disability with a minimum of 20 years of Allowable Service.

Payments cease at age 50.

Chisolm Fire The retirement benefit assuming 20 years of ser-

vice.

Chisolm Police The retirement benefit assuming 20 years of ser-

vice.

Crookston Fire 50% of Benefit Salary less amount of worker's

compensation being received.

Amount: (Continued)

Duluth Police The retirement benefit calculated using the Bene-

> fit Salary as of the date of disability and the Allowable Service as of the date of disability with a minimum of 20 years of Allowable Service.

Payments cease at age 50.

Faribault Fire 51.4% of Benefit Salary.

Hibbing Fire First Class Disability: An amount equal to the

amount which would be paid under Minnesota

Workers' Compensation laws.

Second Class Disability: 75% of First Class Disability.

Third Class Disability: 50% of First Class Disability.

Hibbing Police \$1,440 per year.

Mankato Fire An amount equal to 50% of Benefit Salary.

40% of Benefit Salary if less than 20 years of Red Wing Fire

Allowable Service plus 2% of Benefit Salary for

each year of Allowable Service in excess of 20

years but not more than 25 years.

Red Wing Police An amount equal to 50% of the Benefit Salary

offset by Workers' Compensation.

Rochester Fire An amount equal to 48% of Benefit Salary.

Rochester Police An amount equal to 48% of Benefit Salary.

St. Cloud Fire An amount equal to 48% of Benefit Salary.

St. Louis Park Fire 50% of Benefit Salary if less than 20 years of

> Allowable Service. If 20 or more years of Allowable Service, an amount equal to the retirement

benefit.

St. Louis Park Police An amount equal to 48% of Benefit Salary.

Amount: (Continued)

West St. Paul Fire

An amount equal to 40% of Benefit Salary.

Winona Fire

An amount equal to 42.667% of Benefit Salary.

Winona Police

An amount equal to 48% of Benefit Salary.

Non-Duty Disability Benefits

Eligibility:

Not eligible for a retirement benefit and physically unfit to perform duties as a police officer or firefighter which did not arise as a direct result of an act of duty.

Amount:

Same as the Duty Disability Benefit. The following are exceptions:

Red Wing Fire - 2% of Benefit Salary for each year of Allowable Service with a minimum of 10% of

Benefit Salary and a maximum of 40% of Benefit

Salary.

Crookston Fire - No benefits payable.

Form of Payment:

Same as for retirement.

Benefit Increases:

Same as for retirement.

Retirement Benefits

Eligibility:

Age 50 and continued disability. The following

are exceptions:

Chisolm Fire - Age 55 and continued disability.

Chisolm Police - Age 55 and continued disability.

Crookston Fire - Age 60 and continued disability.

Hibbing Fire - Age 55 and continued disability.

Eligibility: (Continued)

Hibbing Police - Age 55 and continued disability.

West St. Paul Fire - Age 55 and continued disabil-

ity.

Amount:

The larger of the disability benefit paid before Eligibility or the retirement benefit available at

Eligibility.

Benefit Increases:

Same as for retirement.

DEATH

Surviving Spouse Benefit

Eligibility:

Any active, retired, disabled or deferred Member

with surviving spouse.

Amount:

Anoka Police

30% of Benefit Salary.

Buhl Police

72.25% of Benefit Salary.

Chisolm Fire

Greater of 25% of Benefit Salary or 50% of

benefit due Member.

Chisolm Police

Greater of 25% of Benefit Salary or 50% of

benefit due Member.

Crookston Fire

Greater of \$3,600 per year or 50% of benefit due Member.

Duluth Police

25% of Benefit Salary.

Faribault Fire

30% of Benefit Salary.

Hibbing Fire

30% of Benefit Salary

Hibbing Police

30% of Benefit Salary

Mankato Fire

60% of Benefit Salary.

Amount: (Continued)

Red Wing Fire 25% of Benefit Salary.

Red Wing Police Equal to the service pension of disability person.

Rochester Fire 24% of Benefit Salary.

Rochester Police 24% of Benefit Salary.

St. Cloud Fire 32% of Benefit Salary.

St. Louis Park Fire 40% of Benefit Salary if former member had at

least 20 years of Allowable Service. If less than 20 years of Allowable Service, a prorata portion

of 40% of Benefit Salary.

St. Louis Park Police 26.67% of Benefit Salary.

West St. Paul Fire 30% of Benefit Salary.

Winona Fire 24% of Benefit Salary.

Winona Police 24% of Benefit Salary.

Benefit Increases: Same as retirement. The following are exceptions:

Buhl Police - None

Hibbing Fire - None

Hibbing Police - None

Surviving Dependent Child Benefit

Eligibility:

Any active, deferred, retired or disabled Member with a child younger than age 18. The following

are exceptions:

Buhl Police - Any active, deferred, retired or disabled Member with a child younger than age 18, or if the child is a full-time student, younger than age 22.

Eligibility: (Continued)

Chisolm Fire - Any active, deferred, retired or disabled Member with a child younger than age 16.

Chisolm Police - Any active, deferred, retired or disabled Member with a child younger than age 16.

Duluth Police - Any active, deferred, retired or disabled Member with a child younger than age 18, or if the child is a full-time student, younger than age 22.

Amount:

Anoka Police

\$25 per month.

Buhl Police

\$1,500 per year if surviving spouse benefit is payable. If no surviving spouse benefit is payable, then surviving spouse benefit is payable divided in equal shares to all surviving children.

Chisolm Fire

\$1,500 per year.

Chisolm Police

\$1,500 per year.

Crookston Fire

\$180 per child per year up to \$1,260 if spouse is living or \$1,080 if spouse is dead.

Duluth Police

10% of Benefit Salary.

Faribault Fire

10% of Benefit Salary.

Hibbing Fire

10% of Benefit Salary.

Hibbing Police

10% of Benefit Salary.

Mankato Fire

12.5% of Benefit Salary.

Red Wing Fire

8% of Benefit Salary.

Red Wing Police

Determined by Board of Directors upon remarriage

of spouse.

Amount: (Continued)

Rochester Fire

8% of Benefit Salary.

Rochester Police

8% of Benefit Salary.

St. Cloud Fire

5.3333% of Benefit Salary.

St. Louis Park Fire

5% of Benefit Salary.

St. Louis Park Police

8% of Benefit Salary.

West St. Paul Fire

5% of Benefit Salary.

Winona Fire

8% of Benefit Salary.

Winona Police

8% of Benefit Salary.

Benefit Increases:

Same as retirement. The following are exceptions:

Anoka Police- None

Buhl Police- None

Hibbing Fire - None

Hibbing Police - None

Red Wing Police - None

TERMINATION

Refund of Contributions

Eligibility:

Termination of public service and not eligible for

any other benefits.

Amount:

Members' accumulated contributions without inter-

est. The following are exceptions:

Duluth Police - No refunds.

Amount: (Continued)

Rochester Police - 75% of the Members' accumulated contributions without interest.

Winona Fire - 75% of the Members' accumulated contributions without interest.

Deferred Annuity

Eligibility:

Any active Member with sufficient Allowable Service for the retirement benefit, but does not meet the age requirement for the retirement benefit. The following are exceptions:

St. Louis Park Fire - Prior to age 50 with minimum of 10 years of Allowable Service.

Amount:

The amount calculated under the retirement benefit using the Allowable Service and Benefit Salary as of date of termination. The following are exceptions:

St. Cloud Fire - The amount calculated under the retirement benefit using the Allowable Service and Benefit Salary as of date of termination. Benefit cannot exceed 53.3333% of Benefit Salary.

West St. Paul Fire - For the first 20 years of Allowable Service, 0.5% of Benefit Salary for each year of Allowable Service rendered before October 1, 1965; 2% of Benefit Salary for each year of Allowable Service rendered after September 30, 1965; and 1% of Benefit Salary for each year of Allowable Service in excess of 20 years but not more than 52% of Benefit Salary.

Winona Fire - The amount calculated under the retirement benefit using the Allowable Service and Benefit Salary as of date of termination. Benefit cannot exceed 50.6667% of Benefit Salary.

Benefit Increases:

Same as retirement. The following are exceptions:

Red Wing Police - None

SIGNIFICANT CHANGES

The following Accounts were added:

- Chisolm Fire - Mankato Fire - Chisolm Police - Rochester Fire - Crookston Fire - St. Louis Park Police - Faribault Fire - Winona Police

BUHL POLICE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

				YEARS OF					
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u> 15-19</u>	<u>20-24</u>	<u>25-29</u>	<u> 30+</u>	ALL
<25 25-29									
30-34 35-39									
40-44 45-49									
50-54 55-59									
60-64 65+								1	1
ALL								1	1
			AVER	AGE ANNU	AL EARNII	NGS			
			•	YFARS OF	SERVICE				
<u>AGE</u>	<u><1</u>	1-4	5-9	10-14	<u>15-19</u>	20-24	25-29	<u>30+</u>	ALL
<25 25-29									
30-34 35-39									
40-44 45-49									
50-54 55-59									
60-64 65+								36,974	36,974
ALL								36,974	36,974
•	PRIOR	FISCAL Y	EAR EA	RNINGS (ACTUAL D	OLLARS)	BY YEARS	OF SERV	ICE
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	25-29	30+	ALL
ALL								36,974	36,974

BUHL POLICE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

			YE	ARS RETIF	RED			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64		1						1
65-69 70-74								
75-79 80-84								
85+								
ALL		1						. 1
			AVERAGE	ANNUAL E	BENEFIT			
				ARS RETIR				
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64		22,252						22,252
65-69 70-74								
75-79 80-84								
85+					•			
ALL		22,252						22,252
	TOTA	L ANNUAL E	BENEFIT (ACTUAL DO	LLARS) BY	YEARS RET	TIRED	
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL		22,252						22,252

BUHL POLICE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

	YEARS SINCE DEATH									
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54										
55-59 60-64										
65-69 70-74			1					1		
75-79 80-84										
85+										
ALL			1					1		
			AVERAGE	ANNUAL E	BENEFIT					
405				S SINCE E	EATH	00.04	0.5	811		
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
<50 50-54										
55-59 60-64										
65-69 70-74			11,573					11,573		
75-79 80-84										
85+										
ALL			11,573					11,573		
·			NEFIT (AC	TUAL DOLL	ARS) BY Y	EARS SINCE				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL		
ALL			11,573					11,573		

BUHL POLICE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

			YEA	RS DISABL	.ED			
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84				·				
85+								
ALL								
			AVERAGE	ANNUAL E	BENEFIT			
			YEA	RS DISABL				
AGE	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 5 0-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
• •	TOTAL	L_ANNUAL I	BENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS	ABLED	
<u>AGE</u>			5.0	10-14	<u>15-19</u>			ALL
MUL	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	19-19	<u>20-24</u>	<u>25+</u>	VLF

1

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BUHL POLICE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		<u> Actives</u>	Deferred Retirement	Other Non-Vested
A.	ON JUNE 30, 1990	1	0	0
В.	ADDITIONS	0	0	0
c.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	1 0		
Ε.	TOTAL ON JUNE 30, 1991	1	0	0
		Retirement Annuitants	RecipientsDisabled	Survivors
A.	ON JUNE 30, 1990	1	0	1
В.	ADDITIONS	0	0	0
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active DATA ADJUSTMENTS	0 0 0 0	0 0 0 0	0 0 0 0

1

E. TOTAL ON JUNE 30, 1991

BUHL POLICE CONSOLIDATION ACCOUNT

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

JULY 1, 1991

A.	CURRENT ASSETS (0.58% of Table 1, F6)	\$832,737
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$2,958 4,437 66,666
	4. Total Expected Future Assets	\$74,061
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$906,798
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$480,012
	2. Current Employees	
	a. Accumulated Employee Contributions \$30,284 Including Allocated Investment Income*	
	b. Employer-Financed Vested 384,373	
	c. Employer-Financed Nonvested 0 d. Total	\$414,657
	3. Total Pension Benefit Obligation	\$894,669
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$12,129
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$906,798
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$61,932
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

*Estimated

BUHL POLICE CONSOLIDATION ACCOUNT

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

JULY 1, 1991

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0 1	\$ 0 426,786	\$0 418,282
c. Total	1	\$426,786	\$418,282
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients Elected PERA Police and Fire Elected Relief Association 	* 2	\$480,012 0	\$480,012 0
c. Total	2	\$480,012	\$480,012
4. Totala. Elected PERA Police and Fireb. Elected Relief Associationc. No Election (Greater Value)d. Total	* 2 0 1 3	\$480,012 0 426,786 	\$480,012 0 418,282 \$898,294
B. DETERMINATION OF UNFUNDED ACTUARIA	L ACCRUED LIABIL	ITY (UAAL)	
1. AAL (A4) 2. Current Assets (0.58% of Table			\$898,294 832,737
3. UAAL (B1-B2)			\$65,557
· C. NORMAL COST			\$8,504

^{*} Includes MPRIF Reserves of \$480,012

BUHL POLICE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

JULY 1, 1991

A.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9A) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$480,012 0 426,786
	4. Total	\$906,798
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$0 2,958
	3. Total	\$2,958
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$0 4,437
	3. Total	\$4,437
D.	CURRENT VALUE OF TOTAL ASSETS (0.58% of Table 1, F6)	\$832,737
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11A, B.2.b + B.2.c + B.2.d) 3. Total	\$94,196 (27,223) \$66,973
F.	LOSS (GAIN) [A-B-C-D-E]	(\$307)
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other 4. Total	\$37,252 0 (37,559) (\$307)
. н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	(\$35)

\$14,164

BUHL POLICE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

				Percent of Payroll	Dollar <u>Amount</u>
A.	EMPLOYEE CONTRIE	BUTIONS	8.00%	\$3,150 *	
В.	EMPLOYER CONTRIE (Before Adjustme		id)		
	 Regular municipal contribution Additional municipal contribution 			12.00%	\$4,725 *
		<u>Established</u>	Current <u>Balance</u>	Last Payment	Payment Amount **
	a. b. c. d. e.	Initial 7/1/88 7/1/89 7/1/90 7/1/91	\$94,196 2,731 120 (30,074) (307)	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$9,556 357 15 (3,604) (35)
	f.	Total	\$66,666 		\$6,289

ESTIMATED TOTAL STATUTORY CONTRIBUTION

C.

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

DULUTH POLICE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE												
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL			
<25								•				
25-29												
30-34												
35-39				10	1		•		11			
40-44				8 1	7 2	8			23			
45-49				1	2	17	2		22			
50-54						5	7		12			
55-59								6	6			
60-64								1	1			
65+												
ALL				19	10	30	9	7	75			
AVERAGE ANNUAL EARNINGS												
					SERVICE							
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u> 30+</u>	ALL			
<25												
25-29						•						
30-34												
35-39				38,085	41,614				38,406			
40-44				38,677		42,838			41,093			
45-49				35,505	39,276	37,976	36,032		37,805			
50-54						36,646	42,776		40,222			
55-59								48,099	48,099			
60-64 65+								42,474	42,474			
ALL				38,198	41,319	39,051	41,277	47,295	40,174			
	PRIO	R FISCAL	YEAR E	ARNINGS	(IN THOU	SANDS) B	Y YEARS	OF SERVI	CE			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	25-29	30+	ALL			
ALL				726	413	1,172	372	331	3,013			
				- 54	_							

DULUTH POLICE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

	YEARS RETIRED												
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>					
<50 50-54	3	5	1					9					
55-59 60-64		3	4 11	1 2	1			5 17					
65-69 70-74	·	3	3 2	1 3	4 2	2 5	5	13 17					
75-79 80-84				4	3 1	5	3 2	15 3					
85÷						1	3	4					
ALL	3	11	21	11	11	13	13	83					
AVERAGE ANNUAL BENEFIT													
	YEARS RETIRED												
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>					
<50 50-54	17,659	15,473	15,101					16,160					
55-59 60-64		23,050	18,662 19,113	15,101 19,374	19,374			17,950 19,854					
65-69 70-74		24,394	19,374 19,374	20,163 19,810	17,593 19,374	17,474 18,044	16,050	19,753 18,082					
75-79 80-84				19,374	19,374 19,374	18,234	17,158 17,000	18,551 17,791					
85 +						19,374	16,525	17,237					
ALL	17,659	19,973	18,898	19,176	18,726	18,132	16,562	18,524					
						Y YEARS R							
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	<u>ALL</u>					
ALL	52,977	219,703	396,858	210,936	205,986	235,716	215,306	1,537,492					

DULUTH POLICE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

	YEARS SINCE DEATH											
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54		5	1					6				
55-59 60-64			1 1					1				
65-69 70-74	1		1	2 2	1 1	1	2	5 6				
75-79 80-84		1	1 1	1	2 1	1	2 2	6 6				
85+		1	2	1	3	1	4	12				
ALL	1	7	8	6	8	3	10	43				
AVERAGE ANNUAL BENEFIT												
			YEAF	RS SINCE I	DEATH							
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54		12,339	3,799					10,916				
55-59 60-64			9,497 9,497		·			9,497 9,497				
65-69 70-74	9,069		9,497	9,497 9,497	9,497 9,069	9,134	9,497	9,497 9,294				
75-79 80-84		9,497	9,497 9,497	9,134	9,283 9,497	9,497	9,143 9,283	9,308 9,365				
85+		9,497	8,859	9,497	9,354	9,497	9,282	9,283				
ALL	9,069	11,527	8,625	9,437	9,336	9,376	9,297	9,562				
	TOTAL	ANNUAL BE				YEARS SIN						
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u> 20-24</u>	<u>25+</u>	ALL				
ALL	9,069	80,689	69,000	56,622	74,688	28,128	92,970	411,166				

DULUTH POLICE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

	YEARS DISABLED											
<u>AGE</u>	<1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54	3 1	1 2						4				
55-59 60-64												
65-69 70-74												
75-79 80-84												
85+												
ALL	4	3						7				
AVERAGE ANNUAL BENEFIT												
				RS DISABL				·.				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54	18,344 21,251	18,501 18,385						18,383 19,340				
55-59 60-64												
65-69 70-74												
75-79 80-84												
85+												
ALL	19,071	18,424						18,793				
<u>AGE</u>	TOT/	AL ANNUAL 1-4	<u>BENEFIT (</u> <u>5-9</u>	ACTUAL DO 10-14	LLARS) BY 15-19	YEARS DIS 20-24	ABLED <u>25+</u>	ALL				
			<u> </u>	<u> </u>	TA-13	SYTET	LUT					
ALL	76,284	55,272					-,	131,551				

