December 2009

Judges Retirement Fund

Actuarial Valuation Report as of July 1, 2009

MERCER

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Contents

Highlights

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

- Present the results of a valuation of the Judges Retirement Fund as of July 1, 2009.
- Review experience under the Plan for the year ended June 30, 2009.
- 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.

	Actuarial Valuation as of	
Contributions	**July 1, 2009**	**July 1, 2008***
Statutory Contributions – Chapter 490 (% of Payroll)	27.80%	27.88%
Required Contributions – Chapter 356 (% of Payroll)	31.53%	30.33%
Sufficiency / (Deficiency)	(3.73%)	(2.45%)

* *2008 results revised as per our December 9, 2009 letter to MSRS' Executive Director.*

The contribution deficiency increased from (2.45%) of payroll to (3.73%) of payroll. On a market value of assets basis, the plan moved from a deficiency of (2.67%) of payroll to a deficiency of (8.50%) of payroll. The primary reasons for the increased deficiency are the less than expected return on assets and the impact of insufficient contribution rates.

Without a change in contribution rates, or favorable actuarial experience, the funded status will continue to deteriorate.

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 (18.3%) for the plan year ending June 30, 2009. **Only 20% of the asset loss will be recognized in the actuarial value of assets. The reminder will be recognized over the next four years.** The actuarial value of assets earned 3.2% for the plan year ending June 30, 2009 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 actuarial assumptions since the July 1, 2008 valuation. Changes in valuation methods and plan provisions are reflected in this report and summarized in the Actuarial Basis section.

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, 2009	**July 1, 2008***
Contributions *(% of Payroll)*		
Statutory – Chapter 490**	27.80%	27.88%
Required – Chapter 356	31.53%	30.33%
Sufficiency / (Deficiency)	(3.73%)	(2.45%)
Funding Ratios *(dollars in thousands)*		
Accrued Benefit Funding Ratio		
– Current assets (AVA)	$ 147,120	$ 147,542
– Current benefit obligation	232,413	222,380
– Funding ratio	63.30%	66.35%
Accrued Liability Funding Ratio		
– Current assets (AVA)	$ 147,120	$ 147,542
– Current assets (MVA)	114,690	146,088
– Actuarial accrued liability	241,815	231,623
– Funding ratio (AVA)	60.84%	63.70%
– Funding ratio (MVA)	47.43%	63.07%
Projected Benefit Funding Ratio		
– Current and expected future assets	$ 265,193	$ 263,823
– Current and expected future benefit obligations	290,586	280,007
– Funding ratio	91.26%	94.22%
Participant Data		
Active members		
– Number	312	308
– Projected annual earnings *(000s)*	$ 41,644	$ 39,828
– Average annual earnings *(projected)*	$ 133,474	$ 129,312
– Average age	56.9	56.4
– Average service	11.1	10.9
Service retirements	162	181
Survivors	96	89
Disability retirements	27	9
Deferred retirements	20	19
Terminated other non-vested	0	0
Total	**617**	**606**

* *2008 results revised as per our December 9, 2009 letter to MSRS' Executive Director.*

** *Statutory contributions reflect the fact that employee contributions for Judges at the maximum benefit level are directed to the Unclassified Plan.*

Effects of Changes

The following changes in plan provisions and methods were recognized as of July 1, 2009:

Dissolution of Minnesota Post Retirement Investment Fund (MPRIF)

Since the MPRIF composite funding ratio was less than 80 percent as of June 30, 2008, the MPRIF was dissolved, and assets were transferred back to MSRS and merged with the respective active member fund. The transfer of assets and liabilities occurred on June 30, 2009.

In conjunction with the dissolution, benefit recipients will receive future annual 2.5% cost-of-living adjustments (COLA).

The waiting period and proration schedule for the COLA paid in the first year of retirement were also revised.

The MPRIF dissolution and COLA changes did not have an impact on the valuation results.

Asset Method

For the purpose of determining the actuarial value of assets, the MPRIF asset loss for the fiscal year ending June 30, 2009 is recognized incrementally over five years at 20% per year, similar to the smoothing of active fund assets. Prior to June 30, 2009, MPRIF asset gains and losses were not smoothed.

The change in the actuarial asset method for MPRIF assets reduced the required contribution by 0.93% of pay.

