

**Elective State Officers Retirement Fund**  
***ACTUARIAL VALUATION REPORT***

**July 1, 2002**

 **FILE COPY**



A MILLIMAN GLOBAL FIRM

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November 21, 2002

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, 2002.

The results of our calculations are set forth in the following report, as are the actuarial assumptions upon which our calculations have been made. Although we have reviewed the data for reasonableness and consistency, 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.

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, F.S.A., M.A.A.A.  
Consulting Actuary

TKC/WVH/bh

# 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)*

	07/01/01 Valuation	07/01/02 Valuation
<b>A. CONTRIBUTIONS (Table 11)</b>		
1. Statutory Contributions - Chapter 352C % of Payroll	0	0 <sup>(1)</sup>
2. Required Contributions - Chapter 356 % of Payroll	371	412 <sup>(1)</sup>
3. Sufficiency (Deficiency)	(371)	(412) <sup>(1)</sup>
<b>B. FUNDING RATIOS</b>		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	\$ 201	\$ 201
b. Current Benefit Obligations (Table 8)	\$ 3,775	\$ 4,075
c. Funding Ratio	5.32%	4.93%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	\$ 201	\$ 201
b. Actuarial Accrued Liability (Table 9)	\$ 3,775	\$ 4,075
c. Funding Ratio	5.32%	4.93%
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	\$ 201	\$ 201
b. Current and Expected Future Benefit Obligations	\$ 3,775	\$ 4,075
c. Funding Ratio	5.32%	4.93%
<b>C. PLAN PARTICIPANTS</b>		
1. Active Members		
a. Number (Table 3)	0	0
b. Projected Annual Earnings	\$ 0	\$ 0
c. Average Annual Earnings (Projected \$)	\$ 0	\$ 0
d. Average Age	0.0	0.0
e. Average Service	0.0	0.0
2. Others		
a. Service Retirements (Table 4)	8	8
c. Survivors (Table 5)	5	5
b. Disability Retirements (Table 6)	0	0
d. Deferred Retirements (Table 7)	4	4
e. Terminated Other Non-Vested (Table 7)	0	0
f. Total	17	17

<sup>(1)</sup> These amounts are in thousands of dollars.

## 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 4.93%. The corresponding ratio for the prior year was 5.32%.
- 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 2002 the ratio is 4.93%, which is a decrease from the 2001 value of 5.32%.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 4.93% shows that the current statutory contributions are inadequate.

#### *Asset Information (Tables 1 and 2)*

The only assets of this plan are non-segregated member contributions. These assets are shown on an "as reported" basis. No asset smoothing methodology would be appropriate.

#### *Actuarial Balance Sheet (Table 8)*

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

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

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

- For Non-Active Members – The discounted value of benefits, including augmentation in cases where benefits have not commenced.

### ***GASB Disclosure***

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

### ***Actuarial Cost Method (Table 9)***

The approach used by the State of Minnesota to determine contribution sufficiency is the Entry Age Normal Actuarial Cost Method. The primary characteristic of this method is that it allocates costs as a level percentage of payroll. Since this plan has no active members, the costs are shown as level dollar amounts.

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 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 deficiency since the Statutory Contribution Amount is \$0 compared to the Required Contribution Amount of \$412,000.

***Changes in Actuarial Assumptions***

This report reflects the new assumptions which became effective July 1, 2002. These revised assumptions were developed from the recently completed experience study and have been approved by the Commission. Effective with this July 1, 2002 valuation, the following assumptions have been changed:

<b>Assumption</b>	<b>Prior</b>	<b>Revised</b>
Combined Service Annuity Load Factor	None.	0% load on liabilities for active Members and 30% load on liabilities for former Members.

