December 2008

Local Government Correctional Service Retirement Fund

Actuarial Valuation Report as of July 1, 2008

MERCER

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Contents

Highlights

This report has been prepared by Mercer for the Public Employees Retirement Association of Minnesota to:

- Present the results of a valuation of the Local Government Correctional Service 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.

	Plan Year Ending	
Contributions	**June 30, 2009**	**June 30, 2008***
Statutory Contributions – Chapter 353E (% of Payroll)	14.58%	14.58%
Required Contributions – Chapter 356 (% of Payroll)	13.50%	12.36%
Sufficiency / (Deficiency)	1.08%	2.22%

As of the date of this report, the assets have experienced significant losses as a result of the turmoil in the financial marketplace this fall. If not reversed, these losses could result in a deficiency.

The "Plan Assets" section provides detail on the plan assets used for the valuation including a development of the actuarial value of assets. The market value of assets earned (5.16%) for the plan year ending June 30, 2008 compared to an assumption of 8.50%. Only 20% of the non-MPRIF asset loss is recognized this year in the actuarial value of assets. The remainder will be recognized over the next four years. The actuarial value of assets earned 8.3% 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" section details the required accounting information for the Plan under GASB Statement No. 25 (as amended by GASB Statement No. 50).

There were no changes in valuation methods since the July 1, 2007 valuation. Changes in actuarial assumptions and plan provisions are reflected in this report and summarized in the Actuarial Basis section.

* *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 353E	14.58%	14.58%
Required – Chapter 356	13.50%	12.36%
Sufficiency / (Deficiency)	1.08%	2.22%
Funding Ratios *(dollars in thousands)*		
Accrued Benefit Funding Ratio		
– Current assets (AVA)	$ 192,937	$ 159,548
– Current benefit obligations	181,601	147,454
– Funding ratio	106.24%	108.20%
Accrued Liability Funding Ratio		
– Current assets (AVA)	$ 192,937	$ 159,548
– Actuarial accrued liability	192,572	162,169
– Funding ratio	100.19%	98.38%
Projected Benefit Funding Ratio		
– Current and expected future assets	$ 397,555	$ 349,361
– Current and expected future benefit obligations	351,035	306,577
– Funding ratio	113.25%	113.96%
Participant Data		
Active members		
– Number	3,710	3,566
– Projected annual earnings *(000s)*	$ 163,937	$ 148,794
– Average annual earnings *(projected)*	$ 44,188	$ 41,726
– Average age	39.2	39.1
– Average service	5.1	4.7
Service retirements	208	175
Survivors	15	13
Disability retirements	92	87
Deferred retirements	1,520	1,337
Terminated other non-vested	1,473	1,291
Total	**7,018**	**6,469**

* *Provided by The Segal Company.*

Effects of Changes

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

- Payroll growth assumption changed from 6.0% to 4.5%.

This assumption change did not have a material impact on the valuation results.

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

Certification

We have prepared an actuarial valuation of the Local Government Correctional 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 Public Employees Retirement Association of Minnesota 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. We believe that these assumptions are reasonable. This report fully and fairly discloses the actuarial position of the Fund on an ongoing 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.

Stephen T McElhaney	12/4/2008
Stephen T. McElhaney, FSA, EA, MAAA **Principal**	**Date**
Bonita J. Wurst	12/4/2008
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 Public Employees Retirement Association and the Minnesota State Board of Investments. The fund 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
Assets in Trust		
▪ Cash, equivalents, short term securities	$	2,994
▪ Fixed income		43,191
▪ Equity		111,290
▪ Equity in MPRIF		10,279
▪ Other		22,654
Total assets in trust	**$**	**190,408**
Due from MPRIF (for mortality gain)		399
Assets Receivable		487
Total Assets	**$**	**191,294**
Amounts Payable		(452)
Net Assets	**$**	**190,842**
Net assets held in trust for pension benefits		
▪ MPRIF reserves		10,279
▪ Other non-MPRIF reserves		180,563
Total assets available for benefits	**$**	**190,842**