Certification

Mercer has prepared this report exclusively for Board of Directors of the Minnesota State Retirement System Retirement Fund and the Legislative Commission on Pensions and Retirement (LCPR) for the following purposes:

- Present the results of a valuation of the Judges Retirement Fund as of July 1, 2009 as required by Minnesota Statutes, Section 356.215 and the Standards of Actuarial Work established by the State of Minnesota Legislative Commission on Pensions and Retirement
- Review plan experience for the year ended June 30, 2009
- Provide the annual required contribution for the period beginning July 1, 2009
- Provide reporting and disclosure information for financial statements for governmental agencies pursuant to GASB Statements Number 25 (as amended by GASB Number 50) and 27.

This valuation report may not be relied upon for any other purpose or by any party other than the Board of Directors, the LCPR, or the Plan's auditors solely for the purpose of completing an audit related to the matters herein. Mercer is not responsible for the consequences of any unauthorized use.

A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a plan's future financial condition or its 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 the plan pays, the number of people paid benefits, plan expenses and the amount earned on any assets invested to pay the benefits. These amounts and other variables 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 in the Actuarial Basis section, are used to select a single scenario from a 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 one valuation to the next because of changes in mandated requirements, plan experience, changes in expectations about the future and other factors. Due to the limited scope of our assignment, we did not perform, nor do we present, an analysis of the potential range of future possibilities and scenarios.

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 and plan provisions

To prepare this report, Mercer has used and relied on financial data submitted by the Minnesota State Retirement System as of June 30, 2009, as well as participant data supplied by the Minnesota State Retirement System as of June 30, 2009. We have reviewed the financial and participant data for internal consistency and general reasonableness, but we have not verified or audited any of the data or information provided. We have also used and relied on the plan documents, including amendments, supplied by the Minnesota State Retirement System. A summary of the plan provisions valued is presented in our report. The Board of Directors are solely responsible for the accuracy, validity and comprehensiveness of this information. If the data or plan provisions supplied are not accurate and complete, the valuation results may differ significantly from the results that would be obtained with accurate and complete information; this may require a later revision of this report.

Certification

Actuarial Calculations, Methods and Assumptions

To the best of our knowledge and belief, this report is complete and accurate and all costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures, in accordance with the requirements of Minnesota Statutes Section 356.215 and the requirements of the Standards of Actuarial Work established by the LCPR. The economic assumptions, including discount rates, are set in Minnesota Statutes, and the remaining assumptions are adopted by the Board of Directors and the LCPR. This valuation is based on assumptions, plan provisions, methods and other parameters as summarized in this report. If this information is inaccurate or incomplete or does not reflect current statutes, regulations or Board directives, the reader of this report should not rely on the valuation results and should notify Mercer promptly. In our opinion, this report fully and fairly discloses the actuarial position of the plan on an ongoing basis.

Professional qualifications

We are available to answer any questions on the material in this report or to provide explanations or further details as appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. In addition, Mr. Dickson meets the requirements of "approved actuary" under Minnesota Statutes, Section 356.215, Subdivision 1, Paragraph (c). 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.

Gary D. Dickson

Gary D. Dickson, FSA, EA, MAAA
Principal

12/11/2009
Date

Bonita J. Wurst

Bonita J. Wurst, ASA, EA, MAAA
Principal

12/11/2009
Date

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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 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, 2009 *(Dollars in Thousands)*

	Market Value	Cost Value
Assets in Trust		
▪ Cash, equivalents, short term securities	$ 2,654	$ 2,654
▪ Fixed income	26,325	26,523
▪ Equity	104,431	114,969
▪ Other	0	0
Total assets in trust	**$ 133,410**	**$ 144,146**
Assets Receivable	306	306
Total Assets	**$ 133,716**	**$ 144,452**
Amounts Payable	(19,026)	(19,026)
Net assets held in trust for pension benefits	**$ 114,690**	**$ 125,426**

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 Retirement System and the Minnesota State Board of Investment, for the Plan's Fiscal Year July 1, 2008 to June 30, 2009.

