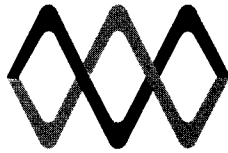


Elective State Officers Retirement Fund
ACTUARIAL VALUATION REPORT

July 1, 1998

 **FILE COPY**



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December 9, 1998

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

RE: Elective State Officers 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, 1998.

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 Minnesota State Retirement System.

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

Respectfully submitted,

MILLIMAN & ROBERTSON, INC.

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Elective State Officers Retirement Fund

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Elective State Officers Retirement Fund

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Elective State Officers Retirement Fund

Report Highlights

(dollars in thousands)

	07/01/97 Valuation	07/01/98 Valuation
A. CONTRIBUTIONS (Table 11)		
1. Statutory Contributions - Chapter 352C % of Payroll	9.00%	9.00%
2. Required Contributions - Chapter 356 % of Payroll	51.07%	51.66%
3. Sufficiency (Deficiency): (A.1. - A.2.)	-42.07%	-42.66%
B. FUNDING RATIOS		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	\$456	\$500
b. Current Benefit Obligations (Table 8)	\$3,071	\$3,222
c. Funding Ratio: (a/b)	14.85%	15.52%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	\$456	\$500
b. Actuarial Accrued Liability (Table 9)	\$3,214	\$3,369
c. Funding Ratio: (a/b)	14.19%	14.84%
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	\$639	\$653
b. Current and Expected Future Benefit Obligations	\$3,397	\$3,522
c. Funding Ratio: (a/b)	18.81%	18.54%
C. PLAN PARTICIPANTS		
1. Active Members		
a. Number (Table 3)	6	6
b. Projected Annual Earnings	\$483	\$500
c. Average Annual Earnings (Actual \$)	\$80,469	\$83,280
d. Average Age	54.0	55.0
e. Average Service	12.3	13.3
2. Others		
a. Service Retirements (Table 4)	5	5
b. Survivors (Table 5)	6	6
c. Disability Retirements (Table 6)	0	0
d. Deferred Retirements (Table 7)	4	3
e. Terminated Other Non-vested (Table 7)	0	0
f. Total	15	14

Elective State Officers 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 15.52%. The corresponding ratio for the prior year was 14.85%
- 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 1998 the ratio is 14.84%, which is an increase from the 1997 value of 14.19%.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 18.54% shows that the current statutory contributions are inadequate.

Asset Information (Tables 1 and 2)

Minnesota Statutes require that the asset value used for actuarial purposes recognize only a third of the unrealized gains and losses. This requirement exists because market values (which include all unrealized gain and losses) are typically volatile and can produce erratic changes in the contribution requirements from year to year.

The calculation of the Actuarial Value of Assets is shown in Table 1 on lines E1 to E6. It combines the cost value of the Assets Available for benefits and one-third of the difference between the market value and cost value of those assets.

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

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

Actuarial Balance Sheet (Table 8)

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

The Current Benefit Obligation used to measure current funding levels is calculated as follows:

- For Active Members – Salary and service are projected to retirement to determine benefits for each member and the ratio of credited service to total service establishes the portion of the projected benefit to be used in calculating the current funding level.
- For Non-Active Members – The discounted value of benefits, including augmentation in cases where benefits have not commenced.

GASB Disclosure

Disclosure of the Current Benefit Obligation amounts used to be required by Statement No. 5 of the Governmental Accounting Standards Board (GASB). However, Statement No. 5 has been superseded by Statement No. 25. Tables 14 and 15 of this report have been added to fulfill the new 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 5.00% 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 will cover the interest and also repay a portion of the unfunded.

Source of Actuarial Gains and Losses (Table 10)

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

Contribution Sufficiency (Table 11)

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

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

- Normal costs based on the Entry Age Normal Actuarial Cost Method.
- A Supplemental Contribution for amortizing any Unfunded Actuarial Accrued Liability.
- An Allowance for Expenses.

Table 11 shows the Plan has a contribution sufficiency since the Statutory Contribution Rate is 9.00% compared to the Required Contribution Rate of 51.66%.