Plan Assets

Reconciliation of Plan Assets

The following exhibit shows the revenue, expenses and resulting assets of the Fund as reported by the Public Employees Retirement Association and 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	$ 167,262	$ 7,019	$ 174,281
2. Contributions			
a. Member	8,922	0	8,922
b. Employer	13,388	0	13,388
c. Other sources	0	0	0
d. Total contributions	22,310	0	22,310
3. Investment income			
a. Investment income	(8,459)	(838)	(9,297)
b. Investment expenses	(242)	(13)	(255)
c. Net subtotal	(8,701)	(851)	(9,552)
4. Other	15	0	15
5. Total income *(2.d. + 3.c. + 4.)*	**$ 13,624**	**$ (851)**	**$ 12,773**
6. Benefits Paid			
a. Annuity benefits	(1,411)	(857)	(2,268)
b. Refunds	(724)	0	(724)
c. Total benefits paid	(2,135)	(857)	(2,992)
7. Expenses			
a. Other	(34)	0	(34)
b. Administrative	(213)	0	(213)
c. Total Expenses	(247)	0	(247)
8. Total disbursements *(6.c. + 7.c.)*	**$ (2,382)**	**$ (857)**	**$ (3,239)**
9. Other changes in reserves			
a. Annuities awarded	(3,088)	3,088	0
b. MPRIF mortality gain	399	(399)	0
c. Change in assumptions	0	0	0
d. Total other changes	(2,689)	2,689	0
10. Fund balance at market value at June 30, 2008 *(1. + 5. + 8. + 9.d.)*	**$ 175,815**	**$ 8,000**	**$ 183,815**

Plan Assets

Actuarial Asset Value *(Dollars in Thousands)*

					June 30, 2008
1. Market value of assets available for benefits				$	183,815
2. Determination of average balance					
a. Non-MPRIF assets available at July 1, 2007					167,262
b. Non-MPRIF assets available at June 30, 2008 (before MPRIF mortality adjustment)					175,416
c. Net investment income for fiscal year ending June 30, 2008					(8,686)
d. Average balance *[a. + b. – c.] / 2*					175,682
3. Expected return *[8.5% * 2.d.]*					14,933
4. Actual return					(8,686)
5. Current year unrecognized asset return *(4. – 3.)*					(23,619)
6. Unrecognized asset returns					
		Original Amount	**% Not Recognized**		
a. Year ended June 30, 2008	$	(23,619)	80%	$	(18,895)
b. Year ended June 30, 2007		13,050	60%		7,830
c. Year ended June 30, 2006		3,875	40%		1,550
d. Year ended June 30, 2005		1,967	20%		393
e. Total unrecognized return				$	(9,122)
7. Actuarial value at June 30, 2008 *(1. – 6.e.)*				**$**	**192,937**

Membership Data

Distribution of Active Participants

	Years of Service June 30, 2008									
Age	0- 4	5 - 9	10 - 14	15 - 19	20 – 24	25 - 29	30 - 34	35 – 39	40+	Total
0 – 19	8									**8**
Avg. Earnings	16,248									**16,248**
20 – 24	263	2								**265**
Avg. Earnings	24,746	38,307								**24,848**
25 – 29	547	97								**644**
Avg. Earnings	32,242	44,437								**34,079**
30 – 34	274	247								**521**
Avg. Earnings	33,569	46,630								**39,761**
35 – 39	201	345								**546**
Avg. Earnings	32,499	49,545								**43,270**
40 – 44	160	346								**506**
Avg. Earnings	31,296	51,415								**45,252**
45 – 49	122	324								**446**
Avg. Earnings	33,276	51,481								**46,501**
50 – 54	79	297								**376**
Avg. Earnings	35,498	52,944								**49,278**
55 – 59	48	225								**273**
Avg. Earnings	37,174	51,051								**48,611**
60 – 64	17	84								**101**
Avg. Earnings	48,127	50,108								**49,774**
65 - 69	5	14								**19**
Avg. Earnings	19,484	36,476								**32,005**
70 – 74	3	2								**5**
Avg. Earnings	23,109	29,093								**25,502**
75+										
Avg. Earnings										
Total	**1,727**	**1,983**								**3,710**
Avg. Earnings	**31,700**	**50,154**								**41,564**