Change in Assets *(dollars in thousands)*	**Non-MPRIF Assets**	**MPRIF Reserve**	**Market Value**
1. Fund balance at market value at July 1, 2008	$ 45,991	$ 100,097	$ 146,088
2. Contributions			
a. Member	2,978	0	2,978
b. Employer	8,219	0	8,219
c. Other sources	0	0	0
d. Total contributions	$ 11,197	$ 0	$ 11,197
3. Investment income*			
a. Investment income/(loss)	$ (26,123)	$ 0	$ (26,123)
b. Investment expenses	(159)	0	(159)
c. Total investment income/(loss)	$ (26,282)	$	$ (26,282)
4. Other	(1)	0	(1)
5. Total income *(2.d. + 3.c. + 4)*	**$ (15,086)**	**$ 0**	**$ (15,086)**
6. Benefits Paid			
a. Annuity benefits	$ (1,222)	$ (15,039)	$ (16,261)
b. Refunds	0	0	0
c. Total benefits paid	$ (1,222)	$ (15,039)	$ (16,261)
7. Expenses			
a. Other	$ (15)	$ 0	$ (15)
b. Administrative	(36)	0	(36)
c. Total expenses	$ (51)	$ 0	$ (51)
8. Total disbursements *(6.c. + 7.c.)*	**$ (1,273)**	**$ (15,039)**	**$ (16,312)**
9. Other changes in reserves			
a. Annuities awarded	$ (3,330)	$ 3,330	$ 0
b. Transfer between reserves	86,103	(86,103)	0
c. Mortality gain/(loss) not transferred	2,285	(2,285)	0
d. Change in assumptions	0	0	0
e. Total other changes	$ 85,058	$ (85,058)	$ 0
10. Fund balance at market value at June 30, 2009 *(1. + 5. + 8. + 9.e.)*	**$ 114,690**	**$ 0**	**$ 114,690**

* *MPRIF investment income allocated to non-MPRIF assets by Minnesota State Retirement System.*

Plan Assets

Actuarial Asset Value *(Dollars in Thousands)*

				June 30, 2009
1. Market value of assets available for benefits			$	114,690
2. Determination of average balance				
a. Assets available at July 1, 2008				146,088
b. Assets available at June 30, 2009				114,690
c. Net investment income for fiscal year ending June 30, 2009				(26,283)
d. Average balance *[a. + b. – c.] / 2*				143,531
3. Expected return *[8.5% * 2.d.]*				12,200
4. Actual return				(26,283)
5. Current year unrecognized asset return				(38,483)
6. Unrecognized asset returns*				
	Original Amount	**% Not Recognized**		
a. Year ended June 30, 2009	$ (38,483)	80%	$	(30,787)
b. Year ended June 30, 2008	(6,753)	60%		(4,052)
c. Year ended June 30, 2007	4,970	40%		1,988
d. Year ended June 30, 2006	2,105	20%		421
e. Total unrecognized return			$	(32,430)
7. Actuarial value at June 30, 2009 *(1. – 6.e.)*			**$**	**147,120**

**Prior to the year ended June 30, 2009, unrecognized asset returns do not include MPRIF gains or losses.*

Membership Data

Distribution of Active Participants

	Years of Service as of June 30, 2009										
Age	**< 1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30 - 34**	**35 - 39**	**40+**	**Total**
< 25											**0**
Avg. Earnings											**N/A**
25 – 29											**0**
Avg. Earnings											**N/A**
30 – 34											**0**
Avg. Earnings											**N/A**
35 – 39	2	1									**3**
Avg. Earnings	63,159	109,259									**78,526**
40 – 44	2	11	1	1							**15**
Avg. Earnings	71,415	129,864	129,124	129,124							**121,972**
45 – 49	2	24	12	3	2						**43**
Avg. Earnings	72,595	129,908	118,415	129,124	129,124						**123,944**
50 – 54	1	10	21	11	3	1					**47**
Avg. Earnings	108,093	129,124	129,525	132,826	129,124	129,124					**129,722**
55 – 59		19	18	21	15	6					**79**
Avg. Earnings		128,685	130,072	130,542	130,116	128,296					**129,737**
60 – 64	4	8	14	19	21	36					**102**
Avg. Earnings	75,338	131,231	129,124	126,291	130,636	124,570					**125,356**
65 – 69	1		3	7	4	8					**23**
Avg. Earnings	63,561		131,933	129,124	137,164	125,644					**126,828**
70+											**0**
Avg. Earnings											**N/A**
Total	**12**	**73**	**69**	**62**	**45**	**51**	**0**	**0**	**0**	**0**	**312***
Avg. Earnings	**73,945**	**129,338**	**127,753**	**129,393**	**130,875**	**125,266**	**N/A**	**N/A**	**N/A**	**N/A**	**126,424**

* *Includes 25 active Judges at the service cap.*

In each cell, the top number is the count of active participants for the age/service combination and the bottom number is the amount of average annual earnings.