DULUTH POLICE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		Activos	Deferred Retirement	Other Non-Vested
		<u>Actives</u>	Recirement	Moll-Aezrea
A.	ON JUNE 30, 1990	82	1	1
В.	ADDITIONS	0	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	(3) (4) 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	75 0		
Ε.	TOTAL ON JUNE 30, 1991	75	1	1
			Recipients	
		Retirement Annuitants	Disabled	<u>Survivors</u>
A.	ON JUNE 30, 1990	84	3	42
В.	ADDITIONS	3	4	5
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (4) 0 0	0 0 0 0	0 (4) 0 0
D.	DATA ADJUSTMENTS	0	0	0
Έ.	TOTAL ON JUNE 30, 1991	83	7	43

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

A.	CURRENT ASSETS (19.91% of Table 1, F6)	\$28,547,721
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$2,270,060 3,405,090 12,078,275
	4. Total Expected Future Assets	\$17,753,425
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$46,301,146
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$22,644,987
	2. Current Employees	
	a. Accumulated Employee Contributions \$2,459,750 Including Allocated Investment Income*	
	b. Employer-Financed Vested 13,579,171	
	d. Total	\$16,038,921
	3. Total Pension Benefit Obligation	\$38,683,908
Ε.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$7,617,238
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$46,301,146
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$10,136,187
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED	Number of <u>Participants</u>	Present Value of Projected Benefits	Actuarial Accrued <u>Liability</u>
LIABILITY (AAL)			
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	13 62	\$4,817,782 18,838,377	\$4,391,857 12,708,685
c. Total	75	\$23,656,159	\$17,100,542
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0 2	\$0 185,769	\$0 185,769
c. Total	2	\$185,769	\$185,769
3. Benefit Recipientsa. Elected PERA Police and Fire*b. Elected Relief Association	122 11	\$19,484,259 2,974,959	\$19,484,259 2,974,959
c. Total	133	\$22,459,218	\$22,459,218
4. Totala. Elected PERA Police and Fire*b. Elected Relief Associationc. No Election (Greater Value)	135 11 64	\$24,302,041 2,974,959 19,024,146	\$23,876,116 2,974,959 12,894,454
d. Total	210	\$46,301,146	\$39,745,529
B. DETERMINATION OF UNFUNDED ACTUARIAL			
 AAL (A4) Current Assets (19.91% of Table 1 	1,F6)		\$39,745,529 28,547,721
3. UAAL (B1-B2)			\$11,197,808
C. NORMAL COST			\$679,349

^{*} Includes MPRIF Reserves of \$17,271,063

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9B) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$24,302,041 2,974,959 19,024,146
	4. Total	\$46,301,146
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$173,524 2,096,536
	3. Total	\$2,270,060
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$260,286 3,144,804
	3. Total	\$3,405,090
D.	CURRENT VALUE OF TOTAL ASSETS (19.91% of Table 1, F6)	\$28,547,721
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain)	\$12,713,941 (2,831,383)
	(Table 11B, B.2.b + B.2.c + B.2.d) 3. Total	\$9,882,558
F.	LOSS (GAIN) [A-B-C-D-E]	\$2,195,717
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other 4. Total	(\$22,398) (38,025) 2,256,140 \$2,195,717
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$253,841

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

				Percent of <u>Payroll</u>	Dollar Amount
A.	EMPLOYEE CONTRIBUTI	ONS		8.00%	\$256,714 *
В.	EMPLOYER CONTRIBUTI (Before Adjustment		id)		
	 Regular municip Additional muni 			12.00%	\$ 385,071 *
	<u>Est</u>	<u>ablished</u>	Current Balance	Last <u>Payment</u>	Payment Amount **
		Initial 7/1/88 7/1/89 7/1/90 7/1/91	\$12,713,941 178,906 (2,794,499) (215,790) 2,195,717	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$1,289,796 23,385 (348,826) (25,863) 253,841
	f.	Total	\$12,078,275		\$1,192,333
C.	ESTIMATED TOTAL STA	TUTORY CONT	RIBUTION		\$1,834,118

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

WEST ST. PAUL FIRE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE												
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL			
<25 25-29												
30-34 35-39				1					1			
40-44 45-49				1	2	2	2		3 6			
50-54 55-59						1			1			
60-64 65+												
ALL				3	3	4	2		12			
AVERAGE ANNUAL EARNINGS												
				YEARS OF	F SERVICE	_						
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL			
<25 25-29												
30-34				40.000								
35-39				40,299					40,299			
40-44 45-49				38,174 44,439		41,536	47,519		41,275 44,452			
50-54 55-59						46,980 32,205			46,980 32,205			
60-64 65+												
ALL				40,970	43,271	40,564	47,519		42,501			
	PRIOR	FISCAL Y	EAR EA	RNINGS	(ACTUAL E	OLLARS)	BY YEARS	OF SERV	ICE			
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	25-29	30+	ALL			
ALL				122,912	129,813	162,257	95,039	-,	510,021			

WEST ST. PAUL FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

YEARS RETIRED												
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54							•					
55-59 60-64		2	1					2 1				
65-69 70-74			1 1	1 1				2 2				
75-79 80-84		٠										
85+												
ALL		2	3	2				7				
AVERAGE ANNUAL BENEFIT												
				ARS RET				<u> </u>				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u> 20-24</u>	<u>25+</u>	ALL				
<50 50-54												
55-59 60-64		19,991	19,121					19,991 19,121				
65-69 70-74			16,444 19,886	16,062 16,062				16,253 17,974				
75-79 80-84												
85+												
ALL		19,991	18,484	16,062				18,222				
	TOTA	AL ANNUAL	BENEFIT (ACTUAL E	OLLARS) BY	Y YEARS RE						
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL				
ALL		39,982	55,452	32,124				127,554				
			-	- 64 -				٠.				

WEST ST. PAUL FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH											
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64					1			1			
65-69 70-74			3					3			
75-79 80-84											
85+	•										
ALL			3		1			4			
AVERAGE ANNUAL BENEFIT											
405		1 4		S SINCE							
<u>age</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64					10,650			10,650			
65-69 70-74			11,472					11,472			
75-79 80-84											
85+											
ALL			11,472		10,650			11,267			
805	_ TOTAL A	NNUAL BE	NEFIT (AC	TUAL DOLI	LARS) BY	EARS SINCE	E DEATH				
<u>age</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
ALL			34,416		10,650			45,068			

WEST ST. PAUL FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

		·	YE!	ARS DISABI				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54		1	1					1 1
55-59 60-64						,		
65-69 70-74								
75-79 80-84								
85+								
ALL		1	1					2
			AVERAGE	E ANNUAL I	BENEFIT			
***			YE/	ARS DISABI	.ED			
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54		14,199	14,199					14,199 14,199
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL		14,199	14,199					14,199
	ТОТ	AL ANNUAL	BENEFIT	ACTUAL DO	DLLARS) BY	YEARS DIS	ABLED	
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL		14,199	14,199					28,398

WEST ST. PAUL FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Termi	inated
		A - A d	Deferred	Other
		Actives	<u>Retirement</u>	Non-Vested
A.	ON JUNE 30, 1990	12	0	0
В.	ADDITIONS	0	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	11 1		
E.	TOTAL ON JUNE 30, 1991	12	0	0
			Recipients	
		Retirement Annuitants	Disabled	Survivors
A.	ON JUNE 30, 1990	6	3	4
В.	ADDITIONS	1	0	0
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 0 0	(1) 0 0 0	0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	7	2	4

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

A.	CURRENT ASSETS (3.57% of Table 1, F6)	\$5,117,805
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$374,012 561,018 325,260
	4. Total Expected Future Assets	\$1,260,290
c.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$6,378,095
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$2,897,989
	2. Current Employees	
	a. Accumulated Employee Contributions \$399,880 Including Allocated Investment Income*	
	b. Employer-Financed Vested 1,917,362 c. Employer-Financed Nonvested 719,079	
	d. Total	\$3,036,321
	3. Total Pension Benefit Obligation	\$5,934,310
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$443,785
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$6,378,095
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$816,505
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	10 2	\$2,915,625 564,481	\$2,199,330 330,205
c. Total	12	\$3,480,106	\$2,529,535
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	10 3	\$1,960,658 937,331	\$1,960,658 937,331
c. Total	13	\$2,897,989	\$2,897,989
4. Total a. Elected PERA Police and Fire* b. Elected Relief Association c. No Election (Greater Value)	20 3 2	\$4,876,283 937,331 564,481	\$4,159,988 937,331 330,205
d. Total	25 	\$6,378,095	\$5,427,524
B. DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABILI	ITY (UAAL)	
 AAL (A4) Current Assets (3.57% of Table 1 	,F6)		\$5,427,524 5,117,805
3. UAAL (B1-B2)			\$309,719
C. NORMAL COST			\$103,664

^{*} Includes MPRIF Reserves of \$1,960,658

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

A.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9C) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$4,876,283 937,331 564,481
	4. Total	\$6,378,095
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$309,285 64,727
	3. Total	\$374,012
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$463,928 97,090
	3. Total	\$561,018
D.	CURRENT VALUE OF TOTAL ASSETS (3.57% of Table 1, F6)	\$5,117,805
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11C, B.2.b + B.2.c + B.2.d)	\$1,505,135 (1,118,936)
	3. Total	\$386,199
F.	LOSS (GAIN) [A-B-C-D-E]	(\$60,939)
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member	\$733,650 0
	3. Other	(794,589)
	4. Total	(\$60,939)
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	(\$7,045)

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

				Percent of Payroll	Dollar <u>Amount</u>
A.	EMPLOYEE CONTRIB	UTIONS		8.00%	\$43,454 *
В.	EMPLOYER CONTRIB		id)		
		cipal contribut unicipal contri		12.00%	\$65,181 *
	1	<u>Established</u>	Current Balance	Last Payment	Payment Amount **
	•	Initial	¢1 505 135	12/31/2010	\$152 692

	<u>Established</u>	Balance	Payment	Amount **
a. b.	Initial 7/1/88	\$1,505,135	12/31/2010 12/31/2002	\$152,692 0
c.	7/1/89	(961,368)	12/31/2003	(120,004)
d. e.	7/1/90 7/1/91	(157,568) (60,939)	12/31/2004 12/31/2005	(18,885) (7,045)
f.	Total	\$ 325,260		\$6,758

C. ESTIMATED TOTAL STATUTORY CONTRIBUTION

\$115,393

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

RED WING FIRE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE									
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL
<25 25-29									
30-34 35-39									
40-44 45-49					3				3
50-54 55-59					3 1	1	1	1	4 4
60-64 65+									
ALL					7	2	1	1	11
			AVER	AGE ANNU	AL EARNI	NGS			
				YEARS OF	SERVICE	•			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u> 25-29</u>	<u>30+</u>	ALL
<25 25-29									
30-34 35-39									
40-44 45-49					37,307				37,307
50-54 55-59					37,263 35,928	39,486 34,930	39,610	40,991	37,819 37,864
60-64 65+									
ALL					37,091	37,208	39,610	40,991	37,696
. . =		FISCAL Y	EAR EAI	RNINGS (OLLARS)	BY YEARS		
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL
ALL					259,641	74,416	39,610	40,991	414,658

RED WING FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

			YE	EARS RETI	RED			
AGE	<u>≤1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	25+	ALL
<50	•							
50-54	1							1
55-59 60-64	2	2	1 3					5 3
65-69 70-74				1	2			2 1
75-79 80-84								
85+								
ALL	3	2	4	1	2			12
			AVERAGE	E ANNUAL I	BENEFIT			
			YE	EARS RETII	RED			
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54	8,291							8,291
55-59 60-64	20,699	13,520	14,197 14,246					16,527 14,246
65-69 70-74				14,110	11,613			11,613 14,110
75-79 80-84								
85+								
ALL	16,563	13,520	14,234	14,110	11,613			14,250
	TOT/	AL ANNUAL	BENEFIT (ACTUAL DO	DLLARS) BY	YEARS RE	TIRED	
<u>AGE</u>	<1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u> 15-19</u>	20-24	25±	ALL
ALL	49,689	27,040	56,936	14,110	23,226			171,000
				73				

RED WING FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH								
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	15-19	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54				2				2
55-59 60-64					1			1
65-69 70-74			1					1
75-79 80-84							1	1
85+							1	1
ALL			1	2	1		2	6
			AVERAGE	ANNUAL B	ENEFIT			
			YEAR	S SINCE D	EATH			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54				2,273				2,273
55-59 60-64					9,427			9,427
65-69 70-74			7,667					7,667
75-79 80-84							4,886	4,886
85+							4,886	4,886
ALL			7,667	2,273	9,427		4,886	5,235
	TOTAL A	NNUAL BEI	NEFIT (AC	TUAL DOLL	.ARS) BY Y	EARS SINC	E DEATH	
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL			7,667	4,546	9,427		9,772	31,410

RED WING FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

			YEA	RS DISABL	.ED			
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
			AVERAGE	ANNUAL B	ENEFIT			
		· • · · · · · · · · · · · · · · · · · ·		RS DISABL				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70 -74								
75-79 80-84								
85+								
ALL								
	TOTAL	ANNUAL I	BENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS	ABLED	
<u>AGE</u>	<1	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL							٠,	

RED WING FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

				inated
		<u>Actives</u>	Deferred <u>Retirement</u>	Other <u>Non-Vested</u>
A.	ON JUNE 30, 1990	14	0	0
В.	ADDITIONS	0	0	0
c.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	(2) 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	(1)	0	. 0
	Vested Non-Vested	9 2		
E.	TOTAL ON JUNE 30, 1991	11	0	0
			Recipients	
		Retirement Annuitants	Disabled	Survivors
A.	ON JUNE 30, 1990	9	0	7
В.	ADDITIONS	3	0	0
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 0 0 0	0 0 0 0	0 0 0
D.	DATA ADJUSTMENTS	0	0	(1)
E.	TOTAL ON JUNE 30, 1991	12	0	6

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

CURRENT ASSETS (3.38% of Table 1, F6)	\$4,848,952
EXPECTED FUTURE ASSETS	
 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$161,708 242,562 508,260
4. Total Expected Future Assets	\$912,530
TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$5,761,482
CURRENT PENSION BENEFIT OBLIGATIONS	
 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$2,918,928
2. Current Employees	
a. Accumulated Employee Contributions \$357,765	
b. Employer-Financed Vested 1,947,993	
d. Total	\$3,437,905
3. Total Pension Benefit Obligation	\$6,356,833
EXPECTED FUTURE PENSION BENEFIT OBLIGATION	(\$595,352)
TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$5,761,481
CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$1,507,881
CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	(\$1)
E 123 4 7 C	Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions Total Expected Future Assets OTAL CURRENT AND EXPECTED FUTURE ASSETS CURRENT PENSION BENEFIT OBLIGATIONS Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits Current Employees a. Accumulated Employee Contributions \$357,765 Including Allocated Investment Income* b. Employer-Financed Vested 1,947,993 c. Employer-Financed Vested 1,947,993 c. Employer-Financed Nonvested 1,132,147 d. Total Total Pension Benefit Obligation EXPECTED FUTURE PENSION BENEFIT OBLIGATION TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED	Number of <u>Participants</u>	Present Value of Projected Benefits	Actuarial Accrued <u>Liability</u>
LIABILITY (AAL)			
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	9 2	\$2,239,324 603,229	\$1,933,218 454,710
c. Total	11	\$2,842,553	\$2,387,928
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	4 14	\$905,957 2,012,971	\$905,957 2,012,971
c. Total	18	\$2,918,928	\$2,918,928
 4. Total a. Elected PERA Police and Fire* b. Elected Relief Association c. No Election (Greater Value) d. Total 	13 14 2 29	\$3,145,281 2,012,971 603,229 \$5,761,481	\$2,839,175 2,012,971 454,710 \$5,306,856
B. DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABIL	TTY (UAAL)	
1. AAL (A4) 2. Current Assets (3.38% of Table)		(0.0.0)	\$5,306,856 4,848,952
3. UAAL (B1-B2)			\$457,904
C. NORMAL COST			\$90,275

^{*} Includes MPRIF Reserves of \$905,957

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9D) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$3,145,281 2,012,971 603,229
	4. Total	\$5,761,481
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$117,257 44,450
	3. Total	\$161,707
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$175,886 66,676
	3. Total	\$242,562
D.	CURRENT VALUE OF TOTAL ASSETS (3.38% of Table 1, F6)	\$4,848,952
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11D, B.2.b + B.2.c + B.2.d)	\$1,381,938 (407,491)
	3. Total	\$974,447
F.	LOSS (GAIN) [A-B-C-D-E]	(\$466,187)
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$20,274 (25,751) (460,710)
	4. Total	(\$466,187)
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	(\$53,895)

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

			Percent of Payroll	Dollar <u>Amount</u>
A.	EMPLOYEE CONTRIBUTIONS		8.00%	\$35,329 *
В.	EMPLOYER CONTRIBUTIONS (Before Adjustment For Stat	e Aid)		
	 Regular municipal contr Additional municipal co 		12.00%	\$52,993 *
	<u>Established</u>	Current Balance	Last Payment	Payment Amount **
	a. Initial b. 7/1/88 c. 7/1/89 d. 7/1/90 e. 7/1/91	\$1,381,938 0 0 (407,491) (466,187)	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$140,194 0 0 (48,839) (53,895)
	f. Total	\$508,260 		\$37,460
C.	ESTIMATED TOTAL STATUTORY (CONTRIBUTION		\$125,782

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

ROCHESTER POLICE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE									
<u>age</u>	<u>≤1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL
<25 25-29									
30-34 35-39				1 16	1				1 17
40-44 45-49				1 2	4	2 11	3		7 17
50-54 55-59						5 1	7 2	1	13 3
60-64 65+							1		1
ALL				20	6	19	13	1	59
			AVER	AGE ANNU	JAL EARNI	NGS			
	_			YEARS OF	SERVICE	<u> </u>			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	15-19	20-24	<u>25-29</u>	<u>30+</u>	ALL
<25 25-29									
30-34 35-39				38,664 40,550	43,116				38,664 40,701
40-44 45-49				40,527 38,101	39,074 37,215	42,076 42,165	51,281		40,139 43,004
50-54 55-59						43,491 49,551	42,973 39,416	51,033	43,792 42,794
60-64 65+							43,019		43,019
ALL				40,210	39,437	42,893	44,346	51,033	42,090
	PRIOR	FISCAL	YEAR E	ARNINGS	(IN THOU	ISANDS) B	Y YEARS	OF SERVI	CE
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	25-29	30+	ALL
ALL				804	237	815	577	51	2,483