Membership Data

Distribution of Service Retirements

	Years Retired as of June 30, 2008							
Age	**<1**	**1 – 4**	**5 - 9**	**10 - 14**	**15 – 19**	**20 - 24**	**25 +**	**Total**
50 – 54	2	5						**7**
Avg. Benefit	7,569	4,710						**5,527**
55 – 59	9	32	1					**42**
Avg. Benefit	7,264	4,788	2,980					**5,275**
60 – 64	10	43	16					**69**
Avg. Benefit	5,416	4,980	2,307					**4,423**
65 – 69	4	37	28					**69**
Avg. Benefit	6,225	4,789	1,586					**3,573**
70 – 74	1	6	11					**18**
Avg. Benefit	4,497	4,252	926					**2,233**
75 – 79			3					**3**
Avg. Benefit			1,111					**1,111**
80 – 84								**0**
Avg. Benefit								**N/A**
85 – 89								**0**
Avg. Benefit								**N/A**
90+								**0**
Avg. Benefit								**N/A**
Total	**26**	**123**	**59**	**0**	**0**	**0**	**0**	**208***
Avg. Benefit	**6,310**	**4,826**	**1,658**	**N/A**	**N/A**	**N/A**	**N/A**	**4,113**

* *Excludes 3 alternate payees of a member due to divorce decree or child support.*

Membership Data

Distribution of Survivors

	Years Since Death as of June 30, 2008							
Age	**<1**	**1 – 4**	**5 - 9**	**10 - 14**	**15 – 19**	**20 - 24**	**25 +**	**Total**
<45		1	1					**2**
Avg. Benefit		10,646	192					**5,419**
45 – 49		1						**1**
Avg. Benefit		2,061						**2,061**
50 – 54	1	1	2					**4**
Avg. Benefit	3,129	3,214	1,005					**2,089**
55 – 59	1	1	1					**3**
Avg. Benefit	6,710	8,118	3,169					**5,999**
60 – 64		1	2					**3**
Avg. Benefit		6,396	13,188					**10,924**
65 – 69		1	1					**2**
Avg. Benefit		457	1,122					**789**
70 – 74								**0**
Avg. Benefit								**N/A**
75 – 79								**0**
Avg. Benefit								**N/A**
80 – 84								**0**
Avg. Benefit								**N/A**
85 – 89								**0**
Avg. Benefit								**N/A**
90+								**0**
Avg. Benefit								**N/A**
Total	**2**	**6**	**7**	**0**	**0**	**0**	**0**	**15**
Avg. Benefit	**4,920**	**5,149**	**4,696**	**N/A**	**N/A**	**N/A**	**N/A**	**4,906**

Membership Data

Distribution of Disability Retirements

	Years Disabled as of June 30, 2008							
Age	**<1**	**1 – 4**	**5 - 9**	**10 - 14**	**15 – 19**	**20 - 24**	**25 +**	**Total**
<45	1	8	1					**10**
Avg. Benefit	24,084	14,262	22,654					**16,084**
45 – 49	1	5	4					**10**
Avg. Benefit	26,830	14,372	24,575					**19,699**
50 – 54	1	10	8					**19**
Avg. Benefit	8,668	17,086	14,624					**15,606**
55 – 59	1	22	9					**32**
Avg. Benefit	18,240	14,359	17,482					**15,358**
60 – 64	1	10	9					**20**
Avg. Benefit	6,058	12,953	17,568					**14,685**
65 – 69		1						**1**
Avg. Benefit		7,000						**7,000**
70 – 74								**0**
Avg. Benefit								**N/A**
75 – 79								**0**
Avg. Benefit								**N/A**
80 – 84								**0**
Avg. Benefit								**N/A**
85+								**0**
Avg. Benefit								**N/A**
Total	**5**	**56**	**31**	**0**	**0**	**0**	**0**	**92**
Avg. Benefit	**16,776**	**14,451**	**17,851**	**N/A**	**N/A**	**N/A**	**N/A**	**15,723**

