Public Employees Retirement Fund
ACTUARIAL VALUATION REPORT

JULY 1, 2001

MILLIMAN USA

A MILLIMAN GLOBAL FIRM

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December 4, 2001

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, 2001.

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.

We, Thomas K. Custis and William V. Hogan, are actuaries for Milliman USA. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Milliman USA

Thomas K. Custis

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

William V. Hogan

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Consulting Actuary

TKC/WVH/bh

Public Employees Retirement Fund

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Public Employees Retirement Fund

Report Highlights

(dollars in thousands)

	07/01/2000 Valuation	07/01/2001 Valuation
A. CONTRIBUTIONS (Table 11)		
1. Statutory Contributions - Chapter 353 % of Payroll	9.98%	10.32%
2. Required Contributions - Chapter 356 % of Payroll	11.94%	11.60%
3. Sufficiency (Deficiency): (A.1. - A.2.)	-1.96%	-1.28%
B. FUNDING RATIOS		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	$9,609,367	$10,527,270
b. Current Benefit Obligations (Table 8)	$10,348,480	$11,304,993
c. Funding Ratio: (a/b)	92.86%	93.12%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	$9,609,367	$10,527,270
b. Actuarial Accrued Liability (Table 9)	$11,133,682	$12,105,337
c. Funding Ratio: (a/b)	86.31%	86.96%
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	$13,358,946	$15,063,174
b. Current and Expected Future Benefit Obligations	$14,613,970	$15,815,784
c. Funding Ratio: (a/b)	91.41%	95.24%
C. PLAN PARTICIPANTS		
1. Active Members		
a. Number (Table 3)	135,560	138,759
b. Projected Annual Earnings	$3,602,750	$3,835,448
c. Average Annual Earnings (Projected $)	$26,577	$27,641
d. Average Age	44.4	44.3
e. Average Service	9.0	9.0
2. Others		
a. Service Retirements (Table 4)	39,940	41,797
b. Survivors (Table 5)	6,010	6,149
c. Disability Retirements (Table 6)	1,397	1,468
d. Deferred Retirements (Table 7)	21,495	25,917
e. Terminated Other Non-vested (Table 7)	79,362	83,027
f. Total	148,204	158,358

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 93.12%. The corresponding ratio for the prior year was 92.86%.
- The Accrued Liability Funding Ratio is also a measure of funding status and funding progress. It is based on the actuarial cost method that has historically been used by the State. For 2001 the ratio is 86.96%, which is an increase from the 2000 value of 86.31%.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 95.24% verifies that the current statutory contributions are deficient.

Asset Information (Tables 1 and 2)

Effective with the July 1, 2000 valuation of the fund, Minnesota Statutes require that the asset value used for actuarial purposes spread differences between actual return (measured on a market-value basis) and expected return on non-MPRIF assets over five years, in a manner similar to that already being used within the MPRIF. The previous method required under Minnesota Statutes recognized one third of the unrealized gains and losses. An Asset Valuation Method requirement exists because market values (which include all unrealized gains and losses) are typically volatile and can produce erratic changes in the contribution requirements from year to year. The intent of the change to the current method is to employ a more effective asset smoothing technique which is market-value based and which eliminates artificial bias related to manager style. The effective date of this requirement is July 1, 2000 with full transition to be accomplished as of July 1, 2003.

The calculation of the Actuarial Value of Assets is shown in Table 1 on lines E.1 to E.4. Actuarial Value of Assets is determined as:

> Market Value of Assets at June 30, 2001, *less*
>
> 80% of the current year Unrecognized Asset Return at July 1, 2001 (the difference between actual net return on Market Value of Assets between 06/30/2000 and 06/30/2001 and the asset return expected during that period based on the assumed interest rate employed in the July 1, 2000 Actuarial Valuation); *less*
>
> 60% of the current year Unrecognized Asset Return at July 1, 2000 (the difference between actual net return on Market Value of Assets between 06/30/99 and 06/30/2000 and the asset return expected during that period based on the assumed interest rate employed in the July 1, 1999 Actuarial Valuation); *less*
>
> 30% of the Unrecognized Asset Return at July 1, 1999 (the difference between Market Value of Assets on 06/30/99 and the Actuarial Value of Assets used in the July 1, 1999 Actuarial Valuation).

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:

- <u>For Active Members</u> – 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 superceded 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 deficiency since the Statutory Contribution Rate is 10.33% compared to the Required Contribution Rate of 11.60%.

Changes in Actuarial Assumptions and Methods

All actuarial assumptions and methods listed in Table 12 are the same as those used in the prior valuation.

Changes in Plan Provisions

Effective with this July 1, 2001 valuation, the following plan provisions have been added or amended:

- Effective January 1, 2002, the additional lump sum benefits that are paid to pre-1973 retirees will be paid as monthly installments to the retirees.
- Effective January 1, 2002, the employee and employer regular contribution rate increases from 8.75 percent of pay to 9.10 percent for basic members, and from 4.75 percent of pay to 5.10 percent for coordinated members
- The full funding date has been extended from June 30, 2024 to June 30, 2031.

All other plan provisions are the same as those used in the prior actuarial valuation of the Fund.

Public Employees Retirement Fund

Statement of Plan Net Assets

(dollars in thousands)

JULY 1, 2001

	Market Value	Cost Value
A. ASSETS IN TRUST		
1. Cash, Equivalents, Short-term Securities	$52,991	$52,991
2. Fixed Income	1,154,443	1,163,391
3. Equity	3,106,810	3,364,061
4. Real Estate	170,317	141,238
5. Equity in MPRIF	5,595,214	5,595,214
6. Invested Securities Lending Collateral	866,387	866,387
7. Other	12,129	12,129
Subtotal	$10,958,291	$11,195,411
B. ASSETS RECEIVABLE	15,594	15,594
C. LIABILITIES		
1. Invested Securities Lending Collateral	(866,387)	(866,387)
2. Other	(16,238)	(16,238)
Subtotal	(882,625)	(882,625)
D. NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
1. MPRIF Reserves	5,595,214	5,595,214
2. Member Reserves	1,459,256	1,459,256
3. Other Non-MPRIF Reserves	3,036,790	3,273,910
4. Total Assets Available for Benefits	$10,091,260	$10,328,380

E. DETERMINATION OF ACTUARIAL VALUE OF ASSETS

1. Market Value of Assets Available for Benefits (D4)		$10,091,260
2. Unrecognized Asset Returns (UAR)		
a. June 30, 2001	($777,813)	
b. June 30, 2000	86,227	
c. June 30, 1999	448,347	
3. UAR Adjustment: .80 * (E2.a) + .60 * (E2.b) + .30 * (E2.c)		(436,010)
4. Actuarial Value of Assets (E1 - E3) (Same as "Current Assets")		10,527,270

Public Employees Retirement Fund

Statement of Change In Plan Net Assets

(dollars in thousands)

YEAR ENDING JUNE 30, 2001

	Non-MPRIF Assets	MPRIF Reserve	Market Value
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	$4,883,390	$5,063,967	$9,947,357
B. ADDITIONS			
1. Member Contributions	$173,380	$0	$173,380
2. Employer Contributions	188,208	0	188,208
3. Contributions From Other Sources	0	0	0
4. MPRIF Income	0	767,922	767,922
5. Net Investment Income			
a. Interest and Dividends	230,117	0	230,117
b. Net Realized Gain (Loss)	87,278	0	87,278
c. Net Change in Unrealized Gain (Loss)	(676,435)	0	(676,435)
d. Investment Expenses	(6,712)	0	(6,712)
e. **Net Subtotal**	(365,752)	0	(365,752)
6. Other	1,907	0	1,907
7. Total Additions	($2,257)	$767,922	$765,665
C. OPERATING EXPENSES			
1. Service Retirements	$1,141	$558,340	$559,481
2. Disability Benefits	14,078	0	14,078
3. Survivor Benefits	18,650	0	18,650
4. Refunds	18,768	0	18,768
5. Administrative Expenses	8,344	0	8,344
6. Other	2,441	0	2,441
7. Total Disbursements	$63,422	$558,340	$621,762
D. OTHER CHANGES IN RESERVES			
1. Annuities Awarded	(324,512)	324,512	0
2. Mortality Gain/Loss	2,847	(2,847)	0
3. Change in MPRIF Assumptions	0	0	0
4. Total Other Changes	(321,665)	321,665	0
E. ASSETS AVAILABLE AT END OF PERIOD	$4,496,046	$5,595,214	$10,091,260

F. DETERMINATION OF CURRENT YEAR UNRECOGNIZED ASSET RETURN

1. Average Balance	
(a) Non-MPRIF Assets Available at Beginning of Period	4,883,390
(b) Non-MPRIF Assets Available at End of Period*	4,493,199
(c) Average Balance { [F1.a + F1.b - B5.e - B6] / 2 }	4,870,217
2. Expected Return: .085 * F1.c	413,968
3. Actual Return	(363,845)
4. Current Year Unrecognized Asset Return: F3 - F2	(777,813)

* *Before adjustment for MPRIF mortality gain/loss and new MPRIF assumptions*

Public Employees Retirement Fund

Active Members as of June 30, 2001

Age	Years of Service ≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	All
<25	3,204	2,563	39	1	1	0	0	0	5,808
25-29	2,721	5,275	880	15	1	0	0	0	8,892
30-34	2,449	5,685	3,094	798	26	0	0	0	12,052
35-39	2,606	6,439	3,761	2,835	1,026	39	0	0	16,706
40-44	2,731	7,511	5,277	3,869	2,462	1,625	66	0	23,541
45-49	2,706	5,992	5,548	4,840	2,809	2,847	1,289	34	26,065
50-54	1,212	3,662	3,932	4,372	2,964	2,729	2,104	643	21,618
55-59	686	1,951	2,046	2,548	2,139	2,097	1,462	866	13,795
60-64	393	1,050	1,056	1,228	978	1,089	786	367	6,947
65+	344	986	690	512	280	225	193	105	3,335
ALL	19,052	41,114	26,323	21,018	12,686	10,651	5,900	2,015	138,759

Average Annual Earnings

Age	Years of Service ≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	All
<25	9,940	15,345	21,182	18,764	10,329	0	0	0	12,402
25-29	13,509	22,171	27,097	24,638	4,304	0	0	0	20,010
30-34	13,757	23,131	31,097	33,407	33,430	0	0	0	23,974
35-39	12,206	20,137	29,900	36,371	36,116	31,119	0	0	24,860
40-44	12,168	18,773	25,816	35,287	40,347	38,839	37,113	0	25,993
45-49	11,568	19,334	24,260	31,776	38,570	42,927	41,694	40,796	27,670
50-54	13,755	20,346	24,143	30,443	35,587	41,597	47,630	47,625	30,948
55-59	13,078	19,760	24,600	28,861	32,299	35,796	42,768	49,935	30,541
60-64	10,350	15,115	21,266	28,196	29,839	31,161	34,222	42,239	26,276
65+	7,309	9,545	14,544	21,180	23,005	25,363	26,001	33,167	16,028
ALL	12,118	19,766	25,906	32,000	35,930	38,941	42,517	46,768	26,042

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	231	813	682	673	456	415	251	94	3,614

Public Employees Retirement Fund

Service Retirements as of June 30, 2001

	Years Retired							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	0	5	0	0	0	0	0	5
50-54	23	25	2	0	0	0	0	50
55-59	668	1,627	9	1	0	0	0	2,305
60-64	1,089	3,571	1,478	14	0	0	0	6,152
65-69	647	4,311	3,758	904	6	0	0	9,626
70-74	141	978	4,506	2,683	598	0	0	8,906
75-79	43	230	1,021	3,658	1,981	47	0	6,980
80-84	16	69	192	775	2,907	596	7	4,562
85+	0	9	26	73	632	1,719	752	3,211
ALL	2,627	10,825	10,992	8,108	6,124	2,362	759	41,797