TABLE 4E

ROCHESTER POLICE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

	YEARS_RETIRED								
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL	
<50 50-54	1	3						4	
55-59 60-64	1	3	3 3	3				7 12	
65-69 70-74		2	2 1	4 2	3 2	1		11 6	
75-79 80-84					3 1	1	2	3	
85+							1	1	
ALL	2	14	9	9	9	2	3	48	
			AVERAG	E ANNUAL	BENEFIT				
			ΥΥ	EARS RETI	RED				
AGE	≤1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL	
<50 50-54	18,095	17,849						17,911	
55-59 60-64	22,932	19,640 20,807	18,582 19,514	18,305			·	19,657 19,858	
65-69 70-74		20,451	18,041 22,807	17,735 19,854	19,042 18,328	19,713		18,641 19,814	
75-79 80-84					19,901 19,713	19,713	18,432	19,901 19,073	
85+							19,995	19,995	
ALL	20,514	19,872	19,242	18,396	19,244	19,713	18,953	19,322	
		AL ANNUAL					ETIRED		
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL	
ALL	41,028	278,208	173,178	165,564	173,196	39,426	56,859	927,456	

ROCHESTER POLICE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH										
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
<50 50-54		1	1					2		
55-59 60-64		1			. 1			1		
65-69 70-74		1		2			1	1 3		
75-79 80-84		1	1			1		1 2		
85+		1					1	2		
ALL		5	2	2	1	1	2	13		
	AVERAGE ANNUAL BENEFIT									
405				RS SINCE I						
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54		8,569	8,448					8,509		
55-59 60-64		8,569			8,448			8,448 8,569		
65-69 70-74		8,448		8,508			8,448	8,448 8,488		
75-79 80-84		8,448	8,569			8,571		8,571 8,509		
85+		8,569					8,569	8,569		
ALL		8,521	8,509	8,508	8,448	8,571	8,509	8,513		
	TOTAL	ANNUAL BI	ENEFIT (AC	TUAL DOI!	LARS) BY Y	EARS STN	CF DFATH			
<u>AGE</u>	<u> </u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL		
ALL		42,605	17,018	17,016	8,448	8,571	17,018	110,669		

ROCHESTER POLICE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

	YEARS DISABLED							
<u>AGE</u>	<u>≤1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 5 0-54					1			1
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL					1			1
			AVERAGE	ANNUAL E	BENEFIT			
405			YEA	RS DISABL	.ED			
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54					10,945			10,945
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL					10,945			10,945
<u>AGE</u>	TOTAL <1	. ANNUAL I 1-4	<u>SENEFIT (</u> <u>5-9</u>	ACTUAL DO 10-14	LLARS) BY	YEARS DIS	ABLED	A1 1
	77	1-4	<u>5-2</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
ALL					10,945			10,945

ROCHESTER POLICE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		<u> Actives</u>	Deferred Retirement	Other Non-Vested
A.	ON JUNE 30, 1990	62	2	0
В.	ADDITIONS	0	1	0
c.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	(2) 0 0 0 (1) 0 0	0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	52 7		
E.	TOTAL ON JUNE 30, 1991	59	3	0
			Recipients	
		Retirement Annuitants	Disabled	Survivors
Α.	ON JUNE 30, 1990	45	4	14
В.	ADDITIONS	5	0	1
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (2) 0 0	(5) 0 0 0	0 (2) 0 0
D.	DATA ADJUSTMENTS	0	2	0
£.	TOTAL ON JUNE 30, 1991	48	1	13

ROCHESTER POLICE CONSOLIDATION ACCOUNT

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

JULY 1, 1991

A.	CURRENT ASSETS (12.84% of Table 1, F6)	\$18,414,643
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$2,247,383 3,371,075 6,491,821
	4. Total Expected Future Assets	\$12,110,279
С.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$30,524,922
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$13,131,309
	2. Current Employees	
	a. Accumulated Employee Contributions \$1,742,852 Including Allocated Investment Income*	
	b. Employer-Financed Vested 9,275,586 c. Employer-Financed Nonvested 2,235,458	
	d. Total	\$13,253,896
	3. Total Pension Benefit Obligation	\$26,385,205
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$4,139,717
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$30,524,922
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$7,970,562
H.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

*Estimated

ROCHESTER POLICE CONSOLIDATION ACCOUNT

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	32 27	\$8,650,543 8,743,070	\$5,628,654 6,386,086
c. Total	59	\$17,393,613	\$12,014,740
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0 3	\$0 142,107	\$0 142,107
c. Total	3	\$142,107	\$142,107
3. Benefit Recipientsa. Elected PERA Police and Fire*b. Elected Relief Association	31 31	\$5,873,311 7,115,891	\$5,873,311 7,115,891
c. Total	62	\$12,989,202	\$12,989,202
 4. Total a. Elected PERA Police and Fire* b. Elected Relief Association c. No Election (Greater Value) d. Total 	63 31 30	\$14,523,854 7,115,891 8,885,177 	\$11,501,965 7,115,891 6,528,193
d. Ibtai	Z=====================================	######################################	222222222
B. DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABILI	ITY (UAAL)	
 AAL (A4) Current Assets (12.84% of Table) 	\$25,146,049 18,414,643		
3. UAAL (B1-B2)			\$6,731,406
C. NORMAL COST			\$480,448

^{*} Includes MPRIF Reserves of \$5,619,424

ROCHESTER POLICE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

A.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9E) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$14,523,854 7,115,891 8,885,177
	4. Total	\$30,524,922
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$1,332,996 914,387
	3. Total	\$2,247,383
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$1,999,494 1,371,581
	3. Total	\$3,371,075
D.	CURRENT VALUE OF TOTAL ASSETS (12.84% of Table 1, F6)	\$18,414,643
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain)	\$8,725,282 (3,224,988)
	(Table 11E, B.2.b + B.2.c + B.2.d) 3. Total	\$5,500,294
F.	LOSS (GAIN) [A-B-C-D-E]	\$991,527
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$43,956 0 947,571
	4. Total	\$991,527
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$114,628

\$1,142,214

ROCHESTER POLICE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

				Percent of <u>Payroll</u>	Dollar <u>Amount</u>
A.	EMPLOYEE CONTRIBUTIONS			8.00%	\$211,581 *
В.	EMPLOYER CONTRIBUTIONS (Before Adjustment For State Aid)				
	 Regular municipal contribution Additional municipal contribution 			12.00%	\$317,371 *
		<u>Established</u>	Current <u>Balance</u>	Last Payment	Payment Amount **
	a. b. c. d. e.	Initial 7/1/88 7/1/89 7/1/90 7/1/91	\$8,725,282 0 0 (3,224,988) 991,527	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$885,157 0 0 (386,523) 114,628
	f.	Total	\$6,491,821		\$613,262

ESTIMATED TOTAL STATUTORY CONTRIBUTION

C.

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

WINONA FIRE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE												
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL			
<25 25-29												
30-34 35-39				1 3	2				1 5			
40-44 45-49				1	1	1 2			3 2			
50-54 55-59						2	6	1	2 7			
60-64 65+							1	4	5			
ALL				5	3	5	7	5	25			
AVERAGE ANNUAL EARNINGS												
					F SERVICE				 			
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL			
<25 25-29												
30-34 35-39				33,503 35,561	34,219				33,503 35,024			
40-44 45-49				33,368	35,006	33,439 36,712			33,937 36,712			
50-54 55-59						34,216	35,786	37,631	34,216 36,049			
60-64 65+							37,656	36,620	36,827			
ALL								36,822	-			
AGE	PRIOR <1	FISCAL 1-4	YEAR EA 5-9	RNINGS	ACTUAL [15-19	00LLARS) 20-24	BY YEARS 25-29	OF SERV 30+				
	<u> </u>	<u> </u>							ALL			
ALL				173,554	103,445	175,296	252,372	184,113	888,780			

WINONA FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

YEARS RETIRED											
<u>age</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64		1	1	4				2 5			
65-69 70-74		1	2	2 2	3			8 2			
75-79 80-84				1	1	1		2 2			
85+											
All		3	3	9	4	2		21			
AVERAGE ANNUAL BENEFIT											
				EARS RETI							
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64		14,539 22,977	14,640	16,380				14,590 17,699			
65-69 70-74		16,833	18,602	17,453 15,822	15,394			16,891 15,822			
75-79 80-84				18,328	17,105	15,822 15,822		17,075 16,464			
85+											
ALL		18,116	17,281	16,711	15,822	15,822		16,739			
		L ANNUAL	BENEFIT	(ACTUAL D		Y YEARS R					
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
ALL		54,348	51,843	150,399	63,288	31,644		351,519			
				- 91 -				•			

WINONA FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

	YEARS SINCE DEATH												
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL					
<50 50-54				2 1				2 1					
55-59 60-64		1	1					2					
65-69 70-74			1		1	1	1	3 2					
75-79 80-84		1			2	1	2	3 3					
85+				1	1			2					
ALL		2	3	4	4	2	3	18					
AVERAGE ANNUAL BENEFIT													
				RS SINCE									
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL					
<50 50-54				10,263 7,697				10,263 7,697					
55-59 60-64		7,309	7,697					7,503					
65-69 70-74			7,697 7,320		7,694	7,697	7,697	7,696 7,509					
75-79 80-84		7,697			7,697	7,697	7,694	7,697 7,695					
85+				7,320	7,697			7,509					
ALL		7,503	7,571	8,886	7,696	7,697	7,695	7,918					
						YEARS SIN							
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL					
ALL		15,006	22,713	35,544	30,784	15,394	23,085	142,524					

WINONA FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

	YEARS DISABLED										
AGE	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54		1						1			
55-59 60-64											
65-69 70-74											
75-79 80-84											
85+											
ALL		2						2			
AVERAGE ANNUAL BENEFIT											
			YEA	RS DISABL	ED						
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54		13,014 13,014						13,014 13,014			
55-59 60-64											
65-69 70-74											
75-79 80-84											
85+											
ALL		13,014						13,014			
	TOTA	AL ANNUAL	BENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS	ABLED				
AGE	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL			
ALL		26,028						26,028			

WINONA FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Terminated	
		<u> Actives</u>	Deferred Retirement	Other Non-Vested
		Actives	<u>Retifement</u>	Non-vested
A.	ON JUNE 30, 1990	25	0	0
В.	ADDITIONS	0	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	23 2		
E.	TOTAL ON JUNE 30, 1991	25	0	0
			Recipients	
		Retirement Annuitants	Disabled	Survivors
A.	ON JUNE 30, 1990	22	2	17
В.	ADDITIONS	0	0	1
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (1) 0 0	0 0 0 0	0 0 0
D.	DATA ADJUSTMENTS	0	0	0
Ε.	TOTAL ON JUNE 30, 1991	21	2	18

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

JULY 1, 1991

A.	CURRENT ASSETS (5.13% of Table 1, F6)	\$7, 361,841
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$497,867 746,800 4,123,814
	4. Total Expected Future Assets	\$5,368,481
С.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$12,730,322
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$6,223,009
	2. Current Employees	
	a. Accumulated Employee Contributions \$700,927 Including Allocated Investment Income*	
	b. Employer-Financed Vested 4,304,331	
	c. Employer-Financed Nonvested 635,085 d. Total	\$5,640,343
	3. Total Pension Benefit Obligation	\$11,863,352
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$866,971
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$12,730,323
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$4,501,511
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$1

*Estimated

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED	Number of <u>Participants</u>	Present Value of Projected Benefits	Actuarial Accrued <u>Liability</u>
LIABILITY (AAL)			
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	21 4	\$5,443,743 1,063,571	\$4,579,520 669,204
c. Total	25	\$6,507,314	\$5,248,724
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and Fires b. Elected Relief Association 	36 5	\$5,026,323 1,196,686	\$5,026,323 1,196,686
c. Total	41	\$6,223,009	\$6,223,009
 4. Total a. Elected PERA Police and Fire b. Elected Relief Association c. No Election (Greater Value) 	5 4	\$10,470,066 1,196,686 1,063,571	\$9,605,843 1,196,686 669,204
d. Total	66 =========	\$12,730,323	\$11,471,733
B. DETERMINATION OF UNFUNDED ACTUARIA	L ACCRUED LIABIL	ITY (UAAL)	
 AAL (A4) Current Assets (5.13% of Table 3 	1,F6)		\$11,471,733 7,361,841
3. UAAL (B1-B2)			\$4,109,892
C. NORMAL COST			\$171,858

^{*} Includes MPRIF Reserves of \$4,171,725

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

A.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9F) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$10,470,066 1,196,686 1,063,571
	4. Total	\$12,730,323
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$357,071 140,796
	3. Total	\$497,867
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$535,606 211,194
	3. Total	\$746,800
D.	CURRENT VALUE OF TOTAL ASSETS (5.13% of Table 1, F6)	\$7,361,841
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11F, B.2.b + B.2.c + B.2.d) 3. Total	\$6,899,093 (3,865,591) \$3,033,502
F.	LOSS (GAIN) [A-B-C-D-E]	\$1,090,312
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	(\$75,584) 0 1,165,896
	4. Total	\$1,090,312
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$126,048

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

				Percent of Payroll	Dollar <u>Amount</u>
A.	EMPLOYEE CONTRIBUT	IONS		8.00%	\$75,724 *
В.	EMPLOYER CONTRIBUT (Before Adjustment		d)		
	 Regular munici Additional mun 			12.00%	\$113,586 *
	<u>Es</u>	stablished	Current Balance	Last Payment	Payment Amount **
	a. b. c. d. e.	Initial 7/1/88 7/1/89 7/1/90 7/1/91	\$6,899,093 0 0 (3,865,591) 1,090,312	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$699,895 0 0 (463,301) 126,048
	f.	Total	\$4,123,814		\$362,642
С.	ESTIMATED TOTAL ST	FATUTORY CONTR	RIBUTION		\$551,952

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

ST. CLOUD FIRE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE												
AGE	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL			
<25 25-29												
30-34 35-39												
40-44 45-49	•					4 7			4 7			
50-54 55-59					\	3	3 2	1 1	7 3			
60-64 65+								1	1			
ALL						14	5	3	22			
	AVERAGE ANNUAL EARNINGS											
			1	YEARS OF	SERVICE				77			
<u>AGE</u>	<u><1</u>	1-4	5-9	10-14	15-19	20-24	25-29	<u>30+</u>	ALL			
<25 25-29												
30-34 35-39												
40-44 45-49						35,745 35,616			35,745 35,616			
50-54 55-59						33,712	41,310 39,645		38,398 43,389			
60-64 65+								47,186	47,186			
ALL						35,245	40,644	47,261	38,110			
	PRIOR	FISCAL Y	EAR EAR	RNINGS (A	ACTUAL DO	LLARS)	BY YEARS	OF SERV	ICE			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL			
ALL					4	193,433	203,223	141,784	838,440			

ST. CLOUD FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

	YEARS_RETIRED												
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL					
<50 50-54		1						1					
55-59 60-64		2	4	2				2 6					
65-69 70-74	1	2	2	1	4 1	1		11 1					
75-79 80-84						1		1					
85+							1	1					
ALL	1	5	6	3	5	2	1	23					
AVERAGE ANNUAL BENEFIT													
	YEARS RETIRED												
<u>AGE</u>	<u><1</u>	<u>1-4</u>	5-9	10-14	15-19	20-24	25+	ALL					
<50 50-54		18,788						18,788					
55-59 60-64		18,099	18,279	17,938				18,099 18,165					
65-69 70-74	29,905	25,358	19,074	17,711	17,711 19,074	16,349		20,334 19,074					
75-79 80-84						17,711		17,711					
85+							14,532	14,532					
ALL	29,905	21,140	18,544	17,862	17,984	17,030	14,532	19,086					
	TOT	AL ANNUAL	BENEFIT	(ACTUAL D	OLLARS) B	Y YEARS R	ETIRED						
<u>AGE</u>	<u> </u>	1-4	5-9	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL					
ALL	29,905	105,700	111,264	53,586	89,920	34,060	14,532	438,978					

ST. CLOUD FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH											
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54		1						1			
55-59 60-64		2	1	. 1				1 3			
65-69 70-74											
75-79 80-84							2	2			
85÷						1	1	2			
ALL		3	1	1		1	3	9			
AVERAGE ANNUAL BENEFIT											
				RS SINCE							
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54		10,899						10,899			
55-59 60-64		10,899	10,899	10,899				10,899 10,899			
65-69 70-74											
75-79 80-84							10,899	10,899			
85+				•		10,899	10,899	10,899			
ALL		10,899	10,899	10,899		10,899	10,899	10,899			
405			ENEFIT (AC		LARS) BY	YEARS SIN					
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
ALL		32,697	10,899	10,899		10,899	32,697	98,091			

ST. CLOUD FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

			YEA	RS DISABL	.ED			
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
			AVERAGE	ANNUAL B	ENEFIT			
			YEA	RS DISABL				
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
205		ANNUAL E	BENEFIT (ACTUAL DO		YEARS DIS		
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
ALL								

ST. CLOUD FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

				inated
		<u>Actives</u>	Deferred <u>Retirement</u>	Other <u>Non-Vested</u>
A.	ON JUNE 30, 1990	23	0	0
В.	ADDITIONS	0	0	0
c.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	(1) 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	22 0		
E.	TOTAL ON JUNE 30, 1991	22	0	0
		Retirement Annuitants	Recipients Disabled	Survivors
A.	ON JUNE 30, 1990	22	0	11
В.	ADDITIONS	1	0	0
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 0 0 0	0 0 0	0 (2) 0 0
D.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	23	0	9

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

JULY 1, 1991

A.	CURRENT ASSETS (4.91% of Table 1, F6)	\$7,037,169
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$561,355 842,032 5,401,128
	4. Total Expected Future Assets	\$6,804,515
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$13,841,684
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$6,770,210
	2. Current Employees	
	a. Accumulated Employee Contributions \$711,854 Including Allocated Investment Income*	
	b. Employer-Financed Vested 4,466,382	
	c. Employer-Financed Nonvestedd. Total	\$5,178,236
	3. Total Pension Benefit Obligation	\$11,948,446
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$1,893,237
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$13,841,683
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$4,911,277
H.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	(\$1)
	•	

*Estimated

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	9 13	\$2,793,891 4,277,582	\$2,328,799 3,222,930
c. Total	22	\$7,071,473	\$5,551,729
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	29 3	\$5,519,649 1,250,561	\$5,519,649 1,250,561
c. Total	32	\$6,770,210	\$6,770,210
4. Totala. Elected PERA Police and Fire*b. Elected Relief Associationc. No Election (Greater Value)	38 3 13	\$8,313,540 1,250,561 4,277,582	\$7,848,448 1,250,561 3,222,930
d. Total	54 ==========	\$13,841,683	\$12,321,939
B. DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABILI	ITY (UAAL)	
 AAL (A4) Current Assets (4.91% of Table 1 	,F6)		\$12,321,939 7,037,169
3. UAAL (B1-B2)			\$5,284,770
C. NORMAL COST			\$179,103

^{*} Includes MPRIF Reserves of \$5,090,542

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9G) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$8,313,540 1,250,561 4,277,582
	4. Total	\$13,841,683
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$211,968 349,386
	3. Total	\$561,354
С.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$317,952 524,079
	3. Total	\$842,031
D.	CURRENT VALUE OF TOTAL ASSETS (4.91% of Table 1, F6)	\$7,037,169
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11G, B.2.b + B.2.c + B.2.d) 3. Total	\$6,265,711 (1,973,340) \$4,292,371
F.	LOSS (GAIN) [A-B-C-D-E]	\$1,108,757
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	(\$231,611) 0 1,340,368
	4. Total	\$1,108,757
H.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$128,180

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

				Percent of Payroll	Dollar <u>Amount</u>
A.	EMPLOYEE CONTRI	BUTIONS		8.00%	\$71,435 *
В.	EMPLOYER CONTRI (Before Adjustm	BUTIONS ment For State Ai	d)		
		nicipal contribut municipal contri		12.00%	\$107,153 *
		<u>Established</u>	Current Balance	Last <u>Payment</u>	Payment Amount **
	a. b.	Initial 7/1/88	\$6,265,711 0	12/31/2010 12/31/2002	\$635,640 0
	c. d. e.	7/1/89 7/1/90 7/1/91	0 (1,973,340) 1,108,757	12/31/2003 12/31/2004 12/31/2005	(236,510) 128,180

\$5,401,128

C. ESTIMATED TOTAL STATUTORY CONTRIBUTION

\$705,898

\$527,310

f.

