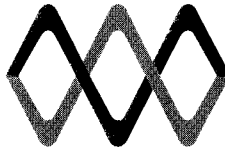


Public Employees Retirement Fund
ACTUARIAL VALUATION REPORT

JULY 1, 1999

 **FILE COPY**



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December 2, 1999

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

RE: Public Employees Retirement Fund

Commission Members:

Pursuant to the terms of our Actuarial Services Contract, we have performed an actuarial valuation of the Fund as of July 1, 1999.

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 Fund.

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.

Respectfully submitted,

MILLIMAN & ROBERTSON, INC.

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Public Employees Retirement Fund

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Public Employees Retirement Fund

Report Highlights
(dollars in thousands)

	07/01/98 Valuation	07/01/99 Valuation
A. CONTRIBUTIONS (Table 11)		
1. Statutory Contributions - Chapter 353 % of Payroll	10.03%	10.00%
2. Required Contributions - Chapter 356 % of Payroll	9.84%	9.44%
3. Sufficiency (Deficiency): (A.1. - A.2.)	0.19%	0.56%
B. FUNDING RATIOS		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	\$7,636,668	\$8,489,177
b. Current Benefit Obligations (Table 8)	\$7,956,280	\$8,606,978
c. Funding Ratio: (a/b)	95.98%	98.63%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	\$7,636,668	\$8,489,177
b. Actuarial Accrued Liability (Table 9)	\$8,769,303	\$9,443,678
c. Funding Ratio: (a/b)	87.08%	89.89%
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	\$10,927,927	\$11,871,320
b. Current and Expected Future Benefit Obligations	\$10,819,348	\$11,549,347
c. Funding Ratio: (a/b)	101.00%	102.79%
C. PLAN PARTICIPANTS		
1. Active Members		
a. Number (Table 3)	136,166	137,528
b. Projected Annual Earnings	\$3,385,720	\$3,544,488
c. Average Annual Earnings (Projected \$)	\$24,865	\$25,773
d. Average Age	43.8	44.1
e. Average Service	8.3	8.5
2. Others		
a. Service Retirements (Table 4)	36,187	38,077
b. Survivors (Table 5)	5,732	5,881
c. Disability Retirements (Table 6)	1,223	1,301
d. Deferred Retirements (Table 7)	12,238	16,340
e. Terminated Other Non-vested (Table 7)	15,847	18,491
f. Total	71,227	80,090

Public Employees Retirement Fund

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 98.63%. The corresponding ratio for the prior year was 95.98%
- 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 1999 the ratio is 89.89%, which is an increase from the 1998 value of 87.08%.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 102.79% 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 E1 to E6. 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 as follows:

- 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

Disclosure of the Current Benefit Obligation amounts used to be required by Statement No. 5 of the Governmental Accounting Standards Board (GASB). However, Statement No. 5 has been superseded by Statement No. 25. Tables 14 and 15 of this report are included to fulfill the requirements of Statement No. 25.

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 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% 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.

Source 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 expectations. 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 10.00% compared to the Required Contribution Rate of 9.44%.

Changes in Actuarial Assumptions

There were no changes in actuarial assumptions since the last valuation.

Changes in Plan Provisions

There were no significant changes in the plan provisions since the last valuation.

TABLE 1

Public Employees Retirement Fund

Statement of Plan Net Assets*(dollars in thousands)*

JULY 1, 1999

	<u>Market Value</u>	<u>Cost Value</u>
A. ASSETS IN TRUST		
1. Cash, Equivalents, Short-term Securities	\$47,670	\$47,670
2. Fixed Income	981,599	1,015,195
3. Equity	3,341,790	2,668,111
4. Real Estate	158,519	126,081
5. Equity in MPRIF	4,336,210	4,336,210
6. Other	889	889
Subtotal	<u>\$8,866,677</u>	<u>\$8,194,156</u>
B. ASSETS RECEIVABLE	73,734	73,734
C. LIABILITIES	(2,887)	(2,887)
<hr/>		
D. NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
1. MPRIF Reserves	4,336,210	4,336,210
2. Member Reserves	1,248,385	1,248,385
3. Other Non-MPRIF Reserves	3,352,929	2,680,408
4. Total Assets Available for Benefits	<u>\$8,937,524</u>	<u>\$8,265,003</u>
<hr/>		
E. DETERMINATION OF ACTUARIAL VALUE OF ASSETS		
1. Cost Value of Assets Available for Benefits (D4)		\$8,265,003
2. Market Value (D4)	\$8,937,524	
3. Cost Value (D4)	<u>8,265,003</u>	
4. Market Over Cost: (E2-E3)	\$672,521	
5. One-third of Market Over Cost: (E4)/3		224,174
6. Actuarial Value of Assets (E1+E5) (Same as "Current Assets")		<u>\$8,489,177</u>

TABLE 2

Public Employees Retirement Fund

Statement of Change In Plan Net Assets*(dollars in thousands)*

YEAR ENDING JUNE 30, 1999

	<u>Market Value</u>	<u>Cost Value</u>
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$8,025,061	\$7,442,471
B. ADDITIONS		
1. Member Contributions	\$158,475	\$158,475
2. Employer Contributions	173,370	173,370
3. Contributions From Other Sources	0	0
4. MPRIF Income	609,733	609,733
5. Net Investment Income		
a. Interest and Dividends	340,644	340,644
b. Net Realized Gain (Loss)	39,402	39,402
c. Net Change in Unrealized Gain (Loss)	89,933	0
d. Investment Expenses	(5,428)	(5,428)
Net Subtotal	<u>464,551</u>	<u>374,618</u>
6. Other	2,405	2,405
7. Total Additions	<u>\$1,408,534</u>	<u>\$1,318,603</u>
C. OPERATING EXPENSES		
1. Service Retirements paid from MPRIF	\$438,641	\$438,641
2. Service Retirements paid from plan assets	1,251	1,251
2. Disability Benefits	11,107	11,107
3. Survivor Benefits	16,603	16,603
4. Refunds	17,219	17,219
6. Administrative Expenses	9,631	9,631
7. Other	1,619	1,619
8. Total Disbursements	<u>\$496,071</u>	<u>\$496,071</u>
D. OTHER CHANGES IN RESERVES	0	0
E. ASSETS AVAILABLE AT END OF PERIOD	<u><u>\$8,937,524</u></u>	<u><u>\$8,265,003</u></u>

TABLE 3

PUBLIC EMPLOYEES RETIREMENT FUND

ACTIVE MEMBERS AS OF JUNE 30, 1999

Age	Years of Service								ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
<25	2,177	2,493	38	1	0	0	0	0	4,709
25-29	2,180	5,863	1,112	18	0	0	0	0	9,173
30-34	1,844	5,588	3,414	1,083	32	0	0	0	11,961
35-39	2,347	6,752	4,514	3,257	1,240	66	0	0	18,176
40-44	2,147	7,094	6,027	4,033	2,644	1,568	61	0	23,574
45-49	2,943	8,074	6,309	4,816	2,785	2,754	1,102	44	28,827
50-54	833	2,996	3,980	4,182	2,689	2,349	1,652	485	19,166
55-59	447	1,673	2,102	2,492	1,982	1,747	1,252	722	12,417
60-64	238	952	1,108	1,240	986	990	776	332	6,622
65+	191	766	655	505	283	216	178	109	2,903
ALL	15,347	42,251	29,259	21,627	12,641	9,690	5,021	1,692	137,528

AVERAGE ANNUAL EARNINGS

Age	Years of Service								ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
<25	10,239	13,001	18,516	262	0	0	0	0	11,766
25-29	14,008	20,117	24,633	26,839	0	0	0	0	19,226
30-34	13,417	21,106	28,548	30,424	28,114	0	0	0	22,907
35-39	12,293	18,866	27,817	34,116	32,877	33,387	0	0	23,982
40-44	12,530	17,354	24,356	33,225	37,015	35,994	36,267	0	24,914
45-49	10,890	16,226	22,939	30,029	37,125	41,113	39,682	38,864	24,784
50-54	13,762	18,964	23,543	28,331	32,816	39,109	44,453	44,883	28,998
55-59	11,346	17,137	22,850	26,572	29,204	32,795	39,053	44,472	27,718
60-64	10,092	13,617	20,252	24,959	27,337	28,322	30,706	38,437	24,213
65+	8,311	8,834	14,009	19,517	21,202	21,855	24,315	31,813	15,812
ALL	12,113	17,870	24,471	29,993	33,384	36,511	39,121	42,444	24,355

PRIOR FISCAL YEAR EARNINGS (IN MILLIONS) BY YEARS OF SERVICE

Age	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	ALL
All	186	755	716	649	422	354	196	72	3,350

TABLE 4

PUBLIC EMPLOYEES RETIREMENT FUND

SERVICE RETIREMENTS AS OF JUNE 30, 1999

Age	Years Retired							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	2	2	0	0	0	0	0	4
50-54	13	19	1	0	0	0	0	33
55-59	668	1,282	12	2	0	0	0	1,964
60-64	1,103	2,914	1,426	11	0	0	0	5,454
65-69	681	4,016	3,517	801	2	0	0	9,017
70-74	113	855	4,413	2,906	245	0	0	8,532
75-79	35	208	994	3,673	1,402	28	2	6,342
80-84	4	33	149	778	2,705	351	4	4,024
85+	1	9	24	100	486	1,500	587	2,707
ALL	2,620	9,338	10,536	8,271	4,840	1,879	593	38,077

AVERAGE ANNUAL BENEFIT

Age	Years Retired							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	8,212	17,824	0	0	0	0	0	13,018
50-54	8,632	16,305	5,491	0	0	0	0	12,955
55-59	10,988	8,309	15,557	13,836	0	0	0	9,270
60-64	8,555	9,727	13,676	23,347	0	0	0	10,550
65-69	8,054	7,384	12,451	14,302	21,277	0	0	10,029
70-74	4,625	6,361	9,513	13,703	30,579	0	0	11,165
75-79	3,203	5,135	7,989	10,667	16,877	11,719	17,761	11,404
80-84	2,388	5,279	5,545	8,508	11,134	17,087	19,339	10,890
85+	7,178	3,267	2,987	5,342	8,295	10,515	10,088	9,740
ALL	8,794	8,107	10,849	11,836	13,501	11,760	10,176	10,621

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS RETIRED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	23,040	75,703	114,305	97,896	65,345	22,097	6,034	404,416

TABLE 5

PUBLIC EMPLOYEES RETIREMENT FUND

SURVIVORS AS OF JUNE 30, 1999

Age	Years Since Death							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	20	119	57	27	9	1	0	233
50-54	11	57	24	20	7	3	0	122
55-59	18	93	85	27	15	9	2	249
60-64	14	130	149	85	41	16	6	441
65-69	9	77	227	225	71	26	18	653
70-74	7	25	210	428	250	67	43	1,030
75-79	4	16	89	338	453	141	91	1,132
80-84	2	7	41	113	335	305	143	946
85+	7	38	81	109	141	301	398	1,075
ALL	92	562	963	1,372	1,322	869	701	5,881

AVERAGE ANNUAL BENEFIT

Age	Years Since Death							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	8,124	7,298	7,690	7,185	11,918	20,444	0	7,686
50-54	10,452	10,009	12,737	8,441	15,337	6,224	0	10,541
55-59	8,072	8,861	11,114	12,934	14,298	10,508	14,073	10,444
60-64	7,913	7,496	11,830	14,901	13,412	14,449	7,195	11,198
65-69	4,771	6,237	9,367	15,167	15,773	11,687	7,437	11,669
70-74	2,153	8,037	7,949	14,903	13,962	11,448	6,212	12,416
75-79	4,407	3,039	6,403	11,847	11,384	11,583	6,021	10,582
80-84	4,270	5,450	4,981	8,090	10,118	9,956	6,142	8,953
85+	4,741	6,101	6,225	8,033	8,288	9,049	7,609	7,967
ALL	7,075	7,539	8,853	12,802	11,577	10,160	7,028	10,209

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS SINCE DEATH

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	651	4,237	8,525	17,564	15,305	8,829	4,927	60,039

TABLE 6

PUBLIC EMPLOYEES RETIREMENT FUND

DISABILITY RETIREMENTS AS OF JUNE 30, 1999

Age	Years Disabled							ALL
	<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	37	137	83	8	1	0	0	266
50-54	33	110	52	15	3	0	0	213
55-59	53	195	64	15	6	1	0	334
60-64	46	203	138	43	4	4	0	438
65-69	1	28	15	3	2	1	0	50
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	170	673	352	84	16	6	0	1,301

AVERAGE ANNUAL BENEFIT

Age	Years Disabled							ALL
	<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	6,829	6,184	5,219	4,973	2,218	0	0	5,921
50-54	9,986	8,454	7,515	6,163	7,632	0	0	8,289
55-59	8,620	8,949	8,021	10,756	11,220	2,042	0	8,821
60-64	7,618	8,139	12,309	10,801	18,877	8,932	0	9,764
65-69	11,206	10,650	10,859	2,784	21,796	12,875	0	10,742
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	8,240	8,132	9,087	9,124	13,221	8,441	0	8,532

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY 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
All	1,401	5,473	3,199	766	212	51	0	11,100

TABLE 7

Public Employees Retirement Fund

Reconciliation Of Members

	Actives	Terminated	
		Deferred Retirement	Other Non-Vested
A. ON JUNE 30, 1998	136,166	12,238	15,847
B. ADDITIONS	18,289	3,239	6,919
C. DELETIONS			
1. Service Retirement	(2,258)	(517)	(96)
2. Disability	(199)	(23)	(7)
3. Death	(207)	(11)	(32)
4. Terminated - Deferred	(3,221)	0	0
5. Terminated - Refund	(3,471)	0	(1,747)
6. Terminated - Other Non-Vested	(5,170)	0	0
7. Returned as Active	0	(420)	(896)
8. Transferred (to)/from Other Fund	(2,280)	2,280	0
D. DATA ADJUSTMENTS	(121)	(446)	(1,497)
Vested	96,031		
Non-Vested	41,497		
E. TOTAL ON JUNE 30, 1999	137,528	16,340	18,491