Average Annual Benefit

	Years Retired							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	0	12,968	0	0	0	0	0	12,968
50-54	10,798	12,679	4,259	0	0	0	0	11,477
55-59	11,706	9,442	18,039	3,481	0	0	0	10,129
60-64	8,711	10,457	13,395	17,305	0	0	0	10,870
65-69	8,479	8,574	13,995	14,526	33,709	0	0	11,258
70-74	4,865	7,096	11,519	13,338	27,984	0	0	12,581
75-79	4,656	5,156	9,919	11,418	21,335	25,763	0	13,862
80-84	5,513	2,687	8,043	9,241	14,537	16,117	16,655	13,363
85+	0	5,782	3,610	6,342	9,825	13,495	12,713	12,325
ALL	9,141	9,091	12,394	12,155	17,582	14,401	12,750	12,167

Total Annual Benefit (In Thousands) by Years RETIRED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	24,013	98,410	136,235	98,553	107,672	34,015	9,677	508,544

Public Employees Retirement Fund

Survivors as of June 30, 2001

Age	Years Since Death <1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	17	109	70	31	11	3	0	241
50-54	13	53	37	20	12	6	0	141
55-59	24	105	73	39	14	10	5	270
60-64	10	115	153	76	37	19	4	414
65-69	8	94	194	193	122	25	16	652
70-74	5	35	145	341	335	68	45	974
75-79	1	20	72	308	566	154	94	1,215
80-84	0	7	23	104	383	383	164	1,064
85+	1	25	58	106	156	340	492	1,178
ALL	79	563	825	1,218	1,636	1,008	820	6,149

Average Annual Benefit

Age	Years Since Death <1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	7,596	7,811	6,834	8,862	13,158	6,726	0	7,877
50-54	9,118	11,070	10,326	11,028	16,410	12,755	0	11,215
55-59	10,942	7,905	12,792	13,007	17,406	10,528	15,033	10,955
60-64	7,216	8,707	13,550	13,683	17,154	14,560	11,418	12,424
65-69	10,129	7,671	10,771	13,789	22,227	16,502	10,781	13,573
70-74	3,172	5,372	9,712	13,442	20,597	13,744	10,384	14,885
75-79	10,677	4,855	7,989	11,004	17,075	13,401	9,554	13,744
80-84	0	5,264	5,294	9,249	13,791	12,430	9,367	11,936
85+	10,223	5,790	7,065	8,163	10,010	11,914	9,601	9,988
ALL	8,863	7,917	10,269	11,908	16,712	12,600	9,657	12,375

Total Annual Benefit (In Thousands) by Years SINCE DEATH

Age	<1	1-4	5-9	10-14	15-19	20-24	25+	All
All	700	4,457	8,472	14,504	27,341	12,701	7,919	76,094

Public Employees Retirement Fund

Disability Retirements as of June 30, 2001

	Years Disabled							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	34	134	83	16	0	0	0	267
50-54	30	143	62	25	5	1	0	266
55-59	54	214	107	22	3	2	0	402
60-64	40	219	155	56	13	1	0	484
65-69	2	23	17	4	2	1	0	49
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	160	733	424	123	23	5	0	1,468

Average Annual Benefit

	Years Disabled							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	7,648	7,687	6,141	4,333	0	0	0	7,001
50-54	9,322	9,268	9,587	6,582	4,749	9,849	0	9,013
55-59	10,707	9,892	10,236	10,540	18,808	5,189	0	10,172
60-64	7,600	9,922	12,115	10,871	17,241	5,921	0	10,730
65-69	2,806	9,387	12,593	15,059	4,983	15,886	0	10,646
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	8,922	9,360	10,121	9,226	13,664	8,407	0	9,585

Total Annual Benefit (In Thousands) by Years DISABLED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	1,428	6,861	4,291	1,135	314	42	0	14,071

Public Employees Retirement Fund

Reconciliation Of Members

	Actives	Terminated: Deferred Retirement	Terminated: Other Non-Vested
A. ON JUNE 30, 2000	135,560	21,495	79,362
B. ADDITIONS	19,410	5,739	6,901
C. DELETIONS			
1. Service Retirement	(2,184)	(2,591)	(9)
2. Disability	(184)	0	(1)
3. Death	(105)	(80)	(29)
4. Terminated - Deferred	(3,207)	0	0
5. Terminated - Refund	(3,106)	(48)	(1,924)
6. Terminated - Other Non-Vested	(3,844)	0	0
7. Returned as Active	(9)	(615)	(2,426)
8. Members switched from Active to Terminated status	(4,731)	1,506	3,225
D. DATA ADJUSTMENTS	1,159	511	(2,072)
Vested	95,419		
Non-Vested	43,340		
E. TOTAL ON JUNE 30, 2001	138,759	25,917	83,027

	Recipients: Retirement Annuitants	Recipients: Disabled	Recipients: Survivors
A. ON JUNE 30, 2000	39,940	1,397	6,010
B. ADDITIONS	3,036	271	453
C. DELETIONS			
1. Service Retirement	0	(106)	0
2. Death	(1,158)	(63)	(281)
3. Annuity Expired	0	0	0
4. Returned as Active	0	0	0
D. DATA ADJUSTMENTS	(21)	(31)	(33)
E. TOTAL ON JUNE 30, 2001	41,797	1,468	6,149

Public Employees Retirement Fund

Actuarial Balance Sheet

(dollars in thousands)

JULY 1, 2001

A.	CURRENT ASSETS (TABLE 1, E6)			$10,527,270
B.	EXPECTED FUTURE ASSETS			
	1. Present Value of Expected Future Statutory Supplemental Contributions (See Table 11)			$825,457
	2. Present Value of Future Normal Costs			3,710,447
	3. Total Expected Future Assets			$4,535,904
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS			$15,063,174
D.	CURRENT BENEFIT OBLIGATIONS	Non-Vested	Vested	Total
	1. Benefit Recipients			
	a. Retirement Annuities		$5,082,123	$5,082,123
	b. Disability Benefits		168,580	168,580
	c. Surviving Spouse and Child Benefits		650,776	650,776
	2. Deferred Retirements with Future Augmentation		432,767	432,767
	3. Former Members without Vested Rights		20,281	20,281
	4. Active Members			
	a. Retirement Annuities	60,523	4,286,204	4,346,727
	b. Disability Benefits	217,270	0	217,270
	c. Survivor's Benefits	70,578	0	70,578
	d. Deferred Retirements	10,114	284,879	294,993
	e. Refund Liability Due to Death or Withdrawal	0	20,898	20,898
	5. Total Current Benefit Obligations	$358,485	$10,946,508	$11,304,993
E.	EXPECTED FUTURE BENEFIT OBLIGATIONS			$4,510,791
F.	TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS			$15,815,784
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D5-A)			$777,723
H.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)			$752,610

Public Employees Retirement Fund

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

(dollars in thousands)

JULY 1, 2001

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
	(1)	(2)	(3)=(1)-(2)
A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)			
1. Active Members			
a. Retirement Annuities	$8,348,144	$3,017,514	$5,330,630
b. Disability Benefits	419,771	203,265	216,506
c. Survivor's Benefit	132,365	61,796	70,569
d. Deferred Retirements	517,018	373,523	143,495
e. Refunds Due to Death or Withdrawal	43,959	54,349	(10,390)
f. Total	$9,461,257	$3,710,447	$5,750,810
2. Deferred Retirements With Future Augmentation	432,767		432,767
3. Former Members Without Vested Rights	20,281		20,281
4. Annuitants in MPRIF	5,595,214		5,595,214
5. Recipients Not in MPRIF	306,265		306,265
6. Total	$15,815,784	$3,710,447	$12,105,337

B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)	
1. AAL (A6)	$12,105,337
2. Current Assets (Table 1, E6)	10,527,270
3. UAAL (B1-B2)	$1,578,067
C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE	
1. Present Value of Future Payrolls Through the Amortization Date of July 1, 2031	$80,141,504
2. Supplemental Contribution Rate (B3/C1)	1.97%

Public Employees Retirement Fund

Changes In Unfunded Actuarial Accrued Liability (UAAL)

(dollars in thousands)

YEAR ENDING JUNE 30, 2001

A.	UAAL AT BEGINNING OF YEAR	$1,524,315
B.	CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
	1. Normal Cost and Expenses	$344,374
	2. Contribution	(361,588)
	3. Interest on A, B1 and B2	128,835
	4. Total (B1+B2+B3)	$111,621
C.	EXPECTED UAAL AT END OF YEAR (A+B4)	$1,635,936
D.	INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
	1. Salary Increases	($50,387)
	2. Investment Return	(24,896)
	3. MPRIF Mortality	(2,847)
	4. Mortality of Other Benefit Recipients	(11,472)
	5. Other Items	31,733
	6. Total	($57,869)
E.	UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTION (C+D6)	$1,578,067
F.	CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY DUE TO CHANGE IN ACTUARIAL METHODS	0
G.	CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS	0
H.	UAAL AT END OF YEAR (E+F+G)	$1,578,067

Public Employees Retirement Fund

Determination Of Contribution Sufficiency

(dollars in thousands)

JULY 1, 2001

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 353		
1. Employee Contributions	4.94% *	$189,604 *
2. Employer Contributions	5.38% *	206,389 *
3. Total	10.32% *	$395,993 *
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	7.77%	$298,126
b. Disability Benefits	0.49%	18,916
c. Survivors	0.15%	5,824
d. Deferred Retirement Benefits	0.87%	33,505
e. Refunds Due to Death or Withdrawal	0.12%	4,479
f. Total	9.40%	$360,850
2. Supplemental Contribution Amortization by July 1, 2031 of UAAL	1.97%	75,558
3. Allowance for Expenses	0.23%	8,822
4. Total	11.60%	$445,230
C. CONTRIBUTION SUFFICIENCY (DEFICIENCY) [A3-B4]	-1.28%	($49,237)

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 2001 is $3,835,448.

* Calculated based on statutory rates in effect for FY 2001-2002. Results based solely as of January 1, 2002 and later would show a deficiency of about 0.95% of payroll.

Public Employees Retirement Fund

Summary of Actuarial Assumptions and Methods

Interest:	**Pre-Retirement:** 8.5% per annum **Post-Retirement:** 8.5% per annum
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 ultimate rate table below. During a 10-year select period, 0.2% x (10 - T) where T is completed years of service is added to the ultimate rate.
Mortality:	**Pre-Retirement:** Male - 1983 Group Annuity Mortality Table for males setback eight years. Female - 1983 Group Annuity Mortality Table for females setback seven years. **Post-Retirement:** Male - 1983 Group Annuity Mortality Table for males. Female - 1983 Group Annuity Mortality Table for females setback one year. **Post-Disability:** Male - 1965 RRB rates through age 54. For ages 55 to 64, graded rates between 1965 RRB rates and the Post-Retirement mortality table. For ages 65 and later, the Post-Retirement mortality table. Female - 1965 RRB rates through age 54. For ages 55 to 64, graded rates between 1965 RRB rates and the Post-Retirement mortality table. For ages 65 and later, the Post-Retirement mortality table.
Retirement Age:	Graded rates beginning at age 55 as shown in rate table. Members who have attained the highest assumed retirement age will retire in one year.