Total

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

HIBBING POLICE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE									
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	25-29	<u> 30+</u>	ALL
<25 25-29									
30-34 35-39				1	1				1 2
40-44 45-49				1	3 2	2			4 5
50-54 55-59						3	2		3 2
60-64 65+							1		1
ALL				4	6	5	3		18
			AVER	AGE ANNU	JAL EARN:	INGS			
					SERVIC				
<u>age</u>	<1	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u> 30+</u>	ALL
<25 25-29									
30-34 35-39				38,828 34,995	37,071				38,828 36,033
40-44 45-49				33,764 36,623	37,210 37,201	40,107			36,348 38,248
50-54 55-59						38,795	41,907		38,795 41,907
60-64 65+							39,519		39,519
ALL				36,052	37,184	39,320	41,111		38,180
à - -	PRIOR	FISCAL Y	EAR EA	RNINGS	ACTUAL E		BY YEARS		
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u> 25-29</u>	<u>30+</u>	ALL
ALL				144,210	223,104	196,601	123,334	·.	687,249

HIBBING POLICE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

				ARS RETI				
<u>age</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64		2	2					2 2
65-69 70-74		1		2	1	1		4 1
75-79 80-84					1		1 2	1 3
85+					1			1
ALL		3	2	2	3	1	3	14
			AVERAGE	ANNUAL	BENEFIT			
			YE	ARS RETI	RED			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64		20,289	23,156					20,289 23,156
65-69 70-74		21,354		18,027	17,319	1,575		14,746 17,319
75-79 80-84					15,499		1,575 17,855	1,575 17,070
85+					16,443			16,443
ALL		20,644	23,156	18,027	16,420	1,575	12,428	16,602
	TOTA	L ANNUAL	BENEFIT (ACTUAL D	OLLARS) BY	YEARS R	ETIRED	
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL		61,932	46,312	36,054	49,260	1,575	37,284	232,428
			-	109 -				•

HIBBING POLICE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

ACE				S SINCE I				
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54		1						1
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+					2		1	3
ALL		1			2		1	4
			AVERAGE	ANNUAL B	ENEFIT			
			YEAR	S SINCE D	EATH		· · · · · · · · · · · · · · · · · · ·	
<u>age</u>	≤1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54		9,184						9,184
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+					3,280		3,280	3,280
ALL		9,184			3,280		3,280	4,756
405	TOTAL	ANNUAL BE	NEFIT (AC	TUAL DOLL	ARS) BY Y	EARS SINC		
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL		9,184			6,560		3,280	19,024

HIBBING POLICE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

			YEA	ARS DISABL	.ED			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u> 15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64	1							1
65-69 70-74								
75-79 80-84								
85+								
ALL	1							1
			AVERAGE	ANNUAL E	ENEFIT			
			YEA	RS DISABL				
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64	15,183							15,183
65-69 70-74								
75-79 80-84								
85+								
ALL	15,183							15,183
405	TOTAL	ANNUAL	BENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS	ABLED	
<u>age</u>	<u><1</u>	<u>1-4</u>	5-9	10-14	15-19	20-24	<u>25+</u>	ALL
ALL	15,183							15,183

HIBBING POLICE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		<u> Actives</u>	Deferred Retirement	Other <u>Non-Vested</u>
A.	ON JUNE 30, 1990	20	0	0
В.	ADDITIONS	0	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	(1) (1) 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	18 0		
E.	TOTAL ON JUNE 30, 1991	18	0	0
		Dotinoment	Recipients	
		Retirement Annuitants	Disabled	Survivors
A.	ON JUNE 30, 1990	13	0	4
В.	ADDITIONS	1	1	0
c.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 0 0	0 0 0 0	0 0 0
D.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	14	1	4

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

JULY 1, 1991

A.	CURRENT ASSETS (1.89% of Table 1, F6)	\$2,714,963
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$500,175 750,263 3,415,440
	4. Total Expected Future Assets	\$4,665,878
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$7,380,841
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$2,855,579
	2. Current Employees	
	a. Accumulated Employee Contributions \$521,895 Including Allocated Investment Income*	
	b. Employer-Financed Vested 2,531,165 c. Employer-Financed Nonvested 935,710	
	d. Total	\$3,988,770
	3. Total Pension Benefit Obligation	\$6,844,349
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$536,492
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$7,380,841
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$4,129,386
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

*Estimated

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	17 1	\$4,192,880 332,382	\$3,036,550 283,378
c. Total	18	\$4,525,262	\$3,319,928
 Former Members Elected PERA Police and Fire No Election (Greater Value) 	0 0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	19 0	\$2,855,579 0	\$2,855,579 0
c. Total	19	\$2,855,579	\$2,855,579
4. Totala. Elected PERA Police and Fire*b. Elected Relief Associationc. No Election (Greater Value)	36 0 1	\$7,048,459 0 332,382	\$5,892,129 0 283,378
d. Total	37 ====================================	\$7,380,841	\$6,175,507
B. DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABILI	ITY (UAAL)	
 AAL (A4) Current Assets (1.89% of Table 1 	,F6)		\$6,175,507 2,714,963
3. UAAL (B1-B2)			\$3,460,544
C. NORMAL COST			\$135,223

^{*} Includes MPRIF Reserves of \$2,594,465

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9H) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$7,048,459 0 332,382
	4. Total	\$7,380,841
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$486,197 13,978
	3. Total	\$500,175
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$729,295 20,967
	3. Total	\$750,262
D.	CURRENT VALUE OF TOTAL ASSETS (1.89% of Table 1, F6)	\$2,714,963
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11H, B.2.b + B.2.c + B.2.d) 3. Total	\$3,216,771 (1,326,842) \$1,889,929
F.	LOSS (GAIN) [A-B-C-D-E]	\$1,525,511
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other 4. Total	\$465,363 0 1,060,148 \$1,525,511
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$176,360

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

				Percent of Payroll	Dollar Amount
A.	EMPLOYEE CONTRIBUT	IONS		8.00%	\$58,554 *
В.	EMPLOYER CONTRIBUT (Before Adjustment		d)		
	 Regular munici Additional mun 			12.00%	\$87,830 *
	<u>Es</u>	tablished	Current Balance	Last <u>Payment</u>	Payment Amount **
	a. b. c. d. e.	Initial 7/1/88 7/1/89 7/1/90 7/1/91	\$3,216,771 0 0 (1,326,842) 1,525,511	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$326,333 0 0 (159,025) 176,360
	f.	Total	\$3,415,440		\$343,668
C.	ESTIMATED TOTAL ST	TATUTORY CONTR	RIBUTION		\$490,052

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

HIBBING FIRE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

	YEARS_OF_SERVICE								
<u>AGE</u>	<1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u> 30+</u>	ALL
<25 25-29									
30-34 35-39				1 2					1 2
40-44 45-49				4	5	1			10
50-54 55-59					1	2	3 1		6 1
55-55		•		•			1		1
60-64 65 +								1	1
ALL				7	6	3	4	1	21
			AVE	RAGE ANNU	JAL EARN	INGS			
					F SERVIC				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL
<25 25-29									
30-34 35-39				33,106 32,572					33,106 32,572
40-44 45-49				32,863	34,060	35,194			33,694
50-54 55-59					36,001	33,752	32,072 33,664		33,286 33,664
60-64 65+								42,017	42,017
ALL				32,814	34,383	34,232	32,470	42,017	33,838
405							BY YEARS		
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL
ALL				229,702	206,303	102,698	129,880	42,017	710,600

HIBBING FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

YEARS RETIRED											
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64		1	11					1 11			
65-69 70-74				2 1				2 1			
75-79 80-84											
85+						1		. 1			
ALL		1	11	3		1		16			
	AVERAGE ANNUAL BENEFIT										
			YE	ARS RETI							
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64		17,812	17,388					17,812 17,388			
65-69 70-74				14,023 16,908				14,023 16,908			
75-79 80-84											
85+						7,406		7,406			
ALL		17,812	17,388	14,985		7,406		16,340			
	TOT/	AL ANNUAL	BENEFIT (ACTUAL D	OLLARS) BY	YEARS RE	TIRED				
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL			
ALL		17,812	191,268	44,955		7,406		261,440			
			•	- 118 -				٠			

HIBBING FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

	YEARS SINCE DEATH									
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54										
55-59 60-64				1			1	1		
65-69 70-74			1				1	2		
75-79 80-84							1 2	1 2		
85+				1	1	2	1	5		
ALL			1	2	1	2	6	12		
	AVERAGE ANNUAL BENEFIT									
				S SINCE D						
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54										
55-59 60-64				6,121			3,280	3,280 6,121		
65-69 70-74			3,280				3,280	3,280		
75-79 80-84							3,280 3,280	3,280 3,280		
85+				3,280	3,280	3,280	3,153	3,255		
ALL			3,280	4,701	3,280	3,280	3,259	3,506		
	TOTAL A	NNUAL BE	NEFIT (AC	TUAL DOLL	ARS) BY Y	EARS SING	CE DEATH			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
ALL			3,280	9,402	3,280	6,560	19,554	42,072		
				110						

HIBBING FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

			YEA	RS DISABL	.ED			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u> 20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
			AVERAGE	ANNUAL B	ENEFIT			
		· · · · · · · · · · · · · · · · · · ·	YEA	RS DISABL		·		
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
	TOTAL	ANNUAL E	ENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS	ABLED	
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	25+	ALL
ALL								

HIBBING FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		Actives	Deferred Retirement	Other <u>Non-Vested</u>
A.	ON JUNE 30, 1990	21	0	0
В.	ADDITIONS	0	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	21 0		
E.	TOTAL ON JUNE 30, 1991	21	0	0
		Retirement Annuitants	Recipients Disabled	Survivors
A.	ON JUNE 30, 1990	17	0	12
В.	ADDITIONS	0	0	1
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (1) 0 0	0 0 0 0	0 (1) 0 0
D.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	16	0	12

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

A.	CURRENT ASSETS (2.73% of Table 1, F6)	\$3,911,175
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$568,557 852,836 2,923,371
	4. Total Expected Future Assets	\$4,344,764
С.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$8,255,939
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$3,676,177
	2. Current Employees	
	a. Accumulated Employee Contributions \$542,577 Including Allocated Investment Income*	
	b. Employer-Financed Vested 2,432,358 c. Employer-Financed Nonvested 1,017,352	
	d. Total	\$3,992,287
	3. Total Pension Benefit Obligation	\$7,668,464
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$587,475
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$8,255,939
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$3,757,289
H.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued Liability
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	21 0	\$4 ,579,762 0	\$3,242,966 0
c. Total	21	\$4,579,762	\$3,242,966
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
3. Benefit Recipientsa. Elected PERA Police and Fire*b. Elected Relief Association	27 1	\$3,358,244 317,933	\$3,358,244 317,933
c. Total	28	\$3,676,177	\$3,676,177
4. Totala. Elected PERA Police and Fire*b. Elected Relief Associationc. No Election (Greater Value)	48 1 0	\$7,938,006 317,933 0	\$6,601,210 317,933 0
d. Total	49	\$8,255,939	\$6,919,143
B. DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABILI	TY (UAAL)	
 AAL (A4) Current Assets (2.73% of Table 1 	,F6)		\$6,919,143 3,911,175
3. UAAL (B1-B2)			\$3,007,968
C. NORMAL COST			\$132,690

^{*} Includes MPRIF Reserves of \$3,220,322

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

A.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 91) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$7,938,006 317,933 0
	4. Total	\$8,255,939
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$568,557 0
	3. Total	\$568,557
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$852,836 0
	3. Total	\$852,836
D.	CURRENT VALUE OF TOTAL ASSETS (2.73% of Table 1, F6)	\$3,911,175
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11I, B.2.b + B.2.c + B.2.d) 3. Total	\$4,228,970 (2,583,090) \$1,645,880
F.	LOSS (GAIN) [A-B-C-D-E]	\$1,277,491
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other 4. Total	\$189,543 0 1,087,948 \$1,277,491
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$147,687

\$418,473

HIBBING FIRE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

				Percent of Payroll	Dollar Amount
A.	EMPLOYEE CONTRI	IBUTIONS		8.00%	\$60,543
В.	EMPLOYER CONTRI (Before Adjustm	IBUTIONS ment For State Ai	id)		
		nicipal contribut municipal contri		12.00%	\$90,815
		<u>Established</u>	Current <u>Balance</u>	Last <u>Payment</u>	Payment Amount **
	a. b. c. d. e.	Initial 7/1/88 7/1/89 7/1/90 7/1/91	\$4,228,970 0 0 (2,583,090) 1,277,491	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$429,018 0 0 (309,590) 147,687
	f.	Total	\$2,923,371		\$267,115

ESTIMATED TOTAL STATUTORY CONTRIBUTION

C.

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

ST. LOUIS PARK FIRE CONSOLIDATION ACCOUNT
ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE											
<u>age</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	30+	ALL		
<25 25-29											
30-34 35-39				2	1				3		
40-44 45-49				1 1	3 2	2			4 5		
50-54 55-59						3	1		3 1		
60-64 65+											
ALL				4	6	5	1		16		
AVERAGE ANNUAL EARNINGS											
					F SERVIC		·				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	25-29	<u>30+</u>	ALL		
<25 25-29											
30-34 35-39				44,896	43,626				44,472		
40-44 45-49				41,986 45,676	45,729 45,168	43,252			44,793 44,503		
50-54 55-59						45,242	46,537		45,242 46,537		
60-64 65+											
ALL							46,537		44,835		
AGE	PRIOR <1	FISCAL 1-4	YEAR EAL	RNINGS	(ACTUAL I	DOLLARS)	BY YEARS				
	77	4-4	<u>5-9</u>	<u>10-14</u>				<u>30+</u>	ALL		
ALL			:	177,454	271,149	222,230	46,537		717,370		

ST. LOUIS PARK FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

	YEARS RETIRED											
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54	1							1				
55-59 60-64	1	2			1			1 3				
65-69 70-74		1		2	1 2			4 2				
75-79 80-84				1				1				
85+												
ALL	2	3		3	4			12				
AVERAGE ANNUAL BENEFIT												
	YEARS RETIRED											
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 5 0-54	19,595							19,595				
55-59 60-64	21,648	22,303			18,841			21,648 21,149				
65-69 70-74		23,495		21,479	19,429 20,160			21,471 20,160				
75-79 80-84				22,610				22,610				
85+												
ALL	20,622	22,700		21,856	19,648			21,125				
<u>AGE</u>		AL ANNUAL 1-4	BENEFIT (ACTUAL D 10-14	OLLARS) B' 15-19	Y YEARS RE 20-24	TIRED 25+	ALL				
						<u> </u>	<u> 23T</u>					
ALL	41,244	68,100		65,568	78,592			253,500				

ST. LOUIS PARK FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH											
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54						1		1			
55-59 60-64			1					1			
65-69 70-74		2		1	1			3 1			
75-79 80-84		1				1		2			
85+											
ALL		3	2	1	1	2		9			
AVERAGE ANNUAL BENEFIT											
ACE		1: 4	YEA	RS SINCE		20.04	05.	A2.1			
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54						15,073		15,073			
55-59 60-64			15,073 15,073					15,073 15,073			
65-69 70-74		15,073		15,238	15,073			15,073 15,238			
75-79 80-84		15,073				15,073		15,073			
85+											
ALL			15,073			ŕ		15,091			
<u>AGE</u>		ANNUAL BI	ENEFIT (AC <u>5-9</u>	TUAL DOL 10-14	LARS) BY 15-19	YEARS SING 20-24	E DEATH 25+	ALL			
ALL	<u> </u>		30,146			30,146	<u> </u>	135,819			

ST. LOUIS PARK FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

	YEARS DISABLED											
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54			1		1			2				
55-59 60-64												
65-69 70-74												
75-79 80-84												
85+												
ALL			1		1			2				
AVERAGE ANNUAL BENEFIT												
			YEA	RS DISABL				1.				
AGE	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL				
<50 50-54			18,841		18,841			18,841				
55-59 60-64												
65-69 70-74												
75-79 80-84												
85+												
ALL			18,841		18,841			18,841				
.		ANNUAL	BENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS						
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
ALL			18,841		18,841		-	37,682				
				100								

ST. LOUIS PARK FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		S.A. Sunn	Deferred	Other
		Actives	Retirement	Non-Vested
Α.	ON JUNE 30, 1990	18	0	0
В.	ADDITIONS	0	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	(2) 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	6 10		
E.	TOTAL ON JUNE 30, 1991	16	0	0
			Recipients	
		Retirement Annuitants	<u>Disabled</u>	Survivors
A.	ON JUNE 30, 1990	11	2	8
В.	ADDITIONS	2	0	2
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (1) 0 0	0 0 0 0	0 0 0 0
D.	DATA ADJUSTMENTS	0	0	(1)
Ε.	TOTAL ON JUNE 30, 1991	12	2	9