Changes in Actuarial Assumptions

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

Changes in Plan Provisions

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

TABLE 1

Elective State Officers Retirement Fund

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

JULY 1, 1998

	Market Value	Cost Value
A. ASSETS IN TRUST		
1. Cash, Equivalents, Short-term Securities	\$0	\$0
2. Fixed Income	0	0
3. Equity	0	0
4. Real Estate	0	0
5. Equity in MPRIF	0	0
6. Other	500	500
Subtotal	\$500	\$500
B. ASSETS RECEIVABLE	3	3
C. LIABILITIES	(3)	(3)
<hr/>		
D. NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
1. MPRIF Reserves	0	0
2. Member Reserves	497	497
3. Other Non-MPRIF Reserves	3	3
4. Total Assets Available for Benefits	\$500	\$500
<hr/>		
E. DETERMINATION OF ACTUARIAL VALUE OF ASSETS		
1. Cost Value of Assets Available for Benefits (D4)		\$500
2. Market Value (D4)	\$500	
3. Cost Value (D4)	500	
4. Market Over Cost: (E2-E3)	\$0	
5. One-third of Market Over Cost: (E4)/3		0
6. Actuarial Value of Assets (E1+E5) (Same as "Current Assets")		\$500

TABLE 2

Elective State Officers Retirement Fund

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

YEAR ENDING JUNE 30, 1998

	<u>Market Value</u>	<u>Cost Value</u>
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$457	\$457
B. ADDITIONS		
1. Member Contributions	\$42	\$42
2. Employer Contributions	175	175
3. Contributions From Other Sources	0	0
4. MPRIF Income	0	0
5. Net Investment Income		
a. Interest and Dividends	0	0
b. Net Realized Gain (Loss)	0	0
c. Net Change in Unrealized Gain (Loss)	0	0
d. Investment Expenses	0	0
Net Subtotal	<u>0</u>	<u>0</u>
6. Other	0	0
7. Total Additions	<u>\$217</u>	<u>\$217</u>
C. OPERATING EXPENSES		
1. Service Retirements paid from MPRIF	\$0	\$0
2. Service Retirements paid from plan assets	171	171
2. Disability Benefits	0	0
3. Survivor Benefits	0	0
4. Refunds	0	0
6. Administrative Expenses	3	3
7. Other	0	0
8. Total Disbursements	<u>\$174</u>	<u>\$174</u>
D. OTHER CHANGES IN RESERVES	0	0
E. ASSETS AVAILABLE AT END OF PERIOD	<u>\$500</u>	<u>\$500</u>

TABLE 3

ELECTIVE STATE OFFICERS RETIREMENT PLAN
ACTIVE MEMBERS AS OF JUNE 30, 1998

Age	Years of Service								ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
<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	1	0	0	0	0	0	0	1
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	0	0	0	0
55-59	0	1	0	1	1	0	0	0	3
60-64	0	0	0	0	1	1	0	0	2
65+	0	0	0	0	0	0	0	0	0
ALL	0	2	0	1	2	1	0	0	6

AVERAGE ANNUAL EARNINGS

Age	Years of Service								ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	
<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	70,833	0	0	0	0	0	0	70,833
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	0	0	0	0
55-59	0	64,931	0	64,931	92,217	0	0	0	74,026
60-64	0	0	0	0	118,050	64,931	0	0	91,491
65+	0	0	0	0	0	0	0	0	0
ALL	0	67,882	0	64,931	105,134	64,931	0	0	79,315

PRIOR FISCAL YEAR EARNINGS (IN ACTUAL DOLLARS) BY YEARS OF SERVICE

Age	≤1	1-4	5-9	10-14	15-19	20-24	25-29	30+	ALL
All	0	135,764	0	64,931	210,268	64,931	0	0	475,890

ELECTIVE STATE OFFICERS RETIREMENT PLAN

SERVICE RETIREMENTS AS OF JUNE 30, 1998

Age	Years Retired							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	0	0	0	0	0	0	0	0
50-54	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	1	3	0	0	0	0	4
70-74	1	0	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	1	1	3	0	0	0	0	5

AVERAGE ANNUAL BENEFIT

Age	Years Retired							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	0	0	0	0	0	0	0	0
50-54	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	2,406	17,391	0	0	0	0	13,645
70-74	11,208	0	0	0	0	0	0	11,208
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	11,208	2,406	17,391	0	0	0	0	13,158

TOTAL ANNUAL BENEFIT (ACTUAL DOLLARS) BY YEARS RETIRED

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	11,208	2,406	52,173	0	0	0	0	65,790

ELECTIVE STATE OFFICERS RETIREMENT PLAN

SURVIVORS AS OF JUNE 30, 1998

Age	Years Since Death							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	0	1	0	0	0	0	1
60-64	0	0	0	0	0	0	0	0
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	1	1	0	0	1	0	3
85+	1	0	0	0	0	0	0	1
ALL	1	2	2	0	0	1	0	6

