

December 2008

Legislators Retirement Fund

Actuarial Valuation Report as of July 1, 2008

MERCER



MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN

Contents

- Highlights.....1
- Principal Valuation Results.....2
- Effects of Changes3
- Certification4
- Supplemental Information6
- Plan Assets7
 - Statement of Plan Net Assets for Year Ended June 30, 2008..... 7
 - Reconciliation of Plan Assets..... 8
 - Actuarial Asset Value..... 9
- Membership Data.....10
 - Distribution of Active Members..... 10
 - Distribution of Service Retirements 11
 - Distribution of Survivors..... 12
 - Reconciliation of Members 13
- Development of Costs.....14
 - Actuarial Valuation Balance Sheet..... 14
 - Determination of Unfunded Actuarial Accrued Liability and Supplemental Contribution Rate 15
 - Changes in Unfunded Actuarial Accrued Liability..... 16
 - Determination of Contribution Sufficiency/(Deficiency) 17
- Actuarial Basis18
 - Actuarial Cost Method 18
 - Summary of Actuarial Assumptions 20
 - Summary of Plan Provisions 21
- Plan Accounting Under GASB 25 (as amended by GASB 50).....25
 - Schedule of Funding Progress Under Entry Age Normal Method..... 25
 - Schedule of Contributions from the Employer and Other Contributing Entities 26
- Glossary27

Highlights

This report has been prepared by Mercer for the Minnesota State Retirement System to:

- Present the results of a valuation of the Legislators Retirement Fund as of July 1, 2008.
- Review experience under the Plan for the year ended June 30, 2008.
- Provide reporting and disclosure information for governmental agencies and other interested parties.

Contributions

The following table summarizes important contribution information as described in the “Development of Costs” section.

Contributions	Plan Year Ending	
	June 30, 2009	June 30, 2008*
Statutory Contributions – Chapter 3A (% of Payroll)	9.00%	9.00%
Required Contributions – Chapter 356 (% of Payroll)	243.21%	171.10%
Sufficiency / (Deficiency)	(234.21%)	(162.10%)

The contribution deficiency increased from (162.10%) of payroll to (234.21%) of payroll. The primary reasons for this increased deficiency are the less than expected return on assets and the impact of insufficient contributions.

Without a change in contribution rates, or favorable actuarial experience, the funded status will continue to deteriorate. In addition, as of the date of this report, the assets may have experienced significant losses as a result of the turmoil in the financial marketplace this fall. If not reversed, these losses will further increase the deficiency.

On the other hand, we would also note that absent any additional losses, the plan has sufficient assets to pay benefits for many years into the future.

The “Plan Assets” section provides detail on the plan assets used for the valuation. The market value of assets earned (2.99%) for the plan year ending June 30, 2008 as compared to the assumed rate of 8.50%.

Participant reconciliation and statistics are detailed in the “Participant Data” section. The “Actuarial Basis” section includes a summary of plan provisions and actuarial methods and assumptions used for the calculations in this report. The “Plan Accounting” sections detail the required accounting information for the Plan under GASB Statement No. 25 (as amended by GASB 50).

There were no changes in valuation methods or plan provisions since the July 1, 2007 valuation.

* Provided by The Segal Company.

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in plan provisions, actuarial assumptions or valuation methods and procedures between the two valuations are described after the summary.

	Actuarial Valuation as of	
	July 1, 2008	July 1, 2007*
Contributions (% of Payroll)		
Statutory – Chapter 3A	9.00%	9.00%
Required – Chapter 356	243.21%	171.10%
Sufficiency / (Deficiency)	(234.21%)	(162.10%)
Funding Ratios (dollars in thousands)		
Accrued Benefit Funding Ratio		
– Current assets (AVA)	\$ 39,209	\$ 44,869
– Current benefit obligations	85,598	85,846
– Funding ratio	45.81%	52.27%
Accrued Liability Funding Ratio		
– Current assets (AVA)	\$ 39,209	\$ 44,869
– Actuarial accrued liability	86,131	86,449
– Funding ratio	45.52%	51.90%
Projected Benefit Funding Ratio		
– Current and expected future assets	\$ 40,594	\$ 46,534
– Current and expected future benefit obligations	87,516	88,114
– Funding ratio	46.38%	52.81%
Participant Data		
Active members		
– Number	52	54
– Projected annual earnings (000s)	2,093	2,498
– Average annual earnings (projected)	40,242	46,268
– Average age	61.6	60.9
– Average service	19.7	19.8
Service retirements	277	272
Survivors	69	68
Disability retirements	0	0
Deferred retirements	106	116
Terminated other non-vested	2	3
Total	506	513

* Provided by The Segal Company.

Effects of Changes

The following changes in assumptions and methods were recognized as of July 1, 2008:

- Payroll growth assumption was reduced from 5.0% to 4.5%.

These assumption changes had the following impact on the valuation results:

- An increase in the required contribution of 5.8% of payroll.