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

A.	CURRENT ASSETS (5.14% of Table 1, F6)	\$7,371,302
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$718,726 1,078,088 2,865,346
	4. Total Expected Future Assets	\$4,662,160
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$12,033,462
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$6,741,659
	2. Current Employees	
	a. Accumulated Employee Contributions \$519,411 Including Allocated Investment Income*	
	b. Employer-Financed Vested 2,517,630 c. Employer-Financed Nonvested 1,137,234	
	d. Total	\$4,174,275
	3. Total Pension Benefit Obligation	\$10,915,934
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$1,117,528
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$12,033,462
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$3,544,632
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	1 15	\$294,979 4,996,824	\$222,661 3,029,766
c. Total	16	\$5,291,803	\$3,252,427
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	4 19	\$1,039,131 5,702,528	\$1,039,131 5,702,528
c. Total	23	\$6,741,659	\$6,741,659
 Total a. Elected PERA Police and Fire* b. Elected Relief Association c. No Election (Greater Value) 	5 19 15	\$1,334,110 5,702,528 4,996,824	\$1,261,792 5,702,528 3,029,766
d. Total	39	\$12,033,462	\$9,994,086
B. DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABIL		
 AAL (A4) Current Assets (5.14% of Table 1 	,F6)		\$9,994,086 7,371,302
3. UAAL (B1-B2)			\$2,622,784
C. NORMAL COST			\$165,865

^{*} Includes MPRIF Reserves of \$1,039,131

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9J) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$1,334,110 5,702,528 4,996,824
	4. Total	\$12,033,462
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$31,252 687,473
	3. Total	\$718,725
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$46,879 1,031,210
	3. Total	\$1,078,089
D.	CURRENT VALUE OF TOTAL ASSETS (5.14% of Table 1, F6)	\$7,371,302
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain)	\$3,212,720 (423,426)
	(Table 11J, B.2.b + B.2.c + B.2.d) 3. Total	\$2,789,294
F.	LOSS (GAIN) [A-B-C-D-E]	\$76,052
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	(\$20,765) (136,905) 233,722
	4. Total	\$76,052
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$8,792

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

			Percent of Payroll	Dollar <u>Amount</u>
A.	EMPLOYEE CONTRIBUTIONS		8.00%	\$61,120 *
В.	EMPLOYER CONTRIBUTIONS (Before Adjustment For Sta	te Aid)		
	 Regular municipal cont Additional municipal c 		12.00%	\$91,680 *
	<u>E</u> stabli <u>she</u>	Current d Balance	Last <u>Payment</u>	Payment Amount **
	a. Initial b. 7/1/88 c. 7/1/89 d. 7/1/90 e. 7/1/91	\$3,212,720 0 0 (423,426) 76,052	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$325,922 0 0 (50,749) 8,792
	f. Total	\$2,865,346		\$283,965
C.	ESTIMATED TOTAL STATUTORY	CONTRIBUTION		\$436,765

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

ANOKA POLICE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE											
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL		
<25 25-29											
30-34 35-39											
40-44 45-49						1	1		2		
50-54 55-59											
60-64 65+											
ALL						1	1		2		
AVERAGE ANNUAL EARNINGS											
			•	YEARS OF	SERVICE						
<u>AGE</u>	<1	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL		
<25 25-29											
30-34 35-39											
40-44 45-49						47,857	58,734		53,295		
50-54 55-59											
60-64 65+											
ALL						47,857	58,734		53,295		
		FISCAL Y	EAR EAR	RNINGS (ACTUAL D	OLLARS)	BY YEARS		ICE		
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL		
ALL						47,857	58,734	٠,	106,591		

ANOKA POLICE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

	YEARS_RETIRED											
<u>AGE</u>	≤1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54		1						1				
55-59 60-64			1	1				1 2				
65-69 70-74				1	2			3				
75-79 80-84												
85+												
ALL		1	2	2	2			7				
AVERAGE ANNUAL BENEFIT												
				EARS RETI								
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL				
<50 50-54		17,827						17,827				
55-59 60-64			18,547 18,547	18,547				18,547 18,547				
65-69 70-74				18,547	18,547			18,547				
75-79 80-84												
85+												
ALL		17,827	18,547	•				18,444				
ACE	TOTA	AL ANNUAL	BENEFIT	(ACTUAL D	OLLARS) B	Y YEARS RE						
<u>AGE</u>	<1	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	<u>ALL</u>				
ALL		17,827	37,094	37,094	37,094			129,108				
				- 136 -				•				

ANOKA POLICE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH											
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50- 54											
55-59 60-64				1	1			2			
65-69 70-74					1			1			
75-79 80-84							1	1			
85+											
ALL				1	2		1	4			
AVERAGE ANNUAL BENEFIT											
<u>AGE</u>	<1	1-4	YEAF 5-9	S SINCE 10-14		20.24	25	A11			
	74	1-4	2-3	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64				12,352	12,352			12,352			
65-69 70-74					11,297			11,297			
75-79 80-84							984	984			
85+											
ALL				12,352	11,825		984	9,246			
405	TOTAL A	NNUAL BEN	EFIT (AC	TUAL DOL	LARS) BY	YEARS SINC					
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
ALL				12,352	23,650		984	36,984			

ANOKA POLICE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

405				RS DISABL				
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64			÷					
65-69 70-74								
75-79 80-84								
85+								
ALL								
			AVERAGE	ANNUAL B	ENEFIT			
				RS DISABL				
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
405	TOTAL	ANNUAL B	ENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS		·
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL								

ANOKA POLICE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		Antiuna	Deferred	Other
		<u>Actives</u>	<u>Retirement</u>	<u>Non-Vested</u>
A.	ON JUNE 30, 1990	2	0	0
B.	ADDITIONS	0	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	2 0		
E.	TOTAL ON JUNE 30, 1991	2	0	0
			Recipients	
		Retirement Annuitants	<u>Disabled</u>	Survivors
A.	ON JUNE 30, 1990	7	0	4
В.	ADDITIONS	0	0	0
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 0 0 0	0 0 0 0	0 0 0
D.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	7	0	4

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

Α.	CURRENT ASSETS (1.62% of Table 1, F6)	\$2,328,522
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$70,038 105,057 347,767
	4. Total Expected Future Assets	\$522,862
С.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$2,851,384
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$2,059,766
	2. Current Employees	
	a. Accumulated Employee Contributions \$79,110 Including Allocated Investment Income*	
	b. Employer-Financed Vested 496,827 c. Employer-Financed Nonvested 0	
	d. Total	\$575,937
	3. Total Pension Benefit Obligation	\$2,635,703
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$215,680
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$2,851,383
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$307,181
H.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	(\$1)

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

Α.	DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
	 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0 2	\$ 0 791,617	\$0 617,159
	c. Total	2	\$791,617	\$617,159
	 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
	c. Total	0	\$0	\$0
	 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	10 1	\$1,920,323 139,443	\$1,920,323 139,443
	c. Total	11	\$2,059,766	\$2,059,766
	4. Totala. Elected PERA Police and Fire*b. Elected Relief Associationc. No Election (Greater Value)	10 1 2	\$1,920,323 139,443 791,617	\$1,920,323 139,443 617,159
	d. Total	13	\$2,851,383	\$2,676,925
В.	DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABILI	TY (UAAL)	
	1. AAL (A4) 2. Current Assets (1.62% of Table 1.	,F6)		\$2,676,925 2,328,522
	3. UAAL (B1-B2)			\$348,403
. c.	NORMAL COST			\$21,304

^{*} Includes MPRIF Reserves of \$1,755,362

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

A.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9K) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$1,920,323 139,443 791,617
	4. Total	\$2,851,383
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$0 70,038
	3. Total	\$70,038
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$0 105,057
	3. Total	\$105,057
D.	CURRENT VALUE OF TOTAL ASSETS (1.62% of Table 1, F6)	\$2,328,522
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain)	\$1,003,811 (683,370)
	(Table 11K, B.2.b + B.2.c + B.2.d) 3. Total	\$320,441
F.	LOSS (GAIN) [A-B-C-D-E]	\$27,326
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	(\$61,360) 0 88,686
	4. Total	\$27,326
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$3,159

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

			Percent of Payroll	Dollar <u>Amount</u>
A.	EMPLOYEE CONTRIBUTIONS		8.00%	\$9,082
В.	EMPLOYER CONTRIBUTIONS (Before Adjustment For Sta	te Aid)		
	 Regular municipal cont Additional municipal c 		12.00%	\$13,622
	<u>Establishe</u>	Current <u>d</u> <u>Balance</u>	Last Payment	Payment Amount **
	a. Initial b. 7/1/88 c. 7/1/89 d. 7/1/90 e. 7/1/91	\$1,003,811 0 0 (683,370) 27,326	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$101,834 0 0 (81,904) 3,159
	f. Total	\$347,767		\$23,089
C.	ESTIMATED TOTAL STATUTORY	CONTRIBUTION		\$45,793

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

RED WING POLICE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

		·		YEARS OF	SERVICE				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL
<25 25-29									
30-34 35-39									
40-44 45-49					2 1	2			2
50-54 55-59							1		1
60-64 65+									
ALL					3	2	1		6
			AVER	AGE ANNU	IAL EARNI	NGS			
			,	YEARS OF	SERVICE				
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u> 30+</u>	ALL
<25 25-29									
30-34 35-39									
40-44 45-49					40,079 37,562	41,780			40,079 40,374
50-54 55-59							45,193		45,193
60-64 65+									·
ALL					39,240	41,780	45,193		41,078
	PRIOR	FISCAL Y	EAR EA	RNINGS (ACTUAL D	OLLARS)	BY YEARS	OF SERV	ICE_
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL
ALL					117,720	83,560	45,193		246,473

RED WING POLICE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

	YEARS RETIRED									
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54			1					1		
EE E0										
55-59 60-64			4	1				4		
65-69 70-74				1	1	1		3		
75-79 80-84							2	2		
85+										
ALL			5	2	1	1	2	11		
			AVERAG	E ANNUAL I	BENEFIT					
			Y	EARS RETII	RED					
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54			15,678					15,678		
55-59 60-64			18,783	15,630				18,783 15,630		
65-69 70-74				15,956	6,609	4,338		8,968		
75-79 80-84							3,581	3,581		
85+										
ALL			18,162	15,793	6,609	4,338	3,581	12,773		
	TOTAL	ANNUAL	BENEFIT	(ACTUAL DO	DLLARS) B	Y YEARS RE	TIRED			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
ALL			90,810	31,586	6,609	4,338	7,162	140,503		
				- 145 -						

RED WING POLICE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH								
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54		1						1
55-59 60-64			1			1		1 1
65-69 70-74								
75-79 80-84					1			1
85+							1	1
ALL		1	1		1	1	1	5
			AVERAGE	ANNUAL E	BENEFIT			
				S SINCE I				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54		15,353						15,353
55-59 60-64			19,792			5,188		19,792 5,188
65-69 70-74								
75-79 80-84					2,510			2,510
85+							2,517	2,517
ALL		15,353	19,792		2,510	5,188	2,517	9,072
	TOTAL	ANNUAL BE	ENEFIT (AC	TUAL DOLL	ARS) BY Y	EARS SINC	E DEATH	
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
ALL		15,353	19,792		2,510	5,188	2,517	45,360

- 146 -

MILLIMAN & ROBERTSON, INC.

RED WING POLICE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

			YEA	RS DISABI	LED			
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54	1			2				3
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL	1			2				3
			AVERAGE	ANNUAL E	BENEFIT			
	_		YEAI	RS DISABI	_ED			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54	18,794			15,229				16,417
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL	18,794			15,229				16,417
ACE	TOTAL	ANNUAL B	ENEFIT (ACTUAL DO	DLLARS) BY	YEARS DIS	SABLED	A11
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL	18,794			30,458				49,251
			_	147 -				

RED WING POLICE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		Actives	Deferred Retirement	Other <u>Non-Vested</u>
Α.	ON JUNE 30, 1990	8	0	0
В.	ADDITIONS	0	1	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 (1) 0 0 (1) 0 0	0 0 0 0 0	0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	3 3		
ŧ.	TOTAL ON JUNE 30, 1991	6	1	0
			Recipients	
		Retirement Annuitants	Disabled	Survivors
A.	ON JUNE 30, 1990	11	2	5
В.	ADDITIONS	0	1	0
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 0 0 0	0 0 0	0 0 0
D.	DATA ADJUSTMENTS	0	0	0
Ε.	TOTAL ON JUNE 30, 1991	11	3	5

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

JULY 1, 1991

A.	CURRENT ASSETS (4.10% of Table 1, F6)	\$5,878,024
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$114,728 172,092 1,540,714
	4. Total Expected Future Assets	\$1,827,534
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$7,705,558
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$4,803,523
	2. Current Employees	
	a. Accumulated Employee Contributions \$202,188 Including Allocated Investment Income* b. Employer-Financed Vested 2,083,668 c. Employer-Financed Nonvested 812,564 d. Total	\$3,098,420
	3. Total Pension Benefit Obligation	\$7,901,943
Ε.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	(\$196,385)
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$7,705,558
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$2,023,919
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	(\$0)

*Estimated

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED	Number of <u>Participants</u>	Present Value of Projected Benefits	Actuarial Accrued <u>Liability</u>
LIABILITY (AAL)			
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0 6	\$0 2,902,035	\$0 2,421,770
c. Total	6	\$2,902,035	\$2,421,770
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0 1	\$ 0 168,388	\$ 0 168,388
c. Total	1	\$168,388	\$168,388
 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	6	\$320,605 4,314,530	\$320,605 4,314,530
c. Total	19	\$4,635,135	\$4,635,135
 Total a. Elected PERA Police and Fire* b. Elected Relief Association c. No Election (Greater Value) 	6 13 7	\$320,605 4,314,530 3,070,423	\$320,605 4,314,530 2,590,158
d. Total	26	\$7,705,558	\$7,225,293
B. DETERMINATION OF UNFUNDED ACTUARIAL		ITY (UAAL)	
 AAL (A4) Current Assets (4.10% of Table 1 	,F6)		\$7,225,293 5,878,024
3. UAAL (B1-B2)			\$1,347,269
C. NORMAL COST			\$83,473

^{*} Includes MPRIF Reserves of \$229,469

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9L) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$320,605 4,314,530 3,070,423
	4. Total	\$7,705,558
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$0 114,728
	3. Total	\$114,728
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$0 172,092
	3. Total	\$172,092
D.	CURRENT VALUE OF TOTAL ASSETS (4.10% of Table 1, F6)	\$5,878,024
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11L, B.2.b + B.2.c + B.2.d)	\$1,903,007 812,596
	3. Total	\$2,715,603
F.	LOSS (GAIN) [A-B-C-D-E]	(\$1,174,889)
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$36,426 0 (1,211,315)
	4. Total	(\$1,174,889)
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	(\$135,826)

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

		Percent of Payroll	Dollar Amount
A.	EMPLOYEE CONTRIBUTIONS	8.00%	\$20,999 *
В.	EMPLOYER CONTRIBUTIONS (Before Adjustment For State Aid)		
	 Regular municipal contribution Additional municipal contribution 	12.00%	\$31,499 *

	Established	Current <u>Balance</u>	Last <u>Payment</u>	Payment <u>Amount **</u>
a.	Initial	\$1,903,007	12/31/2010	\$193,055
b.	7/1/88	0	12/31/2002	0
С.	7/1/89	0	12/31/2003	0
d.	7/1/90	812,596	12/31/2004	97,392
e.	7/1/91	(1,174,889)	12/31/2005	(135,826)
f.	Total	\$1,540,714		\$154,621

C. ESTIMATED TOTAL STATUTORY CONTRIBUTION

\$207,119

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

MANKATO FIRE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

					SERVICE				
<u>age</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL
<25 25-29									
30-34 35-39									
40-44 45-49						3			3
50-54 55-59						1	1		2 1
60-64 65+								1	1
ALL						4	2	1	7
			AVER	AGE ANNU	AL EARNI	NGS			
405				YEARS OF					
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL
<25 25-29									
30-34 35-39									
40-44 45-49						31,875			31,875
50-54 55-59						32,032	31,210 32,512		31,621 32,512
60-64 65+								33,330	33,330
ALL						31,914	31,861	33,330	32,101
	PRIOR	FISCAL '	YEAR EAI	RNINGS (ACTUAL D	DLLARS)	BY YEARS	OF SERV	ICE
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL
ALL						127,658	63,722	33,330	224,710

MANKATO FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

	YEARS_RETIRED								
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL	
<50									
50-54		5						5	
55-59			6					6 6	
60-64				6				6	
65-69				•					
70-74			1	1				2	
75-79 80-84				1	2	2	1 3	6 3	
							3		
85+					1	1		2	
ALL		5	7	8	3	3	4	30	
			AVERAG	E ANNUAL	BENEFIT				
			Y	EARS RETI					
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL	
<50									
50-54		15,765						15,765	
55-59			15,801					15,801	
60-64				15,770				15,770	
65-69			15 000	15 000					
70-74			16,080	16,080				16,080	
75-79 80-84				16,049	8,109	15,797	15,797	13,276	
						4	15,773	15,773	
85+					15,300	162		7,731	
ALL		15,765	15,841	15,844	10,506	10,585	15,779	14,762	
	TOTA	L ANNUAL	BENEFIT	(ACTUAL D	OLLARS) E	BY YEARS F	RETIRED		
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	25+	ALL	
ALL		78,825	110,887	126,752	31,518	31,755	63,116	442,860	
			•		•	•	•	•	

MANKATO FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

AGE	YEARS SINCE DEATH							
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54				1				1
55-59 60-64			1					1
65-69 70-74								
75-79 80-84		1	1		1	1 1	1	3 3
85+						1	1	2
ALL		1	2	1	1	3	2	10
			AVERAGE	ANNUAL I	BENEFIT			
405				S SINCE				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54				9,459				9,459
55-59 60-64			9,459					9,459
65-69 70-74								
75-79 80-84		9,459	9,459		9,459	9,459 9,459	9,459	9,459 9,459
85+						9,459	9,459	9,459
ALL		9,459	9,459	9,459	9,459	9,459	9,459	9,459
405	TOTAL	ANNUAL BI	ENEFIT (AC	TUAL DOLL	ARS) BY	YEARS SIN		
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL		9,459	18,918	9,459	9,459	28,377	18,918	94,590

MANKATO FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

		····		RS DISABL				
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54		1						1
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL		1						1
			AVERAGE	ANNUAL E	ENEFIT			
105				RS DISABL				******
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54		15,765						15,765
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL		15,765						15,765
405		AL ANNUAL	BENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS		
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	<u>ALL</u>
ALL		15,765						15,765

MANKATO FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		A - 4 - 1 - 1 - 1	Deferred	Other
		<u>Actives</u>	<u>Retirement</u>	Non-Vested
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	7	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	7 0		
E.	TOTAL ON JUNE 30, 1991	7	0	0
		Retirement	Recipients	
		<u>Annuitants</u>	<u>Disabled</u>	Survivors
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	31	1	11
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (1) 0 0	0 0 0 0	0 (1) 0 0
D.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	30	1	10

