# Elective State Officers Retirement Fund ACTUARIAL VALUATION REPORT

July 1, 2000







Internationally WOODROW MILLIMAN

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December 1, 2000

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, 2000.

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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# **Report Highlights** (dollars in thousands)

~		07/01/1999 Valuation	07/01/2000 Valuation
А.	<ul> <li>CONTRIBUTIONS (Table 11)</li> <li>1. Statutory Contributions - Chapter 352C</li> <li>% of Payroll</li> </ul>	0	0 *
	<ol> <li>Required Contributions - Chapter 356</li> <li>% of Payroll</li> </ol>	321	340 *
	3. Sufficiency (Deficiency): (A.1 A.2.)	(321)	(340) *
B.	FUNDING RATIOS 1. Accrued Benefit Funding Ratio		
	a. Current Assets (Table 1)	\$198	\$199
	b. Current Benefit Obligations (Table 8)	\$3,373	\$3,535
	c. Funding Ratio: (a/b)	5.87%	5.63%
	2. Accrued Liability Funding Ratio		
	a. Current Assets (Table 1)	\$198	\$199
	b. Actuarial Accrued Liability (Table 9)	\$3,373	\$3,535
	c. Funding Ratio: (a/b)	5.87%	5.63%
	3. Projected Benefit Funding Ratio (Table 8)		
	a. Current and Expected Future Assets	\$198	\$199
	b. Current and Expected Future Benefit Obligations	\$3,373	\$3,535
	c. Funding Ratio: (a/b)	5.87%	5.63%
C.	PLAN PARTICIPANTS		
	1. Active Members		
	a. Number (Table 3)	0	0
	b. Projected Annual Earnings	<b>\$</b> 0	\$0 \$0
	c. Average Annual Earnings (Projected \$)	\$0	\$0
	d. Average Age	0.0	0.0 0.0
	e. Average Service	0.0	0.0
	2. Others		0
	a. Service Retirements (Table 4)	8	8
	b. Survivors (Table 5)	С С	5
	<ul><li>c. Disability Retirements (Table 6)</li><li>d. Deferred Retirements (Table 7)</li></ul>	0	0
	e. Terminated Other Non-vested (Table 7)	4	4
	f. Total	17	17
	1. 10tal	17	1/

\* These amounts are in thousands of dollars.

# 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 5.63%. The corresponding ratio for the prior year was 5.87%
- The Accrued Liability Funding Ratio is also a measure of funding status and funding progress. It is based on the actuarial cost method that has historically been used by the State. For 2000 the ratio is 5.63%, which is a decrease from the 1999 value of 5.87%.
- The Projected Benefit Funding Ratio is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 5.63% 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 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. 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 \$340,000.

# 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.

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#### **Elective State Officers Retirement Fund**

# Statement of Plan Net Assets

(dollars in thousands)

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# JULY 1, 2000

		Market Value	Cost Value
А.	ASSETS IN TRUST 1. Cash, Equivalents, Short-term Securities	<b>\$</b> 0	<b>\$</b> 0
	2. Fixed Income	0	0
	3. Equity	0	0
	4. Real Estate	0	0
	5. Equity in MPRIF	0	0
	6. Other	201	201
	Subtotal	\$201	\$201
B.	ASSETS RECEIVABLE	0	0
C.	LIABILITIES	(2)	(2)
D.	NET ASSETS HELD IN TRUST FOR PENSION BENEFITS 1. MPRIF Reserves	0	0
	2. Member Reserves	0	0
	3. Other Non-MPRIF Reserves	199	199
	4. Total Assets Available for Benefits	\$199	\$199
E.	DETERMINATION OF ACTUARIAL VALUE OF ASSETS		
	1. Market Value of Assets Available for Benefits (D4)		\$199
	<ol> <li>Unrecognized Asset Returns (UAR)</li> <li>a. June 30, 2000</li> </ol>	\$0	
	b. June 30, 1999	<b>0</b>	
	3. UAR Adjustment: $.80 * (E2.a) + .60 * (E2.b)$	-	0
	4. Actuarial Value of Assets (E1 - E3)	-	199
	(Same as "Current Assets")	_	

.