	Retirement Annuitants	Recipients	
		Disabled	Survivors
A. ON JUNE 30, 1998	36,187	1,223	5,732
B. ADDITIONS	3,030	250	434
C. DELETIONS			
1. Service Retirement	0	(103)	0
2. Death	(1,126)	(65)	(257)
3. Annuity Expired	0	0	0
4. Returned as Active	0	0	0
D. DATA ADJUSTMENTS	(14)	(4)	(28)
E. TOTAL ON JUNE 30, 1999	38,077	1,301	5,881

TABLE 8

Public Employees Retirement Fund

Actuarial Balance Sheet*(dollars in thousands)*

JULY 1, 1999

A. CURRENT ASSETS (TABLE 1, E6)				\$8,489,177
B. EXPECTED FUTURE ASSETS				
1. Present Value of Expected Future Statutory Supplemental Contributions (See Table 11)				\$1,276,474
2. Present Value of Future Normal Costs				2,105,669
3. Total Expected Future Assets				<u>\$3,382,143</u>
C. TOTAL CURRENT AND EXPECTED FUTURE ASSETS				<u>\$11,871,320</u>
D. CURRENT BENEFIT OBLIGATIONS	<u>Non-Vested</u>	<u>Vested</u>	<u>Total</u>	
1. Benefit Recipients				
a. Retirement Annuities		\$3,960,849	\$3,960,849	
b. Disability Benefits		112,950	112,950	
c. Surviving Spouse and Child Benefits		514,084	514,084	
2. Deferred Retirements with Future Augmentation		192,582	192,582	
3. Former Members without Vested Rights		8,170	8,170	
4. Active Members				
a. Retirement Annuities	18,904	2,704,049	2,722,953	
b. Disability Benefits	261,151	0	261,151	
c. Survivor's Benefits	67,879	0	67,879	
d. Deferred Retirements	11,300	721,369	732,669	
e. Refund Liability Due to Death or Withdrawal	0	33,691	33,691	
5. Total Current Benefit Obligations	<u>\$359,234</u>	<u>\$8,247,744</u>	<u>\$8,606,978</u>	
E. EXPECTED FUTURE BENEFIT OBLIGATIONS				<u>\$2,942,369</u>
F. TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS				<u>\$11,549,347</u>
G. CURRENT UNFUNDED ACTUARIAL LIABILITY (D5-A)				\$117,801
H. CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)				(\$321,973)

TABLE 9

Public Employees Retirement Fund

**Determination Of Unfunded Actuarial Accrued Liability (UAAL)
And Supplemental Contribution Rate**
(dollars in thousands)

JULY 1, 1999

	Actuarial Present Value of Projected Benefits (1)	Actuarial Present Value of Future Normal Costs (2)	Actuarial Accrued Liability (3)=(1)-(2)
A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)			
1. Active Members			
a. Retirement Annuities	\$4,917,965	\$1,222,648	\$3,695,317
b. Disability Benefits	473,932	174,038	299,894
c. Survivor's Benefit	115,488	39,572	75,916
d. Deferred Retirements	1,173,841	606,993	566,848
e. Refunds Due to Death or Withdrawal	79,485	62,418	17,067
f. Total	<u>\$6,760,711</u>	<u>\$2,105,669</u>	<u>\$4,655,042</u>
2. Deferred Retirements With Future Augmentation	192,582		192,582
3. Former Members Without Vested Rights	8,170		8,170
4. Annuitants in MPRIF	4,336,210		4,336,210
5. Recipients Not in MPRIF	<u>251,674</u>		<u>251,674</u>
6. Total	<u>\$11,549,347</u>	<u>\$2,105,669</u>	<u>\$9,443,678</u>
B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)			
1. AAL (A6)			\$9,443,678
2. Current Assets (Table 1, E6)			<u>8,489,177</u>
3. UAAL (B1-B2)			<u>\$954,501</u>
C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE			
1. Present Value of Future Payrolls Through the Amortization Date of July 1, 2020			\$56,985,461
2. Supplemental Contribution Rate (B3/C1)			1.67%

TABLE 10

Public Employees Retirement Fund

Changes In Unfunded Actuarial Accrued Liability (UAAL)
(dollars in thousands)

YEAR ENDING JUNE 30, 1999

A. UAAL AT BEGINNING OF YEAR	\$1,132,635
B. CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
1. Normal Cost and Expenses	\$265,077
2. Contribution	(331,845)
3. Interest on A, B1 and B2	<u>93,436</u>
4. Total (B1+B2+B3)	<u>\$26,668</u>
C. EXPECTED UAAL AT END OF YEAR (A+B4)	\$1,159,303
D. INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
1. Salary Increases	(\$57,350)
2. Investment Return	(90,800)
3. MPRIF Mortality	(72,180)
4. Mortality of Other Benefit Recipients	(10,853)
5. Other Items	<u>26,381</u>
6. Total	<u>(\$204,802)</u>
E. UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTION (C+D6)	\$954,501
F. CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO PLAN AMENDMENTS	0
G. CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS	<u>0</u>
H. UAAL AT END OF YEAR (E+F+G)	<u><u>\$954,501</u></u>

TABLE 11

Public Employees Retirement Fund

Determination Of Contribution Sufficiency*(dollars in thousands)*

JULY 1, 1999

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 353		
1. Employee Contributions	4.78%	\$169,398
2. Employer Contributions	5.23%	185,221
3. Total	<u>10.00%</u>	<u>\$354,619</u>
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	4.44%	\$157,442
b. Disability benefits	0.61%	21,598
c. Survivors	0.13%	4,693
d. Deferred Retirement Benefits	2.08%	73,768
e. Refunds Due to Death or Withdrawal	0.23%	8,277
f. Total	<u>7.49%</u>	<u>\$265,778</u>
2. Supplemental Contribution Amortization by July 1, 2020 of UAAL	1.67%	59,193
3. Allowance for Expenses	<u>0.28%</u>	<u>9,925</u>
4. Total	<u>9.44%</u>	<u>\$334,896</u>
C. CONTRIBUTION SUFFICIENCY (DEFICIENCY) [A3-B4]	0.56%	\$19,723

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 1999 is \$3,544,488.

Public Employees Retirement Fund

Summary of Actuarial Assumptions and Methods

Interest:	<p>Pre-Retirement: 8.5% per annum</p> <p>Post-Retirement: 8.5% per annum</p>
Benefit Increases After Retirement:	Payment of earnings on retired reserves in excess of 6% accounted for by 6% post-retirement assumptions.
Salary Increases:	Reported salary for prior fiscal year, with new hires annualized, increased to current fiscal year and annually for each future year according to the rate table below.
Mortality:	<p>Pre-Retirement:</p> <p>Male - 1983 Group Annuity Mortality Table for males setback five years.</p> <p>Female - 1983 Group Annuity Mortality Table for females setback five years.</p> <p>Post-Retirement:</p> <p>Male - 1983 Group Annuity Mortality Table for males set forward one year.</p> <p>Female - 1983 Group Annuity Mortality Table for females set forward one year.</p> <p>Post-Disability:</p> <p>Male - 1965 RRB rates</p> <p>Female - 1965 RRB rates</p>
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.

TABLE 12
(Continued)

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.
Social Security:	N/A
Special Consideration:	<p>Married Members assumed to elect subsidized joint and survivor form of annuity as follows:</p> <p>Males - 30% elect 50% J&S option 45% elect 100% J&S option</p> <p>Females - 15% elect 50% J&S option 15% elect 100% J&S option</p>
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% per annum.

TABLE 12

(Continued)

Public Employees Retirement Fund***Summary of Actuarial Assumptions and Methods*****Separation Expressed as Number of Occurrences Per 10,000:**

Age	Pre-Retirement Death		Withdrawal		Disability		Retirement		Salary Increases
	Male	Female	Male	Female	Male	Female	Male	Female	
20	3	1	2,542	2,913	9	9	0	0	7.7%
21	3	1	2,277	2,666	9	9	0	0	7.7
22	3	2	2,050	2,450	9	9	0	0	7.7
23	4	2	1,854	2,259	10	10	0	0	7.7
24	4	2	1,684	2,091	10	10	0	0	7.7
25	4	2	1,536	1,942	10	10	0	0	7.6
26	4	2	1,406	1,808	10	10	0	0	7.5
27	4	2	1,291	1,688	10	10	0	0	7.4
28	4	2	1,189	1,580	11	11	0	0	7.3
29	4	2	1,099	1,482	11	11	0	0	7.2
30	5	3	1,018	1,394	11	11	0	0	7.2
31	5	3	945	1,313	11	11	0	0	7.1
32	5	3	880	1,239	11	11	0	0	7.1
33	5	3	821	1,172	12	12	0	0	7.0
34	6	3	767	1,110	12	12	0	0	7.0
35	6	3	719	1,053	12	12	0	0	6.9
36	7	4	675	1,000	12	12	0	0	6.8
37	7	4	634	952	13	13	0	0	6.7
38	8	4	597	907	13	13	0	0	6.6
39	9	4	563	865	14	14	0	0	6.5
40	9	5	532	826	15	15	0	0	6.4
41	10	5	503	790	16	16	0	0	6.3
42	10	5	476	756	17	17	0	0	6.3
43	11	6	452	724	18	18	0	0	6.3
44	12	6	429	695	20	20	0	0	6.2
45	14	7	408	667	22	22	0	0	6.2
46	15	7	388	641	23	23	0	0	6.1
47	17	8	370	616	25	25	0	0	6.0
48	19	8	352	593	27	27	0	0	5.9
49	22	9	336	571	30	30	0	0	5.8

TABLE 12
(Continued)

Public Employees Retirement Fund

Summary of Actuarial Assumptions and Methods

Separation Expressed as Number of Occurrences Per 10,000:

Age	Pre-Retirement Death		Withdrawal		Disability		Retirement		Salary Increases
	Male	Female	Male	Female	Male	Female	Male	Female	
50	22	10	321	550	33	33	0	0	5.7%
51	25	11	316	531	36	36	0	0	5.7
52	28	12	310	513	40	40	0	0	5.7
53	31	14	270	495	45	45	0	0	5.7
54	35	15	230	487	51	51	0	0	5.7
55	39	16	195	478	58	58	0	0	5.7
56	43	18	150	410	66	66	0	0	5.7
57	48	19	100	362	76	76	0	0	5.7
58	52	21	50	210	88	88	0	0	5.7
59	57	23	20	50	102	102	0	0	5.0
60	61	25	0	0	118	118	0	0	5.0
61	66	28	0	0	136	136	0	0	5.0
62	71	31	0	0	157	157	0	0	5.0
63	77	34	0	0	181	181	0	0	5.0
64	83	38	0	0	208	208	10,000	10,000	5.0
65	91	42	0	0	0	0	0	0	5.0
66	101	47	0	0	0	0	0	0	5.0
67	111	52	0	0	0	0	0	0	5.0
68	124	58	0	0	0	0	0	0	5.0
69	139	64	0	0	0	0	0	0	5.0
70	156	71	0	0	0	0	0	0	5.0

TABLE 14

Public Employees Retirement Fund

SCHEDULE OF FUNDING PROGRESS

(dollars in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (AAL) (B)	Unfunded AAL (UAAL) (B - A)	Funded Ratio (A)/(B)	Actual Covered Payroll (Previous FY) (C)	UAAL as % of Covered Payroll (B - A) / (C)
07/01/91	3,570,304	4,988,671	1,418,367	71.57%	2,124,409	66.77%
07/01/92	3,978,110	5,439,953	1,461,843	73.13%	2,299,532	63.57%
07/01/93	4,374,459	5,784,318	1,409,859	75.63%	2,403,558	58.66%
07/01/94	4,747,128	6,223,622	1,476,494	76.28%	2,557,522	57.73%
07/01/95	5,138,461	6,622,069	1,483,608	77.60%	2,679,069	55.38%
07/01/96	5,786,398	7,270,073	1,483,675	79.59%	2,814,126	52.72%
07/01/97	6,658,410	8,049,666	1,391,256	82.72%	2,979,260	46.70%
07/01/98	7,636,668	8,769,303	1,132,635	87.08%	3,271,737	34.62%
07/01/99	8,489,177	9,443,678	954,501	89.89%	3,302,808	28.90%

TABLE 15

Public Employees Retirement Fund
SCHEDULE OF EMPLOYER CONTRIBUTIONS
(dollars in thousands)

Year Ended June 30	Actuarially Required Contribution Rate (A)*	Actual Covered Payroll (B)	Actual Member Contributions (C)	Annual Required Contribution [(A) x (B)] - (C)	Actual Employer Contribution**	Percentage Contributed
1991	10.04%	2,124,409	94,413	118,878	101,907	85.72%
1992	9.44%	2,299,532	101,655	115,421	109,203	94.61%
1993	9.95%	2,403,558	106,359	132,795	113,183	85.23%
1994	9.58%	2,557,522	112,940	132,071	119,390	90.40%
1995	9.76%	2,679,069	115,986	145,491	123,984	85.22%
1996	9.61%	2,814,126	121,525	148,913	129,738	87.12%
1997	9.75%	2,979,260	128,234	162,244	136,686	84.25%
1998	9.62% ***	3,271,737	140,385	174,356	151,499	86.89%
1999	9.63% ***	3,302,808	158,475	159,585	173,370	108.64%
1999	9.22% ***					

* Actuarially Required Contributions determined for years ended 6/30/95, 6/30/96, and 6/30/97 did not comply with the parameters of GASB Statement No. 25 since a one-percent growth in covered population is assumed in the amortization calculation.