Separation:	Select and ultimate rates based on recent plan experience. Ultimate rates after the third year are shown in rate table. Select rates are as follows:

First Year	Second Year	Third Year
0.24	0.08	0.04

Disability:	Rates as shown in rate table.
Member Status:	Active members who are reported with no salary and no credited service for the prior fiscal year are changed to terminated status as of the prior fiscal year end.
Allowance for Combined Service Annuity:	Liabilities for active and deferred vested participants are increased by 2.5% to account for the effect of some participants having eligibility for a Combined Service Annuity.
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:	Married Members assumed to elect subsidized joint and survivor form of annuity as follows: Males - 30% elect 50% J&S option 45% elect 100% J&S option Females - 15% elect 50% J&S option 15% elect 100% J&S option

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

Asset Valuation Method: Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during the fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year). Transition rules apply between July 1, 2000 and July 1, 2003, when the method is fully in effect.

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. If there is a negative Unfunded Actuarial Accrued Liability, the surplus amount shall be amortized over 30 years as a level percentage of payroll.

Summary of Actuarial Assumptions and Methods

Separation Expressed as Number of Occurrences Per 10,000:

	Pre-Retirement Death		Withdrawal		Disability		Retirement Basic Rule of 90		Retirement Coordinated Rule of 90		Salary
Age	Male	Female	Male	Female	Male	Female	Eligible	Other	Eligible	Other	Increases
20	3	1	370	400	1	1	0	0	0	0	6.75%
21	3	1	370	400	1	1	0	0	0	0	6.70%
22	3	1	370	400	1	1	0	0	0	0	6.65%
23	3	1	370	400	1	1	0	0	0	0	6.60%
24	3	2	370	400	1	1	0	0	0	0	6.55%
25	3	2	350	390	1	1	0	0	0	0	6.50%
26	4	2	330	380	1	1	0	0	0	0	6.45%
27	4	2	310	370	1	1	0	0	0	0	6.40%
28	4	2	290	360	1	1	0	0	0	0	6.35%
29	4	2	270	350	1	1	0	0	0	0	6.30%
30	4	2	260	340	2	2	0	0	0	0	6.25%
31	4	2	250	330	2	2	0	0	0	0	6.21%
32	4	3	240	320	3	3	0	0	0	0	6.17%
33	5	3	230	310	3	3	0	0	0	0	6.13%
34	5	3	220	300	4	4	0	0	0	0	6.09%
35	5	3	210	290	5	4	0	0	0	0	6.05%
36	5	3	200	280	6	4	0	0	0	0	6.01%
37	6	3	190	270	7	5	0	0	0	0	5.97%
38	6	4	180	260	7	5	0	0	0	0	5.93%
39	6	4	170	250	8	5	0	0	0	0	5.89%
40	7	4	162	240	9	6	0	0	0	0	5.85%
41	7	4	154	230	10	6	0	0	0	0	5.81%
42	8	5	146	220	11	6	0	0	0	0	5.77%
43	9	5	140	210	12	7	0	0	0	0	5.73%
44	9	5	136	200	13	8	0	0	0	0	5.69%

Summary of Actuarial Assumptions and Methods

Separation Expressed as Number of Occurrences Per 10,000:

	Pre-Retirement Death		Withdrawal		Disability		Retirement Basic Rule of 90		Retirement Coordinated Rule of 90		Salary
Age	Male	Female	Male	Female	Male	Female	Eligible	Other	Eligible	Other	Increases
45	10	6	132	190	14	9	0	0	0	0	5.65%
46	10	6	128	185	16	10	0	0	0	0	5.62%
47	11	7	124	180	17	12	0	0	0	0	5.59%
48	12	7	120	175	19	13	0	0	0	0	5.56%
49	14	8	116	170	21	14	0	0	0	0	5.53%
50	15	8	112	166	23	16	0	0	0	0	5.50%
51	17	9	108	162	25	18	0	0	0	0	5.45%
52	19	10	104	158	28	19	0	0	0	0	5.40%
53	22	11	100	154	35	22	0	0	0	0	5.35%
54	25	12	98	150	42	24	0	0	0	0	5.30%
55	28	14	96	146	49	26	3,500	600	1,000	300	5.25%
56	31	15	94	142	56	28	3,500	600	1,000	300	5.20%
57	35	16	92	138	61	31	3,500	700	2,000	300	5.15%
58	39	18	90	134	68	36	3,500	700	2,000	300	5.10%
59	43	20	88	130	75	41	3,500	800	3,000	400	5.05%
60	48	21	0	0	82	46	3,500	1,200	3,000	600	5.00%
61	52	23	0	0	89	51	4,000	1,200	4,000	1,100	5.00%
62	57	25	0	0	96	58	4,000	1,600	4,000	2,500	5.00%
63	61	28	0	0	103	65	4,000	1,200	4,000	1,500	5.00%
64	66	31	0	0	110	72	4,000	1,200	4,000	2,500	5.00%
65	71	35	0	0	0	0	5,000	5,000	5,000	5,000	5.00%
66	77	38	0	0	0	0	3,000	3,000	3,000	3,000	5.00%
67	84	43	0	0	0	0	3,000	3,000	3,000	3,000	5.00%
68	92	47	0	0	0	0	3,000	3,000	3,000	3,000	5.00%
69	101	52	0	0	0	0	3,000	3,000	3,000	3,000	5.00%
70	111	58	0	0	0	0	3,000	3,000	3,000	3,000	5.00%
71	124	64	0	0	0	0	10,000	10,000	10,000	10,000	5.00%

TABLE 14

Public Employees Retirement Fund

SCHEDULE OF EMPLOYER CONTRIBUTIONS

(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	3,032,808	28.90
07/01/00	9,609,367	11,133,682	1,524,315	86.31	3,437,954	44.34
07/01/01	10,527,270	12,105,337	1,578,067	86.96	3,466,587	45.52

Public Employees Retirement Fund

SCHEDULE OF EMPLOYER CONTRIBUTIONS

(dollars in thousands)

Year Ended June 30	Actuarially Required Contribution Rate (A)[1]	Actual Covered Payroll (B)	Actual Member Contributions (C)	Annual Required Contribution [(A)x(B)]-(C)	Actual Employer Contribution[2]	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]	3,271,737	140,385	174,356	151,499	86.89
1999	9.63[3]	3,302,808	158,475	159,585	173,370	108.64
2000	9.22[3]	3,437,954	171,073	145,906	186,637	127.92
2001	11.84[3],[4]	3,466,587	173,380	237,064	188,208	79.39
2002	11.85[3]					

(1) 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.

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

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

(4) Actuarially Required Contribution Rate prior to change in Actuarial Assumptions and Asset Valuation Method is 8.73%.

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Public Employees Retirement Fund

Active Members as of June 30, 2001

	Years of Service								
Age	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	All
<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	0	0	0
50-54	0	0	0	0	0	1	1	66	68
55-59	0	0	0	0	0	0	0	113	113
60-64	0	0	0	0	0	0	0	64	64
65+	0	0	0	0	0	0	0	40	40
ALL	0	0	0	0	0	1	1	283	285

Average Annual Earnings

	Years of Service								
Age	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	All
<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	0	0	0
50-54	0	0	0	0	0	6,421	18,116	44,934	43,973
55-59	0	0	0	0	0	0	0	49,492	49,492
60-64	0	0	0	0	0	0	0	37,738	37,738
65+	0	0	0	0	0	0	0	35,602	35,602
ALL	0	0	0	0	0	6,421	18,116	43,808	43,586

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	0	0	0	0	0	6	18	12,398	12,422

Public Employees Retirement Fund

Service Retirements as of June 30, 2001

	Years Retired							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	0	4	0	0	0	0	0	4
50-54	1	8	1	0	0	0	0	10
55-59	100	235	7	0	0	0	0	342
60-64	38	500	355	10	0	0	0	903
65-69	46	301	852	320	6	0	0	1,525
70-74	4	70	745	797	393	0	0	2,009
75-79	1	15	132	964	1,129	44	0	2,285
80-84	0	3	19	168	1,373	427	6	1,996
85+	0	1	1	11	216	1,093	593	1,915
ALL	190	1,137	2,112	2,270	3,117	1,564	599	10,989

Average Annual Benefit

	Years Retired							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	0	15,698	0	0	0	0	0	15,698
50-54	19,688	17,820	6,685	0	0	0	0	16,893
55-59	31,996	31,799	20,558	0	0	0	0	31,627
60-64	21,802	31,948	36,438	16,866	0	0	0	33,119
65-69	27,151	25,268	34,041	32,428	33,709	0	0	31,762
70-74	15,677	24,016	27,353	28,038	38,431	0	0	29,652
75-79	48,457	25,520	28,856	23,163	30,997	25,676	0	27,438
80-84	0	9,929	31,151	23,128	22,477	19,948	17,248	22,039
85+	0	31,703	14,623	26,701	19,816	17,493	13,893	16,699
ALL	28,463	29,361	31,668	26,168	27,412	18,394	13,927	26,174

Total Annual Benefit (In Thousands) by Years RETIRED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	5,407	33,383	66,882	59,401	85,443	28,768	8,342	287,626

Public Employees Retirement Fund

Survivors as of June 30, 2001

	Years Since Death							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	0	1	5	9	4	2	0	21
50-54	0	3	1	6	6	5	0	21
55-59	0	4	17	16	8	9	4	58
60-64	1	9	40	32	25	14	4	125
65-69	1	6	46	75	81	21	16	246
70-74	0	2	34	151	226	54	44	511
75-79	0	1	14	104	342	114	88	663
80-84	0	2	9	47	219	274	148	699
85+	1	18	53	88	107	236	438	941
ALL	3	46	219	528	1,018	729	742	3,285

Average Annual Benefit

	Years Since Death							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	0	12,170	9,056	16,781	20,946	7,860	0	14,666
50-54	0	23,487	35,719	17,989	24,880	15,191	0	20,921
55-59	0	18,996	26,036	22,384	23,605	11,462	18,334	21,415
60-64	13,101	17,553	28,334	23,909	22,248	18,168	11,418	23,406
65-69	16,715	22,306	20,910	24,298	29,208	18,549	10,781	23,832
70-74	0	22,386	20,898	21,625	26,951	15,860	10,324	22,353
75-79	0	6,513	18,506	18,343	22,529	16,185	9,798	18,983
80-84	0	8,539	9,218	14,528	18,759	14,991	9,744	14,937
85+	10,223	7,146	7,432	8,637	12,630	14,347	9,988	11,057
ALL	13,346	14,074	18,563	18,599	22,200	15,135	10,007	16,935

Total Annual Benefit (In Thousands) by Years SINCE DEATH

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	40	647	4,065	9,820	22,599	11,033	7,425	55,631

Public Employees Retirement Fund

Disability Retirements as of June 30, 2001

	Years Disabled							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	0	0	0	0	0	0	0	0
50-54	0	2	1	0	0	1	0	4
55-59	0	4	6	2	1	0	0	13
60-64	2	8	16	9	4	0	0	39
65-69	0	3	1	1	0	1	0	6
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	2	17	24	12	5	2	0	62

Average Annual Benefit

	Years Disabled							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	0	0	0	0	0	0	0	0
50-54	0	45,261	43,782	0	0	9,849	0	36,038
55-59	0	38,554	29,313	23,284	33,071	0	0	31,518
60-64	18,023	31,619	28,954	28,819	31,125	0	0	29,132
65-69	0	19,272	39,873	36,991	0	15,886	0	25,094
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	18,023	32,677	30,117	28,578	31,514	12,868	0	29,687

Total Annual Benefit (In Thousands) by Years DISABLED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	36	555	722	342	157	25	0	1,840

Public Employees Retirement Fund

Determination Of Contribution Sufficiency

(dollars in thousands)

JULY 1, 2001

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 353		
1. Employee Contributions	8.93%	$1,166
2. Employer Contributions	11.61%	1,516
3. Total	20.54%	$2,682
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	11.16%	$1,458
b. Disability Benefits	0.64%	83
c. Survivors	0.38%	50
d. Deferred Retirement Benefits	2.39%	312
e. Refunds Due to Death or Withdrawal	0.10%	13
f. Total	14.67%	$1,916

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 2001 is $13,060.