Membership Data

Distribution of Service Retirements

	Years Retired as of June 30, 2009							
Age	**<1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 +**	**Total**
<50								**0**
								N/A
50 – 54								**0**
Avg. Benefit								**N/A**
55 – 59								**0**
Avg. Benefit								**N/A**
60 – 64	1	3						**4**
Avg. Benefit	57,972	44,017						**47,506**
65 – 69	3	25	4					**32**
Avg. Benefit	60,698	62,670	42,140					**59,919**
70 – 74	1	13	24	3				**41**
Avg. Benefit	72,024	56,841	56,000	77,492				**58,230**
75 – 79			11	13	2			**26**
Avg. Benefit			46,377	78,077	58,673			**63,173**
80 – 84				18	14	3		**35**
Avg. Benefit				63,728	75,922	64,496		**68,671**
85+					8	12	4	**24**
Avg. Benefit					72,813	84,291	83,496	**80,333**
Total	**5**	**41**	**39**	**34**	**24**	**15**	**4**	**162**
Avg. Benefit	**62,418**	**59,457**	**51,864**	**70,429**	**73,448**	**80,332**	**83,496**	**64,622**

In each cell, the top number is the count of retired participants for the age/years retired combination and the bottom number is the average annual benefit amount.

Membership Data

Distribution of Disability Retirements

	Years Retired as of June 30, 2009								
Age	**< 1**	**1 – 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30 +**	**Total**
<50									**0**
Avg. Benefit									**N/A**
50 – 54									**0**
Avg. Benefit									**N/A**
55 – 59		2							**2**
Avg. Benefit		45,469							**45,469**
60 – 64		5	2						**7**
Avg. Benefit		62,592	57,300						**61,080**
65 – 69		2	2						**4**
Avg. Benefit		55,459	51,250						**53,354**
70 – 74			4	3					**7**
Avg. Benefit			62,675	99,248					**78,349**
75 – 79					1				**1**
Avg. Benefit					52,482				**52,482**
80 – 84					1	1	1		**3**
Avg. Benefit					107,053	93,960	65,499		**88,838**
85+					1	1	1		**3**
Avg. Benefit					76,756	72,405	127,320		**92,160**
Total	**0**	**9**	**8**	**3**	**3**	**2**	**2**	**0**	**27**
Avg. Benefit	**N/A**	**57,202**	**58,475**	**99,248**	**78,764**	**83,183**	**96,410**	**N/A**	**69,475**

In each cell, the top number is the count of disabled participants for the age/years since disability combination and the bottom number is the average annual benefit amount.

Membership Data

Distribution of Survivors

	Years Since Death of Member as of June 30, 2009							
Age	**<1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 +**	**Total**
<50								**0**
Avg. Benefits								**N/A**
50 – 54	1		2					**3**
Avg. Benefit	52,095		33,021					**39,499**
55 – 59	2	1		2		2		**7**
Avg. Benefit	33,960	59,821		44,260		53,415		**46,156**
60 – 64	3	4	3			2		**12**
Avg. Benefit	41,507	23,282	46,073			62,721		**40,109**
65 – 69	2	3		1		1		**7**
Avg. Benefit	34,524	30,062		43,880		45,650		**35,538**
70 – 74	1			2		1		**4**
Avg. Benefit	56,745			61,900		43,132		**55,920**
75 – 79		3	3	4	1	1		**12**
Avg. Benefit		56,169	48,286	31,416	61,041	22,146		**43,518**
80 – 84		3	6	5	2	1	6	**23**
Avg. Benefit		48,036	30,864	51,069	49,817	51,820	35,205	**41,188**
85+		3	8	3	5	2	7	**28**
Avg. Benefit		44,100	47,770	62,604	41,429	38,845	43,929	**46,236**
Total	**9**	**17**	**22**	**17**	**8**	**10**	**13**	**96**
Avg. Benefit	**41,148**	**40,473**	**41,674**	**48,531**	**45,977**	**47,271**	**39,902**	**43,328**

In each cell, the top number is the count of survivors for the age/years since death combination and the bottom number is the average annual benefit amount.