MANKATO FIRE CONSOLIDATION ACCOUNT

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

A.	CURRENT ASSETS (3.87% of Table 1, F6)	\$5,552,763					
В.	EXPECTED FUTURE ASSETS						
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$106,646 159,969 2,013,900					
	4. Total Expected Future Assets						
С.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$7,833,278					
D.	CURRENT PENSION BENEFIT OBLIGATIONS						
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$6,130,166					
	2. Current Employees						
	a. Accumulated Employee Contributions \$292,075 Including Allocated Investment Income*						
	b. Employer-Financed Vested 1,087,085 c. Employer-Financed Nonvested 0						
	d. Total	\$1,379,160					
	3. Total Pension Benefit Obligation	\$7,509,326					
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$323,952					
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$7,833,278					
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$1,956,563					
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)						

MANKATO FIRE CONSOLIDATION ACCOUNT

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	7 0	\$1,703,112 0	\$1,436,513 0
c. Total	7	\$1,703,112	\$1,436,513
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	36 5	\$5,794,759 335,407	\$5,794,759 335,407
c. Total	41	\$6,130,166	\$6,130,166
 Total a. Elected PERA Police and Fire* b. Elected Relief Association c. No Election (Greater Value) 	43 5 0	\$7,497,871 335,407 0	\$7,231,272 335,407 0
d. Total	48	\$7,833,278	\$7,566,679
B. DETERMINATION OF UNFUNDED ACTUARIAL			
 AAL (A4) Current Assets (3.87% of Table 1 	,F6)		\$7,566,679 5,552,763
3. UAAL (B1-B2)			\$2,013,916
C. NORMAL COST			\$44,398

^{*} Includes MPRIF Reserves of \$5,584,023

REVISED JULY 29, 1992

MANKATO FIRE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9M) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$7,497,871 335,407 0
	4. Total	\$7,833,278
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$106,646 0
	3. Total	\$106,646
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$159,969 0
	3. Total	\$159,969
D.	CURRENT VALUE OF TOTAL ASSETS (3.87% of Table 1, F6)	\$5,552,763
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11M, B.2.b + B.2.c + B.2.d)	\$7,059,956 0
	3. Total	\$7,059,956
F.	LOSS (GAIN) [A-B-C-D-E]	(\$5,046,056)
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$407,530 (594,109) (4,859,477)
	4. Total	(\$5,046,056)
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	(\$583,361)

REVISED JULY 29, 1992

MANKATO FIRE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

				Percent of Payroll	Dollar Amount
A.	EMPLOYEE CONTRIBUTIONS			8.00%	\$19,145 *
В.	EMPLOYER CONTRIBUTIONS (Before Adjustment For State Aid)				
	 Regular municipal contribution Additional municipal contribution 			12.00%	\$28,718 *
		<u>Established</u>	Current <u>Balance</u>	Last <u>Payment</u>	Payment Amount **
	a. b.	Initial	\$7,059,956	12/31/2010	\$716,214
	D.	7/1/88 7/1/89	0	12/31/2002 12/31/2003	0
	d.	7/1/90	Ŏ	12/31/2004	. 0
	e.	7/1/91	(5,046,056)	12/31/2005	(583,361)

\$2,013,900

C. ESTIMATED TOTAL STATUTORY CONTRIBUTION

f.

\$180,716

\$132,853 =========

Total

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

CHISHOLM FIRE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE												
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u> 30+</u>	ALL			
<25 25-29												
30-34 35-39												
40-44 45-49							1		1			
50-54 55-59							1	1	2			
60-64 65+												
ALL							2	1	3			
AVERAGE ANNUAL EARNINGS												
		=		YEARS OF								
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u> 25-29</u>	<u>30+</u>	ALL			
<25 25-29												
30-34 35-39												
40-44 45-49							33,153		33,153			
50-54 55-59							34,045	35,705	34,875			
60-64 65+												
ALL						-	33,599	35,705	34,301			
405				RNINGS (A	ACTUAL DO		BY YEARS	OF SERV				
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL			
ALL							67,198	35,705	102,903			

CHISHOLM FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

	YEARS RETIRED												
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL					
<50 50-54													
55-59 60-64			2					2					
65-69 70-74			1		1 2			2 2					
75-79 80-84													
85+						1		1					
ALL			3		3	1		7					
AVERAGE ANNUAL BENEFIT													
				ARS RETIR									
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL					
<50 50-54													
55-59 60-64			17,974					17,974					
65-69 70-74			17,423		3,536 9,543			10,480 9,543					
75-79 80-84													
85+						8,531		8,531					
ALL			17,790		7,541	8,531		12,075					
ACE		ANNUAL	BENEFIT (ACTUAL DO	LLARS) BY	YEARS RET		A11					
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL					
ALL			53,370		22,623	8,531		84,525					

CHISHOLM FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH											
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64											
65-69 70-74						1		1			
75-79 80-84						1	1	2			
85+							3	3			
ALL						3	4	7			
AVERAGE ANNUAL BENEFIT											
				S SINCE							
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64											
65-69 70-74						2,207 2,207		2,207 2,207			
75-79 80-84						2,207	2,207	2,207			
85+							2,207	2,207			
ALL						2,207	2,207	2,207			
		ANNUAL BEN		TUAL DOLL		EARS SINC					
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
ALL						6,621	8,828	15,449			

CHISHOLM FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

				RS DISABL					
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL	
<50 50-54									
55-59 60-64									
65-69 70-74									
75-79 80-84									
85+									
ALL									
AVERAGE ANNUAL BENEFIT									
	***			RS DISABL			-		
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL	
<50 50-54									
55-59 60-64									
65-69 70-74									
75-79 80-84									
85+									
ALL									
			ENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS			
<u>AGE</u>	<u>≤1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>	
ALL									

CHISOLM FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		Activos	Deferred	Other
		<u>Actives</u>	<u>Retirement</u>	<u>Non-Vested</u>
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	3	0	0
С.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	3 0		
E.	TOTAL ON JUNE 30, 1991	3	0	0
			Recipients	
		Retirement Annuitants	Disabled	Survivors
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	8	0	7
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (1) 0 0	0 0 0 0	0 0 0
D.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	7	0	7

CHISOLM FIRE CONSOLIDATION ACCOUNT

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

A.	CURRENT ASSETS (0.69% of Table 1, F6)	\$989,699
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$52,624 78,936 718,564
	4. Total Expected Future Assets	\$850,124
c.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$1,839,823
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$1,011,996
	2. Current Employees	
	a. Accumulated Employee Contributions \$87,477 Including Allocated Investment Income*	
	b. Employer-Financed Vested 579,377 c. Employer-Financed Nonvested 0	
	d. Total	\$666,854
	3. Total Pension Benefit Obligation	\$1,678,850
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$160,973
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$1,839,823
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$689,151
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

CHISOLM FIRE CONSOLIDATION ACCOUNT

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED	Number of <u>Participants</u>	Present Value of Projected Benefits	Actuarial Accrued <u>Liability</u>
LIABILITY (AAL)			
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	3 0	\$827,827 0	\$710,616 0
c. Total	3	\$827,827	\$710,616
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and Fire b. Elected Relief Association 	* 14 0	\$1,011,996 0	\$1,011,996 0
c. Total	14	\$1,011,996	\$1,011,996
4. Totala. Elected PERA Police and Fireb. Elected Relief Associationc. No Election (Greater Value)	* 17 0 0	\$1,839,823 0 0	\$1,722,612 0 0
d. Total	17	\$1,839,823	\$1,722,612
B. DETERMINATION OF UNFUNDED ACTUARIA	L ACCRUED LIABILI	ITY (UAAL)	
 AAL (A4) Current Assets (0.69% of Table 	1,F6)		\$1,722,612 989,699
3. UAAL (B1-B2)			\$732,913
C. NORMAL COST			\$18,239

^{*} Includes MPRIF Reserves of \$968,177

REVISED JULY 29, 1992

CHISOLM FIRE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9N) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$1,839,823 0 0
	4. Total	\$1,839,823
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$ 52,624
	3. Total	\$52,624
C .	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$78,936 0
	3. Total	\$78,936
D.	CURRENT VALUE OF TOTAL ASSETS (0.69% of Table 1, F6)	\$989,699
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11N, B.2.b + B.2.c + B.2.d)	\$446,4 19 0
	3. Total	\$446,419
F.	LOSS (GAIN) [A-B-C-D-E]	\$272,145
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$103,998 (97,626) 265,773
	4. Total	\$272,145
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$31,462

REVISED JULY 29, 1992

CHISOLM FIRE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

				Percent of Payroll	Dollar Amount
A.	EMPLOYEE CONTRIBUTION	IS		8.00%	\$8,767 *
В.	EMPLOYER CONTRIBUTION (Before Adjustment Fo		d)		
	 Regular municipal Additional munici 			12.00%	\$13,151 *
	<u>Estat</u>	olished	Current Balance	Last <u>Payment</u>	Payment Amount **
	b. 7/ c. 7/ d. 7/	nitial /1/88 /1/89 /1/90 /1/91	\$446,419 0 0 0 0 272,145	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$45,288 0 0 0 31,462
	f. To	otal	\$718,564		\$76,750
C.	ESTIMATED TOTAL STATU	JTORY CONTR	IBUTION		\$98,668

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

CHISHOLM POLICE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE											
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u> 25-29</u>	<u>30+</u>	ALL		
<25 25-29											
30-34 35-39											
40-44 45-49							1		1		
50-54 55-59											
60-64 65+						,					
ALL							1		1		
AVERAGE ANNUAL EARNINGS											
			,	EARS OF	SERVICE						
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	15-19	20-24	25-29	<u> 30+</u>	ALL		
<25 25-29											
30-34 35-39											
40-44 45-49							37,856		37,856		
50-54 55-59											
60-64 65+											
ALL							37,856		37,856		
	PRIOR	FISCAL Y	EAR EAR	RNINGS (ACTUAL DO	LLARS)	BY YEARS	OF SERVI	CE		
AGE	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL		
ALL							37,856		37,856		

CHISHOLM POLICE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

YEARS RETIRED												
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL				
<50 50-54												
55-59 60-64			2	1				1 2				
65-69 70-74				1				1				
75-79 80-84					1			1				
85+												
ALL			2	2	1			5				
AVERAGE ANNUAL BENEFIT												
	YEARS RETIRED											
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL				
<50 50-54												
55-59 60-64			19,473	13,117				13,117 19,473				
65-69 70-74				14,466				14,466				
75-79 80-84					9,310			9,310				
85+												
ALL			19,473	13,792	9,310			15,168				
_	TOTAL	ANNUAL	BENEFIT	(ACTUAL D	OLLARS) B	Y YEARS RE	TIRED					
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	<u>ALL</u>				
ALL			38,946	27,584	9,310			75,840				
				. 172								

CHISHOLM POLICE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH											
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64					1			1			
					1			1			
65-69 70-74					1			1			
75-79 80-84											
85+											
ALL					2			2			
AVERAGE ANNUAL BENEFIT											
YEARS SINCE DEATH											
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64					2,207			2,207			
65-69								·			
70-74					2,207			2,207			
75-79 80-84											
85+											
ALL					2,207			2,207			
	TOTAL A	NNUAL BEN	EFIT (AC	TUAL DOLL	ARS) BY Y	EARS SINCE	DEATH				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
ALL					4,414			4,414			

CHISHOLM POLICE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

			YEA	RS DISABL	ED			
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
			AVERAGE	ANNUAL B	ENEFIT			
				RS DISABL				·.
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
			ENEFIT (ACTUAL DO		YEARS DIS		
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL								

CHISOLM POLICE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

				inated
		Actives	Deferred Retirement	Other Non-Vested
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	1	0	0
C .	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	1 0		
E.	TOTAL ON JUNE 30, 1991	1	0	0
			Recipients	
		Retirement Annuitants	<u>Disabled</u>	Survivors
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	5	0	2
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 0 0 0	0 0 0 0	0 0 0
D.	DATA ADJUSTMENTS	0	0	0
£.	TOTAL ON JUNE 30, 1991	5	0	2

CHISOLM POLICE CONSOLIDATION ACCOUNT

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

A.	CURRENT ASSETS (0.63% of Table 1, F6)	\$907,042
В.	EXPECTED FUTURE ASSETS	
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$25,872 38,808 236,746
	4. Total Expected Future Assets	\$301,426
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$1,208,468
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$919,905
	2. Current Employees	
	a. Accumulated Employee Contributions \$60,594 Including Allocated Investment Income*	
	b. Employer-Financed Vested 150,440	
	c. Employer-Financed Nonvested d. Total	\$211,034
	3. Total Pension Benefit Obligation	\$1,130,939
Ε.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$77,529
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$1,208,468
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$223,897
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

CHISOLM POLICE CONSOLIDATION ACCOUNT

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
1. Active Membersa. Elected PERA Police and Fireb. No Election (Greater Value)	1 0	\$288,563 0	\$231,643 0
c. Total	1	\$288,563	\$231,643
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0 0	\$0 0	\$0 0
c. Total	0	\$0	\$0
3. Benefit Recipientsa. Elected PERA Police and Fire*b. Elected Relief Association	7 0	\$919,905 0	\$919,905 0
c. Total	7	\$919,905	\$919,905
4. Totala. Elected PERA Police and Fire*b. Elected Relief Associationc. No Election (Greater Value)	8 0 0	\$1,208,468 0 0	\$1,151,548 0 0
d. Total	8	\$1,208,468	\$1,151,548
B. DETERMINATION OF UNFUNDED ACTUARIAL			
 AAL (A4) Current Assets (0.63% of Table 1 	,F6)		\$1,151,548 907,042
3. UAAL (B1-B2)			\$244,506
C. NORMAL COST			\$6,663

^{*} Includes MPRIF Reserves of \$898,366

REVISED JULY 29, 1992

CHISOLM POLICE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 90) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$1,208,468 0 0
	4. Total	\$1,208,468
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$25,872 0
	3. Total	\$25,872
С.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$38,808 0
	3. Total	\$38,808
D.	CURRENT VALUE OF TOTAL ASSETS (0.63% of Table 1, F6)	\$907,042
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 110, B.2.b + B.2.c + B.2.d)	\$73,250 0
	3. Total	\$73,250
F.	LOSS (GAIN) [A-B-C-D-E]	\$163,496
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$97,246 (119,234) 185,484
	4. Total	\$163,496
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$18,901

REVISED JULY 29, 1992

CHISOLM POLICE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

				Percent of Payroll	Dollar <u>Amount</u>
A.	EMPLOYEE CONT	TRIBUTIONS		8.00%	\$3,225 *
В.	EMPLOYER CONT (Before Adjus	TRIBUTIONS stment For State Ai	id)		
		nunicipal contribut al municipal contri		12.00%	\$4,838 *
		<u>Established</u>	Current Balance	Last Payment	Payment Amount **
	t c	a. Initial b. 7/1/88 c. 7/1/89 d. 7/1/90 e. 7/1/91	\$73,250 0 0 0 0 163,496	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$7,431 0 0 0 0 18,901
	1	f. Total	\$236,746		\$26,332
С.	ESTIMATED TO	TAL STATUTORY CONTR	RIBUTION		\$34,395

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

CROOKSTAN POLICE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

	YEARS OF SERVICE								
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u> 15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL
<25 25-29									
30-34 35-39			1	1					2
40-44 45-49				1 1	1				1 2
50-54 55-59				1	1				2 1
60-64 65+									
ALL			1	4	3				8
			AVER	AGE ANNU	AL EARNII	NGS			
				YEARS OF	SERVICE				
<u>AGE</u>	<u><1</u>	1-4	5-9	<u>10-14</u>	<u>15-19</u>	20-24	25-29	<u>30+</u>	ALL
<25 25-29									
30-34 35-39			23,816	23,856					23,836
40-44 45-49				25,042 23,275	24,615				25,042 23,945
50-54 55-59				23,762	24,490 31,386				24,126 31,386
60-64 65+									
ALL			23,816	23,983	26,830				25,030
	PRIOR	FISCAL	YEAR EA	RNINGS (ACTUAL DO	OLLARS)	BY YEARS	OF SERV	ICE
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL
ALL			23,816	95,935	80,491			÷.	200,242

CROOKSTON FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

			YE	ARS RETI	RED		-	
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74			1					1
75-79 80-84				2				2
85+								
ALL			1	2				3
			AVERAGE	ANNUAL I	BENEFIT			
				ARS RETI				
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74			13,814					13,814
75-79 80-84				7,784				7,784
85+								
ALL			13,814	7,784				9,794
ACE.	TOTAL	ANNUAL	BENEFIT (ACTUAL DO	LLARS) BY	YEARS RET	IRED	
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
ALL			13,814	15,568				29,382
			-	181 -				

CROOKSTON FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

				S SINCE E	DEATH			
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 5 0-54								
55-59 60-64								
65-69 70-74					1			1
75-79 80-84					1 1			1 1
85+								
ALL					3			3
			AVERAGE	ANNUAL E	BENEFIT			
	<u> </u>		YEAR	S SINCE [
<u>AGE</u>	<u><1</u>	1-4	5-9	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69					٠			
70-74					3,784			3,784
75-79 80-84					3,784 3,784			3,784 3,784
85+								
ALL					3,784			3,784
	TOTAL A	NNUAL BEN	EFIT (AC	TUAL DOLL	ARS) BY Y	EARS SINCE	DEATH	
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL					11,352			11,352

CROOKSTON FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

			YEA	RS DISABL	.ED			
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
			AVERAGE	ANNUAL B	ENEFIT			
			YEA	RS DISABL	.ED			
<u>age</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL
<50 50-54								
55-59 60-64								
65-69 70-74								
75-79 80-84								
85+								
ALL								
	TOTAL	ANNUAL B	ENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS	ABLED	
<u>AGE</u>	<1	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL
ALL								

CROOKSTON FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

				inated
		Actives	Deferred Retirement	Other Non-Vested
		- MCCIAE2	Recirement	Non-Ae2Cea
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	8	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	8 0		
Ē.	TOTAL ON JUNE 30, 1991	8	0	0
			Recipients	
		Retirement Annuitants	Disabled	Survivors
A.	ON JUNE 30, 1990	0	. 0	0
В.	ADDITIONS	3	0	3
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 0 0	0 0 0 0	0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	3	0	3

CROOKSTON FIRE CONSOLIDATION ACCOUNT

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

JULY 1, 1991

A. CU	RRENT ASSETS (0.52% of Table 1, F6)	\$747,024
B. EX	PECTED FUTURE ASSETS	
2.	Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions	\$152,011 228,017 272,544
4.	Total Expected Future Assets	\$652,572
C. TO	TAL CURRENT AND EXPECTED FUTURE ASSETS	\$1,399,596
D. CU	RRENT PENSION BENEFIT OBLIGATIONS	
1.	Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits	\$347,820
2.	Current Employees	
	a. Accumulated Employee Contributions \$8,024 Including Allocated Investment Income* b. Employer-Financed Vested 612,122 c. Employer-Financed Nonvested 535,421 d. Total	\$ 1,155,567
3.	Total Pension Benefit Obligation	\$1,503,387
E. EX	PECTED FUTURE PENSION BENEFIT OBLIGATION	(\$103,791)
F. 10	TAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$1,399,596
G. CU	RRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$756,363
H. CUI	RRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