# Statement of Change In Plan Net Assets

(dollars in thousands)

YEAR ENDING JUNE 30, 2000

		Non-MPRIF Assets	MPRIF Reserve	Market Value
<b>A</b> .	ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$198	\$0	\$198
B.	ADDITIONS			
	1. Member Contributions	\$0	\$0	\$0
	2. Employer Contributions	0	0	0
	3. Contributions From Other Sources	306	0	306
	4. MPRIF Income	0	0	0
	5. Net Investment Income	0	0	0
	<ul><li>a. Interest and Dividends</li><li>b. Net Realized Gain (Loss)</li></ul>	0	0	0
	c. Net Change in Unrealized Gain (Loss)	0	0	0
	d. Investment Expenses	0	0 0	Ő
	e. Net Subtotal	0	0 _	0
	6. Other	0	0	0
	7. Total Additions	\$306	\$0	\$306
C.	OPERATING EXPENSES			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	1. Service Retirements	\$303	\$0	\$303
	2. Disability Benefits	0	0	0
	3. Survivor Benefits	0	0	0
	4. Refunds	0	0	0
	5. Administrative Expenses	2	0	2
	6. Other	0	0	0
	7. Total Disbursements	\$305	\$0	\$305
D.	OTHER CHANGES IN RESERVES			
	1. Annuities Awarded	0	0	0
	2. Total Other Changes	0	0	0
E.	ASSETS AVAILABLE AT END	\$199	\$0	\$199
	OF PERIOD			
F.	DETERMINATION OF CURRENT YEAR UNR	ECOGNIZED ASSE	T RETURN	
	1. Average Balance			
	(a) Assets Available at Beginning of Period			0
	Less Non-Segregated Member Deposits			0
	(b) Assets Available at End of Period			0
	Less Non-Segregated Member Deposits (c) Average Balance { [F1.a + F1.b - B5.e - B6	51/21		0
	(c) Average Balance { $[F1.a + F1.b - B3.e - B0]$ 2. Expected Return: .085 * F1.c	5] / 4 }		0
	3. Actual Return			0
	4. Current Year Unrecognized Asset Return: F3 -	- F2		Ő
	Ŭ			

# ELECTIVE STATE OFFICERS RETIREMENT PLAN ACTIVE MEMBERS AS OF JUNE 30, 2000

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	Years of Service									
Age	<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>	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	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**

_	Years of Service										
Age	<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>	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	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

Age	<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

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# **ELECTIVE STATE OFFICERS RETIREMENT PLAN**

	_							
Age	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	Years 1 <u>10-14</u>	<u>15-19</u>	20-24	<u>25+</u>	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	3	1	0	0	0	0	4
70-74	0	2	2	0	0	0	0	4
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	5	3	0	Ô	0	0	8

# SERVICE RETIREMENTS AS OF JUNE 30, 2000

# **AVERAGE ANNUAL BENEFIT**

,

	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>	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	37,104	6,510	0	0	0	0	29,456		
70-74	0	18,948	28,587	0	0	0	0	23,768		
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	29,842	21,228	0	0	0	0	26,612		

## TOTAL ANNUAL BENEFIT (ACTUAL DOLLARS) BY YEARS RETIRED

Age	<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>	ALL
All	0	149,210	63,684	0	0	0	0	212,896

# ELECTIVE STATE OFFICERS RETIREMENT PLAN

	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>	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	1	0	0	0	0	1		
65-69	0	0	1	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	1	0	0	0	0	. 1		
85+	0	0	1	0	0	1	0	2		
ALL	0	0	4	0	0	1	0	5		

# SURVIVORS AS OF JUNE 30, 2000

## **AVERAGE ANNUAL BENEFIT**

				Years Sinc	e Death			
Age	<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>	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	6,510	0	0	0	0	6,510
65-69	0	0	37,523	0	0	0	0	37,523
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	17,577	0	0	0	0	17,577
85+	0	0	32,456	0	0	8,161	0	20,309
ALL	0	0	23,517	0	0	8,161	0	20,446

TOTAL ANNUAL BENEFIT	(ACTUAL DOLLARS	S) 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	94,068	0	0	8,161	0	102,230

# ELECTIVE STATE OFFICERS RETIREMENT PLAN

	DI	SABILITY	<u>( RETIRI</u>	EMENTS .	AS OF JU	<u>NE 30, 200</u>	<u>0</u>	
				Years D	isabled	-		
Age	<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>	ALL
<50	0	0	0	0	0	0	0	0
50-54	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**

				Years D	isabled			
Age	<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>	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	ана 1. артика <b>о</b> родина 1. артика <b>о</b> родина	0	0	0	0	0	0	0

#### TOTAL ANNUAL BENEFIT (IN THOUSANDS) BY YEARS DISABLED

Age	<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

# **Reconciliation Of Members**

-			Terminated		
			Deferred	Other	
		Actives	Retirement	Non-Vested	
Α.	ON JUNE 30, 1999	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 Other Fund	0	0	0	
D.	DATA ADJUSTMENTS	0	0	0	
	Vested	0			
	Non-Vested	0			
E.	TOTAL ON JUNE 30, 2000	0	4	0	

			Recipients	
		Retirement		
		Annuitants	Disabled	Survivors
A.	ON JUNE 30, 1999	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, 2000	8	0	5