AVERAGE ANNUAL BENEFIT

Age	Years Since Death							ALL
	≤1	1-4	5-9	10-14	15-19	20-24	25+	
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	0	5,334	0	0	0	0	5,334
60-64	0	0	0	0	0	0	0	0
65-69	0	30,740	0	0	0	0	0	30,740
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	14,400	26,590	0	0	6,686	0	15,892
85+	11,806	0	0	0	0	0	0	11,806
ALL	11,806	22,570	15,962	0	0	6,686	0	15,926

TOTAL ANNUAL BENEFIT (ACTUAL DOLLARS) BY YEARS SINCE DEATH

Age	≤1	1-4	5-9	10-14	15-19	20-24	25+	ALL
All	11,806	45,140	31,924	0	0	6,686	0	95,556

ELECTIVE STATE OFFICERS RETIREMENT PLAN

DISABILITY RETIREMENTS AS OF JUNE 30, 1998

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

AVERAGE ANNUAL BENEFIT

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

TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS DISABLED

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

TABLE 7

Elective State Officers Retirement Fund

Reconciliation Of Members

	Actives	Terminated	
		Deferred Retirement	Other Non-Vested
A. ON JUNE 30, 1997	6	4	0
B. ADDITIONS	0	0	0
C. DELETIONS			
1. Service Retirement	0	(1)	0
2. Disability	0	0	0
3. Death	0	0	0
4. Terminated - Deferred	0	0	0
5. Terminated - Refund	0	0	0
6. Terminated - Other Non-Vested	0	0	0
7. Returned as Active	0	0	0
8. Transferred to Other Fund	0	0	0
D. DATA ADJUSTMENTS	0	0	0
Vested	4		
Non-Vested	2		
E. TOTAL ON JUNE 30, 1998	6	3	0
		Recipients	
	Retirement Annuitants	Disabled	Survivors
A. ON JUNE 30, 1997	5	0	6
B. ADDITIONS	1	0	1
C. DELETIONS			
1. Service Retirement	0	0	0
2. Death	(1)	0	(1)
3. Annuity Expired	0	0	0
4. Returned as Active	0	0	0
D. DATA ADJUSTMENTS	0	0	0
E. TOTAL ON JUNE 30, 1998	5	0	6

Elective State Officers Retirement Fund

Actuarial Balance Sheet*(dollars in thousands)*

JULY 1, 1998

A. CURRENT ASSETS (TABLE 1, E6)				\$500
B. EXPECTED FUTURE ASSETS				
1. Present Value of Expected Future Statutory Supplemental Contributions (See Table 11)				\$0
2. Present Value of Future Normal Costs				153
3. Total Expected Future Assets				<u>\$153</u>
C. TOTAL CURRENT AND EXPECTED FUTURE ASSETS				<u>\$653</u>
D. CURRENT BENEFIT OBLIGATIONS	<u>Non-Vested</u>	<u>Vested</u>		<u>Total</u>
1. Benefit Recipients				
a. Retirement Annuities		\$600		\$600
b. Disability Benefits		0		0
c. Surviving Spouse and Child Benefits		773		773
2. Deferred Retirements with Future Augmentation		246		246
3. Former Members without Vested Rights		0		0
4. Active Members				
a. Retirement Annuities	14	1,305		1,319
b. Disability Benefits	0	0		0
c. Survivor's Benefits	8	0		8
d. Deferred Retirements	19	226		245
e. Refund Liability Due to Death or Withdrawal	0	31		31
5. Total Current Benefit Obligations	<u>\$41</u>	<u>\$3,181</u>		<u>\$3,222</u>
E. EXPECTED FUTURE BENEFIT OBLIGATIONS				<u>\$300</u>
F. TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS				<u>\$3,522</u>
G. CURRENT UNFUNDED ACTUARIAL LIABILITY (D5-A)				\$2,722
H. CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)				\$2,869

Elective State Officers Retirement Fund

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

(dollars in thousands)

JULY 1, 1998

	Actuarial Present Value of Projected Benefits <i>(1)</i>	Actuarial Present Value of Future Normal Costs <i>(2)</i>	Actuarial Accrued Liability <i>(3)=(1)-(2)</i>
A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)			
1. Active Members			
a. Retirement Annuities	\$1,547	\$42	\$1,505
b. Disability Benefits	0	0	0
c. Survivor's Benefit	10	3	7
d. Deferred Retirements	299	69	230
e. Refunds Due to Death or Withdrawal	46	39	7
f. Total	<u>\$1,902</u>	<u>\$153</u>	<u>\$1,749</u>
2. Deferred Retirements With Future Augmentation	246		246
3. Former Members Without Vested Rights	0		0
4. Annuitants in MPRIF	0		0
5. Recipients Not in MPRIF	<u>1,374</u>		<u>1,374</u>
6. Total	<u>\$3,522</u>	<u>\$153</u>	<u>\$3,369</u>
B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)			
1. AAL (A6)			\$3,369
2. Current Assets (Table 1, E6)			<u>500</u>
3. UAAL (B1-B2)			<u>\$2,869</u>
C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE			
1. Present Value of Future Payrolls Through the Amortization Date of July 1, 2020			\$7,618
2. Supplemental Contribution Rate (B3/C1)			37.66%

Note: If non-segregated member reserves were not counted as assets, the UAAL would be \$3,369, resulting in a Supplemental Contribution Rate of 44.22%.

