December 2009

Public Employees 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 Public Employees Retirement Association of Minnesota to:

- Present the results of a valuation of the Public Employees 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 353 (% of Payroll)	12.88%	12.63%
Required Contributions – Chapter 356 (% of Payroll)	15.55%	14.22%
Sufficiency / (Deficiency)	(2.67%)	(1.59%)

Despite the 0.25% of pay increase in statutory contribution rates, the contribution deficiency increased from (1.59%) of payroll to (2.67%) of payroll. On a market value of assets basis, the contribution deficiency increased from (1.97%) of payroll to (6.73%) of payroll. The primary reasons for the increased deficiency are the less than expected return on assets and the impact of insufficient contributions.

Even when taking into account the scheduled increases in member and employer contribution rates, a significant funding deficiency exists. **Without additional changes 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 (18.9%) for the plan year ending June 30, 2009. **Only 20% of the asset loss for the plan year just ended will be recognized in the July 1, 2009 actuarial value of assets. The remainder will be recognized over the next four years.** The actuarial value of assets earned 2.9% 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 "Membership 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 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 353	12.88%	12.63%
Required – Chapter 356	15.55%	14.22%
Sufficiency / (Deficiency)	(2.67%)	(1.59%)
Funding Ratios *(dollars in thousands)*		
Accrued Benefit Funding Ratio		
– Current assets (AVA)	$ 13,158,490	$ 13,048,970
– Current benefit obligations	17,871,561	16,838,233
– Funding ratio	73.63%	77.50%
Accrued Liability Funding Ratio		
– Current assets (AVA)	$ 13,158,490	$ 13,048,970
– Market value of assets (MVA)	10,116,852	12,770,183
– Actuarial accrued liability	18,799,416	17,729,847
– Funding ratio (AVA)	69.99%	73.60%
– Funding ratio (MVA)	53.81%	72.03%
Projected Benefit Funding Ratio		
– Current and expected future assets	$ 19,526,770	$ 19,480,976
– Current and expected future benefit obligations	21,527,827	21,308,992
– Funding ratio	90.70%	91.42%
Participant Data		
Active members		
– Number	142,097	143,562
– Projected annual earnings *(000s)*	$ 5,130,307	$ 4,952,751
– Average annual earnings *(projected)*	$ 36,106	$ 34,499
– Average age	46.9	46.5
– Average service	10.7	10.4
Service retirements	56,942	54,727
Survivors	7,049	6,979
Disability retirements	2,075	2,046
Deferred retirements	43,645	42,043
Terminated other non-vested	122,434	116,634
Total	**374,242**	**365,991**

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 (Post Fund)

Since the Post Fund composite funding ratio was less than 80 percent as of June 30, 2008, the Post Fund was dissolved, and assets were transferred back to PERA 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) post-retirement.

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

The Post Fund dissolution (other than the asset method change discussed below) 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 Post Fund asset loss for the fiscal year ending June 30, 2009 will be recognized incrementally over five years at 20% per year, similar to the smoothing of active fund assets. Prior to June 30, 2009, Post Fund asset gains and losses were not smoothed.

The change in the actuarial asset method for Post Fund assets reduced the required contribution by 1.61% of pay.

Certification

Mercer has prepared this report exclusively for Trustees of Public Employees Retirement Fund and the Legislative Commission on Pension and Retirement (LCPR) for the following purposes:

- Present the results of a valuation of the Public Employees Retirement Fund as of July 1, 2009 as required by Minnesota Statutes Section 356.215 and the requirements of the Standards of Actuarial work established by the 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 Numbers 25 (as amended by GASB 50) and 27

This valuation report may not be relied upon for any other purpose or by any party other than the Trustees, 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 Fund as of June 30, 2009, as well as participant data supplied by the Fund 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 Fund. A summary of the plan provisions valued is presented in our report. The Fund is 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, and 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 Trustees 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

Date 12/3/2009

Bonita J. Wurst
Bonita J. Wurst, ASA, EA, MAAA
Principal

Date 12/3/2009

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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 the Public Employees Retirement Association 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
Assets in Trust		
▪ Cash, equivalents, short term securities	$	257,074
▪ Fixed income		2,234,014
▪ Equity		6,147,187
▪ SBI Alternative		1,516,090
▪ Other		9,700
Total assets in trust	**$**	**10,164,065**
Assets Receivable		14,224
Amounts Payable		(61,437)
Net assets held in trust for pension benefits	**$**	**10,116,852**

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, 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	$ 6,796,557	$ 5,973,626	$ 12,770,183
2. Contributions			
a. Member	298,381	0	298,381
b. Employer	328,603	0	328,603
c. Other sources	0	0	0
d. Total contributions	626,984	0	626,984
3. Investment income			
a. Interest and dividends	(1,355,240)	(1,012,262)	(2,367,502)
b. Investment expenses	(7,569)	(6,571)	(14,140)
c. Net subtotal	(1,362,809)	(1,018,833)	(2,381,642)
4. Other	3,725	0	3,725
5. Total income *(2.d. + 3.c. + 4.)*	**$ (732,100)**	**$ (1,018,833)**	**$ (1,750,933)**
6. Benefits Paid			
a. Annuity benefits	(33,668)	(830,242)	(863,910)
b. Refunds	(26,887)	0	(26,887)
c. Total benefits paid	(60,555)	(830,242)	(890,797)
7. Expenses			
a. Other	(1,895)	0	(1,895)
b. Administrative	(9,706)	0	(9,706)
c. Total Expenses	(11,601)	0	(11,601)
8. Total distributions *(6.c. + 7.c.)*	**$ (72,156)**	**$ (830,242)**	**$ (902,398)**
9. Other changes in reserves			
a. Annuities awarded	(246,303)	246,303	0
b. Transfer between reserves	4,412,611	(4,412,611)	0
c. Mortality gain/(loss) not transferred	(41,757)	41,757	0
d. Change in assumptions	0	0	0
e. Total other changes	4,124,551	(4,124,551)	0
10. Fund balance at market value at June 30, 2009 *(1. + 5. + 8. + 9.e.)*	**$ 10,116,852**	**$ 0**	**$ 10,116,852**

Plan Assets

Actuarial Asset Value *(Dollars in Thousands)*

	Original Amount	% Not Recognized	June 30, 2009
1. Market value of assets available for benefits			$ 10,116,852
2. Determination of average balance			
a. Total assets available at July 1, 2008			12,770,183
b. Total assets available at June 30, 2009			10,116,852
c. Net investment income for fiscal year ending June 30, 2009			(2,377,917)
d. Average balance *[a. + b. – c.] / 2*			12,632,476
3. Expected return *[8.5% x 2.d.]*			1,073,761
4. Actual return			(2,377,917)
5. Current year unrecognized asset return *(4. – 3.)*			(3,451,678)
6. Unrecognized asset returns*			
a. Year ended June 30, 2009	$ (3,451,678)	80%	$ (2,761,342)
b. Year ended June 30, 2008	(941,039)	60%	(564,623)
c. Year ended June 30, 2007	604,970	40%	241,988
d. Year ended June 30, 2006	211,694	20%	42,339
e. Total unrecognized return			$ (3,041,638)
7. Actuarial value at June 30, 2009 *(1. – 6.e.)*			**$ 13,158,490**

** Prior to the year ending June 30, 2009, unrecognized asset returns do not include Post Fund gains or losses.*

Membership Data

Distribution of Active Participants (Total)