*Estimated

CROOKSTON FIRE CONSOLIDATION ACCOUNT

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

	Number of <u>Participants</u>	Present Value of Projected Benefits	Actuarial Accrued <u>Lia</u> bility
A. DETERMINATION OF ACTUARIAL ACC LIABILITY (AAL)	RUED	<u> Denerits</u>	LIBUTTICY
 Active Members a. Elected PERA Police and b. No Election (Greater Val 		\$1,051,776 0	\$673,076 0
c. Total	8	\$1,051,776	\$673,076
 Former Members a. Elected PERA Police and b. No Election (Greater Val 	· · · · · · · · · · · · · · · · · · ·	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and b. Elected Relief Associati 		\$347,820 0	\$347,820 0
c. Total	6	\$347,820	\$347,820
 Total a. Elected PERA Police and b. Elected Relief Associati c. No Election (Greater Val 	on 0	\$1,399,596 0 0	\$1,020,896 0 0
d. Total	14	\$1,399,596	\$1,020,896
B. DETERMINATION OF UNFUNDED ACTU		ITY (UAAL)	
 AAL (A4) Current Assets (0.52% of Ta 	ble 1,F6)		\$1,020,896 747,024
3. UAAL (B1-B2)			\$273,872
C. NORMAL COST			\$41,213

^{*} Includes MPRIF Reserves of \$347,820

REVISED JULY 29, 1992

CROOKSTON FIRE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9P) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$1,399,596 0 0
	4. Total	\$1,399,596
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$152,011 0
	3. Total	\$152,011
С.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$228,017 0
	3. Total	\$228,017
D.	CURRENT VALUE OF TOTAL ASSETS (0.52% of Table 1, F6)	\$747,024
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11P, B.2.b + B.2.c + B.2.d)	\$129,653 0
	3. Total	\$129,653
F.	LOSS (GAIN) [A-B-C-D-E]	\$142,891
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$16,058 (2,981) 129,814
	4. Total	\$142,891
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$16,519

REVISED JULY 29, 1992

CROOKSTON FIRE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

			Percent of Payroll	Dollar Amount
Α.	EMPLOYEE CONTRIBUTIONS		8.00%	\$17,061 *
В.	EMPLOYER CONTRIBUTIONS (Before Adjustment For State Ai	d)		
	 Regular municipal contribut Additional municipal contri 	12.00%	\$25,591 *	
	<u>Established</u>	Current Balance	Last Payment	Payment Amount **
		£100 CE2	10/21/0010	410 150

a.	Initial	\$129,653	12/31/2010	\$13,153
b.	7/1/88	0	12/31/2002	0
c.	7/1/89	0	12/31/2003	Ō
d.	7/1/90	0	12/31/2004	Ō
e.	7/1/91	142,891	12/31/2005	16,519
f.	Total	\$272,544		\$29,672

C. ESTIMATED TOTAL STATUTORY CONTRIBUTION

\$72,324

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

CROOKSTON FIRE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9P) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$1,399,596 0 0
	4. Total	\$1,399,596
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$152,011 0
	3. Total	\$152,011
c.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$228,017 0
	3. Total	\$228,017
D.	CURRENT VALUE OF TOTAL ASSETS (0.52% of Table 1, F6)	\$747,024
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11P, B.2.b + B.2.c + B.2.d) 3. Total	\$0 0 \$0
F.	LOSS (GAIN) [A-B-C-D-E]	\$272,544
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$16,058 (2,981) 259,467
	4. Total	\$272,544
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$0

CROOKSTON FIRE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

				Percent of Payroll	Dollar <u>Amount</u>
A.	EMPLOYEE CONTRI	BUTIONS		8.00%	\$17,061 *
В.	EMPLOYER CONTRI (Before Adjustm	BUTIONS ent For State Ai	d)		
		icipal contribut municipal contri		12.00%	\$25,591 *
		<u>Established</u>	Current Balance	Last Payment	Payment Amount **
	a. b.	Initial 7/1/88	\$272,544 0	12/31/2010 12/31/2002	\$27,649 0
	c. d. e.	7/1/89 7/1/90 7/1/91	0 0 0	12/31/2003 12/31/2004 12/31/2005	0 0 0
	C.	• / • / • 1	•	10,01/2000	•

\$272,544

C. ESTIMATED TOTAL STATUTORY CONTRIBUTION

f.

\$70,301

\$27,649

Total

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

ROCHESTER FIRE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

	YEARS OF SERVICE										
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL		
<25 25-29											
30-34 35-39				1 8	1				1 9		
40-44 45-49				4	4 3	1 10			9 13		
50-54 55-59						6	5 1		11 1		
60-64 65+								2	2		
ALL				13	8	17	6	2	46		
			AVER	AGE ANNU	JAL EARNI	NGS					
				YEARS OF	SERVICE						
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	25-29	<u> 30+</u>	ALL		
<25 25-29											
30-34 35-39				33,020 34,796	34,451				33,020 34,757		
40-44 45-49				35,172	35,760 36,778	37,543 34,064			35,697 34,690		
50-54 55-59						35,450	35,805 41,152		35,611 41,152		
60-64 65+								38,549	38,549		
ALL				34,775	35,978	34,758	36,696	38,549	35,392		
	PRIO	R FISCAL	YEAR E	ARNINGS	(IN THOU	ISANDS) B	Y YEARS	OF SERVI	CE		
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL		
ALL				452	288	591	220	77	1,628		
				- 189) -						

ROCHESTER FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

	YEARS_RETIRED										
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50											
50-54	3	3						6			
55-59			1					1			
60-64	1	2	11	4	1			19			
65-69			4	9	4			17			
70-74				6	1			7			
75-79				1	1		1	3			
80-84								•			
85+		2			1			3			
ALL	4	7	16	20	8		,	FC			
ALL	7	,	10	20	0		1	56			
			AVEDAO	F 4444144	DENEETT						
			AVERAG	E ANNUAL	RENEFII						
105				EARS RET		20.04					
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>			
<50											
50-54	18,093	19,166						18,630			
55-59			18,095					18,095			
60-64	26,691	20,906	20,616	19,031	8,571			19,999			
65-69			20,243	19,589	18,333			19,447			
70-74			·	20,138	19,806			20,091			
75-79				20,000	18,095		18,095	18,730			
80-84				,	,		,	20,700			
85+		25,069			16,667			22,268			
ALL	20,243	21,350	20,365	19,663			10 005				
ALL	•	-	•	-	·		18,095	19,716			
205						Y YEARS RI		***			
<u>age</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
ALL	80,972	149,450	325,840	393,260	136,472		18,095	1,104,096			

ROCHESTER FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

405	YEARS SINCE DEATH									
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
<50 50-54										
55-59 60-64		1	1	1				1 2		
65-69 70-74	1		1		1			3 2		
75-79 80-84				1		2	4	6 2		
85+							2	2		
ALL	2	1	2	2	2	2	7	18		
AVERAGE ANNUAL BENEFIT										
ACE		3.4		RS SINCE		00.04	05			
AGE	<u>≤1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
<50 50-54										
55-59 60-64		8,488	8,575	8,571				8,488 8,573		
65-69 70-74	8,076 8,571		8,571		8,571 8,571			8,406 8,571		
75-79 80-84				8,571		8,571	8,529 8,571	8,543 8,571		
85+	_						8,529	8,529		
ALL	8,324	8,488	8,573	8,571	8,571	8,571	8,535	8,525		
<u>AGE</u>				TUAL DOL		YEARS SIN		Att		
	<u>≤1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL		
ALL	16,648	8,488	17,146	17,142	17,142	17,142	59,745	153,450		

ROCHESTER FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

	YEARS DISABLED									
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
<50 50-54	1		1	1				3		
55-59 60-64										
65-69 70-74										
75-79 80-84										
85+										
ALL	1		1	1				3		
			AVERAGE	E ANNUAL E	BENEFIT					
				RS DISABL						
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u> 20-24</u>	<u>25+</u>	ALL		
<50 50-54	17,143		17,143	13,075				15,787		
55-59 60-64										
65-69 70-74										
75-79 80-84										
85+										
ALL	17,143		17,143	13,075				15,787		
	TOTAL	ANNUAL	BENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS	ABLED			
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u> 15-19</u>	20-24	<u>25+</u>	ALL		
ALL	17,143		17,143	13,075				47,361		
			-	192 -						

ROCHESTER FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

				inated
			Deferred	Other
		<u>Actives</u>	Retirement	Non-Vested
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	46	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	36 10		
E.	TOTAL ON JUNE 30, 1991	46	0	0
			Recipients	
		Retirement Annuitants	<u>Disabled</u>	Survivors
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	58	3	18
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (2) 0 0	0 0 0	0 0 0
D.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	56	3	18

ROCHESTER FIRE CONSOLIDATION ACCOUNT

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

A.	CURRENT ASSETS (12.13% of Table 1, F6)	\$17,392,445
В.	EXPECTED FUTURE ASSETS	,
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$1,413,017 2,119,526 10,648,649
	4. Total Expected Future Assets	\$14,181,192
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$31,573,637
D.	CURRENT PENSION BENEFIT OBLIGATIONS	
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$19,782,707
	2. Current Employees	
	a. Accumulated Employee Contributions \$1,393,682 Including Allocated Investment Income*	
	b. Employer-Financed Vested 6,161,459 c. Employer-Financed Nonvested 1,746,238	
	d. Total	\$9,301,379
	3. Total Pension Benefit Obligation	\$29,084,086
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$2,489,551
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$31,573,637
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$11,691,641
Н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0

ROCHESTER FIRE CONSOLIDATION ACCOUNT

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

JULY 1, 1991

	Number of <u>Participants</u>	Present Value of Projected Benefits	Actuarial Accrued Liability
A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)			
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	21 25	\$4,919,478 6,871,452	\$3,409,085 4,797,244
c. Total	46	\$11,790,930	\$8,206,329
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	8 69	\$1,457,452 18,325,255	\$1,457,452 18,325,255
c. Total	77	\$19,782,707	\$19,782,707
4. Total a. Elected PERA Police and Fire* b. Elected Relief Association c. No Election (Greater Value)	69 25	\$6,376,930 18,325,255 6,871,452	\$4,866,537 18,325,255 4,797,244
d. Total	123	\$31,573,637	\$27,989,036
B. DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABILI	TY (UAAL)	
 AAL (A4) Current Assets (12.13% of Table 	1,F6)		\$27,989,036 17,392,445
3. UAAL (B1-B2)			\$10,596,591
C. NORMAL COST			\$330,283

^{*} Includes MPRIF Reserves of \$851,703

ROCHESTER FIRE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9Q) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$6,376,930 18,325,255 6,871,452
	4. Total	\$31,573,637
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$652,685 760,332
	3. Total	\$1,413,017
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$979,028 1,140,498
	3. Total	\$2,119,526
D.	CURRENT VALUE OF TOTAL ASSETS (12.13% of Table 1, F6)	\$17,392,445
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11Q, B.2.b + B.2.c + B.2.d) 3. Total	\$9,250,471 0 \$9,250,471
F.	LOSS (GAIN) [A-B-C-D-E]	\$1,398,178
G.	ANALYSIS OF LOSS (GAIN)	\$1,390,170
u.	1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	(\$27,517) 0 1,425,695
	4. Total	\$1,398,178
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	\$161,640

ROCHESTER FIRE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

				Percent of Payroll	Dollar Amount
A.	EMPLOYEE CONTRIBU	TIONS		8.00%	\$ 138,712 *
В.	EMPLOYER CONTRIBU (Before Adjustmen		id)		
	 Regular munic Additional mu 			12.00%	\$208,068 *
	<u>E</u>	<u>stablished</u>	Current <u>Balance</u>	Last <u>Payment</u>	Payment Amount **
	a. b. c. d. e.	Initial 7/1/88 7/1/89 7/1/90 7/1/91	\$9,250,471 0 0 0 0 1,398,178	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$938,436 0 0 0 161,640
	f.	Total	\$10,648,649		\$1,100,076
С.	ESTIMATED TOTAL S	TATUTORY CONTI	RIBUTION		\$1,446,856

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

WINONA POLICE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

				YEARS OF	F SERVICE	E			
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u> 30+</u>	ALL
<25 25-29									
30-34 35-39				1	1				2
40-44 45-49				2 1	3 2	2	2		5 7
50-54 55-59						3	2	2	5 2
60-64 65+								1	1
ALL				4	6	5	4	3	22
			AVER	AGE ANNU	JAL EARN	INGS			
				YEARS OF	SERVICE	E			
AGE	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	25-29	<u>30+</u>	ALL
<25 25-29									
30-34				20 100	01 760				
35-39				32,189	31,569				31,879
40-44 45-49				105,366 31,613	32,226 30,828	29,937	32,803		61,482 31,250
50-54 55-59						31,235	29,611	30,798	30,586 30,798
60-6 4 65+								32,425	32,425
ALL				68,633	31,650	30,716	31,207	31,340	38,039
	PRIOR	FISCAL '	<u>(EAR EA</u>	RNINGS	ACTUAL D	OLLARS)	BY YEARS	OF SERV	ICE
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u> 30+</u>	ALL
ALL				274,534	189,904	153,581	124,830	94,022	836,871

WINONA POLICE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

	YEARS RETIRED									
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54	1	1						1		
55-59 60-64		1	3 2	2				4		
65-69 70-74			2 1	1	2	1	2	3 6		
75-79 80-84					2	1	1 2	1 5		
85+										
ALL	1	2	8	3	4	2	5	25		
			AVERAG	E ANNUAL	BENEFIT					
		<u>-</u>		EARS RETI		_				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL		
<50 50-54	17,137	15,898						17,137 15,898		
55-59 60-64		15,423	16,604 17,077	15,637				16,309 16,357		
65-69 70-74			19,025 18,499	18,639	17,780	16,280	15,637	18,896 16,936		
75-79 80-84					17,992	16,280	15,423 17,346	15,423 17,391		
85+										
ALL	17,137	15,661	17,564	16,638	17,886	16,280	16,278	16,975		
107			BENEFIT			Y YEARS R				
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL		
ALL	17,137	31,322		49,914	71,544	32,560	81,390	424,375		
				- 199 -						

WINONA POLICE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH										
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54										
55-59 60-64										
65-69 70-74		1						1		
75-79 80-84			1				1	1 1		
85+							1	1		
ALL		1	1				2	4		
AVERAGE ANNUAL BENEFIT										
AGE	<u><1</u>	1-4	<u>YEAR</u> <u>5-9</u>	S SINCE D 10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54										
55-59 60-64										
65-69 70-74		7,712						7,712		
75-79 80-84			7,712				7,712	7,712 7,712		
85+							7,338	7,338		
ALL		7,712	7,712				7,525	7,619		
402	TOTAL	ANNUAL BE	NEFIT (AC	TUAL DOLL	ARS) BY Y	EARS SING				
<u>AGE</u>	<1	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	<u> 20-24</u>	<u>25+</u>	ALL		
ALL		7,712	7,712				15,050	30,476		

WINONA POLICE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

	YEARS DISABLED											
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL				
<50 50-54												
55-59 60-64												
65-69 70-74												
75-79 80-84												
85+												
ALL												
	AVERAGE ANNUAL BENEFIT											
			YEA	RS DISABL				<u></u>				
<u>AGE</u>	<1	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL				
<50 50-54												
55-59 60-64												
65-69 70-74												
75-79 80-84												
85+												
ALL												
	TOTAL	. ANNUAL B	ENEFIT (ACTUAL DO	LLARS) RY	YEARS DIS	ABI FD					
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL				
ALL							٠,					

WINONA POLICE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

				inated
		Actives	Deferred Retirement	Other <u>Non-Vested</u>
	OV JUNE OO LOOP			
Α.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	22	1	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
	Vested Non-Vested	16 6		
E.	TOTAL ON JUNE 30, 1991	22	1	0
		Dating	Recipients	
		Retirement Annuitants	<u>Disabled</u>	Survivors
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	26	0	4
c.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 (1) 0 0	0 0 0 0	0 0 0 0
D.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	25	0	4

WINONA POLICE CONSOLIDATION ACCOUNT

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

JULY 1, 1991

A.	CURRENT ASSETS (4.21% of Table 1, F6)	\$6,033,878					
В.	EXPECTED FUTURE ASSETS						
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$622,889 934,334 3,022,259					
	4. Total Expected Future Assets						
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$10,613,360					
D.	CURRENT PENSION BENEFIT OBLIGATIONS						
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 	\$4,825,513					
	2. Current Employees						
	a. Accumulated Employee Contributions \$629,482 Including Allocated Investment Income* b. Employer-Financed Vested 3,291,298 c. Employer-Financed Nonvested 1,232,652						
	d. Total	\$5,153,432					
	3. Total Pension Benefit Obligation	\$9,978,945					
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$634,415					
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$10,613,360					
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$3,945,067					
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0					

*Estimated

WINONA POLICE CONSOLIDATION ACCOUNT

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

Α.	DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
	 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	10 12	\$2,674,240 3,113,607	\$1,976,899 2,199,993
	c. Total	22	\$5,787,847	\$4,176,892
	 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0 1	\$ 0 104,567	\$0 104,567
	c. Total	1	\$104,567	\$104,567
	 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	28 1	\$4,689,919 31,027	\$4,689,919 31,027
	c. Total	29	\$4,720,946	\$4,720,946
	4. Totala. Elected PERA Police and Fire*b. Elected Relief Associationc. No Election (Greater Value)d. Total	38 1 13 52	\$7,364,159 31,027 3,218,174 \$10,613,360	\$6,666,818 31,027 2,304,560 \$9,002,405
В.	DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABILI	TY (UAAL)	
	 AAL (A4) Current Assets (4.21% of Table 1, 	,F6)		\$9,002,405 6,033,878
	3. UAAL (B1-B2)			\$2,968,527
c.	NORMAL COST			\$170,723

^{*} Includes MPRIF Reserves of \$4,622,780

WINONA POLICE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

A.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9R) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$7,364,159 31,027 3,218,174
	4. Total	\$10,613,360
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$276,517 346,372
	3. Total	\$622,889
С.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$414,775 519,558
	3. Total	\$934,333
D.	CURRENT VALUE OF TOTAL ASSETS (4.21% of Table 1, F6)	\$6,033,878
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11R, B.2.b + B.2.c + B.2.d)	\$5,200,509 0
	3. Total	\$5,200,509
F.	LOSS (GAIN) [A-B-C-D-E]	(\$2,178,250)
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$163,834 (349,002) (1,993,082)
	4. Total	(\$2,178,250)
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	(\$251,822)