Public Employees Retirement Fund

Summary of Plan Provisions

GENERAL

Eligibility:	A public employee who is not covered under the Social Security Act. General exceptions are employees covered by other public funds and certain part-time employees.
Contributions:	
Member:	8.75% of total salary thereafter.
Employer:	11.43% of total salary. Additional 2.68% is repealed at full funding.
Allowable Service:	Service during which Member contributions were deducted. May also include certain leaves of absence and military service.
Salary:	Includes amounts deducted for deferred compensation or supplemental retirement plans, net income from fees and sick leave payments funded by the employer. Excludes 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.
Average Salary:	Average of the five highest successive years of salary. Average salary is based on all Allowable Service if less than five years.

RETIREMENT

Normal Retirement Benefit:

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

Amount: 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. Effective January 1, 2002, annual lump sum payment is divided by 12 and paid as a monthly life annuity in the annuity form elected.

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%.

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. Members active with a public employer the day prior to the privatization of the employer become vested immediately and receive augmentation at the rate of 5.5% compounded annually through the year the member turns age 55 and 7.5% 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

Effective January 1, 2002, the employee and employer regular contribution rate increases from 8.75 percent of pay to 9.10 percent.

Public Employees Retirement Fund

Active Members as of June 30, 2001

Years of Service

Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30+	All
<25	3,204	2,563	39	1	1	0	0	0	5,808
25-29	2,721	5,275	880	15	1	0	0	0	8,892
30-34	2,449	5,685	3,094	798	26	0	0	0	12,052
35-39	2,606	6,439	3,761	2,835	1,026	39	0	0	16,706
40-44	2,731	7,511	5,277	3,869	2,462	1,625	66	0	23,541
45-49	2,706	5,992	5,548	4,840	2,809	2,847	1,289	34	26,065
50-54	1,212	3,662	3,932	4,372	2,964	2,728	2,103	577	21,550
55-59	686	1,951	2,046	2,548	2,139	2,097	1,462	753	13,682
60-64	393	1,050	1,056	1,228	978	1,089	786	303	6,883
65+	344	986	690	512	280	225	193	65	3,295
ALL	19,052	41,114	26,323	21,018	12,686	10,650	5,899	1,732	138,474

Average Annual Earnings

Years of Service

Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30+	All
<25	9,940	15,345	21,182	18,764	10,329	0	0	0	12,402
25-29	13,509	22,171	27,097	24,638	4,304	0	0	0	20,010
30-34	13,757	23,131	31,097	33,407	33,430	0	0	0	23,974
35-39	12,206	20,137	29,900	36,371	36,116	31,119	0	0	24,860
40-44	12,168	18,773	25,816	35,287	40,347	38,839	37,113	0	25,993
45-49	11,568	19,334	24,260	31,776	38,570	42,927	41,694	40,796	27,670
50-54	13,755	20,346	24,143	30,443	35,587	41,610	47,644	47,933	30,907
55-59	13,078	19,760	24,600	28,861	32,299	35,796	42,768	50,002	30,385
60-64	10,350	15,115	21,266	28,196	29,839	31,161	34,222	43,190	26,169
65+	7,309	9,545	14,544	21,180	23,005	25,363	26,001	31,668	15,791
ALL	12,118	19,766	25,906	32,000	35,930	38,944	42,521	47,252	26,006

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	231	813	682	673	456	415	251	82	3,601

Table 4B
Coordinated

Public Employees Retirement Fund

Service Retirements as of June 30, 2001

	Years Retired							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	0	1	0	0	0	0	0	1
50-54	22	17	1	0	0	0	0	40
55-59	568	1,392	2	1	0	0	0	1,963
60-64	1,051	3,071	1,123	4	0	0	0	5,249
65-69	601	4,010	2,906	584	0	0	0	8,101
70-74	137	908	3,761	1,886	205	0	0	6,897
75-79	42	215	889	2,694	852	3	0	4,695
80-84	16	66	173	607	1,534	169	1	2,566
85+	0	8	25	62	416	626	159	1,296
ALL	2,437	9,688	8,880	5,838	3,007	798	160	30,808

Average Annual Benefit

	Years Retired							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	0	2,048	0	0	0	0	0	2,048
50-54	10,394	10,261	1,834	0	0	0	0	10,124
55-59	8,134	5,668	9,224	3,481	0	0	0	6,384
60-64	8,238	6,959	6,112	18,404	0	0	0	7,043
65-69	7,050	7,321	8,118	4,718	0	0	0	7,399
70-74	4,550	5,792	8,383	7,126	7,958	0	0	7,609
75-79	3,614	3,736	7,108	7,216	8,532	27,045	0	7,256
80-84	5,513	2,358	5,506	5,398	7,431	6,441	13,099	6,615
85+	0	2,542	3,170	2,731	4,638	6,515	8,315	5,863
ALL	7,635	6,713	7,810	6,707	7,393	6,577	8,345	7,172

Total Annual Benefit (In Thousands) by Years RETIRED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	18,606	65,035	69,352	39,155	22,230	5,248	1,335	220,954

Table 5B
Coordinated

Public Employees Retirement Fund

Survivors as of June 30, 2001

	Years Since Death							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	17	108	65	22	7	1	0	220
50-54	13	50	36	14	6	1	0	120
55-59	24	101	56	23	6	1	1	212
60-64	9	106	113	44	12	5	0	289
65-69	7	88	148	118	41	4	0	406
70-74	5	33	111	190	109	14	1	463
75-79	1	19	58	204	224	40	6	552
80-84	0	5	14	57	164	109	16	365
85+	0	7	5	18	49	104	54	237
ALL	76	517	606	690	618	279	78	2,864

Average Annual Benefit

	Years Since Death							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	7,596	7,771	6,664	5,623	8,708	4,460	0	7,230
50-54	9,118	10,326	9,621	8,046	7,941	577	0	9,517
55-59	10,942	7,466	8,772	6,485	9,142	2,124	1,829	8,094
60-64	6,563	7,956	8,318	6,246	6,544	4,461	0	7,675
65-69	9,189	6,674	7,620	7,110	8,436	5,756	0	7,358
70-74	3,172	4,341	6,286	6,939	7,425	5,584	13,048	6,643
75-79	10,677	4,768	5,451	7,263	8,748	5,470	5,980	7,452
80-84	0	3,954	2,772	4,897	7,159	5,994	5,885	6,190
85+	0	2,304	3,186	5,846	4,291	6,395	6,468	5,746
ALL	8,687	7,370	7,272	6,788	7,672	5,978	6,336	7,145

Total Annual Benefit (In Thousands) by Years SINCE DEATH

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	660	3,810	4,406	4,683	4,741	1,667	494	20,463

Public Employees Retirement Fund

Disability Retirements as of June 30, 2001

	Years Disabled							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	34	134	83	16	0	0	0	267
50-54	30	141	61	25	5	0	0	262
55-59	54	210	101	20	2	2	0	389
60-64	38	211	139	47	9	1	0	445
65-69	2	20	16	3	2	0	0	43
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	158	716	400	111	18	3	0	1,406

Average Annual Benefit

	Years Disabled							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	7,648	7,687	6,141	4,333	0	0	0	7,001
50-54	9,322	8,758	9,027	6,582	4,749	0	0	8,601
55-59	10,707	9,347	9,103	9,266	11,677	5,189	0	9,459
60-64	7,052	9,100	10,177	7,435	11,071	5,921	0	9,118
65-69	2,806	7,905	10,889	7,749	4,983	0	0	8,631
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	8,807	8,807	8,922	7,134	8,706	5,433	0	8,699

Total Annual Benefit (In Thousands) by Years DISABLED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	1,391	6,305	3,568	791	156	16	0	12,230

Public Employees Retirement Fund

Determination Of Contribution Sufficiency

(dollars in thousands)

JULY 1, 2001

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 353		
1. Employee Contributions	4.93%	$188,438
2. Employer Contributions	5.36%	204,873
3. Total	10.29%	$393,311

B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	7.76%	$296,668
b. Disability Benefits	0.49%	18,833
c. Survivors	0.15%	5,774
d. Deferred Retirement Benefits	0.87%	33,193
e. Refunds Due to Death or Withdrawal	0.12%	4,466
f. Total	9.39%	$358,934

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 2001 is $3,822,388.

Public Employees Retirement Fund

Summary of Plan Provisions

GENERAL

Eligibility	A public employee who is covered under the Social Security Act. General exceptions are employees covered by other public funds and certain part-time employees. City managers and persons holding elective office may choose to become Members.
Contributions	
Member:	4.75% of total salary.
Employer:	5.18% of total salary. Additional 0.43% is repealed at full funding.
Allowable Service:	Service during which Member contributions were deducted. May also include certain leaves of absence and military service.
Salary:	Includes amounts deducted for deferred compensation or supplemental retirement plans, net income from fees and sick leave payments funded by the employer. Excludes 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.
Average Salary:	Average of the five highest successive years of salary. Average salary is based on all Allowable Service if less than five years.

RETIREMENT

Normal Retirement Benefit

Eligibility: **First hired before July 1, 1989**:
Age 65 and three years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.

Amount: 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;

OR

1.7% of Average Salary for each year of Allowable Service.

Eligibility: **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.

Amount: 1.7% of Average Salary for each year of Allowable Service.

Early Retirement Benefit

Eligibility: **First hired before July 1, 1989**:
Age 55 and three years of Allowable Service. Any age with 30 years of Allowable Service. Rule of 90: Age plus Allowable Service totals 90.

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

Amount: **First hired before July 1, 1989**:

The greater of

1.2% 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;

OR

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.

First hired after June 30, 1989:

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.

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. Benefit recipients receiving benefits for at least one full month but less than 12 full months will receive a partial increase.

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

DISABILITY

Disability Benefit

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

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

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

Eligibility:	Normal retirement age.
Amount:	Any optional annuity continues. Otherwise, the larger of the disability benefit paid before normal retirement age or the normal retirement benefit available at normal retirement age, or an actuarially equivalent optional annuity.
Benefit Increases:	Same as for retirement.

DEATH

Surviving Spouse Optional Annuity

Eligibility:	Member or former Member who dies before retirement or disability benefits commence.
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. Members active with a public employer the day prior to the privatization of the employer become vested immediately and receive augmentation at the rate of 5.5% compounded annually through the year the member turns age 55 and 7.5% 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, 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%.

SUMMARY OF SIGNIFICANT CHANGES

Effective January 1, 2002, the employee and employer regular contribution rate increases from 4.75 percent of pay to 5.10 percent.

Public Employees Police and Fire Fund
ACTUARIAL VALUATION REPORT

July 1, 2001

MILLIMAN USA

A MILLIMAN GLOBAL FIRM

Milliman USA

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December 4, 2001

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, 2001.

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.