** Includes contributions from other sources (if applicable).

*** Actuarially Required Contribution Rate calculated according to parameters of GASB 25 with no assumption for growth of covered population.

TABLE 3A
BASIC

PUBLIC EMPLOYEES RETIREMENT FUND

ACTIVE MEMBERS AS OF JUNE 30, 1999

Age	Years of Service								ALL
	<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>	
<25	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	1	2	3
50-54	0	0	0	0	0	0	3	158	161
55-59	0	0	0	0	0	0	2	255	257
60-64	0	0	0	0	0	0	1	124	125
65+	0	0	0	0	0	0	1	61	62
ALL	0	0	0	0	0	0	8	600	608

AVERAGE ANNUAL EARNINGS

Age	Years of Service								ALL
	<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>	
<25	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	16,796	42,671	34,046
50-54	0	0	0	0	0	0	35,614	43,052	42,913
55-59	0	0	0	0	0	0	40,701	43,754	43,730
60-64	0	0	0	0	0	0	18,026	36,780	36,630
65+	0	0	0	0	0	0	9,314	27,448	27,156
ALL	0	0	0	0	0	0	29,048	40,467	40,316

PRIOR FISCAL YEAR EARNINGS (IN THOUSANDS) BY YEARS OF 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
All	0	0	0	0	0	0	232	24,280	24,512

TABLE 4A
BASIC

PUBLIC EMPLOYEES RETIREMENT FUND

SERVICE RETIREMENTS AS OF JUNE 30, 1999

Age	Years Retired							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	2	2	0	0	0	0	0	4
50-54	7	9	1	0	0	0	0	17
55-59	136	209	11	2	0	0	0	358
60-64	84	512	466	9	0	0	0	1,071
65-69	43	378	941	358	2	0	0	1,722
70-74	4	79	882	1,164	211	0	0	2,340
75-79	2	12	165	1,274	889	24	2	2,368
80-84	0	2	17	226	1,472	289	3	2,009
85+	1	1	2	19	200	1,031	470	1,724
ALL	279	1,204	2,485	3,052	2,774	1,344	475	11,613

AVERAGE ANNUAL BENEFIT

Age	Years Retired							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	8,212	17,824	0	0	0	0	0	13,018
50-54	12,178	21,721	5,491	0	0	0	0	16,837
55-59	29,073	27,033	15,081	13,836	0	0	0	27,367
60-64	22,752	27,771	29,983	24,026	0	0	0	28,308
65-69	22,545	20,365	27,530	26,782	21,277	0	0	25,670
70-74	30,523	20,951	20,535	24,956	33,721	0	0	23,954
75-79	14,701	29,893	20,138	20,188	22,414	12,563	17,761	20,985
80-84	0	15,588	18,312	18,169	16,044	18,948	23,374	16,731
85+	7,178	16,927	8,375	18,518	14,693	12,616	11,170	12,522
ALL	25,430	24,800	24,874	22,627	19,336	13,977	11,275	21,149

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS RETIRED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	7,094	29,859	61,811	69,057	53,638	18,785	5,355	245,603

TABLE 5A
BASIC

PUBLIC EMPLOYEES RETIREMENT FUND

SURVIVORS AS OF JUNE 30, 1999

Age	Years Since Death							ALL
	<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	1	3	7	8	4	1	0	24
50-54	0	3	6	8	5	2	0	24
55-59	2	6	34	12	11	8	2	75
60-64	1	12	47	45	28	14	6	153
65-69	0	9	74	122	53	22	18	298
70-74	0	4	65	221	181	57	42	570
75-79	2	0	29	153	282	111	89	666
80-84	2	6	28	59	217	236	137	685
85+	6	35	76	96	104	232	369	918
ALL	14	78	366	724	885	683	663	3,413

AVERAGE ANNUAL BENEFIT

Age	Years Since Death							ALL
	<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	24,092	12,900	17,237	13,113	19,286	20,444	0	16,081
50-54	0	20,632	26,789	12,637	19,894	8,464	0	18,339
55-59	16,499	19,794	19,606	24,227	17,261	11,634	14,073	18,936
60-64	15,197	16,239	22,591	21,927	17,310	15,744	7,195	19,652
65-69	0	12,788	16,759	23,294	19,536	13,405	7,437	18,998
70-74	0	20,096	14,404	22,527	16,948	12,675	6,172	17,622
75-79	5,887	0	9,840	18,729	14,746	13,341	6,096	14,031
80-84	4,270	6,311	6,002	11,448	12,815	11,476	6,147	10,542
85+	5,348	6,418	6,440	8,536	9,613	9,948	7,801	8,444
ALL	8,906	11,182	14,014	18,873	14,569	11,516	7,131	13,266

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY 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
All	124	872	5,129	13,664	12,893	7,865	4,727	45,276

TABLE 6A
BASIC

PUBLIC EMPLOYEES RETIREMENT FUND

DISABILITY RETIREMENTS AS OF JUNE 30, 1999

Age	Years Disabled							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	0	0	0	0	0	0	0	0
50-54	1	6	1	0	1	0	0	9
55-59	0	11	5	3	2	0	0	21
60-64	3	8	25	9	2	3	0	50
65-69	0	9	2	0	2	1	0	14
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	4	34	33	12	7	4	0	94

AVERAGE ANNUAL BENEFIT

Age	Years Disabled							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	0	0	0	0	0	0	0	0
50-54	39,570	35,000	35,990	0	8,090	0	0	32,628
55-59	0	24,690	25,420	20,710	17,796	0	0	23,639
60-64	16,776	23,672	31,394	29,191	33,338	10,289	0	27,696
65-69	0	20,076	25,367	0	21,796	12,875	0	20,563
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	22,475	25,049	30,263	27,071	21,993	10,936	0	26,200

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS DISABLED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	89	851	998	324	153	43	0	2,462

TABLE 11A
Basic

Public Employees Retirement Fund

Determination Of Contribution Sufficiency
(dollars in thousands)

JULY 1, 1999

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 353		
1. Employee Contributions	8.75%	\$2,263
2. Employer Contributions	11.43%	2,956
3. Total	<u>20.18%</u>	<u>\$5,219</u>
 B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	3.85%	\$995
b. Disability benefits	0.72%	185
c. Survivors	0.40%	104
d. Deferred Retirement Benefits	3.34%	863
e. Refunds Due to Death or Withdrawal	<u>0.00%</u>	<u>1</u>
f. Total	<u>8.31%</u>	<u>\$2,148</u>

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 1999 is \$25,865.

Public Employees Retirement Fund

Summary of Plan Provisions

GENERAL

<i>Eligibility:</i>	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.
<i>Contributions:</i>	
<i>Member:</i>	8.75% of total salary thereafter.
<i>Employer:</i>	11.43% of total salary. Additional 2.68% is repealed at full funding.
<i>Allowable Service:</i>	Service during which Member contributions were deducted. May also include certain leaves of absence and military service.
<i>Salary:</i>	Includes amounts deducted for deferred compensation or supplemental retirement plans, net income from fees and sick leave payments funded by the employer. Excludes unused annual leave and sick leave payments, severance payments, Workers' Compensation benefits and employer-paid flexible spending accounts, cafeteria plans, healthcare expense accounts, day-care expenses, fringe benefits and the cost of insurance coverage.
<i>Average Salary:</i>	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:

<i>Eligibility:</i>	Age 65 and three years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.
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Amount: The greater of:
2.2% of Average Salary for each of the first 10 years of Allowable Service and 2.7% of Average Salary for each subsequent year;
OR
2.7% of Average Salary for each year of Allowable Service.

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
2.2% of Average Salary for each of the first 10 years of Allowable Service and 2.7% 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
2.7% 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:

25%, 50%, 75% 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. Members receiving benefits for at least one full month but less than 12 full months will receive a partial increase.

Benefit Increases: (continued) 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.

Amount: Normal Retirement Benefit based on Allowable Service and average salary at disability without reduction for commencement before normal retirement age. Supplemental benefit of \$25 per month payable to the later of the normal retirement age or the 5-year anniversary at commencement of disability. 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.

If a Member became disabled prior to July 1, 1997 but did not commence their benefit before July 1, 1997, the benefit payable is calculated under the laws in effect at the time the Member became disabled, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

Payments stop if disability ceases. If death occurs prior to age 65 or within five years of disability, the surviving spouse can receive a refund or a survivor benefit. Dependent children are entitled to dependent child benefits subject to the 70% family maximum. 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

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 Benefit

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

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.

If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

TABLE 13A
BASIC
(Continued)

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 22 if full-time student.)

If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

Surviving Spouse Optional Annuity

Eligibility: Member or former Member who dies before retirement benefits commence and other survivor annuity is waived by spouse.

Amount: Survivor's payment of the 100% joint and survivor benefit the Member could have elected if terminated or an actuarial equivalent term certain annuity. If commencement is prior to age 65 (age 62 if 30 years of service), the benefit is reduced same as early retirement with half the applicable reduction factor used from age 55 to the actual commencement age. If no surviving spouse, then an actuarial equivalent dependent child benefit is paid to age 20 or for five years if longer.

If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

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 benefits 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 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.

If a Member terminated employment prior to July 1, 1997 but was not eligible to commence their pension before July 1, 1997, an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

SUMMARY OF SIGNIFICANT CHANGES

No significant changes were recognized for this valuation.

**TABLE 3B
COORDINATED**

**PUBLIC EMPLOYEES RETIREMENT FUND
ACTIVE MEMBERS AS OF JUNE 30, 1999**

Age	Years of Service								ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
<25	2,177	2,493	38	1	0	0	0	0	4,709
25-29	2,180	5,863	1,112	18	0	0	0	0	9,173
30-34	1,844	5,588	3,414	1,083	32	0	0	0	11,961
35-39	2,347	6,752	4,514	3,257	1,240	66	0	0	18,176
40-44	2,147	7,094	6,027	4,033	2,644	1,568	61	0	23,574
45-49	2,943	8,074	6,309	4,816	2,785	2,754	1,101	42	28,824
50-54	833	2,996	3,980	4,182	2,689	2,349	1,649	327	19,005
55-59	447	1,673	2,102	2,492	1,982	1,747	1,250	467	12,160
60-64	238	952	1,108	1,240	986	990	775	208	6,497
65+	191	766	655	505	283	216	177	48	2,841
ALL	15,347	42,251	29,259	21,627	12,641	9,690	5,013	1,092	136,920

AVERAGE ANNUAL EARNINGS

Age	Years of Service								ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
<25	10,239	13,001	18,516	262	0	0	0	0	11,766
25-29	14,008	20,117	24,633	26,839	0	0	0	0	19,226
30-34	13,417	21,106	28,548	30,424	28,114	0	0	0	22,907
35-39	12,293	18,866	27,817	34,116	32,877	33,387	0	0	23,982
40-44	12,530	17,354	24,356	33,225	37,015	35,994	36,267	0	24,914
45-49	10,890	16,226	22,939	30,029	37,125	41,113	39,703	38,682	24,783
50-54	13,762	18,964	23,543	28,331	32,816	39,109	44,469	45,768	28,880
55-59	11,346	17,137	22,850	26,572	29,204	32,795	39,051	44,864	27,379
60-64	10,092	13,617	20,252	24,959	27,337	28,322	30,722	39,425	23,974
65+	8,311	8,834	14,009	19,517	21,202	21,855	24,400	37,360	15,565
ALL	12,113	17,870	24,471	29,993	33,384	36,511	39,138	43,531	24,284

PRIOR FISCAL YEAR EARNINGS (IN MILLIONS) BY YEARS OF SERVICE

Age	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	ALL
All	186	755	716	649	422	354	196	48	3,325

**TABLE 4B
COORDINATED**

PUBLIC EMPLOYEES RETIREMENT FUND

SERVICE RETIREMENTS AS OF JUNE 30, 1999

Age	Years Retired							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	0	0	0	0	0	0	0	0
50-54	6	10	0	0	0	0	0	16
55-59	532	1,073	1	0	0	0	0	1,606
60-64	1,019	2,402	960	2	0	0	0	4,383
65-69	638	3,638	2,576	443	0	0	0	7,295
70-74	109	776	3,531	1,742	34	0	0	6,192
75-79	33	196	829	2,399	513	4	0	3,974
80-84	4	31	132	552	1,233	62	1	2,015
85+	0	8	22	81	286	469	117	983
ALL	2,341	8,134	8,051	5,219	2,066	535	118	26,464

AVERAGE ANNUAL BENEFIT

Age	Years Retired							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	0	0	0	0	0	0	0	0
50-54	4,497	11,432	0	0	0	0	0	8,831
55-59	6,365	4,663	20,793	0	0	0	0	5,237
60-64	7,385	5,882	5,761	20,294	0	0	0	6,212
65-69	7,078	6,036	6,943	4,218	0	0	0	6,337
70-74	3,675	4,876	6,761	6,184	11,085	0	0	6,332
75-79	2,507	3,620	5,571	5,611	7,282	6,659	0	5,695
80-84	2,388	4,614	3,901	4,553	5,273	8,414	7,237	5,068
85+	0	1,560	2,498	2,252	3,822	5,897	5,743	4,863
ALL	6,812	5,637	6,521	5,526	5,667	6,194	5,756	6,002

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS RETIRED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	15,946	45,851	52,500	28,840	11,708	3,313	679	158,836