	Years of Service as of June 30, 2009										
Age	**<3**	**3 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30 - 34**	**35 - 39**	**40+**	**Total**
<25	5,510	527	83								**6,120**
Avg. Earnings	12,365	24,335	21,811								**13,524**
25 – 29	5,846	2,299	1,539	43							**9,727**
Avg. Earnings	21,017	31,754	34,322	36,116							**25,726**
30 – 34	4,103	1,952	3,410	963	16						**10,444**
Avg. Earnings	21,512	34,903	40,978	42,992	40,908						**32,381**
35 – 39	4,258	1,985	3,428	2,520	638	27					**12,856**
Avg. Earnings	19,554	31,252	40,221	48,011	47,245	49,001					**33,885**
40 – 44	4,552	2,489	4,304	2,947	1,973	902	48				**17,215**
Avg. Earnings	17,895	26,501	33,335	44,214	51,427	50,671	47,730				**33,149**
45 – 49	4,239	2,520	5,589	4,420	2,791	2,455	1,159	98			**23,271**
Avg. Earnings	17,930	25,069	29,944	37,014	48,369	54,328	52,379	51,412			**34,560**
50 – 54	3,017	1,841	4,590	4,705	3,846	2,969	2,134	1,483	94	1	**24,680**
Avg. Earnings	19,117	27,245	30,060	34,297	40,617	50,672	56,726	54,401	51,719	7,611	**37,295**
55 – 59	2,013	1,246	3,308	3,277	3,517	3,224	2,036	2,029	629	23	**21,302**
Avg. Earnings	19,610	26,734	31,081	33,789	37,936	45,849	55,493	60,697	58,160	53,664	**39,504**
60 – 64	1,187	771	1,721	1,504	1,824	1,963	1,219	818	462	83	**11,552**
Avg. Earnings	14,894	21,580	29,020	34,683	37,646	42,636	48,100	56,838	62,851	61,561	**37,055**
65 – 69	529	365	723	446	351	358	202	139	67	24	**3,204**
Avg. Earnings	8,899	13,720	19,458	26,742	33,397	37,412	41,212	47,076	55,184	63,820	**25,257**
70+	318	224	540	269	137	105	55	40	26	12	**1,726**
Avg. Earnings	6,394	7,995	11,075	18,903	25,994	29,135	30,490	30,500	40,998	48,920	**15,098**
Total	**35,572**	**16,219**	**29,235**	**21,094**	**15,093**	**12,003**	**6,853**	**4,607**	**1,278**	**143**	**142,097**
Avg. Earnings	**18,035**	**27,871**	**32,627**	**37,883**	**42,460**	**48,222**	**53,359**	**57,115**	**58,887**	**59,232**	33,630

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 Active Participants (Basic)

	Years of Service June 30, 2009										
Age	**<3**	**3 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30 - 34**	**35 - 38**	**40+**	**Total**
<25											**0**
Avg. Earnings											**N/A**
25 – 29											**0**
Avg. Earnings											**N/A**
30 – 34											**0**
Avg. Earnings											**N/A**
35 – 39											**0**
Avg. Earnings											**N/A**
40 – 44											**0**
Avg. Earnings											**N/A**
45 – 49											**0**
Avg. Earnings											**N/A**
50 – 54											**0**
Avg. Earnings											**N/A**
55 – 59										2	**2**
Avg. Earnings										51,300	**51,300**
60 – 64										13	**13**
Avg. Earnings										45,475	**45,475**
65 – 69										7	**7**
Avg. Earnings										52,900	**52,900**
70+										7	**7**
Avg. Earnings										51,283	**51,283**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29**	**29**
Avg. Earnings	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**49,071**	**49,071**

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 Active Participants (Coordinated)

	Years of Service as of June 30, 2009										
Age	**<3**	**3 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30 - 34**	**35 - 39**	**40+**	**Total**
<25	5,510	527	83								**6,120**
Avg. Earnings	12,365	24,335	21,811								**13,524**
25 –29	5,846	2,299	1,539	43							**9,727**
Avg. Earnings	21,017	31,754	34,322	36,116							**25,726**
30 – 34	4,103	1,952	3,410	963	16						**10,444**
Avg. Earnings	21,512	34,903	40,978	42,992	40,908						**32,381**
35 – 39	4,258	1,985	3,428	2,520	638	27					**12,856**
Avg. Earnings	19,554	31,252	40,221	48,011	47,245	49,001					**33,885**
40 – 44	4,552	2,489	4,304	2,947	1,973	902	48				**17,215**
Avg. Earnings	17,895	26,501	33,335	44,214	51,427	50,671	47,730				**33,149**
45 – 49	4,239	2,520	5,589	4,420	2,791	2,455	1,159	98			**23,271**
Avg. Earnings	17,930	25,069	29,944	37,014	48,369	54,328	52,379	51,412			**34,560**
50 – 54	3,017	1,841	4,590	4,705	3,846	2,969	2,134	1,483	94	1	**24,680**
Avg. Earnings	19,117	27,245	30,060	34,297	40,617	50,672	56,726	54,401	51,719	7,611	**37,295**
55 – 59	2,013	1,246	3,308	3,277	3,517	3,224	2,036	2,029	629	21	**21,300**
Avg. Earnings	19,610	26,734	31,081	33,789	37,936	45,849	55,493	60,697	58,160	53,889	**39,503**
60 – 64	1,187	771	1,721	1,504	1,824	1,963	1,219	818	462	70	**11,539**
Avg. Earnings	14,894	21,580	29,020	34,683	37,646	42,636	48,100	56,838	62,851	64,549	**37,045**
65 – 69	529	365	723	446	351	358	202	139	67	17	**3,197**
Avg. Earnings	8,899	13,720	19,458	26,742	33,397	37,412	41,212	47,076	55,184	68,316	**25,196**
70+	318	224	540	269	137	105	55	40	26	5	**1,719**
Avg. Earnings	6,394	7,995	11,075	18,903	25,994	29,135	30,490	30,500	40,998	45,613	**14,951**
Total	**35,572**	**16,219**	**29,235**	**21,094**	**15,093**	**12,003**	**6,853**	**4,607**	**1,278**	**114**	**142,068**
Avg. Earnings	**18,035**	**27,871**	**32,627**	**37,883**	**42,460**	**48,222**	**53,359**	**57,115**	**58,877**	**61,817**	**33,627**

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 (Total)

	Years Since Retirement as of June 30, 2009							
Age	**<1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25+**	**Total**
<45								**0**
Avg. Benefit								**N/A**
45 – 49								**0**
Avg. Benefit								**N/A**
50 – 54	16	41	2					**59**
Avg. Benefit	17,351	9,805	8,109					**11,794**
55 – 59	582	2,349	87	1				**3,019**
Avg. Benefit	15,101	10,583	14,214	24,471				**11,564**
60 – 64	964	4,771	2,995	46	1			**8,777**
Avg. Benefit	14,533	12,689	11,320	23,411	20,246			**12,481**
65 – 69	642	5,313	4,972	2,463	12	2		**13,404**
Avg. Benefit	12,069	10,394	11,416	12,257	40,316	19,638		**11,224**
70 – 74	109	1,048	4,589	4,113	1,484	14	1	**11,358**
Avg. Benefit	8,041	7,415	10,037	13,171	19,790	41,842	45,867	**12,228**
75 – 79	39	336	847	3,830	3,035	775	1	**8,863**
Avg. Benefit	7,040	4,972	6,395	11,878	18,984	20,254	54,539	**14,242**
80 – 84	11	123	280	590	3,022	2,184	202	**6,412**
Avg. Benefit	5,496	3,995	4,764	8,227	14,900	20,237	44,124	**16,357**
85 – 89	1	20	84	125	447	1,910	853	**3,440**
Avg. Benefit	518	1,981	3,692	6,148	11,835	16,162	23,400	**16,639**
90+		6	13	8	58	248	1,277	**1,610**
Avg. Benefit		10,777	3,367	5,385	7,247	13,290	16,632	**15,594**
Total	**2,364**	**14,007**	**13,869**	**11,176**	**8,059**	**5,133**	**2,334**	**56,942**
Avg. Benefit	**13,552**	**10,785**	**10,461**	**12,224**	**17,152**	**18,446**	**21,514**	**13,135**

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.