We, Thomas K. Custis and William V. Hogan, are actuaries for Milliman USA. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Milliman USA

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

William V. Hogan

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

TKC/WVH/bh

Public Employees Police and Fire Fund

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Public Employees Police and Fire Fund

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(Continued)

Public Employees Police and Fire Fund

Report Highlights

(dollars in thousands)

	07/01/2000 Valuation	07/01/2001 Valuation
A. CONTRIBUTIONS (Table 11)		
1. Statutory Contributions - Chapter 353 % of Payroll	15.50%	15.50%
2. Required Contributions - Chapter 356 % of Payroll	12.68%	13.12%
3. Sufficiency (Deficiency): (A.1. - A.2.)	2.82%	2.38%
B. FUNDING RATIOS		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	$4,145,351	$4,510,134
b. Current Benefit Obligations (Table 8)	$3,249,864	$3,567,264
c. Funding Ratio: (a/b)	127.55%	126.43%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	$4,145,351	$4,510,134
b. Actuarial Accrued Liability (Table 9)	$3,383,187	$3,712,360
c. Funding Ratio: (a/b)	122.53%	121.49%
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	$4,835,275	$5,242,810
b. Current and Expected Future Benefit Obligations	$4,543,926	$4,979,963
c. Funding Ratio: (a/b)	106.41%	105.28%
C. PLAN PARTICIPANTS		
1. Active Members		
a. Number (Table 3)	9,627	9,858
b. Projected Annual Earnings	$494,134	$528,942
c. Average Annual Earnings (Projected $)	$51,328	$53,656
d. Average Age	38.7	38.5
e. Average Service	11.0	10.9
2. Others		
a. Service Retirements (Table 4)	3,991	4,188
b. Survivors (Table 5)	1,205	1,267
c. Disability Retirements (Table 6)	482	543
d. Deferred Retirements (Table 7)	470	554
e. Terminated Other Non-vested (Table 7)	626	610
f. Total	6,774	7,162

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 126.43%. The corresponding ratio for the prior year was 127.55%.
- 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 2001, the ratio is 121.49%, which is a decrease from the 2000 value of 122.53%.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 105.28% verifies that the current statutory contributions are sufficient.

Asset Information (Tables 1 and 2)

Effective with the July 1, 2000 valuation of the fund, Minnesota Statutes require that the asset value used for actuarial purposes spread differences between actual return (measured on a market-value basis) and expected return on non-MPRIF assets over five years, in a manner similar to that already being used within the MPRIF. The previous method required under Minnesota Statutes recognized one third of the unrealized gains and losses. An Asset Valuation Method requirement exists because market values (which include all unrealized gains and losses) are typically volatile and can produce erratic changes in the contribution requirements from year to year. The intent of the change to the current method is to employ a more effective asset smoothing technique which is market-value based and which eliminates artificial bias related to manager style. The effective date of this requirement is July 1, 2000 with full transition to be accomplished as of July 1, 2003.

The calculation of the Actuarial Value of Assets is shown in Table 1 on lines E.1 to E.4. Actuarial Value of Assets is determined as:

Market Value of Assets at June 30, 2001, *less*

80% of the current year Unrecognized Asset Return at July 1, 2001 (the difference between actual net return on Market Value of Assets between 06/30/2000 and 06/30/2001 and the asset return expected during that period based on the assumed interest rate employed in the July 1, 2000 Actuarial Valuation); *less*

60% of the current year Unrecognized Asset Return at July 1, 2000 (the difference between actual net return on Market Value of Assets between 06/30/99 and 06/30/2000 and the asset return expected during that period based on the assumed interest rate employed in the July 1, 1999 Actuarial Valuation); *less*

30% of the Unrecognized Asset Return at July 1, 1999 (the difference between Market Value of Assets on 06/30/99 and the Actuarial Value of Assets used in the July 1, 1999 Actuarial Valuation).

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.

The Police and Fire Consolidation Fund was merged into the Public Employees Police and Fire Fund effective July 1, 1999. The Local Relief Association accounts that had a "Positive Amortizable Base" on July 1, 1999 were required to make 10 year fixed amortization payments to pay for the unfunded liability that existed on that date. The Market Value of Assets includes the outstanding balance as of the valuation date.

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:

- <u>For Active Members</u> – 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.
- <u>For Non-Active Members</u> – 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 superceded 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 13.12%.

Changes in Actuarial Assumptions and Methods

All actuarial assumptions and methods listed in Table 12 are the same as those used in the prior valuation.

Changes in Plan Provisions

Effective with this July 1, 2001 valuation, the following plan provision has been amended:

- Effective January 1, 2002, the additional lump sum benefits that are paid to pre-1973 retirees will be paid as monthly installments to retirees.

All other plan provisions are the same as those used in the prior actuarial valuation of the Fund.

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Public Employees Police and Fire Fund

Statement of Plan Net Assets

(dollars in thousands)

JULY 1, 2001

	Market Value	Cost Value
A. ASSETS IN TRUST		
1. Cash, Equivalents, Short-term Securities	$24,986	$24,986
2. Fixed Income	599,209	603,080
3. Equity	1,613,779	1,800,115
4. Real Estate	89,492	76,589
5. Equity in MPRIF	1,874,227	1,874,227
6. Invested Securities Lending Collateral	359,474	359,474
7. Other	0	0
Subtotal	$4,561,167	$4,738,471
B. ASSETS RECEIVABLE		
1. Amounts receivable from municipalities with positive amortizable bases	38,093	38,093
2. Other	42,165	42,165
Subtotal	80,258	80,258
C. LIABILITIES		
1. Invested Securities Lending Collateral	(359,474)	(359,474)
2. Other	(2,998)	(2,998)
Subtotal	(362,472)	(362,472)
D. NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
1. MPRIF Reserves	1,874,227	1,874,227
2. Member Reserves	314,422	314,422
3. Other Non-MPRIF Reserves	2,090,304	2,267,608
4. Total Assets Available for Benefits	$4,278,953	$4,456,257

E. DETERMINATION OF ACTUARIAL VALUE OF ASSETS		
1. Market Value of Assets Available for Benefits (D4)		$4,278,953
2. Unrecognized Asset Returns (UAR)		
a. June 30, 2001	($412,267)	
b. June 30, 2000	42,251	
c. June 30, 1999	244,273	
3. UAR Adjustment: .80 * (E2.a) + .60 * (E2.b) + .30 * (E2.c)		(231,181)
4. Actuarial Value of Assets (E1 - E3) (Same as "Current Assets")		4,510,134

Public Employees Police and Fire Fund

Statement of Change In Plan Net Assets

(dollars in thousands)

YEAR ENDING JUNE 30, 2001

		Non-MPRIF Assets	MPRIF Reserve	Market Value
A.	ASSETS AVAILABLE AT BEGINNING OF PERIOD	$2,645,176	$1,680,540	$4,325,716
B.	ADDITIONS			
	1. Member Contributions	$31,341	$0	$31,341
	2. Employer Contributions	52,960	0	52,960
	3. Contributions From Other Sources	0	0	0
	4. MPRIF Income	0	254,416	254,416
	5. Net Investment Income			
	a. Interest and Dividends	117,544	0	117,544
	b. Net Realized Gain (Loss)	29,636	0	29,636
	c. Net Change in Unrealized Gain (Loss)	(337,616)	0	(337,616)
	d. Investment Expenses	(3,480)	0	(3,480)
	e. **Net Subtotal**	(193,916)	0	(193,916)
	6. Other	2,744	0	2,744
	7. Total Additions	($106,871)	$254,416	$147,545
C.	OPERATING EXPENSES			
	1. Service Retirements	$232	$162,631	$162,863
	2. Disability Benefits	18,234	0	18,234
	3. Survivor Benefits	11,149	0	11,149
	4. Refunds	976	0	976
	5. Administrative Expenses	639	0	639
	6. Other	447	0	447
	7. Total Disbursements	$31,677	$162,631	$194,308
D.	OTHER CHANGES IN RESERVES			
	1. Annuities Awarded	(140,731)	140,731	0
	2. Mortality Gain/Loss	38,829	(38,829)	0
	3. Total Other Changes	(101,902)	101,902	0
E.	ASSETS AVAILABLE AT END OF PERIOD	$2,404,726	$1,874,227	$4,278,953

F.	DETERMINATION OF CURRENT YEAR UNRECOGNIZED ASSET RETURN	
	1. Average Balance	
	(a) Non-MPRIF Assets Available at Beginning of Period	2,645,176
	(b) Non-MPRIF Assets Available at End of Period*	2,365,897
	(c) Average Balance { [F1.a + F1.b - B5.e - B6] / 2 }	2,601,123
	2. Expected Return: .085 * F1.c	221,095
	3. Actual Return	(191,172)
	4. Current Year Unrecognized Asset Return: F3 - F2	(412,267)

** Before adjustment for MPRIF mortality gain/loss*

Public Employees Police and Fire Fund

Active Members as of June 30, 2001

Age	Years of Service <1	1-4	5-9	10-14	15-19	20-24	25-29	30+	All
<25	154	141	1	0	0	0	0	0	296
25-29	219	958	178	1	0	0	0	0	1,356
30-34	132	813	872	193	0	0	0	0	2,010
35-39	69	366	572	688	183	1	0	0	1,879
40-44	26	158	272	425	509	221	0	0	1,611
45-49	47	93	81	196	276	649	188	0	1,530
50-54	6	34	41	67	98	285	349	35	915
55-59	3	14	14	26	32	46	49	24	208
60-64	0	5	8	10	2	3	8	7	43
65+	0	1	2	3	1	1	0	2	10
ALL	656	2,583	2,041	1,609	1,101	1,206	594	68	9,858

Average Annual Earnings

Age	Years of Service <1	1-4	5-9	10-14	15-19	20-24	25-29	30+	All
<25	24,993	36,500	58,463	0	0	0	0	0	30,587
25-29	24,148	41,527	48,553	21,000	0	0	0	0	39,627
30-34	25,407	43,226	51,900	54,110	0	0	0	0	46,864
35-39	23,929	44,680	53,077	55,899	55,853	38,681	0	0	51,667
40-44	20,353	45,725	52,563	55,885	59,836	59,629	0	0	55,516
45-49	20,843	43,688	51,303	53,045	58,171	60,508	58,677	0	56,177
50-54	12,121	46,553	51,228	50,574	55,623	60,984	62,729	67,107	59,254
55-59	31,177	43,553	46,403	43,997	47,381	54,298	58,153	60,363	51,966
60-64	0	49,893	52,172	44,029	27,239	51,963	54,185	62,854	50,953
65+	0	30,080	42,776	27,281	10,756	65,125	0	65,818	40,499
ALL	24,112	42,658	51,947	54,770	57,916	60,187	60,954	64,251	50,423

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	15,818	110,186	106,024	88,125	63,766	72,586	36,207	4,369	497,070

Public Employees Police and Fire Fund

Service Retirements as of June 30, 2001

	Years Retired							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	4	3	0	0	0	0	0	7
50-54	170	306	4	7	3	3	0	493
55-59	96	608	148	16	11	5	1	885
60-64	13	269	398	121	8	9	2	820
65-69	8	78	229	219	70	8	4	616
70-74	1	3	106	154	210	75	9	558
75-79	1	1	9	92	152	137	47	439
80-84	0	0	1	11	70	90	55	227
85+	0	0	0	1	7	52	83	143
ALL	293	1,268	895	621	531	379	201	4,188

Average Annual Benefit

	Years Retired							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	6,653	11,832	0	0	0	0	0	8,873
50-54	34,792	34,228	26,857	30,234	32,412	22,212	0	34,222
55-59	36,314	40,571	31,672	33,850	31,887	26,782	28,789	38,300
60-64	20,120	41,098	43,160	34,729	32,367	36,823	35,865	40,682
65-69	21,274	32,420	42,938	38,285	36,305	37,350	34,782	38,791
70-74	26,767	40,443	39,135	39,220	39,362	38,242	34,212	39,029
75-79	14,213	67,175	47,380	35,490	38,322	36,436	34,930	36,973
80-84	0	0	26,315	36,777	31,194	34,732	33,073	33,301
85+	0	0	0	29,115	22,859	33,748	29,912	30,956
ALL	33,789	38,603	40,678	37,163	37,068	35,809	32,293	37,746