The basis for determining benefit increases for benefit recipients was revised since the last valuation on July 1, 2007. See the Summary of Plan Provisions for detail. This change in plan provision had no impact on the results in this valuation.

Certification

We have prepared an actuarial valuation of the Legislators Retirement Fund as of July 1, 2008 for the plan year ending June 30, 2009. This report reflects the provisions of the Plan effective July 1, 2008. To the best of our knowledge, this actuarial valuation was performed in accordance with the requirements of Minnesota Statutes, Section 356.215 and the requirements of the Standards of Actuarial Work established by the Minnesota Legislative Commission on Pensions and Retirement.

This report has been prepared exclusively for the Minnesota State Retirement System and the Legislative Commission on Pensions and Retirement to determine the annual required contribution and present accounting results required under GASB Nos. 25 (as amended by GASB 50) and 27. Mercer is not responsible for consequences arising from the use of any elements of this report for any other than their intended purpose. Determinations for other purposes may be significantly different from the results shown in this report.

A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it is neither a prediction of a pension plan's future financial condition nor a prediction of a pension plan's ability to pay benefits in the future.

Over time, a plan's total cost will depend on a number of factors, including the amount of benefits it pays, the number of people to whom it pays them, and the amount earned on any assets invested to pay the benefits. These amounts and others are uncertain and unknowable at the valuation date, but are predicted to fall within a reasonable range of possibilities. To prepare this report, *actuarial assumptions*, as described within, are used to select a single scenario from the range of possibilities. The results of that single scenario are included in this report. However, the future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material. In addition, different assumptions or scenarios may also be within the reasonable range and results based on those assumptions would be different. Actuarial assumptions may also be changed from valuation to valuation based on experience, changes in expectations about the future, and other factors.

Because actual plan experience will differ from the assumptions, decisions about benefit changes, investment policy, funding amounts, benefit security and/or benefit related issues should be made only after careful consideration of alternative future financial conditions and scenarios, and not solely on the basis of a valuation report or reports.

Data

We used and relied on financial data submitted by the Fund without further audit. We have also used and relied on participant data supplied by the Fund; this data would customarily not be verified by the Fund's actuary. We have reviewed the participant data for internal consistency and have no reason to doubt its substantial accuracy. The Fund is solely responsible for the validity and completeness of this information.

Contributions


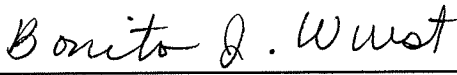
All costs, liabilities and other factors for the Fund were determined in accordance with generally accepted actuarial principles and procedures, in accordance with the provisions of current federal and state statutes and regulations issued thereunder. The economic assumptions are set in Minnesota Statutes, and the remaining assumptions are adopted by the Legislative Commission on Pensions and Retirement. The payroll growth assumption of 4.5% may not be in compliance with GASB because this is a closed group; we believe all other assumptions are reasonable. This report fully and fairly discloses the actuarial position of the Fund on this mandated basis.

Certification

Professional Qualifications

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. We are not aware of any direct or material indirect financial interest or relationship, including investments or other services that could create a conflict of interest, that would impair the objectivity of our work.

The information contained in this document (including any attachments) is not intended by Mercer to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

	<u>12/5/2008</u>
Stephen T. McElhaney, FSA, EA, MAAA Principal	Date
	<u>12/5/2008</u>
Bonita J. Wurst, ASA, EA, MAAA Principal	Date
Mercer 333 South 7th Street, Suite 1600 Minneapolis, MN 55402-2427 612 642 8600	

Supplemental Information

The remainder of the report includes information supporting the results presented in the previous sections.

- **Plan assets** presents information about the plan's assets as reported by the Minnesota State Retirement System and the Minnesota State Board of Investments. The assets represent the portion of total fund liabilities that has been funded.
- **Membership data** presents and describes the membership data used in the valuation.
- **Development of costs** shows the liabilities for plan benefits and the derivation of the contribution amount.
- **Actuarial basis** describes the plan provisions, as well as the methods and assumptions used to value the plan. The valuation is based on the premise that the plan is ongoing.
- **Plan accounting under GASB 25 (as amended by GASB 50)** shows the disclosures required by GASB Statement No. 25 as amended by GASB Statement No. 50.
- **Glossary** defines the terms used in this report.

Plan Assets

Statement of Plan Net Assets for Year Ended June 30, 2008 (Dollars in Thousands)

	Market Value	Cost Value
Assets in Trust		
▪ Cash, equivalents, short term securities	\$ 0	\$ 0
▪ Fixed income	0	0
▪ Equity	0	0
▪ Equity in MPRIF	32,566	39,547
▪ Other	3,270	3,270
Total assets in trust	\$ 35,836	\$ 42,817
Assets Receivable	7,708	7,708
Total Assets	\$ 43,544	\$ 50,525
Due to MPRIF (for mortality losses)	(1,040)	(1,040)
Accounts Payable	(3,295)	(3,295)
Net Assets	\$ 39,209	\$ 46,190
Net assets held in trust for pension benefits		
▪ MPRIF reserves	\$ 32,566	\$ 39,547
▪ Member reserves	6,266	6,266
▪ Other non-MPRIF reserves	377	377
Total assets available for benefits	\$ 39,209	\$ 46,190

Plan Assets

Reconciliation of Plan Assets

The following exhibit shows the revenue, expenses and resulting assets of the Fund as reported by the Minnesota State Board of Investment, for the Plan's Fiscal Year July 1, 2007 to June 30, 2008.