Membership Data

Reconciliation of Members*

		Terminated		Recipients			
	Actives	Deferred Retirement	Other Non-vested	Service Retirements	Disability Retirements	Survivors	Total
Members on 7/1/2007	**3,566**	**1,337**	**1,291**	**175**	**87**	**13**	**6,469**
New entrants	595	0	0	0	0	0	**595**
Return to active	25	(16)	(9)	0	0	0	**0**
Terminated non-vested	(210)	0	237	0	0	0	**27**
Service retirements	(28)	(6)	0	36	(3)	0	**(1)**
Terminated deferred	(157)	211	0	0	0	0	**54**
Terminated refund	(73)	(2)	(44)	0	0	0	**(119)**
Deaths	(1)	(3)	(2)	0	(1)	0	**(7)**
New beneficiary	0	0	0	0	0	2	**2**
Disabled	(7)	(1)	0	0	9	0	**1**
Data correction	0	0	0	0	0	0	**0**
Net change	144	183	182	36	5	2	**552**
Members on 6/30/2008	**3,710**	**1,520**	**1,473**	**211**	**92**	**15**	**7,021**

** Provided by PERA 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						$	192,937
B. Expected future assets							
1. Present value of expected future statutory supplemental contributions						$	46,155
2. Present value of future normal cost contributions							158,463
3. Total present value of future contributions *(1. + 2.)*						$	204,618
C. Total current and expected future assets						$	397,555
D. Current benefit obligations							
1. Benefit recipients		Non-Vested		Vested			Total
a. Service requirements	$	0	$	9,613		$	9,613
b. Disability		0		16,940			16,940
c. Survivors		0		752			752
2. Deferred retirements with augmentation		0		26,887			26,887
3. Former members without vested rights		0		1,683			1,683
4. Active Members		6,922		118,804			125,726
5. Total Current Benefit Obligations	$	6,922	$	174,679		$	181,601
E. Expected Future Benefit Obligations							169,434
F. Total Current and Expected Future Benefit Obligations						$	351,035
G. Unfunded Current Benefit Obligations *(D.5. – A.)*						$	(11,336)
H. Unfunded Current and Future Current Benefit Obligations *(F. – C.)*						$	(46,520)

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	$ 211,481	$ 100,578	$ 110,903
b. Disability benefits	31,053	21,149	9,904
c. Survivor's benefits	9,214	5,035	4,179
d. Deferred retirements	43,412	31,701	11,711
e. Total	$ 295,160	$ 158,463	$ 136,697
2. Deferred retirements with future augmentation	26,887	0	26,887
3. Former members without vested rights	1,683	0	1,683
4. Annuitants in MPRIF	10,279	0	10,279
5. Recipients not in MPRIF	17,026	0	17,026
6. Total	$ 351,035	$ 158,463	$ 192,572
B. Determination of Unfunded Actuarial Accrued Liability (UAAL)			
1. Actuarial accrued liability			$ 192,572
2. Current assets (AVA)			192,937
3. Unfunded actuarial accrued liability			$ (365)
C. Determination of Supplemental Contribution Rate			
1. Present value of future payrolls through the amortization date of July 1, 2023 (30 years if surplus assets)			$ 2,876,612
2. Supplemental contribution rate *(B.3. / C.1.)*			(0.01%)

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	$	2,621
B. Changes due to interest requirements and current rate of funding		
1. Normal cost and actual administrative expenses	$	18,198
2. Contributions		(22,310)
3. Interest on A., B.1. and B.2.		48
4. Total *(B.1. + B.2.+ B.3.)*	$	(4,064)
C. Expected unfunded actuarial accrued liability at end of year *(A. + B.4.)*	$	(1,443)
D. Increase (decrease) due to actuarial losses (gains) because of experience deviations from expected		
1. Salary increases	$	(341)
2. Investment return		311
3. MPRIF Mortality		(399)
4. Mortality of other benefit recipients		18
5. Other items		1,489
6. Total	$	1,078
E. Unfunded actuarial accrued liability at end of year before plan amendments and changes in actuarial assumptions *(C. + D.6.)*	$	(365)
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.)*	$	(365)