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

***Changes in Plan Provisions***

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



**Elective State Officers Retirement Fund**  
**Statement of Plan Net Assets**  
*(dollars in thousands)*

July 1, 2002

	Market Value	Cost Value
<b>A. ASSETS IN TRUST</b>		
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	202	202
Subtotal	\$ 202	\$ 202
<b>B. ASSETS RECEIVABLE</b>	0	0
<b>C. LIABILITIES</b>	(1)	(1)
<b>D. NET ASSETS HELD IN TRUST FOR PENSION BENEFITS</b>		
1. MPRIF Reserves	0	0
2. Member Reserves	194	194
3. Other Non-MPRIF Reserves	7	7
4. Total Assets Available for Benefits	\$ 201	\$ 201
<hr/>		
<b>E. DETERMINATION OF ACTUARIAL VALUE OF ASSETS</b>		
1. Market Value of Assets Available for Benefits (D4)		\$ 201
2. Unrecognized Asset Returns (UAR)		
a. June 30, 2002	0	
b. June 30, 2001	0	
b. June 30, 2000	0	
c. June 30, 1999	0	
3. UAR Adjustment: $.80 * 2(a) + .60 * 2(b) + .40 * 2(c) + .1 * 2(d)$		0
4. Actuarial Value of Assets (E1-E3) (Same as "Current Assets")		\$ 201

**Elective State Officers Retirement Fund**  
**Statement of Change In Plan Net Assets**  
*(dollars in thousands)*

Year Ending June 30, 2002

	Non-MPRIF Assets	MPRIF Reserve	Market Value
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$ 201	0	\$ 201
B. ADDITIONS			
1. Member Contributions	0	0	0
2. Employer Contributions	354	0	354
3. Contributions From Other Sources	0	0	0
4. MPRIF Income	0	0	0
5. Net Investment Income			
a. Interest and Dividends	0	0	0
b. Net Appreciation/(Depreciation)	0	0	0
c. Investment Expenses	0	0	0
d. Net Subtotal	0	0	0
6. Other	0	0	0
7. Total Additions	\$ 354	0	\$ 354
C. OPERATING EXPENSES			
1. Service Retirements	\$ 353	0	\$ 353
2. Disability Benefits	0	0	0
3. Survivor Benefits	0	0	0
4. Refunds	0	0	0
5. Administrative Expenses	1	0	1
6. Other	0	0	0
7. Total Disbursements	\$ 354	0	\$ 354
D. OTHER CHANGES IN RESERVES			
1. Annuities Awarded	0	0	0
2. Total Other Changes	0	0	0
E. ASSETS AVAILABLE AT END OF PERIOD	\$ 201	0	\$ 201
F. DETERMINATION OF CURRENT YEAR UNRECOGNIZED ASSET RETURN			
1. Average Balance			
(a) Non-MPRIF Assets Available at Beginning of Period			0
Less Non-Segregated Member Deposits			
(b) Non-MPRIF Assets Available at End of Period*			0
Less Non-Segregated Member Deposits			
(c) Average Balance {[F1.a+F21.b-B5.d-B6]/2}			0
2. Expected Return: .085*F1.c			0
3. Actual Return			0
4. Current Year UAR: F3-F2			0

**Elective State Officers Retirement Plan**  
**Active Members as of June 30, 2002**

<u>Age</u>	<u>Years of Service</u>								<u>All</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<25	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0	0
ALL	0	0	0	0	0	0	0	0	0

**Average Annual Earnings**

<u>Age</u>	<u>Years of Service</u>								<u>All</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<25	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0	0
ALL	0	0	0	0	0	0	0	0	0

**Prior Fiscal Year Earnings (in ACTUAL DOLLARS) by Years of Service**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>ALL</u>
All	0	0	0	0	0	0	0	0	0

Elective State Officers Retirement Plan  
**Service Retirements as of June 30, 2002**

<u>Age</u>	<u>Years Retired</u>							<u>All</u>
	<u>&lt;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	2	1	0	0	0	0	3
70-74	0	2	1	2	0	0	0	5
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	4	2	2	0	0	0	8

**Average Annual Benefit**

<u>Age</u>	<u>Years Retired</u>							<u>All</u>
	<u>&lt;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	62,021	7,452	0	0	0	0	43,831
70-74	0	21,687	3,361	32,719	0	0	0	22,435
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	41,854	5,407	32,719	0	0	0	30,459

**Total Annual Benefit (actual dollars) by Years Retired**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>All</u>
All	0	167,416	10,814	65,438	0	0	0	243,672