Change in Assets (dollars in thousands)	Non-MPRIF Assets	MPRIF Reserve	Market Value
1. Fund balance at market value at July 1, 2007	\$ 6,895	\$ 37,974	\$ 44,869
2. Contributions			
a. Member	\$ 180	\$ 0	\$ 180
b. Employer	0	0	0
c. Other sources	2,217	0	2,217
d. Total contributions	\$ 2,397	\$ 0	\$ 2,397
3. Investment income			
a. Interest and dividends	\$ 0	\$ (1,185)	\$ (1,185)
b. Investment expenses	0	(48)	(48)
c. Net subtotal	\$ 0	\$ (1,233)	\$ (1,233)
4. Other	0	0	0
5. Total income (2.d. + 3.c. + 4.)	\$ 2,397	\$ (1,233)	\$ 1,164
6. Benefits Paid			
a. Annuity benefits	\$ (1,571)	\$ (5,215)	\$ (6,786)
b. Refunds	(1)	0	(1)
c. Total benefits paid	\$ (1,572)	\$ (5,215)	\$ (6,787)
7. Expenses			
a. Other	\$ (3)	\$ 0	\$ (3)
b. Administrative	(34)	0	(34)
c. Total expenses	\$ (37)	\$ 0	\$ (37)
8. Total disbursements (6.c. + 7.c.)	\$ (1,609)	\$ (5,215)	\$ (6,824)
9. Other changes in reserves			
a. Annuities awarded	\$ 0	\$ 0	\$ 0
b. MPRIF mortality loss	(1,040)	1,040	0
c. Change in assumptions	0	0	0
d. Total other changes	\$ (1,040)	\$ 1,040	\$ 0
10. Fund balance at market value at June 30, 2008 (1. + 5. + 8. + 9.d.)	\$ 6,643	\$ 32,566	\$ 39,209

Plan Assets

Actuarial Asset Value

The Actuarial Value of Assets is equal to the Market Value of Assets.

Membership Data

Distribution of Active Members

Age	Years of Service as of June 30, 2008									Total
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 +	
0 – 19										0
Avg. Earnings										N/A
20 – 24										0
Avg. Earnings										N/A
25 – 29										0
Avg. Earnings										N/A
30 – 34										0
Avg. Earnings										N/A
35 – 39			1							1
Avg. Earnings			41,049							41,049
40 – 44			1							1
Avg. Earnings			40,549							40,549
45 – 49		1		1						2
Avg. Earnings		35,014		42,393						38,703
50 – 54			3	4	1					8
Avg. Earnings			39,224	38,060	37,021					38,367
55 – 59			3	1	3	2				9
Avg. Earnings			39,371	36,169	37,796	39,967				38,623
60 – 64			3	1	2	2	2	1		11
Avg. Earnings			37,629	36,015	37,974	38,609	38,546	40,549		38,155
65 – 69			2	1	3	2	1	1		10
Avg. Earnings			36,092	36,169	39,089	38,359	36,169	36,169		37,467
70 – 74				2	1	1	1	1		6
Avg. Earnings				36,757	40,549	40,549	40,909	36,169		38,615
75+			1	1	2					4
Avg. Earnings			40,549	36,169	38,311					38,335
Total	0	1	14	11	12	7	4	3	0	52
Avg. Earnings	N/A	35,014	38,786	37,515	38,399	39,203	38,543	37,629	N/A	38,326

Membership Data

Distribution of Service Retirements

Age	Years Retired as of June 30, 2008							Total
	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+	
55 - 59	1	5						6
Avg. Benefit	12,867	17,756						16,941
60 - 64	8	10	14					32
Avg. Benefit	17,860	15,791	12,696					14,954
65 - 69	2	21	33					56
Avg. Benefit	17,595	13,364	16,662					15,459
70 - 74	1	4	17	33				55
Avg. Benefit	17,443	19,627	21,621	23,823				22,721
75 - 79		4	9	20	26			59
Avg. Benefit		21,630	25,600	22,859	21,655			22,663
80 - 84			1	9	12	20		42
Avg. Benefit			28,936	30,771	23,015	21,167		23,938
85 - 89		1				4	13	18
Avg. Benefit		36,911				21,575	29,249	27,970
90+							9	9
Avg. Benefit							32,505	32,505
Total	12	45	74	62	38	24	22	277
Avg. Benefit	17,365	16,206	18,304	24,521	22,084	21,235	30,581	21,061