**TABLE 5B
COORDINATED**

PUBLIC EMPLOYEES RETIREMENT FUND

SURVIVORS AS OF JUNE 30, 1999

Age	Years Since Death							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	19	116	50	19	5	0	0	209
50-54	11	54	18	12	2	1	0	98
55-59	16	87	51	15	4	1	0	174
60-64	13	118	102	40	13	2	0	288
65-69	9	68	153	103	18	4	0	355
70-74	7	21	145	207	69	10	1	460
75-79	2	16	60	185	171	30	2	466
80-84	0	1	13	54	118	69	6	261
85+	1	3	5	13	37	69	29	157
ALL	78	484	597	648	437	186	38	2,468

AVERAGE ANNUAL BENEFIT

Age	Years Since Death							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	7,284	7,154	6,354	4,690	6,024	0	0	6,723
50-54	10,452	9,419	8,053	5,645	3,945	1,745	0	8,632
55-59	7,019	8,108	5,454	3,901	6,150	1,503	0	6,784
60-64	7,353	6,607	6,872	6,997	5,017	5,386	0	6,708
65-69	4,771	5,371	5,793	5,543	4,694	2,238	0	5,518
70-74	2,153	5,741	5,056	6,765	6,131	4,459	7,902	5,967
75-79	2,927	3,039	4,742	6,157	5,841	5,081	2,717	5,654
80-84	0	287	2,782	4,423	5,159	4,758	6,030	4,784
85+	1,105	2,403	2,960	4,324	4,564	6,027	5,167	5,184
ALL	6,747	6,953	5,690	6,020	5,519	5,184	5,246	5,982

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS SINCE DEATH

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	526	3,365	3,396	3,900	2,411	964	199	14,763

TABLE 6B
COORDINATED

PUBLIC EMPLOYEES RETIREMENT FUND

DISABILITY RETIREMENTS AS OF JUNE 30, 1999

Age	Years Disabled							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	37	137	83	8	1	0	0	266
50-54	32	104	51	15	2	0	0	204
55-59	53	184	59	12	4	1	0	313
60-64	43	195	113	34	2	1	0	388
65-69	1	19	13	3	0	0	0	36
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	166	639	319	72	9	2	0	1,207

AVERAGE ANNUAL BENEFIT

Age	Years Disabled							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	6,829	6,184	5,219	4,973	2,218	0	0	5,921
50-54	9,062	6,923	6,957	6,163	7,404	0	0	7,216
55-59	8,620	8,009	6,547	8,268	7,932	2,042	0	7,827
60-64	6,980	7,502	8,087	5,934	4,417	4,864	0	7,454
65-69	11,206	6,186	8,628	2,784	0	0	0	6,924
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	7,897	7,232	6,897	6,133	6,399	3,453	0	7,157

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS DISABLED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	1,310	4,621	2,200	441	57	6	0	8,638

Public Employees Retirement Fund

Determination Of Contribution Sufficiency
(dollars in thousands)

JULY 1, 1999

	<u>Percent of Payroll</u>	<u>Dollar Amount</u>
A. STATUTORY CONTRIBUTIONS - CHAPTER 353		
1. Employee Contributions	4.75%	\$167,135
2. Employer Contributions	5.18%	182,265
3. Total	<u>9.93%</u>	<u>\$349,400</u>
 B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	4.45%	\$156,447
b. Disability benefits	0.61%	21,413
c. Survivors	0.13%	4,589
d. Deferred Retirement Benefits	2.07%	72,904
e. Refunds Due to Death or Withdrawal	<u>0.24%</u>	<u>8,275</u>
f. Total	<u>7.50%</u>	<u>\$263,628</u>

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 1999 is \$3,518,623.

Public Employees Retirement Fund

Summary of Plan Provisions

GENERAL

<i>Eligibility</i>	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.
<i>Contributions</i>	
<i>Member:</i>	4.75% of total salary.
<i>Employer:</i>	5.18% of total salary. Additional 0.43% is repealed at full funding.
<i>Allowable Service:</i>	Service during which Member contributions were deducted. May also include certain leaves of absence and military service.
<i>Salary:</i>	Includes amounts deducted for deferred compensation or supplemental retirement plans, net income from fees and sick leave payments funded by the employer. Excludes unused annual leave and sick leave payments, severance payments, Workers' Compensation benefits and employer-paid flexible spending accounts, cafeteria plans, healthcare expense accounts, day-care expenses, fringe benefits and the cost of insurance coverage.
<i>Average Salary:</i>	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

<i>Eligibility:</i>	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.
<i>Amount:</i>	The greater of: 1.2% of Average Salary for each of the first 10 years of Allowable Service and 1.7% of Average Salary for each subsequent year; <div style="text-align: center;">OR</div> 1.7% of Average Salary for each year of Allowable Service.
<i>Eligibility:</i>	First hired after June 30, 1989: The greater of age 65 or the age eligible for full Social Security retirement benefits but no later than age 66 and three years of Allowable Service. Proportionate Retirement Annuity is available at normal retirement age and one year of Allowable Service.
<i>Amount:</i>	1.7% of Average Salary for each year of Allowable Service.

Early Retirement Benefit

<i>Eligibility:</i>	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.
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<i>Amount:</i>	<p>First hired before July 1, 1989:</p> <p>The greater of</p> <p>1.2% of Average Salary for each of the first 10 years of Allowable Service and 1.7% 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;</p> <p style="text-align: center;">OR</p> <p>1.7% 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.</p> <p>First hired after June 30, 1989:</p> <p>1.7% of Average Salary for each year of allowable Service assuming augmentation to the age eligible for full Social Security retirement benefits at 3% per year and actuarial reduction for each month the Member is under the Social Security retirement age, but no later than age 66.</p>
<i>Form of Payment:</i>	<p>Life annuity with return on death of any balance of contributions over aggregate monthly payments. Actuarially equivalent options are:</p> <p>25%, 50%, 75% or 100% joint and survivor with bounce back feature without additional reduction (option canceled if Member is pre-deceased by beneficiary).</p>
<i>Benefit Increases:</i>	<p>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.</p>

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.

If a Member became disabled prior to July 1, 1997 but did not commence their benefit before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

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

<i>Eligibility:</i>	Normal retirement age.
<i>Amount:</i>	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.
<i>Benefit Increases:</i>	Same as for retirement.

DEATH

Surviving Spouse Optional Annuity

<i>Eligibility:</i>	Member or former Member who dies before retirement or disability benefits commence.
<i>Amount:</i>	<p>Survivor's payment of the 100% joint and survivor benefit the Member could have elected if terminated or an actuarial equivalent term certain annuity. If commencement is prior to age 65 (age 62 if 30 years of service), the benefit is reduced same as early retirement with half the applicable reduction factor used from age 55 to the actual commencement age. If no surviving spouse, then an actuarial equivalent dependent child benefit is paid to age 20 or for five years if longer.</p> <p>If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.</p>
<i>Benefit Increases:</i>	Adjusted by PERA to provide same increase as MPRIF.

Refund of Contributions

<i>Eligibility:</i>	Member dies before receiving any retirement benefits and survivor benefits are not payable.
<i>Amount:</i>	The excess of the Member's contributions with 6% interest over any disability or survivor benefits paid.

TERMINATION

Refund of Contributions

<i>Eligibility:</i>	Termination of public service.
<i>Amount:</i>	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

<i>Eligibility:</i>	Three years of Allowable Service.
<i>Amount:</i>	<p>Benefit computed under law in effect at termination and increased by the following 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.</p> <p>If a Member terminated employment prior to July 1, 1997 but was not eligible to commence their pension before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.</p>

SUMMARY OF SIGNIFICANT CHANGES

No significant changes were recognized for this valuation.

Public Employees Police and Fire Fund
ACTUARIAL VALUATION REPORT

July 1, 1999

 **FILE COPY**



MILLIMAN & ROBERTSON, INC.

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December 6, 1999

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

RE: Public Employees Police and Fire Fund

Commission Members:

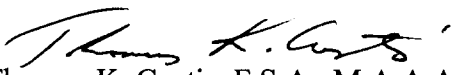
Pursuant to the terms of our Actuarial Services Contract, we have performed an actuarial valuation of the Fund as of July 1, 1999.


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.

Respectfully submitted,

MILLIMAN & ROBERTSON, INC.


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


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TKC/WVH/bh

Public Employees Police and Fire Fund

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Public Employees Police and Fire Fund

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Public Employees Police and Fire Fund

Report Highlights
(dollars in thousands)

	07/01/98 Valuation	07/01/99 Valuation
A. CONTRIBUTIONS (Table 11)		
1. Statutory Contributions - Chapter 353 % of Payroll	19.00%	15.50%
2. Required Contributions - Chapter 356 % of Payroll	11.40%	11.68%
3. Sufficiency (Deficiency): (A.1. - A.2.)	7.60%	3.82%
B. FUNDING RATIOS		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	\$2,337,313	\$3,679,551
b. Current Benefit Obligations (Table 8)	\$1,638,101	\$2,877,732
c. Funding Ratio: (a/b)	142.68%	127.86%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	\$2,337,313	\$3,679,551
b. Actuarial Accrued Liability (Table 9)	\$1,741,344	\$3,004,637
c. Funding Ratio: (a/b)	134.22%	122.46%
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	\$3,218,158	\$4,412,745
b. Current and Expected Future Benefit Obligations	\$2,712,061	\$4,121,345
c. Funding Ratio: (a/b)	118.66%	107.07%
C. PLAN PARTICIPANTS		
1. Active Members		
a. Number (Table 3)	8,499	9,477
b. Projected Annual Earnings	\$399,499	\$474,245
c. Average Annual Earnings (Projected \$)	\$47,005	\$50,042
d. Average Age	38.3	39.0
e. Average Service	10.1	11.0
2. Others		
a. Service Retirements (Table 4)	1,781	3,674
b. Survivors (Table 5)	492	1,173
c. Disability Retirements (Table 6)	251	412
d. Deferred Retirements (Table 7)	314	368
e. Terminated Other Non-vested (Table 7)	194	195
f. Total	3,032	5,822

Public Employees Police and Fire Fund

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 127.86%. The corresponding ratio for the prior year was 142.68%.
- 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 1999 the ratio is 122.46%, which is a decrease from the 1998 value of 134.22%.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 107.07% 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 E1 to E6. 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 as follows:

- 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

Disclosure of the Current Benefit Obligation amounts used to be required by Statement No. 5 of the Governmental Accounting Standards Board (GASB). However, Statement No. 5 has been superseded by Statement No. 25. Tables 14 and 15 of this report are included to fulfill the requirements of Statement No. 25.

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 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.

Source 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 expectations. 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 15.50% compared to the Required Contribution Rate of 11.68%.

Statutes include a change in the calculation of the supplemental contribution rate when current assets exceed the Actuarial Accrued Liability effective with the July 1, 2000 valuation. If that revised methodology were reflected in this valuation, the resulting required contribution rate would be 13.72%.

Changes in Actuarial Assumptions

There were no changes in actuarial assumptions since the last valuation.

Changes in Plan Provisions

The Police and Fire Consolidation Fund was merged into the Police and Fire Fund effective July 1, 1999. The Police and Fire Fund assumed all liabilities of the Police and Fire Consolidation Fund and certain assets of the Police and Fire Consolidation Fund (as shown in Table 1). Employee contribution rates have decreased from 7.60% to 6.20% effective July 1, 1999. Employer contribution rates have decreased from 11.40% to 9.30% effective July 1, 1999. The early retirement reduction factors have been decreased from 2.4% per year to 1.2% per year that retirement precedes age 55 effective July 1, 1999.

TABLE 1

Public Employees Police and Fire Fund

Statement of Plan Net Assets*(dollars in thousands)*

JULY 1, 1999

<u>PRE-MERGER</u>	<u>Market Value</u>	<u>Cost Value</u>
A. ASSETS IN TRUST		
1. Cash, Equivalents, Short-term Securities	\$ 23,452	\$ 23,452
2. Fixed Income	459,203	475,473
3. Equity	1,563,134	1,248,783
4. Real Estate	74,229	59,413
5. Equity in MPRIF	718,623	718,623
6. Other	<u>0</u>	<u>0</u>
Subtotal	\$2,838,641	\$2,525,744
B. ASSETS RECEIVABLE	227	227
C. LIABILITIES	(3,453)	(3,453)
D. NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
1. MPRIF Reserves	\$ 718,623	\$ 718,623
2. Member Reserves	260,239	260,239
3. Other Non-MPRIF Reserves	<u>1,856,553</u>	<u>1,543,656</u>
4. Total Assets Available for Benefits	\$2,835,415	\$2,522,518
E. DETERMINATION OF ACTUARIAL VALUE OF ASSETS (PRE-MERGER)		
1. Cost Value of Assets Available for Benefits: (D4)		\$2,522,518
2. Market Value: (D4)	\$2,835,415	
3. Cost Value: (D4)	<u>2,522,518</u>	
4. Market Over Cost: (E2) - (E3)	\$ 312,897	
5. One-third of Market Over Cost: (E4)/3		<u>104,299</u>
6. Actuarial Value of Assets (E1) + (E5) <i>(same as "Current Assets")</i>		\$2,626,817
F. ACTUARIAL VALUE OF ASSETS (POST-MERGER)		
1. Pre-merger Assets: (E6)	\$2,626,817	
2. MPRIF Transfers From P&F Consolidation Fund	\$ 681,905	
3. Market Value of Non-MPRIF Assets Transferred From P&F Consolidation Fund	\$ 362,182	
4. Current Asset Ratio: (E6-A5)/(E2-A5)	0.9015	
5. Receivable From P&F Consolidation Fund Fixed Amortizations	\$ 44,322	
6. Actuarial Value of Assets Post-Merger: F1 + F2 + (F3 x F4) + F5	\$3,679,551	