Elective State Officers Retirement Fund

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

YEAR ENDING JUNE 30, 1998

A. UAAL AT BEGINNING OF YEAR	\$2,758
B. CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
1. Normal Cost and Expenses	\$71
2. Contribution	(217)
3. Interest on A, B1 and B2	228
4. Total (B1+B2+B3)	<u>\$82</u>
C. EXPECTED UAAL AT END OF YEAR (A+B4)	\$2,840
D. INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
1. Salary Increases	(\$27)
2. Investment Return	40
3. MPRIF Mortality	0
4. Mortality of Other Benefit Recipients	(228)
5. Other Items	244
6. Total	<u>\$29</u>
E. UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTION (C+D6)	\$2,869
F. CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO PLAN AMENDMENTS	0
G. CHANGE IN ACTUARIAL ACCRUED LIABILITY DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS	0
H. UAAL AT END OF YEAR (E+F+G)	<u><u>\$2,869</u></u>

Elective State Officers Retirement Fund

Determination Of Contribution Sufficiency*(dollars in thousands)*

JULY 1, 1998

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 352C		
1. Employee Contributions	9.00%	\$45
2. Employer Contributions	0.00%	0
3. Total	<u>9.00%</u>	<u>\$45</u>
* Employer contributions are required to cover the portion of the benefit liabilities which are not funded by the member's accumulated contribution at the time of benefit commencement.		
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	3.80%	\$19
b. Disability benefits	0.00%	0
c. Survivors	0.20%	1
d. Deferred Retirement Benefits	6.20%	31
e. Refunds Due to Death or Withdrawal	3.20%	16
f. Total	<u>13.40%</u>	<u>\$67</u>
2. Supplemental Contribution Amortization by July 1, 2020 of UAAL	37.66%	188
3. Allowance for Expenses	0.60%	3
4. Total	<u>51.66%</u>	<u>\$258</u>
C. CONTRIBUTION SUFFICIENCY (DEFICIENCY) [A3-B4]	-42.66%	(\$213)

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 1998 is \$500.

The deficiency amount shown above is calculated based on reported assets which include a receivable of 500 for member contributions that are held in the State's general fund. If this amount was not considered as an asset of the fund in these calculations, the deficiency would be 49.22%.

Elective State Officers Retirement Fund

Summary of Actuarial Assumptions and Methods

Interest: **Pre-Retirement:** 8.5% per annum

Post-Retirement: 5.0% per annum

Salary Increases: 5.0% annually

Mortality: **Pre-Retirement:**

Male - 1983 GAM (Males -4)

Female - 1983 GAM (Females -2)

Post-Retirement:

Male - 1983 GAM (Males)

Female - 1983 GAM (Females)

Post-Disability:

Male - N/A

Female - N/A

Retirement Age: Age 62 or if over age 62, one year from valuation date.

Separation: Rates based on years of service:

<u>Year</u>	<u>Rate</u>
1	0%
2	0
3	0
4	50
5	0
6	0
7	0
8	50

Disability: None

TABLE 12
(Continued)

<i>Expenses:</i>	Prior year administration expenses expressed as percentage of prior year payroll.
<i>Return of Contributions:</i>	All employees withdrawing after eight years of service were assumed to leave their contributions on deposit and receive a deferred annuitant benefit.
<i>Family Composition:</i>	85% of Members are assumed to be married. Female is three years younger than male. Each Member may have up to two dependent children depending on the Member's age. Assume first child born at Member's age 28 and second child born at Member's age 31.
<i>Social Security:</i>	N/A
<i>Benefit Increases After Retirement:</i>	Payment of earnings on retired reserves in excess of 5% accounted for by 5% post-retirement assumptions.
<i>Actuarial Cost Method:</i>	Entry Age Normal Actuarial Cost Method based on earnings and the date the employee entered the plan is applied to all plan benefits. Under this method, Actuarial Gains (Losses) reduce (increase) the Unfunded Actuarial Accrued Liability.
<i>Asset Valuation Method:</i>	Cost Value plus one-third Unrealized Gains or Losses.
<i>Payment on the Unfunded Actuarial Accrued Liability:</i>	A level percentage of payroll each year to the statutory amortization date assuming payroll increases of 5.0% per annum.