Membership Data

Distribution of Survivors

Age	Years Since Retirement as of June 30, 2008							Total
	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+	
<45	1							1
Avg. Benefit	4,420							4,420
50 – 54	1							1
Avg. Benefit	11,442							11,442
55 – 59				1				1
Avg. Benefit				6,217				6,217
60 – 64		2	2					4
Avg. Benefit		21,790	21,363					21,576
65 – 69		1	1	2	2	1	2	9
Avg. Benefit		5,232	17,896	13,187	17,543	51,000	20,643	19,653
70 – 74		4	1	1	1			7
Avg. Benefit		14,660	6,811	2,053	12,094			11,371
75 – 79		1	3	3	3		2	12
Avg. Benefit		19,139	23,620	21,559	9,984		9,593	16,984
80 – 84	2	3		5	3		3	16
Avg. Benefit	21,325	9,453		18,685	6,331		10,035	13,346
85 – 89		2	1	2	2	1	2	10
Avg. Benefit		17,932	1,840	13,136	5,619	7,546	3,107	8,897
90+	1			3	3		1	8
Avg. Benefit	5,692			10,886	20,100		14,031	14,085
Total	5	13	8	17	14	2	10	69
Avg. Benefit	12,841	14,678	17,516	14,805	11,976	29,273	11,082	14,259

Membership Data

Reconciliation of Members*

	Actives	Terminated		Recipients			Total
		Deferred Retirement	Other Non-vested	Service Retirements	Disability Retirements	Survivors	
Members on 7/1/2007	54	116	3	272	0	68	513
New entrants	0	0	0	0	0	0	0
Return to active	0	0	0	0	0	0	0
Terminated-nonvested	0	0	0	0	0	0	0
Service retirements	0	(12)	0	12	0	0	0
Terminated deferred	(2)	2	0	0	0	0	0
Terminated refund	0	0	0	0	0	0	0
Deaths	0	0	(1)	(6)	0	(4)	(11)
New beneficiary	0	0	0	0	0	5	5
Disabled	0	0	0	0	0	0	0
Benefits expired	0	0	0	0	0	0	0
Data correction	0	0	0	(1)	0	0	(1)
Net Change	(2)	(10)	(1)	5	0	1	(7)
Members on 6/30/2008	52	106	2	277	0	69	506

* Provided by The Minnesota State Retirement System and checked for reasonableness.

Development of Costs

Actuarial Valuation Balance Sheet (Dollars in Thousands)

The actuarial balance sheet is based on the fundamental equation that at any given time the present value of benefits to be paid in the future must be equal to the assets on hand plus the present value of future contributions to be received. The total rate of contribution is determined as that amount which will make the total present and potential assets balance with the total present value of future benefits. The members' rate of contribution is fixed at the current schedule of compensation. The employer's rate of contribution is the balance required to cover the total rate of contribution.

The contributions made in excess of amounts required for current benefit payments are accumulated as a reserve to help meet benefit payments in later years. It is this reserve system which permits the establishment of a level rate of contribution each year.

				June 30, 2008
A.	Actuarial value of assets			\$ 39,209
B.	Expected future assets			
1.	Present value of expected future statutory supplemental contributions			\$ 0
2.	Present value of future normal costs			1,385
3.	Total expected future assets (1. + 2.)			\$ 1,385
C.	Total current and expected future assets			\$ 40,594
D.	Current benefit obligations	<u>Non-Vested</u>	<u>Vested</u>	<u>Total</u>
1.	Benefit recipients			
a.	Service retirements	\$ 0	\$ 47,060	\$ 47,060
b.	Disability	0	0	0
c.	Survivors	0	7,866	7,866
2.	Deferred retirements with augmentation	0	19,884	19,884
3.	Former members without vested rights	0	25	25
4.	Active Members	0	10,763	10,763
5.	Total Current Benefit Obligations	\$ 0	\$ 85,598	\$ 85,598
E.	Expected Future Benefit Obligations			\$ 1,918
F.	Total Current and Expected Future Benefit Obligations			\$ 87,516
G.	Unfunded Current Benefit Obligations (D.5. - A.)			\$ 46,389
H.	Unfunded Current and Future Benefit Obligations (F. - C.)			\$ 46,922

Development of Costs

Determination of Unfunded Actuarial Accrued Liability and Supplemental Contribution Rate (Dollars in Thousands)

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
A. Determination of Actuarial Accrued Liability (AAL)			
1. Active Members			
a. Retirement annuities	\$ 12,567	\$ 1,346	\$ 11,221
b. Disability benefits	0	0	0
c. Survivor's benefits	105	36	69
d. Deferred retirements	0	0	0
e. Refunds	9	3	6
f. Total	\$ 12,681	\$ 1,385	\$ 11,296
2. Deferred retirements with future augmentation	19,884	0	19,884
3. Former members without vested rights	25	0	25
4. Annuitants in MPRIF	39,547	0	39,547
5. Recipients not in MPRIF	15,379	0	15,379
6. Total	\$ 87,516	\$ 1,385	\$ 86,131
B. Determination of Unfunded Actuarial Accrued Liability (UAAL)			
1. Actuarial accrued liability			\$ 86,131
2. Current assets			39,209
3. Unfunded actuarial accrued liability			\$ 46,922
C. Determination of Supplemental Contribution Rate			
1. Present value of future payrolls through the amortization date of July 1, 2021			\$ 20,987
2. Supplemental Contribution Rate (B.3. / C.1.)			223.58%