TABLE 2

Public Employees Police and Fire Fund

Statement of Change In Plan Net Assets (Pre-Merger)*(dollars in thousands)*

YEAR ENDING JUNE 30, 1999

	<u>Market Value</u>	<u>Cost Value</u>
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$2,519,886	\$2,246,026
B. ADDITIONS		
1. Member Contributions	\$30,897	\$30,897
2. Employer Contributions	46,280	46,280
3. Contributions From Other Sources	0	0
4. MPRIF Income	89,906	89,906
5. Net Investment Income		
a. Interest and Dividends	160,498	160,498
b. Net Realized Gain (Loss)	21,869	21,869
c. Net Change in Unrealized Gain (Loss)	39,037	0
d. Investment Expenses	(2,561)	(2,561)
Net Subtotal	<u>218,843</u>	<u>179,806</u>
6. Other	310	310
7. Total Additions	<u>\$386,236</u>	<u>\$347,199</u>
C. OPERATING EXPENSES		
1. Service Retirements paid from MPRIF	\$57,436	\$57,436
2. Service Retirements paid from plan assets	34	34
2. Disability Benefits	7,500	7,500
3. Survivor Benefits	3,702	3,702
4. Refunds	1,076	1,076
6. Administrative Expenses	737	737
7. Other	222	222
8. Total Disbursements	<u>\$70,707</u>	<u>\$70,707</u>
D. OTHER CHANGES IN RESERVES	0	0
E. ASSETS AVAILABLE END OF PERIOD (PRE-MERGER)	<u>\$2,835,415</u>	<u>\$2,522,518</u>

TABLE 3

PUBLIC EMPLOYEES POLICE AND FIRE FUND
ACTIVE MEMBERS AS OF JUNE 30, 1999

Age	Years of Service								ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
<25	131	111	0	0	0	0	0	0	242
25-29	235	974	170	0	0	0	0	0	1,379
30-34	110	635	774	199	0	0	0	0	1,718
35-39	50	307	525	678	165	2	0	0	1,727
40-44	22	129	239	379	541	226	0	0	1,536
45-49	35	126	81	185	299	654	166	1	1,547
50-54	5	31	41	58	118	304	390	63	1,010
55-59	4	13	16	25	33	51	58	53	253
60-64	1	4	9	7	4	5	12	8	50
65+	1	2	2	2	3	2	0	3	15
ALL	594	2,332	1,857	1,533	1,163	1,244	626	128	9,477

AVERAGE ANNUAL EARNINGS

Age	Years of Service								ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
<25	21,706	32,284	0	0	0	0	0	0	26,558
25-29	23,182	37,814	44,577	0	0	0	0	0	36,154
30-34	24,111	40,541	48,978	50,290	0	0	0	0	44,419
35-39	25,002	40,789	49,211	51,796	52,503	45,682	0	0	48,338
40-44	30,297	40,638	48,472	52,464	54,800	53,052	0	0	51,441
45-49	23,157	41,119	44,821	51,011	53,965	55,049	54,890	54,485	51,948
50-54	45,908	48,910	46,045	44,902	52,605	54,221	57,173	58,281	54,354
55-59	34,653	35,007	40,259	31,454	42,120	50,126	56,289	59,904	49,052
60-64	11,535	33,966	34,603	32,306	31,816	44,315	51,813	61,445	42,943
65+	21,010	46,611	19,639	21,285	22,136	32,634	0	46,722	31,195
ALL	23,689	39,153	48,153	50,950	53,514	54,188	56,383	58,850	46,995

PRIOR FISCAL YEAR EARNINGS (IN THOUSANDS) BY YEARS OF SERVICE

Age	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	ALL
All	14,071	91,305	89,420	78,106	62,237	67,410	35,296	7,533	445,372

TABLE 4

PUBLIC EMPLOYEES POLICE AND FIRE FUND

SERVICE RETIREMENTS AS OF JUNE 30, 1999

Age	Years Retired							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	1	3	1	0	0	0	0	5
50-54	124	173	9	6	5	1	0	318
55-59	136	421	147	20	5	3	1	733
60-64	35	237	347	70	13	5	1	708
65-69	14	83	216	218	76	17	4	628
70-74	0	13	104	179	197	67	13	573
75-79	0	2	17	81	140	109	26	375
80-84	0	0	2	10	67	69	55	203
85+	0	0	0	6	9	43	73	131
ALL	310	932	843	590	512	314	173	3,674

AVERAGE ANNUAL BENEFIT

Age	Years Retired							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	11,602	4,531	3,483	0	0	0	0	5,736
50-54	31,370	27,313	22,253	29,770	20,469	38,853	0	28,727
55-59	37,303	35,246	29,899	25,318	21,532	29,225	23,648	34,150
60-64	27,941	36,849	32,822	29,241	30,232	27,407	36,347	33,494
65-69	21,273	34,453	33,870	31,218	31,386	31,361	19,658	32,287
70-74	0	45,244	30,470	31,998	33,798	31,693	28,017	32,514
75-79	0	33,269	34,429	31,283	30,224	29,282	28,567	30,271
80-84	0	0	21,973	23,755	27,147	27,085	28,738	27,339
85+	0	0	0	19,404	20,733	26,047	23,313	23,854
ALL	33,066	34,147	32,150	30,768	31,022	28,983	26,174	31,803

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS RETIRED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	10,250	31,825	27,102	18,153	15,883	9,100	4,528	116,844

TABLE 5

PUBLIC EMPLOYEES POLICE AND FIRE FUND

SURVIVORS AS OF JUNE 30, 1999

Age	Years Since Death							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	1	18	25	19	11	0	0	74
50-54	3	13	16	13	6	3	1	55
55-59	0	14	22	13	11	1	2	63
60-64	0	5	22	26	15	10	6	84
65-69	0	3	18	39	33	25	18	136
70-74	0	1	15	52	61	40	31	200
75-79	0	1	15	27	58	41	37	179
80-84	0	1	12	16	31	57	75	192
85+	1	1	6	18	20	32	112	190
ALL	5	57	151	223	246	209	282	1,173

AVERAGE ANNUAL BENEFIT

Age	Years Since Death							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	35,289	27,675	25,752	19,355	12,177	0	0	22,688
50-54	24,795	25,093	25,529	19,411	22,113	14,951	21,564	22,918
55-59	0	21,937	20,796	17,072	21,923	15,975	18,143	20,317
60-64	0	23,830	22,118	21,380	15,891	16,558	12,065	19,500
65-69	0	19,253	20,668	19,228	18,865	16,506	13,926	18,129
70-74	0	15,146	12,547	18,625	17,545	15,519	12,999	16,329
75-79	0	12,582	15,828	16,538	15,613	15,328	14,539	15,466
80-84	0	25,010	11,440	12,964	17,137	15,212	15,163	15,132
85+	4,266	6,851	16,440	13,932	14,213	12,563	13,203	13,292
ALL	22,788	24,000	20,066	18,032	16,911	15,107	13,964	16,870

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS SINCE DEATH

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	113	1,368	3,029	4,021	4,160	3,157	3,937	19,788

TABLE 6

PUBLIC EMPLOYEES POLICE AND FIRE FUND

DISABILITY RETIREMENTS AS OF JUNE 30, 1999

Age	Years Disabled							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	29	66	25	20	3	0	0	143
50-54	44	65	27	9	2	3	0	150
55-59	7	53	17	2	0	1	0	80
60-64	3	24	8	0	0	0	0	35
65-69	0	4	0	0	0	0	0	4
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	83	212	77	31	5	4	0	412

AVERAGE ANNUAL BENEFIT

Age	Years Disabled							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	28,282	25,323	23,239	23,692	26,100	0	0	25,347
50-54	34,866	34,167	28,123	27,250	27,705	17,803	0	32,456
55-59	29,825	38,626	32,316	19,468	0	11,196	0	35,693
60-64	25,123	32,053	37,105	0	0	0	0	32,614
65-69	0	24,583	0	0	0	0	0	24,583
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	31,788	32,108	28,396	24,453	26,742	16,151	0	30,554

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS DISABLED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	2,638	6,806	2,186	758	133	64	0	12,588

TABLE 7

Public Employees Police and Fire Fund

Reconciliation Of Members

	Actives	Terminated	
		Deferred Retirement	Other Non-Vested
A. ON JUNE 30, 1998	8,499	314	194
B. ADDITIONS	695	78	72
C. DELETIONS			
1. Service Retirement	(192)	(25)	(10)
2. Disability	(48)	(5)	(1)
3. Death	(4)	(1)	(1)
4. Terminated - Deferred	(76)	0	0
5. Terminated - Refund	(43)	0	(29)
6. Terminated - Other Non-Vested	(46)	0	0
7. Returned as Active	0	(11)	0
8. Transferred (to)/from Other Fund	699	24	0
D. DATA ADJUSTMENTS	(7)	(6)	(30)
Vested	7,549		
Non-Vested	1,928		
E. TOTAL ON JUNE 30, 1999	9,477	368	195

	Retirement Annuitants	Recipients	
		Disabled	Survivors
A. ON JUNE 30, 1998	1,781	251	492
B. ADDITIONS	251	56	31
C. DELETIONS			
1. Service Retirement	0	(8)	0
2. Death	(51)	(3)	(18)
3. Annuity Expired	0	0	0
4. Transferred (to)/from Other Fund	1,696	119	672
D. DATA ADJUSTMENTS	(3)	(3)	(4)
E. TOTAL ON JUNE 30, 1999	3,674	412	1,173

TABLE 8

Public Employees Police and Fire Fund

Actuarial Balance Sheet*(dollars in thousands)*

JULY 1, 1999

A. CURRENT ASSETS (TABLE 1, F6)				\$3,679,551
B. EXPECTED FUTURE ASSETS				
1. Present Value of Expected Future Statutory Supplemental Contributions (See Table 11)				(\$383,514)
2. Present Value of Future Normal Costs				1,116,708
3. Total Expected Future Assets				<u>\$733,194</u>
C. TOTAL CURRENT AND EXPECTED FUTURE ASSETS				<u>\$4,412,745</u>
D. CURRENT BENEFIT OBLIGATIONS	<u>Non-Vested</u>	<u>Vested</u>		<u>Total</u>
1. Benefit Recipients				
a. Retirement Annuities		\$1,306,400		\$1,306,400
b. Disability Benefits		114,634		114,634
c. Surviving Spouse and Child Benefits		189,085		189,085
2. Deferred Retirements with Future Augmentation		35,000		35,000
3. Former Members without Vested Rights		355		355
4. Active Members				
a. Retirement Annuities	8,963	1,042,167		1,051,130
b. Disability Benefits	94,248	0		94,248
c. Survivor's Benefits	37,628	0		37,628
d. Deferred Retirements	1,683	46,302		47,985
e. Refund Liability Due to Death or Withdrawal	0	1,267		1,267
5. Total Current Benefit Obligations	<u>\$142,522</u>	<u>\$2,735,210</u>		<u>\$2,877,732</u>
E. EXPECTED FUTURE BENEFIT OBLIGATIONS				<u>\$1,243,613</u>
F. TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS				<u>\$4,121,345</u>
G. CURRENT UNFUNDED ACTUARIAL LIABILITY (D5-A)				(\$801,819)
H. CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)				(\$291,400)

TABLE 9

Public Employees Police and Fire Fund

**Determination Of Unfunded Actuarial Accrued Liability (UAAL)
And Supplemental Contribution Rate**
(dollars in thousands)

JULY 1, 1999

	Actuarial Present Value of Projected Benefits (1)	Actuarial Present Value of Future Normal Costs (2)	Actuarial Accrued Liability (3)=(1)-(2)
A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)			
1. Active Members			
a. Retirement Annuities	\$2,125,203	\$876,082	\$1,249,121
b. Disability Benefits	183,410	111,708	71,702
c. Survivor's Benefit	72,932	43,788	29,144
d. Deferred Retirements	91,693	82,324	9,369
e. Refunds Due to Death or Withdrawal	2,633	2,806	(173)
f. Total	<u>\$2,475,871</u>	<u>\$1,116,708</u>	<u>\$1,359,163</u>
2. Deferred Retirements With Future Augmentation	35,000		35,000
3. Former Members Without Vested Rights	355		355
4. Annuitants in MPRIF	1,400,528		1,400,528
5. Recipients Not in MPRIF	<u>209,591</u>		<u>209,591</u>
6. Total	<u>\$4,121,345</u>	<u>\$1,116,708</u>	<u>\$3,004,637</u>
B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)			
1. AAL (A6)			\$3,004,637
2. Current Assets (Table 1, F6)			<u>3,679,551</u>
3. UAAL (B1-B2)			<u>(\$674,914)</u>
C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE			
1. Present Value of Future Payrolls Through the Amortization Date of July 1, 2020			\$7,624,536
2. Supplemental Contribution Rate (B3/C1)			-8.85%

Public Employees Police and Fire Fund
Changes in Unfunded Actuarial Accrued Liability (UAAL)
(dollars in thousands)
YEAR ENDING JUNE 30, 1999

A. UAAL AT BEGINNING OF YEAR	\$(595,969)
B. CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
1. Normal Cost and Expenses	81,278
2. Contribution	(77,177)
3. Interest on A, B1 and B2	<u>(50,483)</u>
4. Total: (B1 + B2 + B3)	\$ (46,382)
C. EXPECTED UAAL AT END OF YEAR: (A + B4)	\$(642,351)
D. INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVISIONS FROM EXPECTED	
1. Salary Increases	\$ (12,999)
2. Investment Return	(43,330)
3. MPRIF Mortality	1,987
4. Mortality of Other Benefit Recipients	1,972
5. Other Items	<u>24,167</u>
6. Total	\$ (28,203)
E. UAAL AT END OF YEAR BEFORE MERGER	(670,554)
F. CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO PLAN CHANGES	7,676
G. CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO MERGER	1,040,698
H. CHANGE IN ACTUARIAL VALUE OF PLAN ASSETS DUE TO MERGER	<u>1,052,734</u>
I. UAAL AT END OF YEAR: (E + F + G – H)	<u><u>\$ (674,914)</u></u>

TABLE 11

Public Employees Police and Fire Fund

Determination Of Contribution Sufficiency*(dollars in thousands)*

JULY 1, 1999

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 353		
1. Employee Contributions	6.20%	\$29,403
2. Employer Contributions	9.30%	44,105
3. Total	<u>15.50%</u>	<u>\$73,508</u>
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	15.96%	\$75,674
b. Disability benefits	2.03%	9,616
c. Survivors	0.82%	3,888
d. Deferred Retirement Benefits	1.44%	6,809
e. Refunds Due to Death or Withdrawal	<u>0.05%</u>	<u>238</u>
f. Total	<u>20.30%</u>	<u>\$96,225</u>
2. Supplemental Contribution Amortization by July 1, 2020 of UAAL	-8.85%	(41,971)
3. Allowance for Expenses	<u>0.23%</u>	<u>1,091</u>
4. Total	<u>11.68%</u>	<u>\$55,345</u>
C. CONTRIBUTION SUFFICIENCY (DEFICIENCY) [A3-B4]	3.82%	\$18,163

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 1999 is \$474,245.