Development of Costs

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

	Percent of Payroll		Dollar Amount
A. Statutory contributions – Chapter 353E			
1. Employee contributions	5.83%	$	9,558
2. Employer contributions	8.75%		14,344
3. Total	14.58%	$	23,902
B. Required contributions – Chapter 356			
1. Normal cost			
a. Retirement benefits	8.69%	$	14,249
b. Disability benefits	1.92%		3,145
c. Survivors	0.39%		642
d. Deferred retirement benefits	2.37%		3,882
e. Total	13.37%	$	21,918
2. Supplemental contribution amortization by July 1, 2023 of Unfunded Actuarial Accrued Liability			
a. Due to unfunded MPRIF liability	0.08%	$	1,311
b. Due to unfunded non-MPRIF liability	(0.09%)		(1,327)
c. Total supplemental contribution amortization	(0.01%)	$	(16)
3. Allowance for expenses	0.14%	$	229
4. Total	13.50%	$	22,131
C. Contribution Sufficiency/(Deficiency) *(A.3. – B.4.)*	1.08%	$	1,771

Note: Projected annual payroll for fiscal year beginning on the valuation date: $163,937.

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.

Actuarial Basis

Asset Valuation Method

MPRIF Reserve: Market Value

Non-MPRIF Assets: The assets are valued based on a five-year moving average of expected and market values (five-year average actuarial value) determined as follows:

- At the end of each plan year, an average asset value is calculated as the average of the market asset value at the beginning and end of the fiscal year net of investment income for the fiscal year;
- The investment gain or (loss) is taken as the excess of actual investment income over the expected investment income based on the average asset value as calculated above;
- The investment gain or (loss) so determined is recognized over five years at 20% per year;
- The asset value is the sum of the expected asset value plus the scheduled recognition of investment gains or (losses) during the current and the preceding four plan years.

Payment on the Unfunded Actuarial Accrued Liability

A level percentage of payroll each year to the statutory amortization date of July 1, 2023 assuming payroll increases of 4.50% per annum (6.00% last year). If there is a negative Unfunded Actuarial Accrued Liability, the surplus amount shall be amortized over 30 years as a level percentage of payroll.

Actuarial Basis

Summary of Actuarial Assumptions

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

Investment return:	8.5% compounded annually per-retirement. 6.0% compounded annually post-retirement.
Benefit increases after retirement	Payment of benefit increases after retirement accounted for by using a 6.0% post-retirement assumption.
Salary increases	Reported salary at valuation date increased according to the rate table to current fiscal year and annually for each future year. Prior fiscal year salary is annualized for new members.
Mortality rates	
Healthy Pre-retirement	1983 Group Annuity Mortality for males set back one year 1983 Group Annuity Mortality for females
Healthy Post-retirement	1983 Group Annuity Mortality for males set forward two years 1983 Group Annuity Mortality for females set forward two years
Disabled	Combined Annuity Mortality
Retirement	Age related table as follows: Ages: 50-53 2.0% 54 5.0% 55 25.0% 56-59 10.0% 60-61 20.0% 62-64 40.0% 65-69 50.0% 70 & over 100.0%
Withdrawal	Graded rates based on actual experience of the Local Government Service Retirement Fund. Rates are shown in rate table.
Disability	Rates are shown in rate table.
Allowance for Combined Service Annuity	Liabilities for former members are increased by 30.00% to account for the effect of some participants having eligibility for a Combined Service Annuity.
Administrative expenses	Prior year administrative expenses expressed as percentage of prior year payroll.
Refund of contributions	All employees withdrawing after becoming eligible for a deferred benefit take the larger of their contributions accumulated with interest or the value of their deferred benefit.
Percentage married	85% of members are assumed to be married.
Age of spouse	Female members are assumed to be three years younger than males.

Actuarial Basis

Summary of Actuarial Assumptions *(continued)*

Form of payment	Married members assumed to elect subsidized joint and survivor form of annuity as follows: Males: 25.0% elect 50% J&S option 25.0% elect 100% J&S option Females: 5.0% elect 50% J&S option 5.0% elect 100% J&S option
Changes in actuarial assumptions	The following assumption changes were recognized as of July 1, 2008: ▪ Payroll growth assumption changed from 6.0% to 4.5%.