Elective State Officers Retirement Fund

Summary of Plan Provisions

GENERAL

<i>Eligibility:</i>	Employment as a "Constitutional Officer" as elected prior to July 1, 1997 and who elect to retain coverage under this plan (i.e., do not elect Social Security coverage).
<i>Contributions:</i>	
<i>Member:</i>	9% of salary.
<i>Employer:</i>	No specified statutory contribution rate. State must contribute an amount equal to the full annuity value at benefit commencement less accumulated member contributions.
<i>Allowable Service:</i>	Service while in an eligible position.
<i>Salary:</i>	Salary upon which Elective State Officers Retirement Plan contributions have been made.
<i>Average Salary:</i>	Average of the five highest successive years of salary.

RETIREMENT

Normal Retirement Benefit:

<i>Eligibility:</i>	Age 62 and eight years of Allowable Service.
<i>Amount:</i>	2.5% of Average Salary for each year of Allowable Service. For Members who were employed as of June 30, 1997 and are still employed on July 1, 1997, an actuarial increase shall be made for the change in the post-retirement interest rates from 5% to 6%.

Early Retirement Benefit:

<i>Eligibility:</i>	Age 60 and eight years of Allowable Service.
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Amount: Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date with reduction of 0.5% for each month the Member is under age 62 at time of retirement.

Form of Payment: Life annuity

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

DISABILITY

None

DEATH

Surviving Spouse Benefit:

Eligibility: Death while active or after retirement or with at least eight years of Allowable Service.

Amount: Survivor's payment of 50% of the retirement benefit of the Member assuming the Member had attained age 62 and had a minimum of eight years of Allowable Service. Benefit is paid for life. A former Member's benefit is augmented the same as a Deferred Annuity to date of death before determining the portion payable to the spouse.

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

Surviving Dependent Child Benefit:

Eligibility: Same as spouse's benefit.

Amount: Benefit for first child is 25% of the retirement benefit (computed as for surviving spouse) with 12.5% for each additional child. Maximum payable (including spouse) is 100% of the retirement benefit. Benefits cease when a child marries or attains age 18 (22 if a full-time student).

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

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

TERMINATION

Refund of Contributions:

Eligibility: Termination of service.

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

Deferred Benefit:

Eligibility: Eight years of Allowable Service.

Amount: Benefit computed under law in effect at termination and increased by the following annual percentage: 0% before 7/1/79; 5% from 7/1/79 to 1/1/81; and 3% until 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%.

SIGNIFICANT CHANGES

No significant changes were recognized for this valuation.

TABLE 14

Elective State Officers Retirement Fund

SCHEDULE OF FUNDING PROGRESS
(dollars in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (AAL) (B)	Unfunded AAL (UAAL) (B - A)	Funded Ratio (A)/(B)	Actual Covered Payroll (Previous FY) (C)	UAAL as % of Covered Payroll (B - A) / (C)
07/01/91	308	2,249	1,941	13.69%	422	459.95%
07/01/92	334	2,380	2,046	14.03%	378	541.27%
07/01/93	322	2,689	2,367	11.97%	500	473.40%
07/01/94	361	2,848	2,487	12.68%	411	605.11%
07/01/95	378	2,948	2,570	12.82%	422	609.00%
07/01/96	412	2,983	2,571	13.81%	456	563.82%
07/01/97	456	3,214	2,758	14.19%	467	590.58%
07/01/98	500	3,369	2,869	14.84%	461	622.34%

TABLE 15

Elective State Officers Retirement Fund
SCHEDULE OF EMPLOYER CONTRIBUTIONS
(dollars in thousands)

Year Ended June 30	Actuarially Required Contribution Rate (A)	Actual Covered Payroll (B)	Actual Member Contributions (C)	Annual Required Contribution [(A) x (B)] - (C)	Actual Employer Contribution*	Percentage Contributed
1991	34.84%	422	38	109	40	36.70%
1992	33.28%	378	34	92	111	120.65%
1993	36.23%	500	45	136	88	64.71%
1994	38.64%	411	37	122	164	134.43%
1995	42.00%	422	38	139	165	118.71%
1996	43.58%	456	41	158	151	95.57%
1997	43.49%	467	42	161	167	103.73%
1998	51.07%	461	42	193	175	90.67%

* Includes contributions from other sources (if applicable).