** Difference from number of retired members as shown on page 22 is that multiple payees of members (ex-spouse, child support, etc.) are excluded from this exhibit.*

Membership Data

Distribution of Service Retirements (Basic)

	Years Since Retirement as of June 30, 2009							
Age	**<1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25+**	**Total**
<45								**0**
Avg. Benefit								**N/A**
45 – 49								**0**
Avg. Benefit								**N/A**
50 – 54								**0**
Avg. Benefit								**N/A**
55 – 59		4	4	1				**9**
Avg. Benefit		32,782	29,801	24,471				**30,534**
60 – 64	5	31	177	24	1			**238**
Avg. Benefit	27,590	33,897	40,702	33,555	20,246			**38,734**
65 – 69	8	72	216	397	11	2		**706**
Avg. Benefit	23,024	29,171	34,656	39,784	42,358	19,638		**36,926**
70 – 74		15	171	508	467	13	1	**1,175**
Avg. Benefit		27,695	30,217	38,702	44,128	43,398	45,867	**39,541**
75 – 79		4	33	341	783	341	1	**1,503**
Avg. Benefit		28,103	26,160	30,051	40,742	38,079	54,539	**37,368**
80 – 84		1	8	46	592	840	172	**1,659**
Avg. Benefit		15,814	32,854	30,903	30,622	36,743	49,735	**35,713**
85 – 89			1	6	61	664	555	**1,287**
Avg. Benefit			12,449	33,938	33,716	29,135	30,463	**29,934**
90+					3	67	759	**829**
Avg. Benefit					10,017	31,444	22,789	**23,442**
Total	**13**	**127**	**610**	**1,323**	**1,918**	**1,927**	**1,488**	**7,406**
Avg. Benefit	**24,780**	**30,125**	**34,615**	**36,400**	**38,170**	**34,201**	**28,803**	**34,485**

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 Service Retirements (Coordinated)

	Years Since Retirement as of June 30, 2009							
Age	**<1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25+**	**Total**
<45								**0**
Avg. Benefit								**N/A**
45 – 49								**0**
Avg. Benefit								**N/A**
50 – 54	16	41	2					**59**
Avg. Benefit	17,351	9,805	8,109					**11,794**
55 – 59	582	2,345	83					**3,010**
Avg. Benefit	15,101	10,546	13,462					**11,507**
60 – 64	959	4,740	2,818	22				**8,539**
Avg. Benefit	14,465	12,550	9,475	12,345				**11,750**
65 – 69	634	5,241	4,756	2,066	1			**12,698**
Avg. Benefit	11,931	10,136	10,361	6,967	17,852			**9,795**
70 – 74	109	1,033	4,418	3,605	1,017	1		**10,183**
Avg. Benefit	8,041	7,121	9,256	9,573	8,615	21,613		**9,076**
75 – 79	39	332	814	3,489	2,252	434		**7,360**
Avg. Benefit	7,040	4,693	5,594	10,102	11,420	6,248		**9,519**
80 – 84	11	122	272	544	2,430	1,344	30	**4,753**
Avg. Benefit	5,496	3,898	3,938	6,309	11,070	9,921	11,955	**9,601**
85 – 89	1	20	83	119	386	1,246	298	**2,153**
Avg. Benefit	518	1,981	3,587	4,747	8,377	9,248	10,246	**8,692**
90+		6	13	8	55	181	518	**781**
Avg. Benefit		10,777	3,367	5,385	7,096	6,570	7,611	**7,264**
Total	**2,351**	**13,880**	**13,259**	**9,853**	**6,141**	**3,206**	**846**	**49,536**
Avg. Benefit	**13,490**	**10,608**	**9,350**	**8,978**	**10,588**	**8,977**	**8,693**	**9,943**

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 Survivors (Total)*

	Years Since Death as of June 30, 2009							
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+	Total
<45	14	70	35	28	10	8		**165**
Avg. Benefit	5,363	6,041	6,425	5,810	8,255	9,741		**6,339**
45 – 49	8	34	23	9	7	3		**84**
Avg. Benefit	4,290	6,706	8,139	8,138	12,058	15,531		**7,783**
50 – 54	19	90	49	27	13	3		**201**
Avg. Benefit	8,251	9,806	7,177	8,964	12,071	10,482		**9,062**
55 – 59	38	145	98	32	22	6	5	**346**
Avg. Benefit	13,322	10,408	10,031	12,211	16,881	15,201	19,857	**11,419**
60 – 64	47	183	137	49	31	13	3	**463**
Avg. Benefit	10,095	11,289	10,028	13,470	17,804	15,692	12,152	**11,591**
65 – 69	60	167	182	93	84	17	18	**621**
Avg. Benefit	13,615	12,554	10,622	12,509	17,790	19,154	20,774	**13,211**
70 – 74	42	214	238	163	102	57	44	**860**
Avg. Benefit	15,933	14,416	13,638	16,644	15,006	21,053	22,404	**15,615**
75 – 79	69	222	311	200	169	102	56	**1,129**
Avg. Benefit	17,527	15,393	17,695	18,066	15,104	18,882	18,143	**17,039**
80 – 84	63	289	320	259	216	141	118	**1,406**
Avg. Benefit	15,031	16,353	19,273	17,941	16,880	19,374	16,366	**17,636**
85 – 89	39	204	225	205	165	118	152	**1,108**
Avg. Benefit	15,194	15,941	14,391	16,538	15,906	17,160	13,606	**15,515**
90+	8	72	90	111	108	84	193	**666**
Avg. Benefit	9,207	16,446	16,076	11,725	14,190	14,638	10,257	**13,135**
Total	**407**	**1,690**	**1,708**	**1,176**	**927**	**552**	**589**	**7,049**
Avg. Benefit	**13,650**	**13,532**	**14,435**	**15,609**	**15,780**	**17,915**	**14,415**	**14,817**

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.

** Difference from number of survivors shown on page 22 is due to the inclusion of multiple survivors of members.*

Membership Data

Distribution of Survivors (Basic)

	Years Since Death as of June 30, 2009							
Age	**<1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25+**	**Total**
<45			1	2	2	2		**7**
Avg. Benefit			5,269	5,811	17,724	25,557		**14,779**
45 – 49			2		1			**3**
Avg. Benefit			7,593		34,054			**16,414**
50 – 54		1	1	1	2	1		**6**
Avg. Benefit		22,816	1,889	14,800	21,310	26,446		**18,095**
55 – 59	3	4	5	5	4	3	3	**27**
Avg. Benefit	14,689	11,889	6,944	27,822	38,630	22,939	20,715	**20,405**
60 – 64	2	12	16	2	14	5	2	**53**
Avg. Benefit	14,842	27,850	27,638	32,984	26,839	24,955	17,116	**26,544**
65 – 69	14	35	28	14	34	8	17	**150**
Avg. Benefit	25,058	24,457	23,979	27,743	31,598	32,112	21,594	**26,433**
70 – 74	12	60	67	45	29	29	42	**284**
Avg. Benefit	35,821	30,894	28,650	35,360	27,258	33,490	23,096	**30,021**
75 – 79	18	81	118	84	59	49	52	**461**
Avg. Benefit	30,450	27,605	32,013	29,545	29,335	31,379	18,864	**28,834**
80 – 84	16	120	137	122	103	82	103	**683**
Avg. Benefit	30,156	27,313	31,899	28,466	24,550	27,067	17,805	**26,625**
85 – 89	17	96	115	91	102	63	133	**617**
Avg. Benefit	26,455	22,320	20,473	27,034	20,396	24,461	14,589	**21,019**
90+	3	37	47	66	79	65	166	**463**
Avg. Benefit	16,363	23,473	24,717	14,563	16,464	16,557	10,902	**15,609**
Total	**85**	**446**	**537**	**432**	**429**	**307**	**518**	**2,754**
Avg. Benefit	**28,045**	**26,096**	**27,475**	**26,822**	**23,654**	**25,647**	**15,441**	**24,104**