TABLE 5

**Elective State Officers Retirement Plan**  
**Survivors as of June 30, 2002**

<u>Age</u>	<u>Years Since Death</u>							<u>All</u>
	<u>&lt;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	1	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0
70-74	0	0	1	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	1	1	0	0	1	3
ALL	0	0	3	1	0	0	1	5

**Average Annual Benefit**

<u>Age</u>	<u>Years Since Death</u>							<u>All</u>
	<u>&lt;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	7,452	0	0	0	0	7,452
65-69	0	0	0	0	0	0	0	0
70-74	0	0	42,947	0	0	0	0	42,947
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	20,118	37,148	0	0	9,340	22,202
ALL	0	0	23,506	37,148	0	0	9,340	23,401

**Total Annual Benefit (actual dollars) by Years Since Death**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>All</u>
All	0	0	70,518	37,148	0	0	9,340	117,005

**Elective State Officers Retirement Plan  
Disability Retirements as of June 30, 2002**

<u>Age</u>	<u>Years Disabled</u>							<u>All</u>
	<u>&lt;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**

<u>Age</u>	<u>Years Disabled</u>							<u>All</u>
	<u>&lt;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**

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

**Elective State Officers Retirement Fund**  
**Reconciliation of Members**

	<u>Actives</u>	<u>Terminated</u>	
		<u>Deferred Retirement</u>	<u>Other Non-Vested</u>
A. ON JUNE 30, 2001	0	4	0
B. ADDITIONS	0	0	0
C. DELETIONS			
1. Service Retirement	0	0	0
2. Disability	0	0	0
3. Death	0	0	0
4. Terminated - Deferred	0	0	0
5. Terminated - Refund	0	0	0
6. Terminated - Other Non-Vested	0	0	0
7. Returned as active	0	0	0
8. Transferred to Fund	0	0	0
D. DATA ADJUSTMENTS	0	0	0
1. Vested	0		
2. Non-Vested	0		
E. TOTAL ON JUNE 30, 2002	0	4	0

	<u>Recipients</u>		
	<u>Retirement Annuitants</u>	<u>Disabled</u>	<u>Survivors</u>
A. ON JUNE 30, 2001	8	0	5
B. ADDITIONS	0	0	0
C. DELETIONS			
1. Service Retirement	0	0	0
2. Death	0	0	0
3. Annuity Expired	0	0	0
4. Returned as Active	0	0	0
D. DATA ADJUSTMENTS	0	0	0
E. TOTAL ON JUNE 30, 2002	8	0	5

**Elective State Officers Retirement Fund**  
**Actuarial Balance Sheet**  
*(dollars in thousands)*

July 1, 2002

A. CURRENT ASSETS (Table 1, Line E4)		\$	201
B. EXPECTED FUTURE ASSETS			
1. Present Value of Expected Future Statutory Supplemental Contributions (See Table 11)			0
2. Present Value of Future Normal Costs			0
3. Total Expected Future Assets			0
C. TOTAL CURRENT AND EXPECTED FUTURE ASSETS		\$	201
D. CURRENT BENEFIT OBLIGATIONS	<u>Non-Vested</u>	<u>Vested</u>	<u>Total</u>
1. Benefit Recipients			
a. Retirement Annuities		\$ 2,339	\$ 2,339
b. Disability Benefits		0	0
c. Surviving Spouse and Child Benefits		857	857
2. Deferred Retirements with Future Augmentation		879	879
3. Former Members Without Vested Rights		0	0
4. Active Members			
a. Retirement Annuities	0	0	0
b. Disability Benefits	0	0	0
c. Surviving Spouse and Child Benefits	0	0	0
d. Deferred Retirements	0	0	0
e. Refund Liability Due to Death or Withdrawal	0	0	0
5. Total Current Benefit Obligations	0	\$ 4,075	\$ 4,075
E. EXPECTED FUTURE BENEFIT OBLIGATIONS			0
F. TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS			\$ 4,075
G. CURRENT UNFUNDED ACTUARIAL LIABILITY (D5-A)		\$	3,874
H. CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)		\$	3,874



**Elective State Officers Retirement Fund**  
**Determination of Unfunded Actuarial Accrued Liability (UAAL) and**  
**Supplemental Contribution Rate**  
*(dollars in thousands)*