Membership Data

Reconciliation of Members*

		Terminated		Recipients			
	Actives	Deferred Retirement	Other Non-vested	Service Retirements	Disability Retirements	Survivors	Total
Members on 7/1/2008	**287**	**40**	**0**	**181**	**9**	**89**	**606**
Additions	16	8	0	5	1	11	**41**
Return to active	0	0	0	0	0	0	**0**
Terminated non-vested	0	0	0	0	0	0	**0**
Service retirements	(4)	(1)	0	0	0	0	**(5)**
Terminated deferred	(8)	0	0	0	0	0	**(8)**
Terminated refund	0	0	0	0	0	0	**0**
Deaths	(4)	0	0	(5)	(1)	(2)	**(12)**
Disabled	0	0	0	0	0	0	**0**
Transferred to Fund	0	0	0	0	0	0	**0**
Data correction	0	(2)	0	(19)**	18**	(2)	**(5)**
Net change	0	5	0	(19)	18	7	**11**
Members on 6/30/2009	**287**	**45**	**0**	**162**	**27**	**96**	**617**

* *Provided by MSRS. Twenty-five active Judges at the service cap are included in the Deferred Retirement category.*
** *The data corrections result from MSRS' reclassification of a member's status to a more appropriate category.*

Terminated deferred retirement statistics

- Number 20
- Average age 58.0 years
- Average service 9.7 years
- Average monthly benefit, with augmentation $2,309
  (includes estimated benefits for 5 participants who were reported with $0 benefit)

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 from this fundamental equation; it 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, 2009
A. Actuarial Value of Assets						$	147,120
B. Expected future assets							
1. Present value of expected future statutory supplemental contributions						$	69,302
2. Present value of future normal costs							48,771
3. Total expected future assets *(1. + 2.)*						$	118,073
C. Total current and expected future assets						$	265,193
		Non-Vested		Vested			Total
D. Current benefit obligations							
1. Benefit recipients							
a. Service retirements	$	0	$	86,768		$	86,768
b. Disability		0		15,868			15,868
c. Survivors		0		30,720			30,720
2. Deferred retirements with augmentation		0		4,641			4,641
3. Former members without vested rights		0		0			0
4. Active members		4,631		89,785			94,416
5. Total Current Benefit Obligations	$	4,631	$	227,782		$	232,413
E. Expected Future Benefit Obligations						$	58,173
F. Total Current and Expected Future Benefit Obligations						$	290,586
G. Unfunded Current Benefit Obligations *(D.5. – A.)*						$	85,293
H. Unfunded Current and Future Benefit Obligations *(F. – C.)*						$	25,393

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	$ 139,885	$ 42,325	$ 97,560
b. Disability benefits	5,902	3,072	2,830
c. Survivor's benefits	6,615	3,326	3,289
d. Deferred retirements	0	0	0
e. Refunds	187	48	139
f. Total	$ 152,589	$ 48,771	$ 103,818
2. Deferred retirements with future augmentation	4,641	0	4,641
3. Former members without vested rights	0	0	0
4. Benefit recipients	133,356	0	133,356
5. Total	$ 290,586	$ 48,771	$ 241,815
B. Determination of Unfunded Actuarial Accrued Liability (UAAL)			
1. Actuarial accrued liability			$ 241,815
2. Current assets (AVA)			147,120
3. Unfunded actuarial accrued liability			$ 94,695
C. Determination of Supplemental Contribution Rate			
1. Present value of future payrolls through the amortization date of June 30, 2038			$ 679,594
2. Supplemental Contribution Rate *(B.3. / C.1.)*			13.93%

Development of Costs

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

		Year Ending June 30, 2009
A. Unfunded actuarial accrued liability at beginning of year	$	84,081
B. Changes due to interest requirements and current rate of funding		
1. Normal cost and actual administrative expenses	$	6,993
2. Contributions		(11,197)
3. Interest on A., B.1. and B.2.		6,969
4. Total *(B.1. + B.2. + B.3.)*	$	2,765
C. Expected unfunded actuarial accrued liability at end of year *(A. + B.4.)*	$	86,846
D. Increase (decrease) due to actuarial losses (gains) because of experience deviations from expected		
1. Salary increases	$	(540)
2. Investment return		7,685
3. Mortality of benefit recipients		3,659
4. Other items*		3,377
5. Total	$	14,181
E. Unfunded actuarial accrued liability at end of year before plan amendments and changes in actuarial assumptions *(C. + D.6.)*	$	101,027
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. Change in unfunded actuarial accrued liability due to changes in asset methods	$	(6,332)
I. Unfunded actuarial accrued liability at end of year *(E. + F. + G.+ H.)*	$	94,695

* *Approximately $1.5 million of the liability gain is due to data corrections that changed 17 benefit recipients from retired to disabled status.*