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

Distribution of Survivors (Coordinated)

	Years Since Death as of June 30, 2009							
Age	**<1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25+**	**Total**
<45	14	70	34	26	8	6		**158**
Avg. Benefit	5,363	6,041	6,459	5,810	5,887	4,468		**5,965**
45 – 49	8	34	21	9	6	3		**81**
Avg. Benefit	4,290	6,706	8,191	8,138	8,392	15,531		**7,463**
50 – 54	19	89	48	26	11	2		**195**
Avg. Benefit	8,251	9,660	7,287	8,740	10,391	2,500		**8,784**
55 – 59	35	141	93	27	18	3	2	**319**
Avg. Benefit	13,204	10,366	10,197	9,320	12,048	7,463	18,570	**10,658**
60 – 64	45	171	121	47	17	8	1	**410**
Avg. Benefit	9,884	10,127	7,700	12,639	10,364	9,903	2,225	**9,658**
65 – 69	46	132	154	79	50	9	1	**471**
Avg. Benefit	10,133	9,397	8,194	9,809	8,401	7,635	6,844	**9,000**
70 – 74	30	154	171	118	73	28	2	**576**
Avg. Benefit	7,977	7,995	7,757	9,506	10,139	8,172	7,889	**8,513**
75 – 79	51	141	193	116	110	53	4	**668**
Avg. Benefit	12,966	8,378	8,942	9,753	7,471	7,327	8,770	**8,900**
80 – 84	47	169	183	137	113	59	15	**723**
Avg. Benefit	9,882	8,571	9,820	8,568	9,889	8,681	6,486	**9,144**
85 – 89	22	108	110	114	63	55	19	**491**
Avg. Benefit	6,492	10,271	8,033	8,160	8,636	8,797	6,720	**8,598**
90+	5	35	43	45	29	19	27	**203**
Avg. Benefit	4,914	9,017	6,630	7,561	7,997	8,074	6,288	**7,491**
Total	**322**	**1,244**	**1,171**	**744**	**498**	**245**	**71**	**4,295**
Avg. Benefit	**9,850**	**9,027**	**8,455**	**9,099**	**8,996**	**8,226**	**6,927**	**8,861**

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

Distribution of Disability Retirements (Total)

	Years Disabled as of June 30, 2009							
Age	**<1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25+**	**Total**
<45	3	32	21	1	1			**58**
Avg. Benefit	7,607	5,757	4,719	5,117	4,510			**5,445**
45 – 49	8	76	47	15	8	1		**155**
Avg. Benefit	12,667	8,390	6,744	6,086	5,669	4,021		**7,720**
50 – 54	33	154	123	49	26			**385**
Avg. Benefit	8,369	10,143	9,058	7,579	7,523			**9,141**
55 – 59	56	282	202	76	30	9	1	**656**
Avg. Benefit	13,605	11,937	10,028	10,466	8,687	7,645	3,284	**11,101**
60 – 64	47	298	280	134	32	12	2	**805**
Avg. Benefit	13,446	11,324	12,219	13,397	9,424	8,542	10,245	**11,985**
65 – 69	2	7	5	1	1			**16**
Avg. Benefit	3,326	4,373	2,172	2,721	2,431			**3,330**
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	**149**	**849**	**678**	**276**	**98**	**22**	**3**	**2,075**
Avg. Benefit	**12,086**	**10,784**	**10,307**	**11,091**	**8,266**	**7,970**	**7,925**	**10,609**

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 Disability Retirements (Basic)

	Years Disabled as of June 30, 2009							
Age	**<1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25+**	**Total**
<45								**0**
Avg. Benefit								**N/A**
45 – 49								**0**
Avg. Benefit								**N/A**
50 – 54								**0**
Avg. Benefit								**N/A**
55 – 59								**0**
Avg. Benefit								**N/A**
60 – 64		1	2	6			1	**10**
Avg. Benefit		1,612	59,320	53,419			11,977	**45,274**
65 – 69								**0**
Avg. Benefit								**N/A**
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	**0**	**1**	**2**	**6**	**0**	**0**	**1**	**10**
Avg. Benefit	**N/A**	**1,612**	**59,320**	**53,419**	**N/A**	**N/A**	**11,977**	**45,274**

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 Disability Retirements (Coordinated)

	Years Disabled as of June 30, 2009							
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+	Total
<45	3	32	21	1	1			**58**
Avg. Benefit	7,607	5,757	4,719	5,117	4,510			**5,445**
45 – 49	8	76	47	15	8	1		**155**
Avg. Benefit	12,667	8,390	6,744	6,086	5,669	4,021		**7,720**
50 – 54	33	154	123	49	26			**385**
Avg. Benefit	8,369	10,143	9,058	7,579	7,523			**9,141**
55 – 59	56	282	202	76	30	9	1	**656**
Avg. Benefit	13,605	11,937	10,028	10,466	8,687	7,645	3,284	**11,101**
60 – 64	47	297	278	128	32	12	1	**795**
Avg. Benefit	13,446	11,357	11,880	11,521	9,424	8,542	8,513	**11,566**
65 – 69	2	7	5	1	1			**16**
Avg. Benefit	3,326	4,373	2,172	2,721	2,431			**3,330**
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	**149**	**848**	**676**	**270**	**98**	**22**	**2**	**2,065**
Avg. Benefit	**12,086**	**10,795**	**10,162**	**10,150**	**8,266**	**7,970**	**5,899**	**10,442**

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

Reconciliation of Members

		Terminated		Recipients			
	Actives	Deferred Retirement	Other Non-vested	Service Retirements	Disability Retirements	Survivors	Total
Members on 6/30/2008	**143,562****	**42,308**	**116,805**	**54,855**	**2,046**	**6,979**	**366,555**
New entrants	12,290	0	0	0	0	0	**12,290**
Return to active	2,036	(727)	(1,309)	0	0	0	**0**
Terminated non-vested	(5,861)	0	8,039	0	0	0	**2,178**
Service retirements	(2,242)	(1,201)	(39)	3,619	(137)	0	**0**
Terminated deferred	(4,072)	4,072	0	0	0	0	**0**
Terminated refund	(1,980)	(732)	(823)	0	0	0	**(3,535)**
Deaths	(171)	(102)	(185)	(1,519)	(81)	(378)	**(2,436)**
New beneficiary	0	0	0	0	0	487	**487**
Disabled	(202)	(50)	0	0	252	0	**0**
Benefits expired	0	0	0	0	0	(11)	**(11)**
Data correction	(7)	(435)	(798)	(7)	(5)	(41)	**(1,293)**
Net change	(209)	825	4,885	2,093	29	57	**7,680**
Members on 6/30/2009*	**143,353**	**43,133**	**121,690**	**56,948**	**2,075**	**7,036**	**374,235**
Members switched from active to terminated status***	(1,256)	512	744	0	0	0	0
Members on 6/30/2009	**142,097**	**43,645**	**122,434**	**56,948**	**2,075**	**7,036**	**374,235**

* *Provided by PERA and checked for reasonableness.*
** *Corrected by PERA to remove double-counting of privatized members.*
*** *Members who did not accrue service in the past year under the Public Employees Retirement Fund are treated as deferred retirements or non-vested terminations for valuation purposes.*

Terminated deferred retirement statistics

- Average age 49.0 years
- Average service 7.5 years
- Average annual benefit, including augmentation $8,383

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. The Employer's rate of contribution is the balance required to cover the remainder of the funding requirements.

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.