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# Actuarial Balance Sheet

(dollars in thousands)

JULY 1, 2000

А.	A. CURRENT ASSETS (TABLE 1, E6)				
B.	<ul> <li>EXPECTED FUTURE ASSETS</li> <li>1. Present Value of Expected Future Statutory Supplemental Contributions (S</li> <li>2. Present Value of Future Normal Costs</li> <li>3. Total Expected Future Assets</li> </ul>	ee Table 11)		\$0 	
C.	TOTAL CURRENT AND EXPECTED FUTU	RE ASSETS	=	\$199	
D.	CURRENT BENEFIT OBLIGATIONS 1. Benefit Recipients	Non-Vested	Vested	Total	
	a. Retirement Annuities		\$2,158	\$2,158	
	b. Disability Benefits		0	0	
	c. Surviving Spouse and Child Benefits		805	805	
	2. Deferred Retirements with Future Augment	572	572		
	3. Former Members without Vested Rights		0	0	
	4. Active Members				
	a. Retirement Annuities	0	0	0	
	b. Disability Benefits	0	0	0	
	c. Survivor's Benefits	0	0	0	
	d. Deferred Retirements	0	0	0	
	e. Refund Liability Due to Death or Withdrawal	0	0	0	
	5. Total Current Benefit Obligations	\$0	\$3,535	\$3,535	
E.	E. EXPECTED FUTURE BENEFIT OBLIGATIONS				
F.	TOTAL CURRENT AND EXPECTED FUTU	RE BENEFIT OBLIGA	TIONS _	\$3,535	
G.	CURRENT UNFUNDED ACTUARIAL LIAB	ULITY (D5-A)		\$3,336	
H.	CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F-C)				

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#### **Elective State Officers Retirement Fund**

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

(dollars in thousands)

#### JULY 1, 2000

А.	DETERMINATION OF ACTUARIAL	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability (3)=(1)-(2)
1 1.	ACCRUED LIABILITY (AAL)			
	1. Active Members		••	<b>*</b> *
	a. Retirement Annuities	\$0	\$0	\$0
	b. Disability Benefits	0	0	0
	c. Survivor's Benefit	0	0	0
	d. Deferred Retirements	0	0	0
	e. Refunds Due to Death or Withdrawal	0	<u> </u>	<u> </u>
	f. Total	\$0	<u> </u>	20
	2. Deferred Retirements With Future Augmentation	572		572
	3. Former Members Without Vested Rights	0		0
	4. Annuitants in MPRIF	0		0
	5. Recipients Not in MPRIF	2,963		2,963
	6. Total	\$3,535	<u>\$0</u>	\$3,535
Б	DETERMINATION OF UNFUNDED ACTUAR			
В.		IAL ACCROLD L		\$3,535
	<ol> <li>AAL (A6)</li> <li>Current Assets (Table 1, E6)</li> </ol>			199
	3. UAAL (B1-B2)			\$3,336
C.	DETERMINATION OF SUPPLEMENTAL CON	NTRIBUTION RAT	ΓE	
	1. Current UAAL to be Amortized by July 1, 202	20		\$3,336
	2. Supplemental Contribution Amount			338

Note: If non-segregated member reserves were not counted as assets, the UAAL would be \$3,537, resulting in a Supplemental Contribution Amount of 359.

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MILLIMAN & ROBERTSON, INC.

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

## YEAR ENDING JUNE 30, 2000

A.	UAAL AT BEGINNING OF YEAR	\$3,175
B.	CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
	<ol> <li>Normal Cost and Expenses</li> <li>Contribution</li> <li>Interest on A, B1 and B2</li> </ol>	\$5 0 270
	4. Total (B1+B2+B3)	\$275
C.	EXPECTED UAAL AT END OF YEAR (A+B4)	\$3,450
D.	INCREASE (DECREASE) DUE TO ACTUARIAL LOSSES (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
	<ol> <li>Salary Increases</li> <li>Investment Return</li> <li>MPRIF Mortality</li> </ol>	\$0 17 0
	<ol> <li>Mortality of Other Benefit Recipients</li> <li>Other Items</li> </ol>	(182)
	6. Total	(\$114)
E.	UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTION (C+D6)	\$3,336
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)	\$3,336

#### **Elective State Officers Retirement Fund**

## **Determination Of Contribution Sufficiency**

(dollars in thousands)

#### JULY 1, 2000

		Percent of Payroll	Dollar Amount
А.	STATUTORY CONTRIBUTIONS - CHAPTER 352C		
	1. Employee Contributions		\$0
	2. Employer Contributions		0
	3. Total		\$0
B.	* Employer contributions are required to cover the portion of the ben funded by the member's accumulated contribution at the time of ben REQUIRED CONTRIBUTIONS - CHAPTER 356		are not
	<ol> <li>Normal Cost         <ul> <li>a. Retirement Benefits</li> </ul> </li> </ol>		\$0
	b. Disability Benefits		0
	c. Survivors		0
	d. Deferred Retirement Benefits		0
	e. Refunds Due to Death or Withdrawal		0
	f. Total		\$0
	2. Supplemental Contribution Amortization by July 1, 2020 of UAAL		338
	3. Allowance for Expenses		2
	4. Total		\$340

CONTRIBUTION SUFFICIENCY (DEFICIENCY) [A3-B4] C.