Development of Costs

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

	Percent of Payroll		Dollar Amount
A. Statutory contributions – Chapter 490			
1. Employee contributions*	7.30%	$	3,039
2. Employer contributions	20.50%		8,537
3. Total	27.80%	$	11,576
B. Required contributions – Chapter 356			
1. Normal cost			
a. Retirement benefits	15.18%	$	6,321
b. Disability benefits	1.10%		457
c. Survivors	1.23%		511
d. Deferred retirement benefits	0.00%		0
e. Refunds due to death or withdrawal	0.01%		6
f. Total	17.52%	$	7,295
2. Supplemental contribution amortization by July 1, 2038 of Unfunded Actuarial Accrued Liability	13.93%		5,801
3. Allowance for expenses	0.08%	$	33
4. Total	31.53%	$	13,129
C. Contribution Sufficiency/(Deficiency) *(A.3. – B.4.)*	(3.73%)	$	(1,553)

Note: Projected annual payroll for fiscal year beginning on the valuation date: $41,644.

* *For Judges who have reached the maximum benefit amount, employee contributions equal to 8% of pay are directed to the Unclassified Plan. The employee contribution amount shown is based on a total payroll of $37,987, which excludes the payroll for Judges at the maximum level.*

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 member's 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 date of retirement termination, disability or death.

At any given date, a liability is calculated equal to the contributions which would have been accumulated if this method of funding had always been used, the current plan provisions had always been in place, and all assumptions had been precisely accurate. The difference between this liability and the assets (if any) which are held in the fund is the unfunded liability. The unfunded liability is typically funded over a chosen period in accordance with the amortization schedule.

A detailed description of the calculation follows:

The normal cost for each active member under the assumed retirement age is determined by applying to eamings 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 members' 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 members, 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 costs.
- 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

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 market asset value plus the scheduled recognition of investment gains or (losses) during the current and the preceding four plan years.

For the purpose of determining the actuarial value of assets, the MPRIF asset loss for the fiscal year ending June 30, 2009 is recognized incrementally over five years at 20% per year, similar to the smoothing of active fund assets. Prior to June 30, 2009, MPRIF asset gains and losses were not smoothed.

Payment on the Unfunded Actuarial Accrued Liability

A level percentage of payroll each year to the statutory amortization date of June 30, 2038 assuming payroll increases of 4.00% per annum. If there is a negative Unfunded Actuarial Accrued Liability, the surplus amount shall be amortized over 30 years as a level percentage of payroll.

Funding Objective

The fundamental financing objective of the fund is to establish contribution rates which, when expressed as a percentage of active member payroll, will remain approximately level from generation to generation and meet the required deadline for full funding.

Benefits included or excluded

To the best of our knowledge, all material benefits have been included in the liability.

IRC Section 415(b): The limitations of Internal Revenue Code Section 415(b) have been incorporated into our calculations. Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2009, the limit is $195,000.

IRC Section 401(a)17: The limitations of Internal Revenue Code Section 401(a)(17) have been incorporated into our calculations. Compensation for any 12-month period used to determine accrued benefits may not exceed the limits in IRC Section 401(a)(17) for the calendar year in which the 12-month period begins. This limit is indexed annually. For 2009, the limit is $245,000.

Actuarial Basis

Summary of Actuarial Assumptions

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

Investment return:	6.0% compounded annually post-retirement. 8.5% compounded annually pre-retirement.		
Benefit increases after retirement	Payment of 2.5% annual benefit increases after retirement accounted for by using a 6.00% post-retirement assumption, as required by statute.		
Salary increases	4.00% annually.		
Mortality rates			
Healthy Pre-retirement	1983 Group Annuity Mortality for males set back four years 1983 Group Annuity Mortality for females set back two years		
Healthy Post-retirement	RP-2000 Combined Annuity Mortality, projected 8 years, with no collar adjustment		
Disabled	Combined Annuity Mortality.		
Retirement	The percentages of retirements for eligible members assumed to retire at each age are:		
	Ages:	62-63	10%
		64	5%
		65-67	20%
		68-69	30%
		70 & over	100%
Withdrawal	None.		
Disability	Rates based on actual experience, as 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.		
Percentage married	Marital status as indicated by data.		
Age of spouse	Female are assumed to be three years younger than males.		
Changes in actuarial assumptions	No assumption changes were recognized as of July 1, 2009.		