	Non-Vested	Vested	June 30, 2009 Total
A. Actuarial Value of Assets			$ 13,158,490
B. Present value of expected future assets			
1. Present value of expected future statutory supplemental contributions			$ 3,639,869
2. Present value of future normal cost contributions			2,728,411
3. Total present value of future contributions *(1. + 2.)*			$ 6,368,280
C. Total current and expected future assets *(A. + B.3.)*			$ 19,526,770
D. Current benefit obligations			
1. Benefit recipients			
a. Service retirements	$ 0	$ 7,007,861	$ 7,007,861
b. Disability	0	268,914	268,914
c. Survivors	0	810,589	810,589
2. Deferred retirements with augmentation	0	2,200,270	2,200,270
3. Former members without vested rights	0	80,672	80,672
4. Active Members	94,134	7,409,121	7,503,255
5. Total Current Benefit Obligations	$ 94,134	$ 17,777,427	$ 17,871,561
E. Expected Future Benefit Obligations			3,656,266
F. Total Current and Expected Future Benefit Obligations *(D.5. + E.)*			$ 21,527,827
G. Unfunded Current Benefit Obligations *(D.5. – A.)*			$ 4,713,071
H. Unfunded Current and Future Benefit Obligations *(F. – C.)*			$ 2,001,057

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	$ 9,835,570	$ 1,929,038	$ 7,906,532
b. Disability benefits	423,043	136,462	286,581
c. Survivor's benefits	152,170	48,666	103,504
d. Deferred retirements	748,738	614,245	134,493
e. Total	$ 11,159,521	$ 2,728,411	$ 8,431,110
2. Deferred retirements with future augmentation	2,200,270	0	2,200,270
3. Former members without vested rights	80,672	0	80,672
4. Annuitants	8,087,364	0	8,087,364
5. Total	$ 21,527,827	$ 2,728,411	$ 18,799,416
B. Determination of Unfunded Actuarial Accrued Liability (UAAL)			
1. Actuarial accrued liability			$ 18,799,416
2. Current assets (AVA)			13,158,490
3. Unfunded actuarial accrued liability			$ 5,640,926
C. Determination of Supplemental Contribution Rate			
1. Present value of future payrolls through the amortization date of July 1, 2031			$ 74,894,418
2. Supplemental contribution rate *(B.3. / C.1.)*			7.53%

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	$	4,680,877
B. Changes due to interest requirements and current rate of funding		
1. Normal cost and actual administrative expenses	$	392,817
2. Contributions		(626,984)
3. Interest on A., B.1. and B.2.		387,922
4. Total *(B.1. + B.2.+ B.3.)*	$	153,755
C. Expected unfunded actuarial accrued liability at end of year *(A. + B.4.)*	$	4,834,632
D. Increase (decrease) due to actuarial losses (gains) because of experience deviations from expected		
1. Salary increases	$	(12,262)
2. Investment return		1,927,455
3. Mortality of benefit recipients		58,985
4. Other items		34,954
5. Total	$	2,009,132
E. Unfunded actuarial accrued liability at end of year before plan amendments and changes in actuarial assumptions *(C. + D.5.)*	$	6,843,764
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 actuarial methods	$	(1,202,838)
I. Unfunded actuarial accrued liability at end of year *(E. + F. + G. + H.)*	$	5,640,926

Development of Costs

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

	Percent of Payroll	Dollar Amount
A. Statutory contributions – Chapter 353		
1. Employee contributions	6.00%	$ 307,819
2. Employer contributions	6.88%	352,965
3. Total	12.88%	$ 660,784
B. Required contributions – Chapter 356		
1. Normal cost		
a. Retirement benefits	5.77%	$ 296,183
b. Disability benefits	0.37%	18,983
c. Survivors	0.14%	6,903
d. Deferred retirement benefits	1.54%	78,887
e. Total	7.82%	$ 400,956
2. Supplemental contribution amortization by July 1, 2031 of Unfunded Actuarial Accrued Liability	7.53%	386,312
3. Allowance for expenses	0.20%	$ 10,261
4. Total	15.55%	$ 797,529
C. Contribution Sufficiency/(Deficiency) *(A.3. – B.4.)*	(2.67%)	$ (136,745)

Note: Projected annual payroll for fiscal year beginning on the valuation date: $5,130,307.

Development of Costs

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

	Percent of Payroll	Dollar Amount
A. Statutory contributions – Chapter 353		
1. Employee contributions	9.10%	$ 135
2. Employer contributions	11.78%	174
3. Total	20.88%	$ 309
B. Required contributions – Chapter 356		
1. Normal cost		
a. Retirement benefits	5.61%	$ 83
b. Disability benefits	0.34%	5
c. Survivors	0.20%	3
d. Deferred retirement benefits	3.51%	52
e. Total	9.66%	$ 143

Note: Projected annual payroll for fiscal year beginning on the valuation date: $1,480.

Development of Costs

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

	Percent of Payroll		Dollar Amount
A. Statutory contributions – Chapter 353			
1. Employee contributions	6.00%	$	307,684
2. Employer contributions	6.88%		352,791
3. Total	12.88%	$	660,475
B. Required contributions – Chapter 356			
1. Normal cost			
a. Retirement benefits	5.77%	$	296,100
b. Disability benefits	0.37%		18,978
c. Survivors	0.13%		6,900
d. Deferred retirement benefits	1.54%		78,835
e. Total	7.81%	$	400,813

Note: Projected annual payroll for fiscal year beginning on the valuation date: $5,128,827.

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 full-career 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 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

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 for the fiscal year is recognized over five years at 20% per year;
- The asset value is the sum of the market value plus the scheduled recognition of investment gains or (losses) during the current and the preceding four fiscal years.

Changes in Asset Valuation Method

For the purpose of determining the actuarial value of assets, the Post Fund 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, Post Fund 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 July 1, 2031 assuming payroll increases of 4.5% 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.

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.

IRC Section 401(a)17: The limitations of Internal Revenue Code Section 401(a)(17) have been incorporated into our calculations.

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

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 cost-of-living adjustments after retirement accounted for by using a 6.0% post-retirement assumption, as required by statute.
Salary increases	Reported salary for prior fiscal year, with new hires annualized, increased to current fiscal year and annually for each future year according to the ultimate rates in the rate table. During a 5-year select period, 0.60% x (5-T) where T is completed years of service is added to the ultimate rate.
Mortality	
Healthy Pre-retirement	1983 Group Annuity Mortality for males set back eight years 1983 Group Annuity Mortality for females set back seven years
Healthy Post-retirement	1983 Group Annuity Mortality for males set back one year 1983 Group Annuity Mortality for females set back one year
Disabled	1965 RRB rates through age 54. For ages 55 to 64, graded rates between 1965 RRB rates and the Healthy Post-Retirement Mortality. For ages 65 and later, the Healthy Post-Retirement Mortality.
Retirement	Graded rates beginning at age 55 as shown in rate table. Members who have attained the highest assumed retirement age are assumed to retire in one year.