Development of Costs

Changes in Unfunded Actuarial Accrued Liability (UAAL) (Dollars in Thousands)

	Year Ending June 30, 2008
A. Unfunded actuarial accrued liability at beginning of year	\$ 41,580
B. Changes due to interest requirements and current rate of funding	
1. Normal cost and actual administrative expenses	\$ 477
2. Contributions	(2,397)
3. Interest on A., B.1. and B.2.	3,453
4. Total (B.1. + B.2. + B.3.)	\$ 1,533
C. Expected unfunded actuarial accrued liability at end of year (A. + B.4.)	\$ 43,113
D. Increase (decrease) due to actuarial losses (gains) because of experience deviations from expected	
1. Salary increases	\$ (1,225)
2. Investment return	4,897
3. MPRIF mortality	1,040
4. Mortality of other benefit recipients	25
5. Other items	(928)
6. Total	\$ 3,809
E. Unfunded actuarial accrued liability at end of year before plan amendments and changes in actuarial assumptions (C. + D.6.)	\$ 46,922
F. Change in unfunded actuarial accrued liability due to changes in plan provisions	0
G. Change in unfunded actuarial accrued liability due to changes in actuarial assumptions	0
H. Unfunded actuarial accrued liability at end of year (E. + F. + G.)	\$ 46,922

Development of Costs

Determination of Contribution Sufficiency/(Deficiency) (Dollars in Thousands)

	Percent of Payroll	Dollar Amount
A. Statutory contributions – Chapter 3A		
1. Employee contributions	9.00%	\$ 188
2. Employer contributions	0.00%	0
3. Total	9.00%	\$ 188
B. Required contributions – Chapter 356		
1. Normal cost		
a. Retirement benefits	17.64%	\$ 369
b. Disability benefits	0.00%	0
c. Survivors	0.59%	12
d. Deferred retirement benefits	0.00%	0
e. Refunds	0.05%	1
f. Total	18.28%	\$ 382
2. Supplemental contribution amortization by July 1, 2021 of Unfunded Actuarial Accrued Liability		
a. Due to unfunded MPRIF liability	33.26%	\$ 697
b. Due to unfunded non-MPRIF liability	190.32%	3,983
c. Total supplemental contribution amortization	223.58%	\$ 4,680
3. Allowance for expenses	1.35%	\$ 28
4. Total	243.21%	\$ 5,090
C. Contribution Sufficiency/(Deficiency) (A.3. – B.4.)*	(234.21%)	\$ (4,902)

Note: Projected annual payroll for fiscal year beginning on the valuation date: \$2,093.

* Plan is funded by annual appropriations from the General Fund.

Actuarial Basis

Actuarial Cost Method

Liabilities and contributions in this report are computed using the Individual Entry Age Normal Cost Method. This method is prescribed by Minnesota Statutes.

The objective under this method is to fund each participants' benefits under the Plan as payments which are level as a percentage of salary, starting at original participation date (or employment date), and continuing until the assumed retirement termination, disability or death.

At the time the funding method is introduced, there will be a liability which represents the contributions which would have been accumulated if this method of funding had always been used. The difference between this liability and the assets (if any) which are held in the fund is the unfunded liability which is typically funded over a chosen period in accordance with the amortization schedule.

A detailed description of the calculation follows:

The normal costs for each active participant under the assumed retirement age is determined by applying to earnings the level percentage of salary which, if contributed each year from date of entry into the Plan until the assumed retirement (termination, disability or death) date, is sufficient to provide the full value of the benefits expected to be payable.

- The present value of present value of future normal costs is the total of the discounted values of all active participants' normal cost, assuming these to be paid in each case from the valuation date until retirement (termination, disability or death) date.
- The present value of projected benefits is calculated as the value of all benefit payments expected to be paid to the Plan's current participants, including active and retired members, beneficiaries, and terminated members with vested rights.
- The accrued liability is the excess of the present value of projected benefits over the present value of future normal cost.
- The unfunded liability is the excess of the accrued liability over the assets of the fund, and represents that part of the accrued liability which has not been funded by accumulated past contributions.

Amortization Method

The unfunded liability is amortized as a level percentage of payroll each year to the statutory amortization date of July 1, 2021 assuming payroll increases of 4.5% per year (5.0% last year). If the unfunded Actuarial Accrued Liability is negative, the surplus amount shall be amortized over 30 years as a level percentage of payroll

Actuarial Basis

Asset Valuation Method

MPRIF Reserve and Non-MPRIF Assets: Market Value

Valuation and Accounting Procedures

Financial and census data: We used financial data submitted by the Fund and the Fund's auditor and participant data submitted by the Fund without further audit. This information would customarily not be verified by a plan's actuary. We have reviewed the information for internal consistency and we have no reason to doubt its substantial accuracy.