Actuarial Basis

Summary of Actuarial Assumptions *(continued)*

Summary of Rates

	Rate (%)					
	Pre-retirement Mortality		Post-retirement Mortality		Disability	
Age	Male	Female	Male	Female	Male	Female
20	0.03%	0.02%	0.03%	0.02%	0.00%	0.00%
25	0.04	0.02	0.03	0.02	0.00	0.00
30	0.05	0.03	0.04	0.02	0.02	0.00
35	0.06	0.04	0.07	0.04	0.02	0.01
40	0.09	0.06	0.10	0.06	0.02	0.02
45	0.14	0.08	0.14	0.10	0.03	0.05
50	0.25	0.14	0.18	0.15	0.14	0.10
55	0.43	0.21	0.31	0.25	0.34	0.24
60	0.66	0.34	0.59	0.49	0.76	0.62
65	1.01	0.58	1.14	0.93	0.00	0.00
70	1.76	0.97	1.97	1.61	0.00	0.00

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	July 1 through June 30
Eligibility	A judge or justice of any court. If the member was active prior to January 1, 1974, benefits may be computed according to provisions of the prior plan.
Contributions	
Member	8.00% of salary (8.15% if Basic Member). Contributions after maximum benefit is reached are redirected to the Unclassified Plan.
Employer	20.50% of salary.
	Employee contributions are "picked up" according to the provisions of Internal Revenue Code 414(h).
Allowable service	Service as a judge. Half credit is received for service not compensated at an annual salary or for service while entitled to practice law. Credit may also be earned for uncredited judicial service if the appropriate employee contributions, with interest, are made.
Salary	Salary set by law.
Average salary	Average of the five highest years of salary of the last 10 years prior to retirement.
Retirement	
Normal retirement benefit	
Age/Service requirements	(a.) Age 65 and five years of Allowable Service.
	(b.) Age 70.
Amount	2.70% of Average Salary for each year of Allowable Service prior to July 1, 1980 and 3.20% of Average Salary for each year of Allowable Service after June 30, 1980.
	Maximum benefit of 76.80% of Average Salary.

Actuarial Basis

Summary of Plan Provisions *(continued)*

Retirement *(continued)*	
Early retirement benefit	
Age/Service requirements	Age 62 and five years of Allowable Service.
Amount	Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date with reduction of 0.50% for each month the member is under age 65 at time of retirement.
Form of payment	Life annuity. Actuarially equivalent options are: (a.) 50%, 75% or 100% joint and survivor with no bounce back feature (b.) 50%, 75% or 100% bounce back feature (c.) 10 or 15-year certain and life thereafter
Benefit increases	Benefit recipients will receive future annual 2.5% cost-of-living adjustments. A benefit recipient who has been receiving a benefit for at least 12 full months as of December 31 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	
Disability benefit	
Age/service requirement	Permanent inability to perform the function of judge.
Amount	No benefit is paid by the Fund. Instead salary is continued for one year but not beyond age 70. Employee contributions continue and Allowable Service is earned. If disability continues after the first year (or at age 70 if earlier), the larger of 25.00% of Average Salary or the Normal Retirement Benefit, without reduction.
Retirement after disability	
Age/service requirement	Member is still disabled after salary payments cease after one year or at age 70, if earlier.
Amount	No change in disability benefit amount from pre-retirement computed benefit amount.
Form of payment	Same as for retirement.
Benefit increases	Same as for retirement.

Actuarial Basis

Summary of Plan Provisions *(continued)*

Death	
<u>*Survivor's benefit*</u>	
Age/service requirement	Active or disabled member dies before retirement or a former member eligible for a deferred annuity dies.
Amount	Larger of 25% of Average Salary or 60% of Normal Retirement Benefit had the member retired at date of death. Benefit paid to spouse for life. If no spouse, benefit is paid to surviving dependent children until child marries, dies, or attains age 18 (age 22 if full-time student).
Benefit increases	Same as for retirement.
<u>*Prior survivor's benefit*</u>	
Age/service requirement	Retired member dies who did not elect an optional annuity and such member retired prior to January 1, 1974 and continued contributing 4.00% of pay to provide this post-retirement death benefit.
Amount	50% of retired member's benefit continues to the surviving spouse if married three years. Benefit begins immediately unless spouse is not yet age 40 and continues to death.
Benefit Increases	Same as for retirement.
<u>*Refund of contributions*</u>	
Age/service requirement	Member dies prior to retirement or former member eligible for a deferred annuity dies and survivors' benefits are not payable.
Amount	Member's contributions with 5.00% interest.