July 1, 2002

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
<b>A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)</b>			
1. Active Members			
a. Retirement Annuities	\$ 0	\$ 0	\$ 0
b. Disability Benefits	0	0	0
c. Survivor's Benefits	0	0	0
d. Deferred Retirements	0	0	0
e. Refunds Due to Death or Withdrawal	0	0	0
f. Total	\$ 0	\$ 0	\$ 0
2. Deferred Retirements With Future Augmentation	879		879
3. Former Members Without Vested Rights	0		0
4. Annuitants in MPRIF	0		0
5. Recipients Not in MPRIF	3,196		3,196
7. Total	\$ 4,075	\$ 0	\$ 4,075
<b>B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)</b>			
1. AAL (A6)			\$ 4,075
2. Current Assets (Table 1, E4)			201
3. UAAL (B1-B2)			\$ 3,874
<b>C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE</b>			
1. Current UAAL to be Amortized by July 1, 2020			3,874
2. Supplemental Contribution Amount			411

Note: If non-segregated member reserves were not counted as assets, the UAAL would be \$4,076, resulting in a Supplemental Contribution Amount of \$432.

**Elective State Officers Retirement Fund**  
**Changes in Unfunded Actuarial Accrued Liability (UAAL)**  
*(dollars in thousands)*

Year Ending June 30, 2002

A. UAAL AT BEGINNING OF YEAR	\$	3,574
B. CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING		
1. Normal Cost and Expenses	\$	1
2. Contributions		(354)
3. Interest on A, B1, and B2		289
		<hr/>
4. Total (B1+B2+B3)	\$	(64)
C. EXPECTED UAAL AT END OF YEAR (A+B4)	\$	3,510
D. INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED		
1. Salary Increases		0
2. Investment Return		17
3. MPRIF Mortality		0
4. Mortality of Other Benefit Recipients		73
5. Other Items		71
		<hr/>
6. Total	\$	161
E. UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTIONS (C+D6)	\$	3,671
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		203
		<hr/>
H. UAAL AT END OF YEAR (E+F+G)	\$	<u>3,874</u>

**Elective State Officers Retirement Fund**  
**Determination of Contribution Sufficiency**  
*(dollars in thousands)*

July 1, 2002

	<u>Dollar Amount</u>
<b>A. STATUTORY CONTRIBUTIONS - CHAPTER 352C</b>	
1. Employee Contributions	\$ 0
2. Employer Contributions <sup>(1)</sup>	0
	0
3. Total	\$ 0
<sup>(1)</sup> 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 the benefit commencement.	
<b>B. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>	
1. Normal Cost	
a. Retirement Benefits	\$ 0
b. Disability Benefits	0
c. Survivors	0
d. Deferred Retirement Benefits	0
e. Refunds Due to Death or Withdrawal	0
	0
f. Total	\$ 0
2. Supplemental Contribution Amortization by July 1, 2020 of UAAL	411
3. Allowance for Expenses	1
4. Total	\$ 412
<b>C. CONTRIBUTION SUFFICIENCY (DEFICIENCY) [A3-B4] <sup>(2)</sup></b>	<b>(412)</b>

Note: Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date: 0

<sup>(2)</sup> The deficiency amount shown above is calculated based on reported assets which include a receivable of \$202 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 \$433.