Total Annual Benefit (In Thousands) by Years RETIRED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	9,900	48,948	36,406	23,078	19,683	13,571	6,490	158,080

Public Employees Police and Fire Fund

Survivors as of June 30, 2001

	Years Since Death							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	6	38	37	18	10	3	0	112
50-54	2	7	18	18	13	2	0	60
55-59	4	9	27	18	8	9	3	78
60-64	2	7	25	31	15	8	4	92
65-69	0	1	15	30	30	26	17	119
70-74	0	1	5	49	63	34	38	190
75-79	0	1	5	28	70	52	63	219
80-84	1	0	6	13	29	60	73	182
85+	0	2	6	11	28	28	140	215
ALL	15	66	144	216	266	222	338	1,267

Average Annual Benefit

	Years Since Death							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	15,425	14,188	17,478	16,109	16,631	8,385	0	15,713
50-54	20,404	29,230	33,744	24,948	23,358	20,585	0	27,445
55-59	19,581	28,084	27,193	23,484	26,631	22,558	23,475	25,314
60-64	17,075	21,162	27,756	24,533	21,466	17,653	13,744	23,423
65-69	0	31,152	30,166	26,709	22,146	19,830	18,922	23,416
70-74	0	18,438	20,918	22,757	22,381	20,063	16,217	20,771
75-79	0	15,318	15,954	19,209	21,027	19,896	17,154	19,270
80-84	7,929	0	23,144	17,255	18,807	18,562	17,605	18,217
85+	0	6,768	18,153	15,602	18,070	18,368	16,082	16,585
ALL	16,917	18,532	24,770	22,095	21,063	19,238	16,807	20,024

Total Annual Benefit (In Thousands) by Years SINCE DEATH

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	253	1,223	3,566	4,772	5,602	4,270	5,680	25,370

Public Employees Police and Fire Fund

Disability Retirements as of June 30, 2001

Age	Years Disabled ≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	29	89	23	19	3	1	0	164
50-54	28	112	37	9	3	0	1	190
55-59	7	72	47	2	0	0	0	128
60-64	1	21	33	0	0	0	0	55
65-69	0	5	0	0	0	0	0	5
70-74	0	1	0	0	0	0	0	1
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	65	300	140	30	6	1	1	543

Average Annual Benefit

Age	Years Disabled ≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	24,609	27,692	27,468	28,063	30,376	44,028	0	27,307
50-54	39,739	37,141	33,917	39,789	30,266	0	13,305	36,788
55-59	40,510	45,552	42,725	31,252	0	0	0	44,015
60-64	22,464	41,099	44,408	0	0	0	0	42,746
65-69	0	21,204	0	0	0	0	0	21,204
70-74	0	25,027	0	0	0	0	0	25,027
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	32,806	36,328	38,287	31,793	30,321	44,028	13,305	36,066

Total Annual Benefit (In Thousands) by Years DISABLED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	2,132	10,898	5,360	953	181	44	13	19,583

Public Employees Police and Fire Fund

Reconciliation Of Members

		Actives	Terminated Deferred Retirement	Terminated Other Non-Vested
A.	ON JUNE 30, 2000	9,627	470	626
B.	ADDITIONS	708	427	67
C.	DELETIONS			
	1. Service Retirement	(264)	(291)	0
	2. Disability	(73)	0	(1)
	3. Death	(3)	(7)	(1)
	4. Terminated - Deferred	(88)	0	0
	5. Terminated - Refund	(31)	0	(26)
	6. Terminated - Other Non-Vested	(35)	0	0
	7. Returned as Active	0	(16)	(30)
	8. Transferred to Other Fund	0	0	0
D.	DATA ADJUSTMENTS	17	(29)	(25)
	Vested	8,259		
	Non-Vested	1,599		
E.	TOTAL ON JUNE 30, 2001	9,858	554	610

		Recipients Retirement Annuitants	Recipients Disabled	Recipients Survivors
A.	ON JUNE 30, 2000	3,991	482	1,205
B.	ADDITIONS	304	84	117
C.	DELETIONS			
	1. Service Retirement	0	(11)	0
	2. Death	(104)	(7)	(51)
	3. Annuity Expired	0	0	0
	4. Returned as Active	0	0	0
D.	DATA ADJUSTMENTS	(3)	(5)	(4)
E.	TOTAL ON JUNE 30, 2001	4,188	543	1,267

Public Employees Police and Fire Fund

Actuarial Balance Sheet

(dollars in thousands)

JULY 1, 2001

A.	CURRENT ASSETS (TABLE 1, E6)			$4,510,134
B.	EXPECTED FUTURE ASSETS			
	1. Present Value of Expected Future Statutory Supplemental Contributions (See Table 11)			($534,927)
	2. Present Value of Future Normal Costs			1,267,603
	3. Total Expected Future Assets			$732,676
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS			$5,242,810
D.	CURRENT BENEFIT OBLIGATIONS	Non-Vested	Vested	Total
	1. Benefit Recipients			
	a. Retirement Annuities		$1,754,126	$1,754,126
	b. Disability Benefits		179,378	179,378
	c. Surviving Spouse and Child Benefits		237,420	237,420
	2. Deferred Retirements with Future Augmentation		53,922	53,922
	3. Former Members without Vested Rights		516	516
	4. Active Members			
	a. Retirement Annuities	13,437	1,122,196	1,135,633
	b. Disability Benefits	105,972	0	105,972
	c. Survivor's Benefits	41,493	0	41,493
	d. Deferred Retirements	2,840	54,645	57,485
	e. Refund Liability Due to Death or Withdrawal	0	1,319	1,319
	5. Total Current Benefit Obligations	$163,742	$3,403,522	$3,567,264
E.	EXPECTED FUTURE BENEFIT OBLIGATIONS			$1,412,699
F.	TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS			$4,979,963
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D5-A)			($942,870)
H.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)			($262,847)

Public Employees Police and Fire Fund

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

(dollars in thousands)

JULY 1, 2001

	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	$2,354,470	$991,827	$1,362,643
b. Disability Benefits	207,537	127,508	80,029
c. Survivor's Benefit	80,946	48,933	32,013
d. Deferred Retirements	108,951	96,090	12,861
e. Refunds Due to Death or Withdrawal	2,697	3,245	(548)
f. Total	$2,754,601	$1,267,603	$1,486,998
2. Deferred Retirements With Future Augmentation	53,922		53,922
3. Former Members Without Vested Rights	516		516
4. Annuitants in MPRIF	1,874,227		1,874,227
5. Recipients Not in MPRIF	296,697		296,697
6. Total	$4,979,963	$1,267,603	$3,712,360

B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)	
1. AAL (A6)	$3,712,360
2. Current Assets (Table 1, E6)	4,510,134
3. UAAL (B1-B2)	($797,774)
C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE	
1. Present Value of Future Payrolls Through the Amortization Date of July 1, 2031	$11,052,220
2. Supplemental Contribution Rate (B3/C1)	-7.22%

Public Employees Police and Fire Fund

Changes In Unfunded Actuarial Accrued Liability (UAAL)

(dollars in thousands)

YEAR ENDING JUNE 30, 2001

A.	UAAL AT BEGINNING OF YEAR	($762,164)
B.	CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
	1. Normal Cost and Expenses	$99,424
	2. Contribution	(84,301)
	3. Interest on A, B1 and B2	(64,141)
	4. Total (B1+B2+B3)	($49,018)
C.	EXPECTED UAAL AT END OF YEAR (A+B4)	($811,182)
D.	INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
	1. Salary Increases	($5,139)
	2. Investment Return	(14,635)
	3. MPRIF Mortality	(38,828)
	4. Mortality of Other Benefit Recipients	13,051
	5. Other Items	58,959
	6. Total	$13,408
E.	UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTION (C+D6)	($797,774)
F.	CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY DUE TO CHANGE IN ACTUARIAL METHODS	0
G.	CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS	0
H.	UAAL AT END OF YEAR (E+F+G)	($797,774)

Public Employees Police and Fire Fund

Determination Of Contribution Sufficiency

(dollars in thousands)

JULY 1, 2001

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 353		
1. Employee Contributions	6.20%	$32,793
2. Employer Contributions	9.30%	49,189
3. Total	15.50%	$81,982
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	15.86%	$83,878
b. Disability Benefits	2.03%	10,750
c. Survivors	0.80%	4,245
d. Deferred Retirement Benefits	1.47%	7,765
e. Refunds Due to Death or Withdrawal	0.05%	267
f. Total	20.21%	$106,905
2. Supplemental Contribution Amortization by July 1, 2031 of UAAL	-7.22%	(38,190)
3. Allowance for Expenses	0.13%	688
4. Total	13.12%	$69,403
C. CONTRIBUTION SUFFICIENCY (DEFICIENCY) [A3-B4]	2.38%	$12,579

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 2001 is $528,942.

Public Employees Police and Fire Fund

Summary of Actuarial Assumptions and Methods

Interest:	**Pre-Retirement**: 8.5% per annum **Post-Retirement**: 8.5% per annum
Benefit Increases After Retirement:	Payment of earnings on retired reserves in excess of 6% accounted for by 6% post-retirement assumption.
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:	**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
Retirement Age:	Rates as shown in table.
Separation:	Graded rates based on plan experience through June 30, 1992. Rates are shown in rate table.
Disability:	Rates as shown in rate table.
Expenses:	Prior year expenses expressed as percentage of prior year payroll.
Return of Contributions:	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.

***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*:**	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
***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*:**	Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during the fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year). Transition rules apply between July 1, 2000 and July 1, 2003, when the method is fully in effect.
***Payment on the Unfunded Actuarial Accrued Liability*:**	A level percentage of payroll each year to the statutory amortization date assuming payroll increases of 6.0% per annum. If there is a negative Unfunded Actuarial Accrued Liability, the surplus amount shall be amortized over 30 years as a level percentage of payroll.

Public Employees Police and Fire Fund

Summary of Actuarial Assumptions and Methods

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

	Pre-Retirement Death		Withdrawal		Disability		Retirement		Salary Increases
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	
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

Public Employees Police and Fire Fund

Summary of Actuarial Assumptions and Methods

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

	Pre-Retirement Death		Withdrawal		Disability		Retirement		Salary Increases
Age	Male	Female	Male	Female	Male	Female	Male	Female	
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

Eligibility:	All full-time and certain part-time, police officers and fire fighters, who are not contributing to any other local retirement fund.
Contributions:	
Member:	6.2% of salary effective July 1, 1999.
Employer:	9.3% of salary effective July 1, 1999.
Allowable Service:	Police and fire service during which Member contributions were deducted. May also include certain leaves of absence and military service.
Salary:	Includes amounts deducted for deferred compensation or supplemental retirement plans, net income from fees and sick leave payments funded by the employer. Excludes lump-sum annual leave and sick leave payments and Workers' Compensation benefits.
Average Salary:	Average of the five highest successive years of salary. Average salary is based on all Allowable Service if less than five years.