4. Total

Note: Projected Annual Payroll for Fiscal Year Beginning on JULY 1, 2000 is \$0.

The deficiency amount shown above is calculated based on reported assets which include a receivable of 201 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 361.

(\$340)

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# Summary of Actuarial Assumptions and Methods

Interest:	Pre-Retirement Post-Retiremen		
Benefit Increases After Retirement:	for by using a 6%	% post-retirer nent discoun	ed reserves in excess of 6% accounted ment assumption. For those not yet in pay status, it rate is used to account for the one-time ement.
Salary Increases:	5.0% annually		
Mortality:	Fer Post-Retirement	ıle - nale -	1983 GAM (Males -4) 1983 GAM (Females -2) 1983 GAM (Males)
		nale -	1983 GAM (Females)
		le - nale -	N/A N/A
Retirement Age:	Age 62 or if over	age 62, one	year from valuation date.
Separation:	Rates based on ye	ears of servio	ce:
		<u>Year</u> 1 2 3 4 5 6 7 8	Rate 0% 0 0 50 0 0 0 0 50
Disability:	None		
Expenses:	Prior year admini	istration expo	enses expressed as percentage of prior year payroll.

Return of Contributions:	All employees withdrawing after eight years of service were assumed to leave their contributions on deposit and receive a deferred annuitant benefit.
Family Composition:	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.
Social Security:	N/A
Actuarial Cost Method:	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.
Asset Valuation Method:	Only plan assets are non-segregated member contributions which theoretically serve to offset state costs. No market smoothing is applicable.
Payment on the Unfunded Actuarial Accrued Liability:	A level dollar amount each year to the statutory amortization date.

# Summary of Plan Provisions

# GENERAL

 Eligibility:
 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).

 Contributions:
 Member:

 9% of salary.

amount equal to the full annuity value at benefit commence less accumulated member contributions.Allowable Service:Service while in an eligible position.Salary:Salary upon which Elective State Officers Retirement Plan	
Employer:	No specified statutory contribution rate. State must contribute an amount equal to the full annuity value at benefit commencement less accumulated member contributions.
Allowable Service:	Service while in an eligible position.
Salary:	Salary upon which Elective State Officers Retirement Plan contributions have been made.
Average Salary:	Average of the five highest successive years of salary.

# RETIREMENT

## Normal Retirement Benefit:

Eligibility:	Age 62 and eight years of Allowable Service.
Amount:	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:

*Eligibility*: Age 60 and eight years of Allowable Service.

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).

TABLE 13 (Continued)

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**

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# **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.

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## Elective State Officers Retirement Fund

## (qollars in thousands) SCHEDULE OF FUNDING PROGRESS

UAAL as % of Covered Payroll	Actual Covered Payroll (Previous FY)	Funded	Dabruhded (JAAU) (JAAU)	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets	Actuarial Date
(B - A) / (C)	(כ)	(g)/(¥)	( <u></u> <b>B</b> - <b>A</b> )	(B)	(¥)	Valuation Date
%\$6`6\$7	455	%69.£1	176,1	5*748	308	1661/10/20
%22.142	828	14.03%	5,046	5,380	334	7661/10/20
%07°EL7	00\$	%26.11	5,367	5'689	322	£661/10/L0
%11'\$09	1117	%89'71	2,487	5,848	198	7661/10/20
%00.609	422	17.82%	5,570	5,948	825	\$661/10/20
28.292	957	%18.61	125'7	586'7	412	9661/10/20
%85.062	L97	<b>%61.41</b>	52,758	3,214	957	L661/10/L0
622.34%	197	<b>%</b> \$8.\$1	598'7	69E'E	005	8661/10/20
%40.1601	167	%L8'S	SLI'E	£2£'£	861	6661/10/20
V/N	0	%£9`\$	955'5	SES'E	661	0007/10/20

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## **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%
1999	51.66%	291	26	124	40	32.26%
2000	321 **	0	0	0	306	N/A
2001	340					

\* Includes contributions from other sources (if applicable). \*\* Shown in thousands of dollars for years after 1999.

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