## Elective State Officers Retirement Fund

**Summary of Actuarial Assumptions and Methods**

<b>Interest:</b>	<b>Pre-Retirement:</b> 8.5% per annum <b>Post-Retirement:</b> 8.5% per annum																		
<b>Benefit Increases After Retirement:</b>	Payment of earnings on retired reserves in excess of 6% accounted for by using a 6% post-retirement assumption. For those not yet in pay status, a 5% post-retirement discount rate is used to account for the one-time adjustment applicable at retirement.																		
<b>Salary Increases:</b>	5.0% annually																		
<b>Mortality:</b>	<p><b>Pre-Retirement:</b></p> <p>Male - 1983 GAM (Males -4) Female - 1983 GAM (Females -2)</p> <p><b>Post-Retirement:</b></p> <p>Male - 1983 GAM (Males) Female - 1983 GAM (Females)</p> <p><b>Post-Disability:</b></p> <p>Male - N/A Female - N/A</p>																		
<b>Retirement Age:</b>	Age 62 or if over age 62, one year from valuation date.																		
<b>Separation:</b>	Rates based on years of service:																		
	<table> <thead> <tr> <th><u>Year</u></th> <th><u>Rate</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0%</td> </tr> <tr> <td>2</td> <td>0</td> </tr> <tr> <td>3</td> <td>0</td> </tr> <tr> <td>4</td> <td>50</td> </tr> <tr> <td>5</td> <td>0</td> </tr> <tr> <td>6</td> <td>0</td> </tr> <tr> <td>7</td> <td>0</td> </tr> <tr> <td>8</td> <td>50</td> </tr> </tbody> </table>	<u>Year</u>	<u>Rate</u>	1	0%	2	0	3	0	4	50	5	0	6	0	7	0	8	50
<u>Year</u>	<u>Rate</u>																		
1	0%																		
2	0																		
3	0																		
4	50																		
5	0																		
6	0																		
7	0																		
8	50																		
<b>Disability:</b>	None																		

<i>Allowance for Combined Service Annuity:</i>	Last year no assumption was made. For the current year, liabilities for active Members are increased by 0% and liabilities for former Members are increased by 30% to account for the effect of some participants having eligibility for a Combined Service Annuity.
<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>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>	Only plan assets are non-segregated member contributions which theoretically serve to offset state costs. No market smoothing is applicable.
<i>Payment on the Unfunded Actuarial Accrued Liability:</i>	A level dollar amount each year to the statutory amortization date.

## Elective State Officers Retirement Fund

**Summary of Plan Provisions**

*This summary of provisions reflects the interpretation of applicable Statutes by the Commission Actuary for purposes of preparing this valuation. This interpretation is not intended to create or rescind any benefit rights in conflict with any Minnesota Statutes.*

**GENERAL**

<b><i>Eligibility:</i></b>	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).
<b><i>Contributions:</i></b>	
<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.
<b><i>Allowable Service:</i></b>	Service while in an eligible position.
<b><i>Salary:</i></b>	Salary upon which Elective State Officers Retirement Plan contributions have been made.
<b><i>Average Salary:</i></b>	Average of the five highest successive years of salary.

**RETIREMENT*****Normal Retirement Benefit:***

<b><i>Eligibility:</i></b>	Age 62 and eight years of Allowable Service.
<b><i>Amount:</i></b>	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.
<i>Amount:</i>	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.
<i>Form of Payment:</i>	Life annuity
<i>Benefit Increases:</i>	Adjusted by MSRS to provide same increase as MPRIF.

**DISABILITY** None

**DEATH**

***Surviving Spouse Benefit:***

<i>Eligibility:</i>	Death while active or after retirement or with at least eight years of Allowable Service.
<i>Amount:</i>	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:***

<i>Eligibility:</i>	Same as spouse's benefit.
<i>Amount:</i>	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 in plan provisions were recognized for this valuation.



**Elective State Officers Retirement Fund**  
**Schedule of Funding Progress**  
*(dollars in thousands)*

July 1, 2002

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (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%
07/01/99	198	3,373	3,175	5.87%	291	1091.07%
07/01/00	199	3,535	3,336	5.63%	0	N/A
07/01/01	201	3,775	3,574	5.32%	0	N/A
07/01/02	201	4,075	3,874	4.93%	0	N/A

**Elective State Officers Retirement Fund**  
**Schedule of Employer Contributions**  
*(dollars in thousands)*

July 1, 2002

Year Ended June 30	Actuarially Required Contribution Rate (A)	Actual Covered Payroll (B)	Actual Member Contributions (C)	Annual Required Contributions [(A)*(B)]-(C)	Actual Employer Contributions <sup>(1)</sup>	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%
1999	51.66%	291	26	124	40	32.26%
2000	321 <sup>(2)</sup>	0	0	0	306	N/A
2001	340	0	0	0	330	N/A
2002	371	0	0	0	354	N/A
2003	412 <sup>(3)</sup>					

<sup>(1)</sup> Includes contributions from other sources (if applicable)

<sup>(2)</sup> Shown in thousands of dollars for years after 1999.

<sup>(3)</sup> Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 389.