RETIREMENT

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

***Early Retirement Benefit*:**

Eligibility:	Age 50 and three years of Allowable Service.
Amount:	Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date and a 0.1%* reduction for each month the Member is under age 55.
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.
Benefit Increases:	Benefits may be increased each January 1 depending on the investment performance of the Minnesota Post Retirement Investment Fund (MPRIF). A benefit recipient who has been receiving a benefit for at least 12 full months as of June 30 will receive a full increase. Benefit recipients receiving benefits for at least one full month but less than 12 full months will receive a partial increase. Members retired under law in effect before July 1, 1973 receive an additional lump-sum payment each year. In 1989, this lump-sum payment is the greater of $25 times each full year of Allowable Service or the difference between $400 times each full year of Allowable Service and the sum of the benefits paid from any Minnesota public pension plan plus cash payments from the Social Security Administration for the preceding fiscal year July 1, 1988 through June 30, 1989. In each following year, the lump-sum payment will increase by the same percentage increase that is applied to regular annuities paid from MPRIF. Effective January 1, 2002, annual lump sum payment is divided by 12 and paid as a monthly life annuity in the annuity form elected.

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*:**

Eligibility:	Age 55
Amount:	Any optional annuity continues. Otherwise, the larger of the disability benefit paid before age 55 or the normal retirement benefit available at age 55, or an actuarially equivalent optional annuity.
Benefit Increases:	Same as for retirement.

DEATH

***Surviving Spouse Benefit*:**

Eligibility:	Active 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

No significant changes were recognized for this valuation.

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
07/01/00	4,145,351[1]	3,383,187	(762,164)	122.53	392,796	-194.04
07/01/01	4,472,041[1]	3,712,360	(759,681)	120.46	500,839	-151.68

[1] Excludes amounts receivable from municipalities with positive amortizable bases.

TABLE 15

Public Employees Police and Fire Fund

SCHEDULE OF EMPLOYER CONTRIBUTIONS

(dollars in thousands)

Year Ended June 30	Actuarially Required Contribution Rate (A)[1]	Actual Covered Payroll (B)	Actual Member Contributions (C)	Annual Required Contribution [(A)x(B)]-(C)	Actual Employer Contribution[2]	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[3]	375,131	28,552	30,306	42,786	141.18
1999	12.32[3]	352,066	30,897	12,478	46,280	370.89
2000	12.87[3]	392,796	31,214	19,339	53,178	274.98
2001	12.21[3],[4],[5]	500,839	31,341	29,811	52,960	177.65
2002	12.61[3],[5]					

(1) 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.

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

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

(4) Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 11.41%.

(5) Excludes amounts receivable from municipalities with positive amortizable bases.

LOCAL GOVERNMENT CORRECTIONAL SERVICE RETIREMENT FUND

ACTUARIAL VALUATION REPORT

July 1, 2001

MILLIMAN USA

A MILLIMAN GLOBAL FIRM

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December 4, 2001

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, 2001.

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.

We, Thomas K. Custis and William V. Hogan, are actuaries for Milliman USA. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Milliman USA

Thomas K. Custis

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

William V. Hogan

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

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(Continued)

Local Government Correctional Service Retirement Fund

Report Highlights

(dollars in thousands)

	07/01/2000 Valuation	07/01/2001 Valuation
A. CONTRIBUTIONS (Table 11)		
1. Statutory Contributions - Chapter 353 % of Payroll	14.58%	14.58%
2. Required Contributions - Chapter 356 % of Payroll	14.37%	14.21%
3. Sufficiency (Deficiency): (A.1. - A.2.)	0.21%	0.37%
B. FUNDING RATIOS		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	$11,116	$25,014
b. Current Benefit Obligations (Table 8)	$10,337	$24,496
c. Funding Ratio: (a/b)	107.54%	102.11%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	$11,116	$25,014
b. Actuarial Accrued Liability (Table 9)	$10,195	$25,453
c. Funding Ratio: (a/b)	109.03%	98.28%
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	$110,180	$147,071
b. Current and Expected Future Benefit Obligations	$106,557	$141,538
c. Funding Ratio: (a/b)	103.40%	103.91%
C. PLAN PARTICIPANTS		
1. Active Members		
a. Number (Table 3)	2,781	3,238
b. Projected Annual Earnings	$80,818	$100,460
c. Average Annual Earnings (Projected $)	$29,061	$31,025
d. Average Age	37.5	37.7
e. Average Service	0.9	1.6
2. Others		
a. Service Retirements (Table 4)	9	20
b. Survivors (Table 5)	0	0
c. Disability Retirements (Table 6)	3	17
d. Deferred Retirements (Table 7)	0	97
e. Terminated Other Non-vested (Table 7)	0	267
f. Total	12	401

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 102.11%. The corresponding ratio for the prior year was 107.54%.
- 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 2001 the ratio is 98.28%, which is a decrease from the 2000 value of 109.03%.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 103.91% verifies that the current statutory contributions are sufficient.

Asset Information (Tables 1 and 2)

Effective with the July 1, 2000 valuation of the fund, Minnesota Statutes require that the asset value used for actuarial purposes spread differences between actual return (measured on a market-value basis) and expected return on non-MPRIF assets over five years, in a manner similar to that already being used within the MPRIF. The previous method required under Minnesota Statutes recognized one third of the unrealized gains and losses. An Asset Valuation Method requirement exists because market values (which include all unrealized gains and losses) are typically volatile and can produce erratic changes in the contribution requirements from year to year. The intent of the change to the current method is to employ a more effective asset smoothing technique which is market-value based and which eliminates artificial bias related to manager style. The effective date of this requirement is July 1, 2000 with full transition to be accomplished as of July 1, 2003.

The calculation of the Actuarial Value of Assets is shown in Table 1 on lines G.1 to G.4. Actuarial Value of Assets is determined as:

> Market Value of Assets at June 30, 2001, *less*
>
> 80% of the current year Unrecognized Asset Return at July 1, 2001 (the difference between actual net return on Market Value of Assets between 06/30/2000 and 06/30/2001 and the asset return expected during that period based on the assumed interest rate employed in the July 1, 2000 Actuarial Valuation); *less*

60% of the current year Unrecognized Asset Return at July 1, 2000 (the difference between actual net return on Market Value of Assets between 06/30/99 and 06/30/2000 and the asset return expected during that period based on the assumed interest rate employed in the July 1, 1999 Actuarial Valuation); *less*

30% of the Unrecognized Asset Return at July 1, 1999 (the difference between Market Value of Assets on 06/30/99 and the Actuarial Value of Assets used in the July 1, 1999 Actuarial Valuation).

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 "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). However, Statement No. 5 has been superceded 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 6.00% 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 sufficiency since the Statutory Contribution Rate is 14.58% compared to the Required Contribution Rate of 14.21%.

Changes in Actuarial Assumptions and Methods

All actuarial assumptions and methods listed in Table 12 are the same as those used in the prior valuation.

Changes in Plan Provisions

All plan provisions are the same as those used in the prior actuarial valuation of the Fund.

Local Government Correctional Service Retirement Fund

Statement of Plan Net Assets

(dollars in thousands)

JULY 1, 2001

	Market Value	Cost Value
A. ASSETS IN TRUST		
1. Cash, Equivalents, Short-term Securities	$3,941	$3,941
2. Fixed Income	4,943	4,942
3. Equity	13,307	14,671
4. Real Estate	737	754
5. Equity in MPRIF	127	127
6. Invested Securities Lending Collateral	3,392	3,392
7. Other	0	0
Subtotal	$26,447	$27,827
B. ASSETS RECEIVABLE	576	576
C. LIABILITIES		
1. Invested Securities Lending Collateral	(3,392)	(3,392)
2. Other	(463)	(463)
Subtotal	(3,855)	(3,855)
D. NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
1. MPRIF Reserves	127	127
2. Member Reserves	9,211	9,211
3. Other Non-MPRIF Reserves	13,830	15,210
4. Total Assets Available for Benefits	$23,168	$24,548

E. DETERMINATION OF ACTUARIAL VALUE OF ASSETS

1. Market Value of Assets Available for Benefits (D4)		$23,168
2. Unrecognized Asset Returns (UAR)		
a. June 30, 2001	($2,139)	
b. June 30, 2000	(225)	
c. June 30, 1999	0	
3. UAR Adjustment: .80 * (E2.a) + .60 * (E2.b) + .30 * (E2.c)		(1,846)
4. Actuarial Value of Assets (E1 - E3) (Same as "Current Assets")		25,014

Local Government Correctional Service Retirement Fund

Statement of Change In Plan Net Assets

(dollars in thousands)

YEAR ENDING JUNE 30, 2001

		Non-MPRIF Assets	MPRIF Reserve	Market Value
A.	ASSETS AVAILABLE AT BEGINNING OF PERIOD	$10,891	$45	$10,936
B.	ADDITIONS			
	1. Member Contributions	$5,308	$0	$5,308
	2. Employer Contributions	8,054	0	8,054
	3. Contributions From Other Sources	0	0	0
	4. MPRIF Income	0	5	5
	5. Net Investment Income			
	a. Interest and Dividends	635	0	635
	b. Net Realized Gain (Loss)	11,007	0	11,007
	c. Net Change in Unrealized Gain (Loss)	(12,317)	0	(12,317)
	d. Investment Expenses	(16)	0	(16)
	e. **Net Subtotal**	(691)	0	(691)
	6. Other	20	0	20
	7. Total Additions	$12,691	$5	$12,696
C.	OPERATING EXPENSES			
	1. Service Retirements	$0	$13	$13
	2. Disability Benefits	160	0	160
	3. Survivor Benefits	0	0	0
	4. Refunds	160	0	160
	5. Administrative Expenses	130	0	130
	6. Other	1	0	1
	7. Total Disbursements	$451	$13	$464
D.	OTHER CHANGES IN RESERVES			
	1. Annuities Awarded	(145)	145	0
	2. Mortality Gain/Loss	55	(55)	0
	3. Total Other Changes	(90)	90	0
E.	ASSETS AVAILABLE AT END OF PERIOD	$23,041	$127	$23,168

F.	DETERMINATION OF CURRENT YEAR UNRECOGNIZED ASSET RETURN	
	1. Average Balance	
	(a) Non-MPRIF Assets Available at Beginning of Period	10,891
	(b) Non-MPRIF Assets Available at End of Period*	22,986
	(c) Average Balance { [F1.a + F1.b - B5.e - B6] / 2 }	17,274
	2. Expected Return: .085 * F1.c	1,468
	3. Actual Return	(671)
	4. Current Year Unrecognized Asset Return: F3 - F2	(2,139)

** Before adjustment for MPRIF mortality gain/loss*

Public Employees Correctional Fund

Active Members as of June 30, 2001

Age	Years of Service <1	1-4	5-9	10-14	15-19	20-24	25-29	30+	All
<25	131	110	0	0	0	0	0	0	241
25-29	220	362	0	0	0	0	0	0	582
30-34	166	429	0	0	0	0	0	0	595
35-39	109	402	0	0	0	0	0	0	511
40-44	89	344	0	0	0	0	0	0	433
45-49	80	327	0	0	0	0	0	0	407
50-54	27	257	0	0	0	0	0	0	284
55-59	11	114	0	0	0	0	0	0	125
60-64	2	50	0	0	0	0	0	0	52
65+	2	6	0	0	0	0	0	0	8
ALL	837	2,401	0	0	0	0	0	0	3,238

Average Annual Earnings

Age	Years of Service <1	1-4	5-9	10-14	15-19	20-24	25-29	30+	All
<25	15,070	22,358	0	0	0	0	0	0	18,397
25-29	14,679	28,577	0	0	0	0	0	0	23,323
30-34	14,601	32,020	0	0	0	0	0	0	27,160
35-39	15,240	35,943	0	0	0	0	0	0	31,527
40-44	15,431	36,680	0	0	0	0	0	0	32,313
45-49	15,731	36,784	0	0	0	0	0	0	32,646
50-54	14,180	39,688	0	0	0	0	0	0	37,263
55-59	11,346	38,560	0	0	0	0	0	0	36,165
60-64	12,171	38,118	0	0	0	0	0	0	37,120
65+	4,579	23,321	0	0	0	0	0	0	18,636
ALL	14,888	34,268	0	0	0	0	0	0	29,258