Public Employees Police and Fire Fund

Summary of Actuarial Assumptions and Methods

<i>Interest:</i>	Pre-Retirement: 8.5% per annum Post-Retirement: 8.5% per annum
<i>Benefit Increases After Retirement:</i>	Payment of earnings on retired reserves in excess of 6% accounted for by 6% post-retirement assumption.
<i>Salary Increases:</i>	Reported salary for prior fiscal year, with new hires annualized, increased to current fiscal year and annually for each future year according to the rate table below.
<i>Mortality:</i>	Pre-Retirement: Male - 1983 Group Annuity Mortality Table for males setback five years. Female - 1983 Group Annuity Mortality Table for females setback five years. Post-Retirement: Male - 1983 Group Annuity Mortality Table for males Female - 1983 Group Annuity Mortality Table for females Post-Disability: Male - 1965 RRB rates Female - 1965 RRB rates
<i>Retirement Age:</i>	Rates as shown in table.
<i>Separation:</i>	Graded rates based on plan experience through June 30, 1992. Rates are shown in rate table.
<i>Disability:</i>	Rates as shown in rate table.
<i>Expenses:</i>	Prior year expenses expressed as percentage of prior year payroll.
<i>Return of Contributions:</i>	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.

TABLE 12
(Continued)

<i>Family Composition:</i>	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.
<i>Social Security:</i>	N/A
<i>Special Consideration:</i>	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
<i>Actuarial Cost Method:</i>	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.
<i>Asset Valuation Method:</i>	Cost Value plus one-third Unrealized Gains or Losses.
<i>Payment on the Unfunded Actuarial Accrued Liability:</i>	A level percentage of payroll each year to the statutory amortization date assuming payroll increases of 6.0% per annum.

TABLE 12
(Continued)

Public Employees Police and Fire Fund

Summary of Actuarial Assumptions and Methods

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

<u>Age</u>	<u>Pre-Retirement Death</u>		<u>Withdrawal</u>		<u>Disability</u>		<u>Retirement</u>		<u>Salary Increases</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	3	1	859	859	11	11	0	0	11.50%
21	3	1	750	750	11	11	0	0	11.50
22	3	2	660	660	12	12	0	0	11.00
23	4	2	583	583	12	12	0	0	10.50
24	4	2	519	519	13	13	0	0	10.00
25	4	2	463	463	13	13	0	0	9.50
26	4	2	416	416	14	14	0	0	9.20
27	4	2	374	374	14	14	0	0	8.90
28	4	2	339	339	14	14	0	0	8.60
29	4	2	307	307	15	15	0	0	8.30
30	5	3	280	280	16	16	0	0	8.00
31	5	3	256	256	16	16	0	0	7.80
32	5	3	234	234	17	17	0	0	7.60
33	5	3	215	215	17	17	0	0	7.40
34	6	3	198	198	18	18	0	0	7.20
35	6	3	183	183	19	19	0	0	7.00
36	6	4	169	169	20	20	0	0	6.80
37	7	4	157	157	22	22	0	0	6.60
38	7	4	146	146	23	23	0	0	6.40
39	8	4	135	135	24	24	0	0	6.20
40	9	5	126	126	26	26	0	0	6.00
41	9	5	118	118	28	28	0	0	5.90
42	10	5	110	110	29	29	0	0	5.80
43	10	6	103	103	31	31	0	0	5.70
44	11	6	97	97	34	34	0	0	5.60
45	12	7	91	91	36	36	0	0	5.50
46	14	7	86	86	41	41	0	0	5.45
47	15	8	81	81	46	46	0	0	5.40
48	17	8	69	69	52	52	0	0	5.35
49	19	9	59	59	60	60	0	0	5.30

TABLE 12
(Continued)

Public Employees Police and Fire Fund

Summary of Actuarial Assumptions and Methods

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

<u>Age</u>	<u>Pre-Retirement Death</u>		<u>Withdrawal</u>		<u>Disability</u>		<u>Retirement</u>		<u>Salary Increases</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	22	10	50	50	69	69	500	500	5.25%
51	25	11	39	39	80	80	500	500	5.25
52	28	12	29	29	91	91	500	500	5.25
53	31	14	22	22	104	104	500	500	5.25
54	35	15	15	15	119	119	500	500	5.25
55	39	16	11	11	135	135	3,000	3,000	5.25
56	43	18	7	7	152	152	1,000	1,000	5.25
57	48	19	5	5	171	171	1,000	1,000	5.25
58	52	21	3	3	192	192	1,000	1,000	5.25
59	57	23	1	1	215	215	1,000	1,000	5.25
60	61	25	0	0	0	0	2,000	2,000	5.25
61	66	28	0	0	0	0	2,000	2,000	5.25
62	71	31	0	0	0	0	5,000	5,000	5.25
63	77	34	0	0	0	0	5,000	5,000	5.25
64	84	38	0	0	0	0	5,000	5,000	5.25
65	92	42	0	0	0	0	5,000	5,000	5.25
66	101	47	0	0	0	0	5,000	5,000	5.25
67	111	52	0	0	0	0	5,000	5,000	5.25
68	124	58	0	0	0	0	5,000	5,000	5.25
69	134	64	0	0	0	0	5,000	5,000	5.25
70	156	71	0	0	0	0	10,000	10,000	5.25

Public Employees Police and Fire Fund

Summary of Plan Provisions**GENERAL**

<i>Eligibility:</i>	All full-time and certain part-time, police officers and fire fighters, who are not contributing to any other local retirement fund.
<i>Contributions:</i>	
<i>Member:</i>	6.2% of salary effective July 1, 1999. Automatically adjusted downward after four continuous years of sufficiencies at or above .5% of salary.
<i>Employer:</i>	9.3% of salary effective July 1, 1999. Automatically adjusted downward after four continuous years of sufficiencies at or above .5% of salary.
<i>Allowable Service:</i>	Police and fire service during which Member contributions were deducted. May also include certain leaves of absence and military service.
<i>Salary:</i>	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.
<i>Average Salary:</i>	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:***

<i>Eligibility:</i>	Age 55 and three years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.
<i>Amount:</i>	3.0% of Average Salary for each year of Allowable Service.

Early Retirement Benefit:

<i>Eligibility:</i>	Age 50 and three years of Allowable Service.
<i>Amount:</i>	Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date and a 0.1%* reduction for each month the Member is under age 55.
<i>Form of Payment:</i>	Life annuity with return on death of any balance of contributions over aggregate monthly payments. Actuarially equivalent options are: 25%, 50%, 75% or 100% joint and survivor with bounce back feature without additional reduction.
<i>Benefit Increases:</i>	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.

****Effective July 1, 1999. From July 1, 1996 through June 30, 1999, the reduction is 0.2% for each month the Member is under age 55. Prior to July 1, 1996, an actuarial reduction is used assuming augmentation of the normal benefit to age 55 at 3% per year.***

DISABILITY

Duty Disability Benefit:

Eligibility: Physically or mentally unable to perform duties as a police officer or fire fighter as a direct result of an act of duty.

Amount: 60% of Average Salary plus 3.0% 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 and actual earnings, does not exceed salary or 125% of pay for an employee at same position. Payments change to retirement annuity at age 65.

If a Member became disabled prior to July 1, 1997 but did not commence their benefit before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in post-retirement interest rates from 5% to 6%.

Non-Duty Disability Benefits:

Eligibility: 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 65.

If a Member became disabled prior to July 1, 1997 but did not commence their benefit before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in post-retirement interest rates from 5% to 6%.

Form of Payment: Same as for retirement.

Benefit Increases: Adjusted by PERA to provide same increase as MPRIF.

Retirement Benefits:

<i>Eligibility:</i>	Age 55
<i>Amount:</i>	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.
<i>Benefit Increases:</i>	Same as for retirement.

DEATH

Surviving Spouse Benefit:

Eligibility: Active or Disabled Member with surviving spouse, married for at least one year unless death in the line of duty.

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.

If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

Surviving Dependent Child Benefit:

Eligibility: Active or Disabled 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.)

If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

Surviving Spouse Optional Annuity:

Eligibility: Active or Disabled 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.

If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

Benefit Increases: Adjusted by PERA to provide same increase as MPRIF.

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 percentage compounded 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.

If a Member terminated employment prior to July 1, 1997 but was not eligible to commence their pension before July 1, 1997, an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

SUMMARY OF SIGNIFICANT CHANGES

Employee contribution rates decreased from 7.60% to 6.20% effective July 1, 1999. Employer contribution rates decreased from 11.40% to 9.30% effective July 1, 1999.

The early retirement reduction factor was changed from 0.2% to 0.1% reduction for each month the member is under age 55 effective July 1, 1999.

All liabilities and a portion of the assets of the Police and Fire Consolidation Fund were transferred into the Police and Fire Fund effective July 1, 1999.

TABLE 14

Public Employees Police and Fire Fund

SCHEDULE OF FUNDING PROGRESS
(dollars in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (AAL) (B)	Unfunded AAL (UAAL) (B - A)	Funded Ratio (A)/(B)	Actual Covered Payroll (Previous FY) (C)	UAAL as % of Covered Payroll (B - A) / (C)
07/01/91	839,560	794,295	(45,265)	105.70%	238,230	-19.00%
07/01/92	979,981	888,826	(91,155)	110.26%	239,158	-38.11%
07/01/93	1,118,342	1,009,226	(109,116)	110.81%	253,666	-43.02%
07/01/94	1,234,961	1,099,221	(135,740)	112.35%	277,566	-48.90%
07/01/95	1,385,901	1,196,795	(189,106)	115.80%	293,919	-64.34%
07/01/96	1,633,010	1,334,202	(298,808)	122.40%	316,189	-94.50%
07/01/97	1,974,635	1,556,483	(418,152)	126.87%	346,319	-120.74%
07/01/98	2,337,313	1,741,344	(595,969)	134.22%	375,131	-158.87%
07/01/99	3,679,551	3,004,637	(674,914)	122.46%	352,066	-191.70%

TABLE 15

Public Employees Police and Fire Fund
SCHEDULE OF EMPLOYER CONTRIBUTIONS
(dollars in thousands)

Year Ended June 30	Actuarially Required Contribution Rate (A)	Actual Covered Payroll (B)	Actual Member Contributions (C)	Annual Required Contribution [(A) x (B)] - (C)	Actual Employer Contribution*	Percentage Contributed
1991	17.56%	238,230	17,636	24,197	26,440	109.27%
1992	17.54%	239,158	19,217	22,731	28,766	126.55%
1993	18.60%	253,666	20,406	26,776	30,434	113.66%
1994	17.45%	277,566	21,806	26,629	32,536	122.18%
1995	17.28%	293,919	22,356	28,433	33,548	117.99%
1996	16.49%	316,189	24,065	28,075	36,066	128.46%
1997	15.11%	346,319	26,354	25,975	39,508	152.10%
1998	15.69% ***	375,131	28,552	30,306	42,786	141.18%
1999	12.32% ***	352,066	30,897	12,478	46,280	370.89%
1999	12.87% ***					

* Actuarially Required Contributions determined for years ended 6/30/95, 6/30/96, and 6/30/97 did not comply with the parameters of GASB Statement No. 25 since a one-percent growth in covered population is assumed in the amortization calculation.

** Includes contributions from other sources (if applicable).

*** Actuarially Required Contribution Rate calculated according to parameters of GASB 25 with no assumption for growth of covered population.

**LOCAL GOVERNMENT CORRECTIONAL
SERVICE RETIREMENT FUND
*ACTUARIAL VALUATION REPORT***

July 1, 1999

 **FILE COPY**



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December 6, 1999

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

RE: Local Government Correctional Service Retirement Fund

Commission Members:

Pursuant to the terms of our Actuarial Services Contract, we have performed an actuarial valuation of the Fund as of July 1, 1999.

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.

Respectfully submitted,

MILLIMAN & ROBERTSON, INC.