WINONA POLICE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

JULY 1, 1991

				Percent of Payroll	Dollar Amount
A.	EMPLOYEE CONTRI	BUTIONS		8.00%	\$71,301 *
В.	EMPLOYER CONTRI (Before Adjustm	BUTIONS ment For State Ai	id)		
		nicipal contribut municipal contri		12.00%	\$106,952 *
		<u>Established</u>	Current <u>Balance</u>	Last <u>Payment</u>	Payment Amount **
	a. b. c. d. e.	Initial 7/1/88 7/1/89 7/1/90 7/1/91	\$5,200,509 0 0 0 (2,178,250)	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$527,578 0 0 0 0 (251,822)
	f.	Total	\$3,022,259		\$275,756

C. ESTIMATED TOTAL STATUTORY CONTRIBUTION

\$454,009

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

ST. LOUIS PARK POLICE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE									
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	15-19	20-24	<u>25-29</u>	<u>30+</u>	ALL
<25									
25-29									
30-34									
35-39				3	2				5
40-44				1	4	4			9
45-49					1	9	1		11
50-54									
55-59						1	2	2	5
60-64									
65+									
ALL				4	7	14	3	2	30
			AVER	RAGE ANNI	JAL EARN	INGS			
					SERVICE				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25-29</u>	<u> 30+</u>	ALL
<25 25-29									
30-34									
35-39				38,376	30,297				35,144
40-44				40,225	40,065	39,103			39,655
45-49				·	38,948	40,159	42,019		40,218
50-54									
55-59						42,920	42,427	42,771	42,663
60-64 65+									
ALL				38,838	37,114	40,055	42,291	42,771	39,611
	PRIOR	FISCAL	YEAR EA	RNINGS (ACTUAL I	OLLARS	BY YEARS	OF SERV	ICE
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	25-29	<u>30+</u>	ALL
ALL				155,353	259,803	560,772	126,874	85,542	836,871
				00.	•			•	

ST. LOUIS PARK POLICE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

YEARS RETIRED												
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL				
<50 50-54		2						2				
55-59 60-64	1	1	3	1 6	1			4 11				
65-69 70-74			1	1	5			6 1				
75-79 80-84						1		1				
85+												
ALL	1	4	4	8	7	1		25				
AVERAGE ANNUAL BENEFIT												
			Y	EARS RETI	RED							
<u>AGE</u>	≤1	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL				
<50 50-54		17,305						17,305				
55-59 60-64	25,946	22,480 28,876	22,626	19,169 18,457	19,169 19,169			21,691 20,606				
65-69 70-74			22,364	18,438	20,532			20,183 22,364				
75-79 80-84						18,637		18,637				
85+			,									
ALL	25,946	21,492	22,561	18,544	20,143	18,637		20,406				
				(ACTUAL D		Y YEARS R						
AGE	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>				
ALL	25,946	85,968	90,244	148,352	141,001	18,637		510,150				

ST. LOUIS PARK POLICE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH											
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64				1		1	1	3			
65-69 70-74											
75-79 80-84			1			1	1	1 2			
85+											
ALL			1	1		2	2	6			
AVERAGE ANNUAL BENEFIT											
				RS SINCE			······				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
<50 50-54											
55-59 60-64				12,375		9,482	9,482	10,446			
65-69 70-74											
75-79 80-84			9,585			9,482	12,375	9,482 10,980			
85+											
ALL			9,585	12,375		9,482	10,929	10,463			
405	TOTAL A	NNUAL BEI	NEFIT (AC	TUAL DOL	LARS) BY	YEARS SIN	CE DEATH				
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL			
ALL			9,585	12,375		18,964	21,858	62,778			

ST. LOUIS PARK POLICE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

			YE#	RS DISABL	ED					
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54				1				1		
55-59 60-64										
65-69 70-74										
75-79 80-84										
85+										
ALL				1				1		
AVERAGE ANNUAL BENEFIT										
	_		YEA	ARS DISABL	ED					
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL		
<50 50-54				24,751				24,751		
55-59 60-64										
65-69 70-74										
75-79 80-84										
85+										
ALL				24,751				24,751		
442		ANNUAL E	BENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS	ABLED			
<u>AGE</u>	<1	<u>1-4</u>	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL		
ALL				24,751				24,751		
				- 210 -						

ST. LOUIS PARK POLICE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Term	inated
		Actives	Deferred Retirement	Other Non-Vested
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	32	0	0
С.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
D.	DATA ADJUSTMENTS	(2)	0	0
	Vested Non-Vested	30 0		
Ε.	TOTAL ON JUNE 30, 1991	30	0	0
		Retirement	Recipients	
		<u>Annuitants</u>	<u>Disabled</u>	<u>Survivors</u>
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	25	1	5
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 0 0	0 0 0	0 0 0
D.	DATA ADJUSTMENTS	0	0	1
E.	TOTAL ON JUNE 30, 1991	25	1	6

ST. LOUIS PARK POLICE CONSOLIDATION ACCOUNT

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

A.	CURRENT ASSETS (9.69% of Table 1, F6)	\$13,897,698				
В.	EXPECTED FUTURE ASSETS					
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$908,818 1,363,228 829,105				
	4. Total Expected Future Assets	\$3,101,151				
С.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$16,998,849				
D.	CURRENT PENSION BENEFIT OBLIGATIONS					
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 					
	2. Current Employees					
	a. Accumulated Employee Contributions \$1,040,850 Including Allocated Investment Income*					
	b. Employer-Financed Vested 5,112,239 c. Employer-Financed Nonvested 0					
	d. Total	\$6,153,089				
	3. Total Pension Benefit Obligation	\$14,083,923				
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$2,914,926				
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$16,998,849				
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$186,225				
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0				

ST. LOUIS PARK POLICE CONSOLIDATION ACCOUNT

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
 Active Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	12 18	\$3,350,698 5,717,317	\$2,587,106 4,062,792
c. Total	30	\$9,068,015	\$6,649,898
2. Former Membersa. Elected PERA Police and Fireb. No Election (Greater Value)	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients a. Elected PERA Police and Fire* b. Elected Relief Association 	27 5	\$6,915,954 1,014,880	\$6,915,954 1,014,880
c. Total	32	\$7,930,834	\$7,930,834
 4. Total a. Elected PERA Police and Fire* b. Elected Relief Association c. No Election (Greater Value) d. Total 	39 5 18	\$10,266,652 1,014,880 5,717,317 \$16,998,849	\$9,503,060 1,014,880 4,062,792 \$14,580,732

B. DETERMINATION OF UNFUNDED ACTUARIAL	ACCRUED LIABILI	TY (UAAL)	
 AAL (A4) Current Assets (9.69% of Table 1 	,F6)		\$14,580,732 13,897,698
3. UAAL (B1-B2)			\$683,034
C. NORMAL COST			\$250,135

^{*} Includes MPRIF Reserves of \$6,329,930

ST. LOUIS PARK POLICE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9S) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$10,266,652 1,014,880 5,717,317
	4. Total	\$16,998,849
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$316,580 592,239
	3. Total	\$908,819
C.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$474,869 888,358
	3. Total	\$1,363,227
D.	CURRENT VALUE OF TOTAL ASSETS (9.69% of Table 1, F6)	\$13,897,698
E.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11S, B.2.b + B.2.c + B.2.d) 3. Total	\$3,930,412 0 \$3,930,412
F.	LOSS (GAIN) [A-B-C-D-E]	(\$3,101,307)
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other 4. Total	\$524,870 (916,747) (2,709,430) (\$3,101,307)
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	(\$358,534)

ST. LOUIS PARK POLICE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

			Percent of <u>Payroll</u>	Dollar Amount	
A.	EMPLOYEE CONTRIBUTIONS		8.00%	\$101,247 *	
В.	EMPLOYER CONTRIBUTIONS (Before Adjustment For	State Aid)			
	 Regular municipal of the second control of the second		12.00% \$151,		
	<u>Establi</u>	Current shed Balance	Last <u>Payment</u>	Payment Amount **	
	a. Init b. 7/1/ c. 7/1/ d. 7/1/ e. 7/1/	788 0 789 0 790 0	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$398,730 0 0 0 (358,534)	
	f. Tota	\$829,105		\$40,196	
С.	ESTIMATED TOTAL STATUTO	DRY CONTRIBUTION		\$293,313	

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

FARIBAULT FIRE CONSOLIDATION ACCOUNT ACTIVE MEMBERS AS OF JUNE 30, 1991

YEARS OF SERVICE												
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL			
<25 25-29												
30-34 35-39				1					1			
40-44 45-49				2	2 1				4 1			
50-54 55-59						2	1		3			
60-64 65+												
ALL				3	3	2	1		9			
AVERAGE ANNUAL EARNINGS												
405		•		YEARS OF								
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30+</u>	ALL			
<25 25-29												
30-34 35-39				30,640					30,640			
40-44 45-49				30,959	31,807 30,893				31,383 30,893			
50-54 55-59						31,332	31,485		31,383			
60-64 65+												
ALL				30,853	31,502	31,332	31,485		31,246			
	PRIOR	FISCAL	YEAR EA	RNINGS (ACTUAL D	OLLARS)	BY YEARS					
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	ALL			
ALL				92,559	94,507	62,665	31,485		281,216			

FARIBAULT FIRE CONSOLIDATION ACCOUNT SERVICE RETIREMENTS AS OF JUNE 30, 1991

			Y	EARS RETI	RED						
<u>AGE</u>	<u><1</u>	1-4	<u>5-9</u>	10-14	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54	1	1		1	1			4			
55-59 60-64		3		1 2				4 2			
65-69 70-74				1	2			1 2			
75-79 80-84							1	1			
85+							1	1			
ALL	1	4		5	3		2	15			
AVERAGE ANNUAL BENEFIT											
AGE		1.4		ARS RETI		20.04	0F.				
-	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54	15,417	2,820		14,997	14,997			12,058			
55-59 60-64		15,417		12,177 14,997				14,607 14,997			
65-69 70-74				14,997	14,997			14,997 14,997			
75-79 80-84							14,997	14,997			
85+							14,997	14,997			
ALL	15,417	12,268		14,433	14,997		14,997	14,109			
405	TOT/	AL ANNUAL	BENEFIT (ACTUAL D	OLLARS) B						
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
ALL	15,417	49,072		72,165	44,991		29,994	211,635			

FARIBAULT FIRE CONSOLIDATION ACCOUNT SURVIVORS AS OF JUNE 30, 1991

YEARS SINCE DEATH													
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL					
<50 50-54			2					2					
55-59 60-64													
65-69 70-74							1	1					
75-79 80-84					1		1	2					
85+						1	1	2					
ALL			2		1	1	3	7					
	AVERAGE ANNUAL BENEFIT												
405				S SINCE									
<u>age</u>	<u><1</u>	1-4	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL					
<50 50-54			5,998					5,998					
55-59 60-64													
65-69 70-74							780	780					
75-79 80-84					8,998		1,200	5,099					
85+					-,	8,998							
							8,998	8,998					
ALL			5,998		8,998	8,998	3,659	5,853					
ACE	TOTAL A	NNUAL BEI	NEFIT (AC	TUAL DOLL	ARS) BY Y			44.5					
AGE	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	ALL					
ALL			11,996		8,998	8,998	10,977	40,971					

FARIBAULT FIRE CONSOLIDATION ACCOUNT DISABILITY RETIREMENTS AS OF JUNE 30, 1991

YEARS DISABLED											
<u>AGE</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
<50 50-54	1		2					3			
55-59 60-64											
65-69 70-7 4											
75-79 80-84											
85+											
ALL	1		2					3			
AVERAGE ANNUAL BENEFIT											
AGE	<u><1</u>	1-4	<u>YEA</u> <u>5-9</u>	RS DISABL 10-14	ED 15-19	20-24	<u>25+</u>	ALL			
		- ·		<u> </u>	<u> 10 15</u>	<u> </u>	<u> 25+</u>				
<50 50-54	15,417		14,997					15,137			
55-59 60-64											
65-69 70-74											
75-79 80-84											
85+											
ALL	15,417		14,997					15,137			
ACE	TOTAL	ANNUAL B	ENEFIT (ACTUAL DO	LLARS) BY	YEARS DIS					
<u>age</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	ALL			
ALL	15,417		29,994					45,411			

FARIBAULT FIRE CONSOLIDATION ACCOUNT RECONCILIATION OF MEMBERS

			Terminated	
		•	Deferred	Other
		<u>Actives</u>	<u>Retirement</u>	Non-Vested
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	9	0	0
C.	DELETIONS 1. Service Retirement 2. Disability 3. Death-Survivor 4. Death-Other 5. Terminated - Deferred 6. Terminated - Refund 7. Terminated - Other Non-Vested 8. Returned as Active	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
D.	DATA ADJUSTMENTS	0	0	. 0
	Vested Non-Vested	3 6		
E.	TOTAL ON JUNE 30, 1991	9	0	0
			Recipients	
		Retirement Annuitants	Disabled	Survivors
A.	ON JUNE 30, 1990	0	0	0
В.	ADDITIONS	15	3	7
C.	DELETIONS 1. Service Retirement 2. Death 3. Annuity Expired 4. Returned as Active	0 0 0 0	0 0 0 0	0 0 0 0
Đ.	DATA ADJUSTMENTS	0	0	0
E.	TOTAL ON JUNE 30, 1991	15	3	7

FARIBAULT FIRE CONSOLIDATION ACCOUNT

ACTUARIAL BALANCE SHEET (ACTUAL DOLLARS)

A.	CURRENT ASSETS (2.43% of Table 1, F6)	\$3,484,255			
В.	EXPECTED FUTURE ASSETS				
	 Present Value of Employee Contributions Present Value of Regular Municipal Contributions Present Value of Additional Municipal Contributions 	\$225,709 338,564 2,118,650			
	4. Total Expected Future Assets	\$2,682,923			
С.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$6,167,178			
D.	. CURRENT PENSION BENEFIT OBLIGATIONS				
	 Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits 				
	2. Current Employees				
	a. Accumulated Employee Contributions \$242,379 Including Allocated Investment Income*				
	b. Employer-Financed Vested 1,036,315 c. Employer-Financed Nonvested 565,060				
	d. Total	\$1,843,754			
	3. Total Pension Benefit Obligation	\$6,009,545			
E.	EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$157,633			
F.	TOTAL CURRENT AND EXPECTED FUTURE PENSION BENEFIT OBLIGATION	\$6,167,178			
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D3-A)	\$2,525,290			
н.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)	\$0			

FARIBAULT FIRE CONSOLIDATION ACCOUNT

ENTRY AGE NORMAL COST CALCULATIONS (ACTUAL DOLLARS)

A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)	Number of <u>Participants</u>	Present Value of Projected <u>Benefits</u>	Actuarial Accrued <u>Liability</u>
• •			
 Active Members Elected PERA Police and Fire No Election (Greater Value) 	0 9	\$ 0 2,001,387	\$0 1,373,508
c. Total	9	\$2,001,387	\$1,373,508
 Former Members a. Elected PERA Police and Fire b. No Election (Greater Value) 	0	\$0 0	\$0 0
c. Total	0	\$0	\$0
 Benefit Recipients Elected PERA Police and Fire Elected Relief Association 	* 25 0	\$4,165,791 0	\$4,165,791 0
c. Total	25	\$4,165,791	\$4,165,791
 4. Total a. Elected PERA Police and Fire b. Elected Relief Association c. No Election (Greater Value) 	* 25 0 9	\$4,165,791 0 2,001,387	\$4,165,791 0 1,373,508
d. Total	34	\$6,167,178	\$5,539,299
B. DETERMINATION OF UNFUNDED ACTUARIA		ITY (UAAL)	
 AAL (A4) Current Assets (2.43% of Table 	\$5,539,299 3,484,255		
3. UAAL (B1-B2)			\$2,055,044
C. NORMAL COST			\$63,337

^{*} Includes MPRIF Reserves of \$2,865,553

FARIBAULT FIRE CONSOLIDATION ACCOUNT

NET ACTUARIAL LOSS (GAIN) (ACTUAL DOLLARS)

Α.	ACTUARIAL PRESENT VALUE OF PROJECTED BENEFITS (Table 9T) 1. Elected PERA Police and Fire 2. Elected Relief Association 3. No Election (Greater Value)	\$4,165,791 0 2,001,387
	4. Total	\$6,167,178
В.	PRESENT VALUE OF FUTURE EMPLOYEE CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$0 225,709
	3. Total	\$225,709
С.	PRESENT VALUE OF FUTURE REGULAR MUNICIPAL CONTRIBUTIONS 1. Elected PERA Police and Fire 2. No Election (Greater Value)	\$0 338,564
	3. Total	\$338,564
D.	CURRENT VALUE OF TOTAL ASSETS (2.43% of Table 1, F6)	\$3,484,255
Ε.	PRESENT VALUE OF FUTURE ADDITIONAL MUNICIPAL CONTRIBUTIONS 1. Initial contribution - Amortized Through December 31, 2010 2. 15 year amortization of prior years' loss (gain) (Table 11T, B.2.b + B.2.c + B.2.d)	\$3,538,435 0
	3. Total	\$3,538,435
F.	LOSS (GAIN) [A-B-C-D-E]	(\$1,419,785)
G.	ANALYSIS OF LOSS (GAIN) 1. MPRIF Mortality 2. PERA Benefit Election by Inactive Member 3. Other	\$89,478 (541,669) (967,594)
	4. Total	(\$1,419,785)
н.	15 YEAR AMORTIZATION OF LOSS (GAIN)	(\$164,138)

FARIBAULT FIRE CONSOLIDATION ACCOUNT

DETERMINATION OF STATUTORY CONTRIBUTIONS (ACTUAL DOLLARS)

				Percent of Payroll	Dollar Amount
Α.	EMPLOYEE CONTRIBUT	TIONS		8.00%	\$23,960 *
В.	EMPLOYER CONTRIBUTIONS (Before Adjustment For State Aid)				
	 Regular municipal contribution Additional municipal contribution 		12.00%	\$ 35,939 *	
	<u>E:</u>	<u>stablished</u>	Current <u>Balance</u>	Last <u>Payment</u>	Payment Amount **
	a. b. c. d. e.	Initial 7/1/88 7/1/89 7/1/90 7/1/91	\$3,538,435 0 0 0 0 (1,419,785)	12/31/2010 12/31/2002 12/31/2003 12/31/2004 12/31/2005	\$358,965 0 0 0 (164,138)
	f.	Total	\$2,118,650		\$194,827
С.	ESTIMATED TOTAL ST	TATUTORY CONT	RIBUTION		\$254,726

^{*} Estimated based on prior years' payroll.

^{**} Contribution is assumed to be paid on December 31, 1991.

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