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	12,462	82,278	0	0	0	0	0	0	94,737

Local Government Correctional Service Retirement Fund

Service Retirements as of June 30, 2001

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
	Years Retired							
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	1	0	0	0	0	0	1
60-64	7	7	0	0	0	0	0	14
65-69	3	2	0	0	0	0	0	5
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	10	10	0	0	0	0	0	20

Average Annual Benefit

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
	Years Retired							
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	290	0	0	0	0	0	290
60-64	1,299	340	0	0	0	0	0	820
65-69	942	245	0	0	0	0	0	663
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	1,192	316	0	0	0	0	0	754

Total Annual Benefit (In Dollars) by Years RETIRED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	11,920	3,160	0	0	0	0	0	15,080

Local Government Correctional Service Retirement Fund

Survivors as of June 30, 2001

Age	Years Since Death ≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<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 ≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<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 Dollars) 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

Local Government Correctional Service Retirement Fund

Disability Retirements as of June 30, 2001

	Years Disabled							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	1	4	0	0	0	0	0	5
50-54	1	1	0	0	0	0	0	2
55-59	3	1	0	0	0	0	0	4
60-64	2	3	0	0	0	0	0	5
65-69	0	1	0	0	0	0	0	1
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	10	0	0	0	0	0	17

Average Annual Benefit

	Years Disabled							
Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
<50	5,368	13,604	0	0	0	0	0	11,957
50-54	7,080	18,783	0	0	0	0	0	12,932
55-59	12,599	458	0	0	0	0	0	9,564
60-64	7,191	5,553	0	0	0	0	0	6,208
65-69	0	9,979	0	0	0	0	0	9,979
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	9,232	10,030	0	0	0	0	0	9,701

Total Annual Benefit (In Dollars) by Years DISABLED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	All
All	64,624	100,300	0	0	0	0	0	164,917

Local Government Correctional Service Retirement Fund

Reconciliation Of Members

		Actives	Terminated Deferred Retirement	Terminated Other Non-Vested
A.	ON JUNE 30, 2000	2,781	0	0
B.	ADDITIONS	753	94	199
C.	DELETIONS			
	1. Service Retirement	(11)	(8)	0
	2. Disability	(9)	(3)	0
	3. Death	0	0	0
	4. Terminated - Deferred	(73)	0	0
	5. Terminated - Refund	(77)	0	(19)
	6. Terminated - Other Non-Vested	(123)	0	0
	7. Returned as Active	0	(23)	(19)
	8. Transferred to Other Fund	0	0	0
D.	DATA ADJUSTMENTS	(3)	37	106
	Vested	1,810		
	Non-Vested	1,428		
E.	TOTAL ON JUNE 30, 2001	3,238	97	267

		Recipients Retirement Annuitants	Recipients Disabled	Recipients Survivors
A.	ON JUNE 30, 2000	9	3	0
B.	ADDITIONS	11	14	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, 2001	20	17	0

Local Government Correctional Service Retirement Fund

Actuarial Balance Sheet

(dollars in thousands)

JULY 1, 2001

		Non-Vested	Vested	Total
A.	CURRENT ASSETS (TABLE 1, E6)			$25,014
B.	EXPECTED FUTURE ASSETS			
	1. Present Value of Expected Future Statutory Supplemental Contributions (See Table 11)			$5,972
	2. Present Value of Future Normal Costs			116,085
	3. Total Expected Future Assets			$122,057
C.	TOTAL CURRENT AND EXPECTED FUTURE ASSETS			$147,071
D.	CURRENT BENEFIT OBLIGATIONS	Non-Vested	Vested	Total
	1. Benefit Recipients			
	a. Retirement Annuities		$127	$127
	b. Disability Benefits		2,077	2,077
	c. Surviving Spouse and Child Benefits		0	0
	2. Deferred Retirements with Future Augmentation		359	359
	3. Former Members without Vested Rights		163	163
	4. Active Members			
	a. Retirement Annuities	11,727	17	11,744
	b. Disability Benefits	4,284	0	4,284
	c. Survivor's Benefits	577	0	577
	d. Deferred Retirements	3,799	4	3,803
	e. Refund Liability Due to Death or Withdrawal	0	1,362	1,362
	5. Total Current Benefit Obligations	$20,387	$4,109	$24,496
E.	EXPECTED FUTURE BENEFIT OBLIGATIONS			$117,042
F.	TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS			$141,538
G.	CURRENT UNFUNDED ACTUARIAL LIABILITY (D5-A)			($518)
H.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)			($5,533)

Local Government Correctional Service Retirement Fund

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

(dollars in thousands)

JULY 1, 2001

	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	$95,182	$77,653	$17,529
b. Disability Benefits	17,753	15,922	1,831
c. Survivor's Benefit	3,924	3,286	638
d. Deferred Retirements	18,280	15,412	2,868
e. Refunds Due to Death or Withdrawal	3,673	3,812	(139)
f. Total	$138,812	$116,085	$22,727
2. Deferred Retirements With Future Augmentation	359		359
3. Former Members Without Vested Rights	163		163
4. Annuitants in MPRIF	127		127
5. Recipients Not in MPRIF	2,077		2,077
6. Total	$141,538	$116,085	$25,453

B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)	
1. AAL (A6)	$25,453
2. Current Assets (Table 1, E6)	25,014
3. UAAL (B1-B2)	$439
C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE	
1. Present Value of Future Payrolls Through the Amortization Date of July 1, 2020	$1,493,057
2. Supplemental Contribution Rate (B3/C1)	0.03%

Local Government Correctional Service Retirement Fund

Changes In Unfunded Actuarial Accrued Liability (UAAL)

(dollars in thousands)

YEAR ENDING JUNE 30, 2001

A.	UAAL AT BEGINNING OF YEAR	($921)
B.	CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
	1. Normal Cost and Expenses	$11,649
	2. Contribution	(13,362)
	3. Interest on A, B1 and B2	(151)
	4. Total (B1+B2+B3)	($1,864)
C.	EXPECTED UAAL AT END OF YEAR (A+B4)	($2,785)
D.	INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
	1. Salary Increases	$2,110
	2. Investment Return	489
	3. MPRIF Mortality	(54)
	4. Mortality of Other Benefit Recipients	16
	5. Other Items	663
	6. Total	$3,224
E.	UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTION (C+D6)	$439
F.	CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY DUE TO CHANGE IN ACTUARIAL METHODS	0
G.	CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS	0
H.	UAAL AT END OF YEAR (E+F+G)	$439

Local Government Correctional Service Retirement Fund

Determination Of Contribution Sufficiency

(dollars in thousands)

JULY 1, 2001

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 353		
1. Employee Contributions	5.83%	$5,858
2. Employer Contributions	8.75%	8,792
3. Total	14.58%	$14,650
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	9.43%	$9,471
b. Disability Benefits	2.00%	2,013
c. Survivors	0.36%	366
d. Deferred Retirement Benefits	1.76%	1,770
e. Refunds Due to Death or Withdrawal	0.47%	473
f. Total	14.02%	$14,093
2. Supplemental Contribution Amortization by July 1, 2020 of UAAL	0.03%	30
3. Allowance for Expenses	0.16%	161
4. Total	14.21%	$14,284
C. CONTRIBUTION SUFFICIENCY (DEFICIENCY) [A3-B4]	0.37%	$366

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 2001 is $100,460.

Local Government Correctional Service Retirement Fund

Summary of Actuarial Assumptions and Methods

Interest:	**Pre-Retirement**: 8.5% per annum **Post-Retirement**: 8.5% per annum
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 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 Group Annuity Mortality Table for males setback one year. Female - 1983 Group Annuity Mortality Table for females. **Post-Retirement**: Male - 1983 Group Annuity Mortality Table for males set forward two years. Female - 1983 Group Annuity Mortality Table for females set forward two years. **Post-Disability**: Male - Combined Annuity Mortality Table Female - Combined Annuity Mortality Table
Retirement Age:	Age-related table as follows:

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 for the Correctional Employees Retirement Fund. Rates are shown in rate table.
Disability:	Rates as shown in rate table.

Administrative and Investment Expenses:	Prior year administration 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 Members are assumed to be married. Female is three years younger than male.
Social Security:	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.
Special Consideration:	Married Members assumed to elect subsidized joint and survivor form of annuity as follows: **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
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:	Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during the fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year). Transition rules apply between July 1, 2001 and July 1, 2003, when the method is fully in effect.
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. If there is a negative Unfunded Actuarial Accrued Liability, the surplus amount shall be amortized over 30 years as a level percentage of payroll.

Local Government Correctional Service Retirement Fund

Summary of Actuarial Assumptions and Methods

Separation Expressed as Number of Occurrences Per 10,000:

	Death		Withdrawal		Disability		Retirement		Salary
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Increases**
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

Local Government Correctional Service Retirement Fund

Summary of Actuarial Assumptions and Methods

Separation Expressed as Number of Occurrences Per 10,000:

	Death		Withdrawal		Disability		Retirement		Salary
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Increases**
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

Effective Date:	July 1, 1999
***Eligibility*:**	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.
***Contributions*:**	
Member:	5.83% of salary.
Employer:	8.75% of salary.
***Allowable Service*:**	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.
***Salary*:**	Includes wages, allowances and fees. Excludes lump-sum payments at separation and reduced salary while receiving Worker's Compensation benefits.
***Average Salary*:**	Average of the five highest successive years of salary. Average Salary is based on all Allowable Service if less than five years.

RETIREMENT

***Normal Retirement Benefit*:**	
Eligibility:	Age 55 and three years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.
Amount:	1.9% of Average Salary for each year of Allowable Service, pro rata for completed months.

***Early Retirement Benefit*:**

Eligibility:	Age 50 and three years of Allowable Service.
Amount:	Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date reduced to the actuarial equivalent of the benefit that would be payable if the Member deferred the benefit until age 55.
Form of Payment:	Life annuity. Actuarially equivalent options are: ➢ 25%, 50%, 75% or 100% joint and survivor with bounce back feature without additional reduction. ➢ Level Social Security option to age 62.
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.

DISABILITY

***Occupational Disability*:**

Eligibility:	Member who cannot perform his duties as a direct result of a disability related to an act of duty.
Amount:	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).

	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*:**

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

***Surviving Dependent Children's Benefit*:**

Eligibility:	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.
Amount:	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.

Refund of Contributions With Interest:

Eligibility:	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.
Amount:	The Member's contributions with 6% interest.

TERMINATION

Refund of Contributions:

Eligibility:	Termination of local government service.
Amount:	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:

Eligibility:	Three years of Allowable Service.
Amount:	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

No significant changes were recognized for this valuation.

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
07/01/00	11,116	10,195	(921)	109.03%	70,690	-1.30%
07/01/01	25,014	25,453	439	98.28	91,025	0.48

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[1]	Percentage Contributed
1999	0.00%	0	0	0	0	N/A
2001	15.03%	70,690	4,382	6,243	6,487	103.91%
2001	14.36[2],[3]	91,025	5,308	7,763	8,054	103.75
2002	14.21[2]					

[1] *Includes contributions from other sources (if applicable).*
[2] *Actuarially Required Contribution Rate calculated according to parameters of GASB 25 with no assumption for growth of covered population.*
[3] *Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 14.38%.*