Actuarial Basis

Summary of Actuarial Assumptions *(continued)*

Summary of Rates

	Rate (%)					
	Pre-Retirement Mortality		Ultimate Withdrawal		Disability	Salary Increase
Age	Male	Female	Male	Female		
20	0.04%	0.02%	24.00%	16.00%	0.04%	7.25%
25	0.04	0.03	14.70	14.20	0.06	7.00
30	0.06	0.03	9.10	13.50	0.08	7.00
35	0.08	0.05	6.00	12.90	0.11	7.00
40	0.11	0.07	4.40	10.40	0.18	6.50
45	0.19	0.10	3.40	6.40	0.29	5.75
50	0.35	0.16	2.40	4.70	0.50	5.50
55	0.57	0.25	1.40	3.30	0.88	5.25
60	0.84	0.42	0.00	0.00	1.41	5.25
65	1.29	0.71	0.00	0.00	0.00	5.25
70	2.48	1.24	0.00	0.00	0.00	5.25

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.

Plan year	Effective July 1, 1999
Eligibility	Local government employees in covered correctional service for a county-administered jail or correctional facility or in a regional correctional facility administered by multiple counties, who are directly responsible for security, custody and control of persons confined in jail or facility, who are expected to respond to incidents within the jail or facility, and who are not members of the Public Employees Police and Fire Fund.
Contributions	Shown as a percent of salary: Member: 5.83% of salary. Employer 8.75% of salary.
Allowable service	Local Government Correctional Service during which member contributions were made. May also include certain leaves of absence, military service and periods while temporary Worker's Compensation is paid.
Salary	Includes wages, allowances and fees: Excludes lump sum payments at separation and reduced salary while receiving Worker's Compensation benefits.
Average salary	Average of the five highest successive years of salary. Average Salary is based on all Allowable Service if less than five years.
Retirement	
Normal retirement benefit	
Age/Service requirements	Age 55 and three years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.
Amount	1.9% of Average Salary for each year of Allowable Service, pro rata for completed months.
Early retirement	
Age/Service requirements	Age 50 and three years of Allowable Service.
Amount	Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date with actuarial reduction to commencement age assuming 3% augmentation to age 55.
Form of payment	Life annuity. Actuarially equivalent options are: 25%, 50%, 75% or 100% Joint and Survivor with bounce back feature without additional reduction.

Actuarial Basis

Summary of Plan Provisions *(continued)*

Retirement *(continued)*	
Benefit increases	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. A benefit recipient who has been receiving a benefit for at least 12 full months as of June 30 will receive a full increase. Members receiving benefits for at least one full month but less than 12 full months will receive a pro rata increase.
Disability	
Duty disability	
Age/service requirement	Member who cannot perform his duties as a direct result of a disability relating to an act of duty specific to protecting the property and personal safety of others.
Amount	47.50% of Average Salary plus 1.90% of Average Salary for each year in excess of 25 years of Allowable Service (pro rata for completed months). Payment begins at disability and ends at age 65 or earlier if disability ceases or death occurs. Benefits may be paid upon re-employment but salary plus benefit cannot exceed current salary of position held at time of disability.
Regular disability	
Age/service requirement	At least one year of Allowable Service and a disability preventing member from performing normal duties that arise out of activities not related to covered employment or while at work, activities related to duties that do not present inherent dangers specific to occupation.
Amount	Normal Retirement Benefit based on Allowable Service (minimum of 10 years) and Average Salary at disability. Payment begins at disability and ends at age 65 or earlier if disability ceases or death occurs. Benefits may be paid upon re-employment but salary plus benefit cannot exceed current salary of position held at time of disability.