Actuarial Basis

Summary of Actuarial Assumptions

The following assumptions were used in valuing the liabilities and benefits under the plan.

<i>Investment return:</i>	6.0% compounded annually post-retirement. 8.5% compounded annually pre-retirement.		
<i>Benefit increases after retirement</i>	Payment of benefit increases after retirement accounted for by using a 6.00% post-retirement assumption. For those not yet in pay status, a 5.00% post-retirement interest rate is used to account for the one-time adjustment applicable at retirement.		
<i>Salary increases</i>	5.00% annually.		
<i>Mortality</i>			
<i>Healthy Pre-retirement</i>	1983 Group Annuity Mortality for males set back four years 1983 Group Annuity Mortality for females set back two years		
<i>Healthy Post-retirement</i>	1983 Group Annuity Mortality for males 1983 Group Annuity Mortality for females		
<i>Disabled</i>	Male: N/A Female: N/A		
<i>Retirement</i>	Age 62 or if over age 62, one-year from valuation date.		
<i>Withdrawal</i>	Rates based on years of service.		
	<u>Year</u>	<u>House</u>	<u>Senate</u>
	1	0%	0%
	2	30	0
	3	0	0
	4	20	25
	5	0	0
	6	10	0
	7	0	0
	8	5	10
<i>Disability</i>	None.		
<i>Allowance for combined service annuity</i>	Liabilities for former members are increased by 30.00% to account for the effect of some participants having eligibility for a Combined Service Annuity.		
<i>Administrative expenses</i>	Prior year administrative expenses expressed as percentage of prior year payroll.		
<i>Refund of contributions</i>	All employees withdrawing after becoming eligible for a deferred benefit were assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit.		
<i>Percentage married</i>	85.00% of members are assumed to be married.		
<i>Age of spouse</i>	Female are assumed to be three years younger than males.		
<i>Eligible children</i>	Each member may have two dependent children depending upon member's age. Assumed first child born at member's age 28 and second child is born at member's age 31.		
<i>Changes in actuarial assumptions</i>	The following assumption changes were recognized as of July 1, 2008. <ul style="list-style-type: none"> ▪ Payroll growth assumption was reduced from 5.0% to 4.5%. 		

Actuarial Basis

Summary of Plan Provisions

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

<i>Plan year</i>	July 1 through June 30
<i>Eligibility</i>	Members of the State Legislature elected to office before July 1, 1997 and who elect to retain coverage under this plan (i.e., do not elect Social Security coverage). A member of PERA who is elected to the Legislature may elect to remain a member of PERA and receive credit under PERA for service as a legislator.
<i>Contributions</i>	
<i>Member</i>	9.00% of salary.
<i>Employer:</i>	Plan is funded by annual appropriations from the General Fund.
<i>Allowable service</i>	Granted for the full term unless termination occurs before the end of the term. Service during all or part of four regular legislative sessions is deemed to be eight years of service.
<i>Salary</i>	Compensation received for service as a member of the legislature. Salary includes the monthly compensation paid to a legislator and the per diem payments paid during a regular or special session. Salary does not include additional compensation attributable to a leadership position.
<i>Average salary</i>	Average of the five highest successive years of salary.
Retirement	
<u><i>Normal retirement benefit</i></u>	
<i>Age/service requirements</i>	Age 62 and either six full years of service or service during all or part of four regular legislative sessions. For eligibility purposes, service does not include credit for time not served when a member does not serve a full term of office.
<i>Amount</i>	A percentage of Average Salary for each year of service as follows: First hired prior to January 1, 1979 (a) 5.00% for the first eight years; and (b) 2.50% for subsequent years Hired after December 31, 1978 (a) 2.50%

Actuarial Basis

Summary of Plan Provisions *(continued)*

Retirement <i>(continued)</i>	
<u>Early retirement benefit</u>	
<i>Age/service requirements</i>	Age 60 and either six full years of Service or Service during all or part of four regular legislative sessions.
<i>Form of payment</i>	Normal retirement benefit based on service and Average Salary at retirement date and actuarially reduced for each month the member is under age 62 assuming augmentation to age 62 at 3.00% per year.
<u>Form of payment</u>	Paid as a 50% joint and survivor annuity to member, spouse and dependent children. Combined service annuitants with less than six years of Legislator service may elect 100% joint and survivor bounce back annuity, life annuity, or a term certain and life annuity on an actuarially equivalent basis. Automatic survivor benefits are provided outside of the Fund
<u>Benefit increases</u>	The inflation-based benefit increase provided by the Minnesota Post Retirement Investment Fund (Post Fund) to benefit recipients is equal to 100 percent of CPI-W, but not to exceed 2.5 percent. An additional benefit increase may be provided to any individuals who have lost purchasing power compared to the value of the benefit they initially received when their benefit first commenced. This additional benefit increase can only be paid if the Post Fund composite funding ratio is at least 90 percent, if the rate of return earned on Post Fund assets exceeds 8.5 percent for the year, and if the inflation rate certified for the year is less than 2.5 percent. If the Post Fund has a funding ratio of 100 percent or more, an additional inflation component will be paid when CPI-W inflation exceeds 2.5 percent. An overall cap of 5.0 percent annually on benefit recipient adjustments is effective June 30, 2010.
<hr/>	
Disability	None.
<hr/>	
Death	
<u>Surviving spouse benefit</u>	
<i>Age/service requirement</i>	Death while active, or after termination if service requirements for a normal retirement benefit is met but payments have not begun.
<i>Amount</i>	Survivor payments of 50% of the retirement benefit of the member assuming the member had attained normal retirement age and had a minimum of eight years of service. Benefit is paid for life. A former member's benefit is augmented as a Deferred Annuity to date of death before determining the portion payable to the spouse. If the legislator was at least age 60 at death, the surviving spouse may elect an optional joint and survivor annuity. If a deferred benefit was not eligible to be in pay status before July 1, 1997, an actuarial increase shall be made for the change in the post-retirement interest rates from 5.00% to 6.00%.
<i>Benefit increases</i>	Adjusted by MSRS to provide same increase as MPRIF.