Actuarial Basis

Summary of Plan Provisions *(continued)*

Termination	
Refund of contributions	
Age/service requirement	Termination of service as a judge.
Amount	Member's contributions with 5.00% interest. A deferred annuity may be elected in lieu of a refund.
Deferred benefit	
Age/service requirement	Five years of Allowable Service.
Amount	Benefit computed under law in effect at termination. Amount is payable as a normal or early retirement annuity. 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 5.00% to 6.00%.
Form of Payment	Same as for retirement.
Changes in plan provisions	The following changes in plan provisions are reflected in this valuation: Dissolution of Minnesota Post Retirement Investment Fund (MPRIF) Since the MPRIF composite funding ratio was less than 80 percent as of June 30, 2008, the MPRIF was dissolved, and assets were transferred back to MSRS and merged with the respective active member fund. The transfer of assets and liabilities occurred on June 30, 2009. In conjunction with the dissolution, benefit recipients will receive future annual 2.5% cost-of-living adjustments (COLA). The waiting period and proration schedule for the COLA paid in the first year of retirement were also revised.

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[1] *(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	$ 33,559	$ 78,429	$ 44,870	42.79%	$ 18,410	243.73%
07/01/1992	37,768	83,969	46,201	44.98%	22,765	202.95%
07/01/1993	44,156	90,509	46,353	48.79%	22,084	209.89%
07/01/1994	50,428	98,313	47,885	51.29%	22,264	215.08%
07/01/1995	56,813	102,238	45,425	55.57%	22,877	198.56%
07/01/1996	64,851	108,150	43,299	59.96%	22,421	193.12%
07/01/1997	74,681	117,714	43,033	63.44%	22,909	187.84%
07/01/1998	86,578	130,727	44,149	66.23%	24,965	176.84%
07/01/1999	97,692	139,649	41,957	69.96%	32,940	127.37%
07/01/2000	111,113	153,660	42,547	72.31%	26,315	161.68%
07/01/2001	123,589	165,244	41,655	74.79%	28,246	147.47%
07/01/2002	131,379	171,921	40,542	76.42%	31,078	130.45%
07/01/2003	134,142	176,291	42,149	76.09%	33,771	124.81%
07/01/2004	138,948	190,338	51,390	73.00%	34,683	148.17%
07/01/2005	144,465	191,414	46,949	75.47%	35,941	130.63%
07/01/2006	151,850	202,301	50,451	75.06%	36,529	138.11%
07/01/2007	153,562	214,297	60,735	71.66%	36,195	167.80%
07/01/2008	147,542	231,623	84,081	63.70%	38,296	219.56%
07/01/2009	147,120	241,815	94,695	60.84%	39,444	240.07%

[1] *Information 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[1]

(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 (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	23.59%	$ 18,410	$ 799	$ 3,544	$ 0	0.00%
1992	25.10%	22,765	988	4,726	4,722	99.92%
1993	26.59%	22,084	1,409	4,463	4,845	108.56%
1994	26.29%	22,264	1,416	4,437	4,912	110.71%
1995	28.27%	22,877	1,455	5,012	5,162	102.99%
1996	27.32%	22,421	1,426	4,699	4,972	105.81%
1997	27.01%	22,909	1,457	4,731	6,632	140.18%
1998	27.60%	24,965	1,570	5,320	7,129	134.00%
1999	27.32%	32,940	2,069	6,930	7,051	101.75%
2000	26.75%	26,315	2,107	4,932	7,298	147.97%
2001[3]	24.58%	28,246	2,162	4,781	7,793	163.00%
2002	26.72%	31,078	2,345	5,959	8,369	140.44%
2003[4]	26.82%	33,771	2,574	6,483	6,923	106.79%
2004	26.73%	34,683	2,643	6,628	7,110	107.27%
2005	29.42%	35,941	2,662	7,912	7,225	91.32%
2006	29.14%	36,529	2,866	7,779	7,336	94.30%
2007	30.73%	36,195	2,792	8,331	7,572	90.88%
2008[5]	33.70%	38,296	2,861	10,045	7,936	79.00%
2009[6,7]	30.33%	39,444	2,978	8,985	8,219	91.47%
2010[8]	31.53%					

[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 plan provisions and Asset Valuation Method is 26.81%.*
[4] *Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 26.75%.*
[5] *Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 31.61%.*
[6] *Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 38.78%..*
[7] *2008 results revised as per our December 9, 2009 letter to MSRS' Executive Director.*
[8] *Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 32.46%.*

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.

EA. Enrolled Actuary.

FSA. Fellow of the Society of Actuaries.

MAAA. Member of the American Academy 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.

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