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

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

TKC/WVH/bh

Local Government Correctional Service Retirement Fund

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Local Government Correctional Service Retirement Fund

Report Highlights

(dollars in thousands)

	<u>07/01/98 Valuation</u>	<u>07/01/99 Valuation</u>
A. CONTRIBUTIONS (Table 11)		
1. Statutory Contributions – Chapter 353E % of Payroll	N/A	14.58%
2. Required Contributions – Chapter 356 % of Payroll	<u>N/A</u>	<u>15.03%</u>
3. Sufficiency (Deficiency): (A.1.-A.2.)	N/A	(0.45)%
B. FUNDING RATIOS		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	N/A	\$ 0
b. Current Benefit Obligations (Table 8)	<u>N/A</u>	<u>0</u>
c. Funding Ratio: (a/b)	N/A	N/A
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	N/A	\$ 0
b. Actuarial Accrued Liability (Table 9)	<u>N/A</u>	<u>0</u>
c. Funding Ratio: (a/b)	N/A	N/A
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	N/A	\$83,846
b. Current and Expected Future Benefit Obligations	<u>N/A</u>	<u>86,484</u>
c. Funding Ratio: (a/b)	N/A	96.95%
C. PLAN PARTICIPANTS		
1. Active Members		
a. Number (Table 3)	N/A	2,280
b. Projected Annual Earnings	N/A	\$68,915
c. Average Annual Earnings (actual \$)	N/A	\$30,226
d. Average Age	N/A	38.1
e. Average Service	N/A	0.0
2. Others		
a. Service Retirements (Table 4)	N/A	0
b. Survivors (Table 5)	N/A	0
c. Disability Retirements (Table 6)	N/A	0
d. Deferred Retirements (Table 7)	N/A	0
e. Terminated Other Nonvested (Table 7)	<u>N/A</u>	<u>0</u>
f. Total	N/A	0

Local Government Correctional Service Retirement Fund

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. Since this is a new plan effective July 1, 1999, there are no accrued benefits or plan assets.
- 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. Since this is a new plan effective July 1, 1999, there is no Accrued Liability under the plan.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 96.95% verifies that the current statutory contributions are modestly deficient.

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 E1 to E6. 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 as follows:

- 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

Disclosure of the Current Benefit Obligation amounts used to be required by Statement No. 25 of the Governmental Accounting Standards Board (GASB). Tables 14 and 15 of this report are included to fulfill the requirements of Statement No. 25.

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 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 6.00% 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

Source 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 expectations. 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 14.58% compared to the Required Contribution Rate of 15.03%.

Changes in Actuarial Assumptions

This is the first actuarial valuation for this plan. All assumptions used are outlined in Table 12.

Changes in Plan Provisions

This is the first actuarial valuation for this plan. However, this valuation does reflect a modest interpretive difference from the cost analyses performed earlier this year. That difference relates to the eligibility for augmentation of benefits for participants in this plan who terminate employment before eligibility for immediate retirement but after completion of at least three years of service.

TABLE 1

Local Government Correctional Service Retirement Fund

Statement of Plan Net Assets*(dollars in thousands)*

JULY 1, 1999

	<u>Market Value</u>	<u>Cost Value</u>
A. ASSETS IN TRUST		
1. Cash, Equivalents, Short-term Securities	\$0	\$0
2. Fixed Income	0	0
3. Equity	0	0
4. Real Estate	0	0
5. Equity in MPRIF	0	0
6. Other	0	0
Subtotal	<u>\$0</u>	<u>\$0</u>
B. ASSETS RECEIVABLE	0	0
C. LIABILITIES	0	0
	<u> </u>	<u> </u>
D. NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
1. MPRIF Reserves	0	0
2. Member Reserves	0	0
3. Other Non-MPRIF Reserves	0	0
4. Total Assets Available for Benefits	<u>\$0</u>	<u>\$0</u>
<hr/>		
E. DETERMINATION OF ACTUARIAL VALUE OF ASSETS		
1. Cost Value of Assets Available for Benefits (D4)		\$0
2. Market Value (D4)	\$0	
3. Cost Value (D4)	0	
4. Market Over Cost: (E2-E3)	<u>\$0</u>	
5. One-third of Market Over Cost: (E4)/3		0
6. Actuarial Value of Assets (E1+E5) (Same as "Current Assets")		<u>\$0</u>

TABLE 2

Local Government Correctional Service Retirement Fund

Statement of Change In Plan Net Assets*(dollars in thousands)*

YEAR ENDING JUNE 30, 1999

	<u>Market Value</u>	<u>Cost Value</u>
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$0	\$0
B. ADDITIONS		
1. Member Contributions	\$0	\$0
2. Employer Contributions	0	0
3. Contributions From Other Sources	0	0
4. MPRIF Income	0	0
5. Net Investment Income		
a. Interest and Dividends	0	0
b. Net Realized Gain (Loss)	0	0
c. Net Change in Unrealized Gain (Loss)	0	0
d. Investment Expenses	0	0
Net Subtotal	<u>0</u>	<u>0</u>
6. Other	0	0
7. Total Additions	<u>\$0</u>	<u>\$0</u>
C. OPERATING EXPENSES		
1. Service Retirements paid from MPRIF	\$0	\$0
2. Service Retirements paid from plan assets	0	0
2. Disability Benefits	0	0
3. Survivor Benefits	0	0
4. Refunds	0	0
6. Administrative Expenses	0	0
7. Other	0	0
8. Total Disbursements	<u>\$0</u>	<u>\$0</u>
D. OTHER CHANGES IN RESERVES	0	0
E. ASSETS AVAILABLE AT END OF PERIOD	<u><u>\$0</u></u>	<u><u>\$0</u></u>

TABLE 3

LOCAL GOVERNMENT CORRECTIONAL SERVICE RETIREMENT FUND
ACTIVE MEMBERS AS OF JUNE 30, 1999

Age	Years of Service								ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
<25	151	0	0	0	0	0	0	0	151
25-29	404	0	0	0	0	0	0	0	404
30-34	403	0	0	0	0	0	0	0	403
35-39	345	0	0	0	0	0	0	0	345
40-44	319	0	0	0	0	0	0	0	319
45-49	327	0	0	0	0	0	0	0	327
50-54	192	0	0	0	0	0	0	0	192
55-59	98	0	0	0	0	0	0	0	98
60-64	32	0	0	0	0	0	0	0	32
65+	9	0	0	0	0	0	0	0	9
ALL	2,280	0	0	0	0	0	0	0	2,280

AVERAGE ANNUAL EARNINGS

Age	Years of Service								ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
<25	16,085	0	0	0	0	0	0	0	16,085
25-29	25,144	0	0	0	0	0	0	0	25,144
30-34	29,987	0	0	0	0	0	0	0	29,987
35-39	32,595	0	0	0	0	0	0	0	32,595
40-44	33,357	0	0	0	0	0	0	0	33,357
45-49	32,153	0	0	0	0	0	0	0	32,153
50-54	36,601	0	0	0	0	0	0	0	36,601
55-59	36,309	0	0	0	0	0	0	0	36,309
60-64	32,772	0	0	0	0	0	0	0	32,772
65+	31,306	0	0	0	0	0	0	0	31,306
ALL	30,258	0	0	0	0	0	0	0	30,257

PRIOR FISCAL YEAR EARNINGS (IN THOUSANDS) BY YEARS OF SERVICE

Age	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	ALL
All	68,988	0	0	0	0	0	0	0	68,986

TABLE 4

LOCAL GOVERNMENT CORRECTIONAL SERVICE RETIREMENT FUND

SERVICE RETIREMENTS AS OF JUNE 30, 1999

Age	Years Retired							ALL
	<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	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	0	0	0	0	0	0	0

AVERAGE ANNUAL BENEFIT

Age	Years Retired							ALL
	<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	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	0	0	0	0	0	0	0

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY 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
All	0	0	0	0	0	0	0	0

TABLE 5

LOCAL GOVERNMENT CORRECTIONAL SERVICE RETIREMENT FUND

SURVIVORS AS OF JUNE 30, 1999

Age	Years Since Death							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	0	0	0	0	0	0	0

AVERAGE ANNUAL BENEFIT

Age	Years Since Death							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	0	0	0	0	0	0	0

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS SINCE DEATH

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	0	0	0	0	0	0	0	0

TABLE 6

LOCAL GOVERNMENT CORRECTIONAL SERVICE RETIREMENT FUND

DISABILITY RETIREMENTS AS OF JUNE 30, 1999

Age	Years Disabled							ALL
	<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	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	0	0	0	0	0	0	0

AVERAGE ANNUAL BENEFIT

Age	Years Disabled							ALL
	<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	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	0	0	0	0	0	0	0

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY 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
All	0	0	0	0	0	0	0	0

TABLE 7

Local Government Correctional Service Retirement Fund

Reconciliation Of Members

	Actives	Terminated	
		Deferred Retirement	Other Non-Vested
A. ON JUNE 30, 1998	0	0	0
B. ADDITIONS	2,280	0	0
C. DELETIONS			
1. Service Retirement	0	0	0
2. Disability	0	0	0
3. Death	0	0	0
4. Terminated - Deferred	0	0	0
5. Terminated - Refund	0	0	0
6. Terminated - Other Non-Vested	0	0	0
7. Returned as Active	0	0	0
8. Transferred to Other Fund	0	0	0
D. DATA ADJUSTMENTS	0	0	0
Vested	1,409		
Non-Vested	871		
E. TOTAL ON JUNE 30, 1999	2,280	0	0

	Recipients		
	Retirement Annuitants	Disabled	Survivors
A. ON JUNE 30, 1998	0	0	0
B. ADDITIONS	0	0	0
C. DELETIONS			
1. Service Retirement	0	0	0
2. Death	0	0	0
3. Annuity Expired	0	0	0
4. Returned as Active	0	0	0
D. DATA ADJUSTMENTS	0	0	0
E. TOTAL ON JUNE 30, 1999	0	0	0

TABLE 8

Local Government Correctional Service Retirement Fund

Actuarial Balance Sheet*(dollars in thousands)*

JULY 1, 1999

A. CURRENT ASSETS (TABLE 1, E6)				\$0
B. EXPECTED FUTURE ASSETS				
1. Present Value of Expected Future Statutory Supplemental Contributions (See Table 11)				(\$2,638)
2. Present Value of Future Normal Costs				86,484
3. Total Expected Future Assets				<u>\$83,846</u>
C. TOTAL CURRENT AND EXPECTED FUTURE ASSETS				<u><u>\$83,846</u></u>
D. CURRENT BENEFIT OBLIGATIONS	<u>Non-Vested</u>	<u>Vested</u>		<u>Total</u>
1. Benefit Recipients				
a. Retirement Annuities		\$0		\$0
b. Disability Benefits		0		0
c. Surviving Spouse and Child Benefits		0		0
2. Deferred Retirements with Future Augmentation		0		0
3. Former Members without Vested Rights		0		0
4. Active Members				
a. Retirement Annuities	0	0		0
b. Disability Benefits	0	0		0
c. Survivor's Benefits	0	0		0
d. Deferred Retirements	0	0		0
e. Refund Liability Due to Death or Withdrawal	0	0		0
5. Total Current Benefit Obligations	<u>\$0</u>	<u>\$0</u>		<u>\$0</u>
E. EXPECTED FUTURE BENEFIT OBLIGATIONS				<u>\$86,484</u>
F. TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS				<u><u>\$86,484</u></u>
G. CURRENT UNFUNDED ACTUARIAL LIABILITY (D5-A)				\$0
H. CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)				\$2,638

TABLE 9

Local Government Correctional Service Retirement Fund

**Determination Of Unfunded Actuarial Accrued Liability (UAAL)
And Supplemental Contribution Rate**

(dollars in thousands)

JULY 1, 1999

	Actuarial Present Value of Projected Benefits <i>(1)</i>	Actuarial Present Value of Future Normal Costs <i>(2)</i>	Actuarial Accrued Liability <i>(3)=(1)-(2)</i>
A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)			
1. Active Members			
a. Retirement Annuities	\$59,430	\$59,430	\$0
b. Disability Benefits	13,041	13,041	0
c. Survivor's Benefit	2,412	2,412	0
d. Deferred Retirements	9,921	9,921	0
e. Refunds Due to Death or Withdrawal	1,680	1,680	0
f. Total	<u>\$86,484</u>	<u>\$86,484</u>	<u>\$0</u>
2. Deferred Retirements With Future Augmentation	0		0
3. Former Members Without Vested Rights	0		0
4. Annuitants in MPRIF	0		0
5. Recipients Not in MPRIF	<u>0</u>		<u>0</u>
6. Total	<u>\$86,484</u>	<u>\$86,484</u>	<u>\$0</u>
B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)			
1. AAL (A6)			\$0
2. Current Assets (Table 1, E6)			<u>0</u>
3. UAAL (B1-B2)			<u>\$0</u>
C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE			
1. Present Value of Future Payrolls Through the Amortization Date of July 1, 2020			\$1,107,965
2. Supplemental Contribution Rate (B3/C1)			0.00%

TABLE 10

Local Government Correctional Service Retirement Fund

Changes In Unfunded Actuarial Accrued Liability (UAAL)
(dollars in thousands)

YEAR ENDING JUNE 30, 1999

A. UAAL AT BEGINNING OF YEAR	\$0
B. CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
1. Normal Cost and Expenses	\$0
2. Contribution	0
3. Interest on A, B1 and B2	0
	<hr/>
4. Total (B1+B2+B3)	\$0
C. EXPECTED UAAL AT END OF YEAR (A+B4)	\$0
D. INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
1. Salary Increases	\$0
2. Investment Return	0
3. MPRIF Mortality	0
4. Mortality of Other Benefit Recipients	0
5. Other Items	0
	<hr/>
6. Total	\$0
E. UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTION (C+D6)	\$0
F. CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO PLAN AMENDMENTS	0
G. CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS	0
	<hr/>
H. UAAL AT END OF YEAR (E+F+G)	<u><u>\$0</u></u>

TABLE 11

Local Government Correctional Service Retirement Fund

Determination Of Contribution Sufficiency*(dollars in thousands)*

JULY 1, 1999

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 353		
1. Employee Contributions	5.83%	\$4,018
2. Employer Contributions	8.75%	6,030
3. Total	<u>14.58%</u>	<u>\$10,048</u>
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	10.13%	\$6,981
b. Disability benefits	2.29%	1,575
c. Survivors	0.38%	262
d. Deferred Retirement Benefits	1.65%	1,137
e. Refunds Due to Death or Withdrawal	<u>0.30%</u>	<u>209</u>
f. Total	<u>14.75%</u>	<u>\$10,164</u>
2. Supplemental Contribution Amortization by July 1, 2020 of UAAL	0.00%	0
3. Allowance for Expenses	0.28%	193
4. Total	15.03%	\$10,357
C. CONTRIBUTION SUFFICIENCY (DEFICIENCY) [A3-B4]	-0.45%	(\$309)

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 1999 is \$68,915.