Actuarial Basis

Summary of Plan Provisions *(continued)*

Death

Surviving dependent children's benefit

<i>Age/service requirement</i>	Same as spouse's benefit.
<i>Amount</i>	Benefit for first child is 25.00% of the retirement benefit (computed as for surviving spouse) with 12.50% for each additional child. Maximum payable (including spouse) is 100.00% of the retirement benefit. Benefits cease when a child marries or attains age 18 (22 if a full-time student).
<i>Benefit Increases</i>	Adjusted by MSRS to provide same increase as MPRIF.

Refund of contributions

<i>Age/service requirement</i>	Member dies before receiving any retirement benefits and survivor benefits are not payable.
<i>Amount</i>	Member's contributions without interest.

Termination

Refund of contributions

<i>Age/service requirement</i>	Termination of service.
<i>Amount</i>	Member's contributions with 6.00% interest. A deferred annuity may be elected in lieu of a refund.

Deferred benefit

<i>Age/service requirement</i>	Same service requirements as for normal retirement.
<i>Amount</i>	Benefit computed under law in effect at termination and increased by the following annual percentage: <ul style="list-style-type: none"> (a) 0.00% before July 1, 1973, (b) 5.00% from July 1, 1973 to January 1, 1981; and (c) 5.00% thereafter until the annuity begins. Amount is payable as a normal or early retirement. For members who terminated prior to July 1, 1997 but were not eligible to commence their pensions before July 1, 1997, the benefit shall be increased to reflect the actuarial equivalent change in post-retirement interest rate from 5.00% to 6.00%.

Actuarial Basis

Summary of Plan Provisions *(continued)*

*Changes in plan provisions*Revised Minnesota Post Retirement Investment Fund Benefit Increase

The inflation-based benefit increase provided by the Minnesota Post Retirement Investment Fund (Post Fund) to benefit recipients is equal to 100 percent of CPI-W, but not to exceed 2.5 percent. An additional benefit increase may be provided to any individuals who have lost purchasing power compared to the value of the benefit they initially received when their benefit first commenced. This additional benefit increase can only be paid if the Post Fund composite funding ratio is at least 90 percent, if the rate of return earned on Post Fund assets exceeds 8.5 percent for the year, and if the inflation rate certified for the year is less than 2.5 percent. If the Post Fund has a funding ratio of 100 percent or more, an additional inflation component will be paid when CPI-W inflation exceeds 2.5 percent. An overall cap of 5.0 percent annually on benefit recipient adjustments is effective June 30, 2010.

Potential Dissolution of Minnesota Post Fund

If the Post Fund composite funding ratio is less than 80 percent in any one year, or less than 85 percent in two consecutive years, the Post Fund must be dissolved, and assets will be transferred back to the applicable plan and be merged with the active member assets for that plan. If the Post Fund is dissolved, notwithstanding any other law, the benefit recipients will receive an annual 2.5 percent increase in lieu of any other benefit increase.

Plan Accounting Under GASB 25 (as amended by GASB 50)

Provided below is information required under GASB Statement No. 25 as amended by GASB Statement No. 50 – Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans as amended by GASB Statement No. 50.