	Retirement	
Age	Rule of 90 Eligible	Other
55	30%	7%
56	25%	7%
57	25%	7%
58	25%	7%
59	25%	9%
60	25%	9%
61	30%	15%
62	40%	22%
63	30%	20%
64	30%	20%
65	40%	40%
66	25%	25%
67	25%	25%
68	25%	25%
69	25%	25%
70	25%	25%
71	100%	100%

Actuarial Basis

Summary of Actuarial Assumptions *(continued)*

Withdrawal	Select and ultimate rates based on recent plan experience. Ultimate rates after the third year are shown in the rate table. Select rates are as follows: First Year 40.00% Second Year 15.00% Third Year 10.00%
Disability	Rates are shown in rate table.
Allowance for Combined Service Annuity	Liabilities for active members are increased by 0.80% and liabilities for former members are increased by 60.00% to account for the effect of some participants having eligibility for a Combined Service Annuity.
Administrative expenses	Prior year administrative expenses expressed as a percentage of prior year payroll.
Refund of contributions	All employees withdrawing after becoming eligible for a deferred benefit are assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit.
Percentage married *Age of spouse* *Eligible children*	85% of male members and 65% of female members are assumed to be married. Wives are assumed to be four years younger than their husbands. For members in payment status, actual spouse date of birth is used if provided. Retiring members are assumed to have no dependent children.
Form of payment	Married members assumed to elect subsidized joint and survivor form of annuity as follows: Males / Females 25% J&S option 10% 5% 50% J&S option 20% 5% 75% J&S option 10% 5% 100% J&S option 30% 15%
Unknown data for members	To prepare this report, Mercer has used and relied on participant data supplied by the Fund. We have reviewed the participant data for internal consistency and general reasonableness, but we have not verified or audited any of the data or information provided. In cases where submitted data was missing or incomplete, the following assumptions were applied: Data for active members: Date of birth: July 1, 1964 Gender: Female Salary: Prior year salary Data for terminated members: Date of birth: July 1, 1964 Gender: Female Allowable service: 9 years Salary: $24,000

Actuarial Basis

Changes in actuarial assumptions	None

Actuarial Basis

Summary of Actuarial Assumptions *(continued)*

Summary of Rates

	Rate (%)						
	Pre-Retirement Mortality		Ultimate Withdrawal		Disability		Salary Increase
Age	Male	Female	Male	Female	Male	Female	
20	0.03%	0.01%	8.40%	8.40%	0.01%	0.01%	5.40%
25	0.03	0.02	6.90	6.90	0.01	0.01	5.40
30	0.04	0.02	5.40	5.40	0.02	0.02	5.20
35	0.05	0.03	3.90	4.20	0.05	0.04	5.00
40	0.07	0.04	3.00	3.50	0.09	0.06	4.80
45	0.10	0.06	2.50	3.00	0.14	0.09	4.60
50	0.15	0.08	2.00	2.50	0.23	0.16	4.40
55	0.28	0.14	0.00	0.00	0.49	0.26	4.20
60	0.48	0.21	0.00	0.00	0.82	0.46	4.00
65	0.71	0.35	0.00	0.00	0.00	0.00	4.00
70	1.11	0.58	0.00	0.00	0.00	0.00	4.00

Actuarial Basis

Summary of Plan Provisions – Basic

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 public employee who is not covered under the Social Security Act. General exceptions are employees covered by other public funds, certain part-time employees and full-time students under age 23.
Contributions	Shown as a percent of salary:
Member	9.10% of salary
Employer	9.10% of total salary. Additional 2.68% is repealed at full funding
	Employee contributions are "picked up" according to the provisions of Internal Revenue Code 414(h).
Allowable service	Service during which member contributions were made. May also include certain leaves of absence and military service. Does not include pro-rated service credit for part-time employment for post December 31, 2001 hires.
Salary	Includes amounts deducted for deferred compensation or supplemental retirement plans, net income from fees and sick leave payments funded by the employer. Excludes unused annual leaves and sick leave payments, severance payments, Workers' Compensation benefits and employer-paid flexible spending accounts, cafeteria plans, healthcare expense accounts, day-care expenses, fringe benefits and the cost of insurance coverage.
Average Salary	Average of the five highest successive years of annual salary. Average salary is based on all Allowable Service if less than five years.
Retirement	
Normal retirement benefit	
Age/Service requirements	Age 65 and three years of Allowable Service. Proportionate retirement annuity is available at age 65 and one year of Allowable Service.
Amount	2.70% of Average Salary for each year of Allowable Service.
Early retirement benefit	
Age/Service requirements	(a.) Age 55 and three years of Allowable Service. (b.) Any age with 30 years of Allowable Service. (c.) Rule of 90: Age plus Allowable Service totals 90.

Actuarial Basis

Summary of Plan Provisions – Basic *(continued)*

***Retirement** (continued)*

Early retirement benefit (continued)

Amount

The greater of (a) or (b):

(a.) 2.20% of Average Salary for each of the first ten years of Allowable Service and 2.70% of Average Salary for each subsequent year with reduction of 0.25% for each month if the Member is under age 65 at time of retirement and has less than 30 years of Allowable Service or if the Member is under age 62 and has 30 or more years of Allowable Service. No reduction if age plus years of Allowable Service totals 90.

(b.) 2.70% of Average Salary for each year of Allowable Service assuming augmentation to age 65 at 3.00% per year and actuarial reduction for each month the Member is under age 65.

Form of payment

Life annuity with return on death of any balance of contributions over aggregate monthly payments. Actuarially equivalent options are:

25%, 50%, 75% or 100% Joint and Survivor with bounce back feature without additional reduction (option canceled if Member is pre-deceased by beneficiary).

Benefit increases

Benefit recipients will receive future annual 2.5% cost-of-living adjustments (COLA).

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.

Members retired under laws in effect before July 1, 1973 receive an additional lump sum payment each year. In 1989, this lump sum payment is the greater of $25 times each full year of Allowable Service or the difference between $400 times each full year of Allowable Service and the sum of benefits paid from any Minnesota public pension plan plus cash payments from the Social Security Administration for the preceding fiscal year July 1, 1988 through June 30, 1989. In each following year, the lump sum payment will increase by the same percentage increase that is applied to regular annuities paid from the fund. Effective January 1, 2002, annual lump sum payment is divided by 12 and paid as a monthly life annuity in the annuity form elected.

Actuarial Basis

Summary of Plan Provisions – Basic *(continued)*

Disability	
Disability benefit	
Age/service requirement	Total and permanent disability before normal retirement age with three years of Allowable Service
Amount	Normal Retirement benefit based on Allowable Service and Average Salary at disability without reduction for commencement before Normal Retirement Age. Supplemental benefit of $25 per month payable to the later of the normal retirement age or the five-year anniversary of commencement of disability. The disability benefit is reduced to that amount which, when added to Workers' Compensation, does not exceed the salary the disabled Member received as of the date of the disability or the salary currently payable for the same employment position substantially similar to the one the person held as of the date of the disability, whichever is greater. If a member becomes disabled prior to July 1, 1997 but did not commence their benefit before July 1, 1997, the benefit payable is calculated under the laws in effect at the time the Member became disabled and an actuarial increase shall be made for the change in the post-retirement interest rates from 5.00% to 6.00%. Payments stop earlier if disability ceases. If death occurs prior to age 65, or within five years of disability, the surviving spouse can receive a refund or a survivor benefit. Dependent children are entitled to dependent child benefits subject to the 70.00% family maximum. Payments revert to a retirement annuity at normal retirement age. Benefits may be reduced on resumption of partial employment.
Form of payment	Same as for retirement.
Benefit increases	Same as for retirement.
Retirement after disability	
Age/service requirement	Normal retirement age
Amount	Any optional annuity continues. Otherwise, the larger of the disability benefit paid before normal retirement age or the normal retirement benefit available at normal retirement age, or an actuarially equivalent optional annuity.
Benefit increases	Same as for retirement.

Actuarial Basis

Summary of Plan Provisions – Basic *(continued)*

Death

Surviving spouse benefit

Age/service requirement	Active Member with 18 months of Allowable Service or while Member is receiving a disability benefit.
Amount	50.00% of salary averaged over last six months. Family benefit is maximum of 70.00% and minimum of 50.00% of average salary. Benefit paid until spouse's death but no payments while spouse is remarried prior to July 1, 1991. If a member becomes deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefit as of July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5.00% to 6.00%. Surviving spouse optional annuity may be elected in lieu of this benefit.
Benefit increases	Same as for retirement.