Actuarial Basis

Summary of Plan Provisions *(continued)*

Disability *(continued)*	
Retirement benefit	
Age/service requirement	Age 65 with continued disability.
Amount	Any optional annuity continues. Otherwise, the larger of the disability benefit paid before age 65 or the normal retirement benefit available at age 65, or an actuarially equivalent optional annuity.
Form of payment	Same as for retirement.
Benefit increases	Same as for retirement.
Death	
Surviving spouse benefit	
Age/service requirement	Member at any age or former member age 50 or older who dies before retirement or disability benefit commences with three years of Allowable Service. If an active member dies, benefits may commence immediately, regardless of age.
Amount	Surviving spouse receives the 100% joint and survivor benefit using the Normal Retirement formula above. If commencement is prior to age 50, the appropriate early retirement formula described above applies except that one-half the monthly reduction factor is used from age 50 to the commencement age. In lieu of this benefit, the surviving spouse may elect a refund of contributions with interest or an actuarially equivalent term certain annuity (lump sum payable to estate at death).
Benefit increases	Adjusted by PERA to provide same income as MPRIF.
Surviving dependent children's benefit	
Age/service requirement	If no surviving spouse, all dependent children (biological or adopted) below age 20 who are dependent for more than half of their support on deceased member.
Amount	Actuarially equivalent to surviving spouse 100% joint and survivor annuity payable to the later of age 20 or five years. The amount is to be proportionally divided among surviving children.
Refund of contributions	
Age/service requirement	Active employee dies and survivor benefits are not payable or a former employee dies before annuity begins. If accumulated contributions with interest exceed total payments to the surviving spouse and children, then the remainder is paid out.
Amount	The member's contributions with 6.00% interest.

Actuarial Basis

Summary of Plan Provisions *(continued)*

Termination	
<u>*Refund of contributions*</u>	
Age/service requirement	Termination of local government service.
Amount	Member's contributions with 6.00% interest compounded annually. A deferred annuity may be elected in lieu of a refund if three or more years of Allowable Service.
<u>*Deferred benefit*</u>	
Age/service requirement	Three years of Allowable Service.
Amount	Benefit computed under law in effect at termination and increased by 3.00% compounded annually until January 1 of the year following attainment of age 55 and 5.00% (2.50% if hired after June 30, 2006) thereafter until the annuity begins.
Changes in Plan Provisions	<u>Revised Minnesota Post Retirement Investment Fund Benefit Increase</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. <u>Potential Dissolution of Minnesota Post Fund</u> 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, not withstanding any other law, the benefit recipients will receive an annual 2.5 percent increase in lieu of any other benefit increase. By November 30 following the dissolution of the Post Fund, the executive directors of the applicable plans must propose legislation needed to revise statutes to conform to the dissolved Post Fund.

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 Progress *(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)
07/01/2000	$ 11,116	$ 10,195	$ (921)	109.03%	$ 70,690	(1.30%)
07/01/2001	25,014	25,453	439	98.28%	91,025	0.48%
07/01/2002	40,105	42,144	2,039	95.16%	101,309	2.01%
07/01/2003	56,487	62,542	6,055	90.32%	110,296	5.49%
07/01/2004	75,515	85,693	10,178	88.12%	109,600	9.29%
07/01/2005	98,156	108,926	10,770	90.11%	116,849	9.22%
07/01/2006	125,776	133,306	7,530	94.35%	125,189	6.01%
07/01/2007	159,548	162,169	2,621	98.38%	134,117	1.95%
07/01/2008	192,937	192,572	(365)	100.19%	154,202	(0.24%)

* *Data prior to 2008 provided by The Segal Company.*

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

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

The GASB Statement No. 25 (as amended by GASB 50) required and actual contributions are as follows:

Plan Year Ended June 30	Actuarially Required Contribution Rate[1] (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)
2000	15.03%	$ 70,690	$ 4,382	$ 6,243	$ 6,487	103.91%
2001[3]	14.36%	91,025	5,308	7,763	8,054	103.75%
2002	14.21%	101,309	5,882	8,514	8,830	103.71%
2003[4]	14.10%	110,296	6,430	9,122	9,645	105.74%
2004	14.15%	109,600	6,672	8,837	10,029	113.50%
2005	13.06%	116,849	7,192	8,068	10,814	134.03%
2006	13.09%	125,189	7,881	8,507	11,826	139.02%
2007	12.71%	134,117	8,335	8,712	12,499	143.48%
2008[5]	12.37%	154,202	8,922	10,153	13,388	131.87%
2009	13.50%					

* *Data prior to 2008 provided by The Segal Company.*

[1] *Actuarially Required Contributions calculated according to parameters of GASB 25 with no assumption for growth of covered population.*
[2] *Includes contributions from other sources (if applicable).*
[3] *Actuarially Required Contributions Rate prior to change in Asset Valuation Method is 14.38%.*
[4] *Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 14.08%.*
[5] *Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 12.33%.*

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.