Schedule of Funding Progress¹ (Dollars in Thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded (Overfunded) AAL (UAAL) (b) – (a)	Funded Ratio (a)/(b)	Actual Covered Payroll (Previous FY) (c)	UAAL as a Percentage of Covered Payroll (b) – (a) (c)
07/01/1991	\$ 14,694	\$ 30,403	\$ 15,709	48.33%	\$ 7,078	221.94%
07/01/1992	15,160	33,224	18,064	45.63%	6,556	275.53%
07/01/1993	17,169	36,801	19,632	46.65%	7,322	268.12%
07/01/1994	18,738	45,448	26,710	41.23%	6,589	405.37%
07/01/1995	21,213	50,255	29,042	42.21%	7,056	411.59%
07/01/1996	22,532	54,225	31,693	41.55%	6,267	505.71%
07/01/1997	25,678	60,055	34,377	42.76%	7,767	442.60%
07/01/1998	31,212	62,928	31,716	49.60%	6,802	466.27%
07/01/1999	33,474	66,418	32,944	50.40%	7,490	439.84%
07/01/2000	37,265	69,364	32,099	53.72%	5,808	552.67%
07/01/2001	42,608	75,072	32,464	56.76%	5,858	554.18%
07/01/2002	45,501	78,070	32,569	58.28%	5,089	639.99%
07/01/2003 ²	–	–	–	–	–	–
07/01/2004	46,155	83,197	37,042	55.48%	3,815	970.89%
07/01/2005	45,523	81,836	36,314	55.63%	3,014	1,204.84%
07/01/2006	48,504	81,361	32,858	59.62%	2,894	1,135.45%
07/01/2007	44,869	86,449	41,580	51.90%	2,380	1,747.42%
07/01/2008	39,209	86,131	46,922	45.52%	1,993	2,354.34%

¹ Information prior to 2008 provided by The Segal Company.

² An actuarial valuation was not completed as of July 1, 2003.

Plan Accounting Under GASB 25 (as amended by GASB 50)

Schedule of Contributions from the Employer and Other Contributing Entities¹ (Dollars in Thousands)

The GASB Statement No. 25 required and actual contributions are as follows:

Plan Year Ended June 30	Actuarially Required Contribution Rate (a)	Actual Covered Payroll (b)	Actual Member Contributions (c)	Annual Required Contributions [(a)x(b)] - (c) = (d)	Actual Employer Contributions ² (e)	Percentage Contributed (e) / (d)
1991	32.62%	\$ 7,078	\$ 637	\$ 1,672	\$ 1,889	112.98%
1992	27.67%	6,556	590	1,224	601	49.10%
1993	30.49%	7,322	659	1,573	2,284	145.20%
1994	31.12%	6,589	593	1,457	1,618	111.05%
1995	38.34%	7,056	635	2,070	2,938	141.93%
1996	41.54%	6,267	564	2,039	1,511	74.10%
1997	43.96%	7,767	699	2,715	3,176	116.98%
1998	48.03%	6,802	612	2,655	5,199	195.82%
1999	47.19%	7,490	674	2,861	2,091	73.09%
2000	52.72%	5,808	523	2,539	3,192	125.72%
2001	47.26%	5,858	527	2,241	5,039	224.85%
2002	60.14%	5,089	458	2,603	4,135	158.86%
2003 ³	63.12%	—	—	—	—	—
2004 ⁴	63.12%	3,815	343	2,065	—	—
2005	104.72%	3,014	384	2,773	—	—
2006	112.64%	2,894	264	2,995	—	—
2007	111.24%	2,380	239	2,408	—	—
2008 ^{5, 6}	171.10%	1,993	180	3,230	— ⁷	—
2009 ⁸	243.21% ⁹					

¹ Information prior to 2008 provided by The Segal Company.

² Includes contributions from other sources (if applicable).

³ Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 61.36%.

⁴ Actuarially Required Contribution Rate is equal to prior year's rate since an actuarial valuation was not completed as of July 1, 2003.

⁵ Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 161.95%.

⁶ Actuarially Required Contribution Rate was provided by The Segal Company.

⁷ Excludes contributions from other sources, per direction by Minnesota State Retirement System.

⁸ Actuarially Required Contribution Rate prior to change in actuarial method is 237.40%.

⁹ Actuarially Required Contribution Rate is based on assumed payroll growth of 4.5%, which may not be appropriate since this is a closed group.

Glossary

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method. The goal of an asset valuation method is to produce a relatively stable asset value thereby reducing year-to-year volatility in contribution requirements.

Actuarial Cost Method. Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Annual Pension Cost. A measure of the periodic cost of an employer’s participation in a defined benefit pension plan.

Annual Required Contributions (ARC). The employer’s periodic required contributions to a defined benefit pension plan, calculated in accordance with the parameters of GASB 25 (as amended by GASB 50) or GASB 27.

ASA. Associate of the Society of Actuaries.

Current Benefit Obligations. The present value of benefits earned to the valuation date, based on current service and including future salary increases to retirement.

FSA. Fellow of the Society of Actuaries.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use.

Present Value. Sometimes called “actuarial present value,” the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Statement No. 25 of the Governmental Accounting Standards Board (GASB 25). The accounting standard governing the financial reporting for defined benefit pension plans and note disclosures for defined contribution plans.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer’s accounting for pensions.

Statement No. 50 of the Governmental Accounting Standards Board (GASB 50). The accounting standard amending both GASB 25 and GASB 27 to require a schedule of funding progress under the Entry Age Normal method for plans that use the aggregate funding method to determine the Annual Required Contribution.

MERCER



MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN

Mercer (US) Inc.
333 South 7th Street, Suite 1600
Minneapolis, MN 55402-2427
612 642 8600

Consulting. Outsourcing. Investments.