Surviving dependent children's benefit

Age/service requirement	Active Member with 18 months of Allowable Service or while Member is receiving a disability benefit.
Amount	10.00% of salary averaged over last six months for each child. Family benefit minimum (including spouse's benefit) of 50.00% of salary and maximum of 70.00% of average salary. Benefits paid until child marries, dies, or attains age 18 (age 22 if full-time student). If a member becomes deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefit before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5.00% to 6.00%.
Benefit increases	Same as for retirement.

Actuarial Basis

Summary of Plan Provisions – Basic *(continued)*

Death *(continued)*	
Surviving spouse optional annuity	
Age/service requirement	Member or former Member who dies before retirement benefits commence and other survivor annuity is waived by spouse.
Amount	Survivor's payment of the 100% joint and survivor benefit the Member could have elected if terminated or an actuarial equivalent term certain annuity. If commencement is prior to age 65 (age 62 if 30 years of service), the benefit is reduced the same as early retirement with half the applicable reduction factor used from age 55 to the actual commencement age. If no surviving spouse, then an actuarial equivalent dependent child benefit is paid to age 20 or for five years if longer. If a member becomes deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefit as of July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5.00% to 6.00%.
Benefit increases	Same as for retirement.
Refund of contributions with interest	
Age/service requirement	Member dies before receiving any retirement benefits and survivor benefits are not payable.
Amount	The excess of the Member's contributions with 6.00% interest over any disability or survivor benefits paid.
Termination	
Refund of contributions	
Age/service requirement	Termination of public service.
Amount	Member's contributions with 5.00% interest compounded annually if termination occurred before May 16, 1989 and 6.00% interest if termination occurred on or after May 16, 1989. A deferred annuity may be elected in lieu of a refund if three or more years of Allowable Service.

Actuarial Basis

Summary of Plan Provisions – Basic *(continued)*

***Termination** (continued)*	
<u>*Deferred benefit*</u>	
Age/service requirement	Three years of Allowable Service.
Amount	Benefit computed under law in effect at termination and increased by the following percentage: (a.) 0.00% before July 1, 1971; (b.) 5.00% from July 1, 1971 to January 1, 1981; (c.) 3.00% thereafter until January 1 of the year following attainment of age 55; and (d.) 5.00% thereafter until the annuity begins. Members active with a public employer the day prior to the privatization of the employer become vested immediately and receive enhanced augmentation. Amount is payable at a normal or early retirement. Augmentation occurs at the rate of 4.0% compounded annually through the year the Member turns age 55 and 6.0% thereafter until the annuity begins. If privatization occurred prior to January 1, 2007 (or January 1, 2008 for Hutchinson Area Health Care), augmentation occurs at the rate of 5.5% compounded annually through the year the Member turns age 55 and 7.5% thereafter until the annuity begins. 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%.
<u>*Form of payment*</u>	Same as for retirement.
Combined Service Annuity	Members who have at least one-half year of allowable service must have their benefit based on the following: (a.) Allowable service in all covered plans are combined in order to determine eligibility for early retirement. (b.) Average salary is based on the high five consecutive years during their entire service in all covered plans.
Changes in Plan Provisions	<u>Dissolution of Minnesota Post Retirement Investment Fund (Post Fund)</u> Since the Post Fund composite funding ratio was less than 80 percent as of June 30, 2008, the Post Fund was dissolved, and assets were transferred back to PERA 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.

Actuarial Basis

Summary of Plan Provisions – Coordinated

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 public employee who is covered under the Social Security Act. General exceptions are employees covered by other public funds, certain part-time employees and full-time students under age 23. City managers and persons holding elective office may choose to become Members.
Contributions	Shown as a percent of salary: Date of Increase — Member — Employer Current — 6.00% — 6.75% January 2010 — 6.00% — 7.00% Employee contributions are "picked up" according to the provisions of Internal Revenue Code 414(h).
Allowable service	Service during which member contributions are deducted. May also include certain leaves of absence and military service. Does not include pro-rated service credit for part-time employment for post December 31, 2001 hires.
Salary	Includes amounts deducted for deferred compensation or supplemental retirement plans, net income from fees and sick leave payments funded by the employer. Excludes unused annual leave and sick leave payments, severance payments, Workers' Compensation benefits and employer-paid flexible spending accounts, cafeteria plans, healthcare expense accounts, day-care expenses, fringe benefits and the cost of insurance coverage.
Average Salary	Average of the five highest successive years of annual salary. Average salary is based on all Allowable Service if less than five years.
Retirement	
Normal retirement benefit	
Age/service requirements	First hired before July 1, 1989: (a.) Age 65 and three years of Allowable Service. (b.) Proportionate retirement annuity is available at age 65 and one year of Allowable Service.
Amount	1.70% of Average Salary for each year of Allowable Service.

Actuarial Basis

Summary of Plan Provisions – Coordinated *(continued)*

***Retirement** (continued)*

Normal retirement benefit (continued)

Age/service requirements	First hired after June 30, 1989: (a.) The greater of age 65 or the age eligible for full Social Security retirement benefits but no later than age 66 and three years of Allowable Service. (b.) Proportionate Retirement Annuity is available at normal retirement age and one year of Allowable Service.
Amount	1.70% of Average Salary for each year of Allowable Service.

Early retirement benefit

Age/service requirements	First hired before July 1, 1989: (a.) Age 55 with three years of Allowable Service. (b.) Any age with 30 years of Allowable Service. (c.) Rule of 90: Age plus Allowable Service totals 90. First hired after June 30, 1989: (a.) Age 55 with three years of Allowable Service.
Amount	First hired before July 1, 1989: The greater of (a) or (b): (a.) 1.20% of Average Salary for each of the first ten years of Allowable Service and 1.70% of Average Salary for each subsequent year with reduction of 0.25% for each month the Member is under age 65 at time of retirement or under age 62 if 30 years of Allowable Service. No reduction if age plus years of Allowable Service totals 90. (b.) 1.70% of Average Salary for each year of Allowable Service assuming augmentation to age 65 at 3.00% per year and actuarial reduction for each month the Member is under age 65. First hired after June 30, 1989: (a.) 1.70% of Average Salary for each year of Allowable Service assuming augmentation to normal retirement age at 3.00% per year and actuarial reduction for each month the Member is under normal retirement age.

Form of payment	Life annuity with return on death of any balance of contributions over aggregate monthly payments. Actuarially equivalent options are: 25%, 50%, 75% or 100% Joint and Survivor with bounce back feature without additional reduction (option canceled if Member is pre-deceased by beneficiary).

Actuarial Basis

Summary of Plan Provisions – Coordinated *(continued)*

***Retirement** (continued)*	
Benefit increases	Benefit recipients will receive future annual 2.5% cost-of-living adjustments (COLA). 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. Members retired under laws in effect before July 1, 1973 receive an additional lump sum payment each year. In 1989, this lump sum payment is $25 times each full year of Allowable Service. In each following year, the lump sum payment will increase by the same percentage increase that is applied to regular annuities paid from the fund.
Disability	
Disability benefit	
Age/service requirement	Total and permanent disability before normal retirement age with three years of Allowable Service
Amount	Normal Retirement benefit based on Allowable Service and Average Salary at disability without reduction for commencement before normal retirement age. The disability benefit is reduced to that amount which, when added to Workers' Compensation, does not exceed the salary the disabled Member received as of the date of the disability or the salary currently payable for the same employment position substantially similar to the one the person held as of the date of the disability, whichever is greater. If a Member becomes disabled prior to July 1, 1997 but did not commence their benefit before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5.00% to 6.00%. Payments stop if disability ceases or death occurs. Payments change to a retirement annuity at normal retirement age. Benefits may be reduced on resumption of partial employment.
Form of payment	Same as for retirement.
Benefit increases	Same as for retirement.