Local Government Correctional Service Retirement Fund

Summary of Actuarial Assumptions and Methods

Interest:	Pre-Retirement: 8.5% per annum Post-Retirement: 6.0% per annum																								
Salary Increases:	Reported salary at valuation date increased according to the rate table below to current fiscal year and annually for each future year. Prior fiscal year salary is annualized for new Members.																								
Mortality:	Pre-Retirement: Male - 1983 GAM (Males -1) Female - 1983 GAM (Females) Post-Retirement: Male - 1983 GAM (Males +2) Female - 1983 GAM (Females +2) Post-Disability: Male - Combined Annuity Mortality Table Female - Combined Annuity Mortality Table																								
Retirement Age:	Age-related table as follows: <table><tr><td>Ages:</td><td>50-53</td><td>2%</td></tr><tr><td></td><td>54</td><td>5</td></tr><tr><td></td><td>55</td><td>25</td></tr><tr><td></td><td>56-59</td><td>10</td></tr><tr><td></td><td>60-61</td><td>20</td></tr><tr><td></td><td>62-64</td><td>40</td></tr><tr><td></td><td>65-69</td><td>50</td></tr><tr><td></td><td>70+</td><td>100</td></tr></table>	Ages:	50-53	2%		54	5		55	25		56-59	10		60-61	20		62-64	40		65-69	50		70+	100
Ages:	50-53	2%																							
	54	5																							
	55	25																							
	56-59	10																							
	60-61	20																							
	62-64	40																							
	65-69	50																							
	70+	100																							
Separation:	Graded rates based on actual experience developed by the June 30, 1997 experience analysis. Rates are shown in rate table.																								
Disability:	Rates as shown in rate table.																								

TABLE 12
(Continued)

<i>Administrative and Investment Expenses:</i>	Prior year administration expenses expressed as percentage of prior year payroll.				
<i>Return of Contributions:</i>	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.				
<i>Family Composition:</i>	85% of Members are assumed to be married. Female is three years younger than male.				
<i>Social Security:</i>	Based on the present law and 6.0% retroactive salary scale. Only earnings history while in state service is used. Future Social Security benefits replace the same proportion of salary as at present.				
<i>Benefit Increases After Retirement:</i>	Payment of earnings on retired reserves in excess of 6% accounted for by 6% post-retirement assumptions.				
<i>Special Consideration:</i>	Married Members assumed to elect subsidized joint and survivor form of annuity as follows: <table data-bbox="646 1050 1218 1207"> <tr> <td>Males -</td><td>25% elect 50% J&S option 25% elect 100% J&S option</td></tr> <tr> <td>Females -</td><td>5% elect 50% J&S option 5% elect 100% J&S option</td></tr> </table>	Males -	25% elect 50% J&S option 25% elect 100% J&S option	Females -	5% elect 50% J&S option 5% elect 100% J&S option
Males -	25% elect 50% J&S option 25% elect 100% J&S option				
Females -	5% elect 50% J&S option 5% elect 100% J&S option				
<i>Actuarial Cost Method:</i>	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.				
<i>Asset Valuation Method:</i>	Cost Value plus one-third Unrealized Gains or Losses.				
<i>Payment on the Unfunded Actuarial Accrued Liability:</i>	A level percentage of payroll each year to the statutory amortization date assuming payroll increases of 5% per annum.				

TABLE 12
(Continued)

Local Government Correctional Service Retirement Fund
Summary of Actuarial Assumptions and Methods

Separation Expressed as Number of Occurrences Per 10,000:

<u>Age</u>	<u>Death</u>		<u>Withdrawal</u>		<u>Disability</u>		<u>Retirement</u>		<u>Salary Increases</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	4	2	2,400	1,600	4	4	0	0	7.75%
21	4	2	2,200	1,560	4	4	0	0	7.1454
22	4	2	2,000	1,520	5	5	0	0	7.1094
23	4	2	1,810	1,480	5	5	0	0	7.0725
24	4	2	1,630	1,450	6	6	0	0	7.0363
25	4	3	1,470	1,420	6	6	0	0	7
26	5	3	1,330	1,400	6	6	0	0	7
27	5	3	1,210	1,380	7	7	0	0	7
28	5	3	1,100	1,370	7	7	0	0	7
29	5	3	1,000	1,360	8	8	0	0	7
30	6	3	910	1,350	8	8	0	0	7
31	6	4	830	1,340	9	9	0	0	7
32	6	4	760	1,330	9	9	0	0	7
33	7	4	700	1,320	10	10	0	0	7
34	7	4	650	1,310	10	10	0	0	7
35	8	5	600	1,290	11	11	0	0	7
36	9	5	560	1,260	12	12	0	0	6.9019
37	9	5	520	1,220	13	13	0	0	6.8074
38	10	6	490	1,170	15	15	0	0	6.7125
39	10	6	460	1,110	16	16	0	0	6.6054
40	11	7	440	1,040	18	18	0	0	6.5
41	12	7	420	960	20	20	0	0	6.354
42	14	8	400	870	22	22	0	0	6.2087
43	15	8	380	780	24	24	0	0	6.0622
44	17	9	360	700	26	26	0	0	5.9048
45	19	10	340	640	29	29	0	0	5.75
46	22	11	320	590	32	32	0	0	5.6940
47	25	12	300	560	36	36	0	0	5.6375
48	28	14	280	530	41	41	0	0	5.5822
49	31	15	260	500	46	46	0	0	5.5405

TABLE 12*(Continued)***Local Government Correctional Service Retirement Fund*****Summary of Actuarial Assumptions and Methods*****Separation Expressed as Number of Occurrences Per 10,000:**

Age	<u>Death</u>		<u>Withdrawal</u>		<u>Disability</u>		<u>Retirement</u>		<u>Salary Increases</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	35	16	240	470	50	50	200	200	5.5%
51	39	18	220	440	57	57	200	200	5.4384
52	43	19	200	410	64	64	200	200	5.3776
53	48	21	180	390	72	72	200	200	5.3167
54	52	23	160	360	80	80	500	500	5.2826
55	57	25	140	330	88	88	2,500	2,500	5.25
56	61	28	120	290	98	98	1,000	1,000	5.25
57	66	31	100	230	108	108	1,000	1,000	5.25
58	71	34	70	170	118	118	1,000	1,000	5.25
59	77	38	40	90	129	129	1,000	1,000	5.25
60	84	42	0	0	141	141	2,000	2,000	5.25
61	92	47	0	0	154	154	2,000	2,000	5.25
62	101	52	0	0	167	167	4,000	4,000	5.25
63	111	58	0	0	0	0	4,000	4,000	5.25
64	124	64	0	0	0	0	4,000	4,000	5.25
65	129	71	0	0	0	0	5,000	5,000	5.25
66	156	78	0	0	0	0	5,000	5,000	5.25
67	176	87	0	0	0	0	5,000	5,000	5.25
68	198	97	0	0	0	0	5,000	5,000	5.25
69	222	109	0	0	0	0	5,000	5,000	5.25
70	248	124	0	0	0	0	10,000	10,000	5.25

Local Government Correctional Service Retirement Fund

Summary of Plan Provisions**GENERAL**

<i>Effective Date:</i>	July 1, 1999
<i>Eligibility:</i>	Local government employees in covered correctional service for a county-administered jail or correctional facility or in a regional correctional facility administered by multiple counties, spends at least 95% of working time in direct contact with persons confined in the jail or facility, and is not a member of the Public Employees Police and Fire Fund.
<i>Contributions:</i>	
<i>Member:</i>	5.83% of salary.
<i>Employer:</i>	8.75% of salary.
<i>Allowable Service:</i>	Local Government Correctional Service during which Member contributions were made. May also include certain leaves of absence, military service and periods while temporary Worker's Compensation is paid.
<i>Salary:</i>	Includes wages, allowances and fees. Excludes lump-sum payments at separation and reduced salary while receiving Worker's Compensation benefits.
<i>Average Salary:</i>	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: 1.9% of Average Salary for each year of Allowable Service, pro rata for completed months.

TABLE 13
(Continued)

Early Retirement Benefit:

<i>Eligibility:</i>	Age 50 and three years of Allowable Service.
<i>Amount:</i>	Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date reduced to the actuarial equivalent of the benefit that would be payable if the Member deferred the benefit until age 55.
<i>Form of Payment:</i>	Life annuity. Actuarially equivalent options are: <ul style="list-style-type: none"> ➤ 25%, 50%, 75% or 100% joint and survivor with bounce back feature without additional reduction. ➤ Level Social Security option to age 62.
<i>Benefit Increases:</i>	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.

DISABILITY

Occupational Disability:

<i>Eligibility:</i>	Member who cannot perform his duties as a direct result of a disability related to an act of duty.
<i>Amount:</i>	47.5% of Average Salary plus 1.9% of Average Salary for each year in excess of 25 years of Allowable Service (pro rata for completed months).

TABLE 13
(Continued)

Payment begins at disability and stops at age 65 or earlier if disability ceases or death occurs. Benefits may be paid upon re-employment but salary plus benefit cannot exceed current salary of position held at time of disability.

Non-Occupational Disability:

Eligibility: At least one year of Allowable Service and disability not related to covered employment.

Amount: Normal Retirement Benefit based on Allowable Service (minimum of 10 years) and Average Salary at disability.

Payment begins at disability and ends at age 65 or earlier if disability ceases or death occurs. Benefits may be paid upon re-employment but salary plus benefit cannot exceed current salary of position held at time of disability.

Form of Payment: Same as for retirement.

Benefit Increases: Adjusted by PERA to provide same increase as MPRIF.

Retirement Benefits:

Eligibility: Age 65 with continued disability.

Amount: Any optional annuity continues. Otherwise, the larger of the disability benefit paid before age 65 or the normal retirement benefit available at age 65, or an actuarially equivalent optional annuity.

Form of Payment: Same as for retirement.

Benefit Increases: Same as for retirement.

DEATH

Surviving Spouse Benefit:

<i>Eligibility:</i>	Member at any age or former Member age 50 or older who dies before retirement or disability benefits commence with three years of Allowable Service. If an active member dies, benefits may commence immediately, regardless of age.
<i>Amount:</i>	Surviving spouse receives the 100% joint and survivor benefit using the Normal Retirement formula above. If commencement is prior to age 50, the appropriate early retirement formula described above applies except that one-half the monthly reduction factor is used from age 50 to the commencement age. In lieu of this benefit, the surviving spouse may elect a refund of contributions with interest or an actuarially equivalent term certain annuity (lump sum payable to estate at death).
<i>Benefit Increases:</i>	Adjusted by PERA to provide same increase as MPRIF.

Surviving Dependent Children's Benefit:

<i>Eligibility:</i>	If no surviving spouse, all dependent children (biological or adopted) below age 20 who are dependent for more than half of their support on deceased Member.
<i>Amount:</i>	Actuarially equivalent to surviving spouse 100% joint and survivor annuity payable to the later of age 20 or five years. The amount is to be proportionally divided among surviving children.

TABLE 13
(Continued)

Refund of Contributions With Interest:

<i>Eligibility:</i>	Active employee dies and survivor benefits are not payable or a former employee dies before annuity begins. If accumulated contributions with interest exceed total payments to the surviving spouse and children, then the remainder is paid out.
<i>Amount:</i>	The Member's contributions with 6% interest.

TERMINATION

Refund of Contributions:

<i>Eligibility:</i>	Termination of local government service.
<i>Amount:</i>	Member's contributions with 6% interest compounded annually. A deferred annuity may be elected in lieu of a refund if three or more years of Allowable Service.

Deferred Annuity:

<i>Eligibility:</i>	Three years of Allowable Service.
<i>Amount:</i>	Benefit computed under law in effect at termination and increased by 3% compounded annually until January 1 of the year following attainment of age 55 and 5% thereafter until the annuity begins.

SIGNIFICANT CHANGES

This valuation is the first valuation for this plan.

Local Government Correctional Service Retirement Fund

SCHEDULE OF FUNDING PROGRESS

(dollars in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (AAL) (B)	Unfunded AAL (UAAL) (B-A)	Funded Ratio (A)/(B)	Actual Covered Payroll (Previous FY) (C)	UAAL as % of Covered Payroll (B-A)/(C)
07/01/99	0	0	0	N/A	0	N/A

TABLE 15

Local Government Correctional Service Retirement Fund

SCHEDULE OF EMPLOYER CONTRIBUTIONS

(dollars in thousands)

Year Ended June 30	Actuarially Required Contribution Rate (A)	Actual Covered Payroll (B)	Actual Member Contributions (C)	Annual Required Contribution [(A)x(B)]-(C)	Actual Employer Contribution*	Percentage Contributed
1999	0.00%	0	0	0	0	N/A

**Included contributions from other sources (if applicable).*