Actuarial Basis

Summary of Plan Provisions – Coordinated *(continued)*

***Disability** (continued)*	
Retirement after disability	
Age/service requirement	Normal retirement age
Amount	Any optional annuity continues. Otherwise, the larger of the disability benefit paid before normal retirement age or the normal retirement benefit available at normal retirement age, or an actuarially equivalent optional annuity.
Benefit increases	Same as for retirement.
Death	
Surviving spouse optional annuity	
Age/service requirement	Member or former Member who dies before retirement or disability benefits commence
Amount	Survivor's payment of the 100% joint and survivor benefit the Member could have elected if terminated or an actuarial equivalent term certain annuity. If commencement is prior to age 65 (age 62 if 30 years of service), the benefit is reduced the same as early retirement with half the applicable reduction factor used from age 55 to the actual commencement age. If no surviving spouse, then an actuarial equivalent dependent child benefit is paid to age 20 or for five years if longer. If a member becomes deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefit before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from 5.00% to 6.00%.
Benefit increases	Same as for retirement.
Refund of contributions	
Age/service requirement	Member dies before receiving any retirement benefits and survivor benefits are not payable.
Amount	The excess of the Member's contributions with 6.00% interest over any disability or survivor benefits paid.
Termination	
Refund of contributions	
Age/service requirement	Termination of public service.
Amount	Member's contributions with 5.00% interest compounded annually if termination occurred before May 16, 1989 and 6.00% interest if termination occurred on or after May 16, 1989. A deferred annuity may be elected in lieu of a refund if three or more years of Allowable Service.

Actuarial Basis

Summary of Plan Provisions – Coordinated *(continued)*

***Termination** (continued)*	
<u>*Deferred benefit*</u>	
Age/service requirement	Three years of Allowable Service.
Amount	Benefit computed under law in effect at termination and increased by the following percentage compounded annually: (a.) 0.00% before July 1, 1971; (b.) 5.00% from July 1, 1971 to January 1, 1981; (c.) 3.00% thereafter until January 1 of the year following attainment of age 55; and (d.) 5.00% hereafter until the annuity begins (2.50% if hired after June 30, 2006). Members active with a public employer the day prior to the privatization of the employer become vested immediately and receive enhanced augmentation. Amount is payable at a normal or early retirement. Augmentation occurs at the rate of 4.0% compounded annually through the year the Member turns age 55 and 6.0% thereafter until the annuity begins. If privatization occurred prior to January 1, 2007 (or January 1, 2008 for Hutchinson Area Health Care), augmentation occurs at the rate of 5.5% compounded annually through the year the Member turns age 55 and 7.5% thereafter until the annuity begins. If a member terminated employment prior to July 1, 1997 but was not eligible to commence their pension before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997 and an actuarial increase shall be made for the change in the post-retirement interest rates from 5.00% to 6.00%.
<u>*Form of payment*</u>	Same as for retirement.
Combined Service Annuity	Members who have at least one-half year of allowable service must have their benefit based on the following: (a.) Allowable service in all covered plans are combined in order to determine eligibility for early retirement. (b.) Average salary is based on the high five consecutive years during their entire service in all covered plans.
Changes in Plan Provisions	<u>Dissolution of Minnesota Post Retirement Investment Fund (Post Fund)</u> Since the Post Fund composite funding ratio was less than 80 percent as of June 30, 2008, the Post Fund was dissolved, and assets were transferred back to PERA 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)

Summary of Plan Provisions – Coordinated *(continued)*

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)
07/01/1991	$ 3,570,304	$ 4,988,671	$ 1,418,367	71.57%	$ 2,124,409	66.77%
07/01/1992	3,978,110	5,439,953	1,461,843	73.13%	2,299,532	63.57%
07/01/1993	4,374,459	5,784,318	1,409,859	75.63%	2,403,558	58.66%
07/01/1994	4,747,128	6,223,622	1,476,494	76.28%	2,557,522	57.73%
07/01/1995	5,138,461	6,622,069	1,483,608	77.60%	2,679,069	55.38%
07/01/1996	5,786,398	7,270,073	1,483,675	79.59%	2,814,126	52.72%
07/01/1997	6,658,410	8,049,666	1,391,256	82.72%	2,979,260	46.70%
07/01/1998	7,636,668	8,769,303	1,132,635	87.08%	3,271,737	34.62%
07/01/1999	8,489,177	9,443,678	954,501	89.89%	3,302,808	28.90%
07/01/2000	9,609,367	11,133,682	1,524,315	86.31%	3,437,954	44.34%
07/01/2001	10,527,270	12,105,337	1,578,067	86.96%	3,466,587	45.52%
07/01/2002	11,017,414	12,958,105	1,940,691	85.02%	3,809,864	50.94%
07/01/2003	11,195,902	13,776,198	2,580,296	81.27%	4,387,649	58.81%
07/01/2004	11,477,961	14,959,465	3,481,504	76.73%	3,968,034	87.74%
07/01/2005	11,843,936	15,892,555	4,048,619	74.53%	4,096,138	98.84%
07/01/2006	12,495,207	16,737,757	4,242,550	74.65%	4,247,109	99.89%
07/01/2007	12,985,324	17,705,627	4,720,303	73.34%	4,448,954	106.10%
07/01/2008	13,048,970	17,729,847	4,680,877	73.60%	4,722,432	99.12%
07/01/2009	13,158,490	18,799,416	5,640,926	69.99%	4,778,708	118.04%

* *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*

(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)
1991	10.04%	$ 2,124,409	$ 94,413	$ 118,878	$ 101,907	85.72%
1992	9.44%	2,299,532	101,655	115,421	109,203	94.61%
1993	9.95%	2,403,558	106,359	132,795	113,183	85.23%
1994	9.58%	2,557,522	112,940	132,071	119,390	90.40%
1995	9.76%	2,679,069	115,986	145,491	123,984	85.22%
1996	9.61%	2,814,126	121,525	148,913	129,738	87.12%
1997	9.75%	2,979,260	128,234	162,244	136,686	84.25%
1998[3]	9.62%	3,271,737	140,385	174,356	151,499	86.89%
1999[3]	9.63%	3,302,808	158,475	159,585	173,370	108.64%
2000[3]	9.22%	3,437,954	171,073	145,906	186,637	127.92%
2001[3,4]	11.84%	3,466,587	173,380	237,064	188,208	79.39%
2002[3]	11.85%	3,809,864	191,422	260,047	206,982	79.59%
2003[3,5]	11.52%	4,387,649	205,963	299,494	221,689	74.02%
2004[3]	12.25%	3,968,034	215,697	270,388	225,745	83.49%
2005[3]	12.72%	4,096,138	216,701	304,328	232,963	76.55%
2006[3]	13.26%	4,247,109	235,901	327,265	255,531	78.08%
2007[3]	13.41%	4,448,954	260,907	335,697	283,419	84.43%
2008[3,6]	13.86%[7]	4,722,432	280,007	374,522	303,304	80.98%
2009[3,8]	14.22%	4,778,708	298,381	381,151	328,603	86.21%
2010[3,9]	15.55%					

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

[1] *Actuarially Required Contributions determined for years ended 1995, 1996 and 1997 did not comply with the parameters of GASB 25 since a one percent growth in covered population is assumed in the amortization calculation.*
[2] *Includes contributions from other sources (if applicable)*
[3] *Actuarially Required Contributions Rate calculated according to parameters of GASB 25 with no assumption for growth of covered population.*
[4] *Actuarially Required Contribution Rate prior to change in Actuarial Assumptions and Actuarial Valuation Method is 11.41%.*
[5] *Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 11.86%.*
[6] *Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 13.22%.*
[7] *Actuarially Required Contribution Rate provided by The Segal Company.*
[8] *Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 14.74%.*
[9] *Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 17.16%.*

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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