Public Employees Retirement Association of Minnesota

Actuarial Valuation and Review
as of July 1, 2007

SEGAL

The Segal Company
101 North Wacker Drive, Suite 500 Chicago, IL 60606-1724
T 312.984.8500 F 312.984.8590 www.segalco.com

November 28, 2007

Ms. Mary Most Vanek
Public Employees Retirement Association of Minnesota
60 Empire Drive, Suite 200
St. Paul, Minnesota 55103-2088

Dear Ms. Most Vanek:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2007. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2008 and analyzes the preceding year's experience.

The census and financial information on which our calculations were based was prepared by the Association. That assistance is gratefully acknowledged. The actuarial calculations were completed under our supervision.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions used in the valuation are consistent with those in the statute, and reasonably represent the experience of the plan.

Sincerely,

THE SEGAL COMPANY

By:

Thomas D. Levy, FSA, MAAA, EA	*Andre Latia, FSA, MAAA, EA*	*Susan M. Hogarth, MAAA, EA*
Senior Vice President and Chief Actuary	*Senior Vice President and Consulting Actuary*	*Consulting Actuary*

cc: *Legislative Commission on Pensions and Retirement (3 copies)*
Minnesota Legislative Reference Library (6 copies)
Minnesota Department of Finance (2 copies)

SECTION 1

VALUATION SUMMARY

SECTION 2

VALUATION RESULTS

SECTION 3

SUPPLEMENTAL INFORMATION

SECTION 4

REPORTING INFORMATION

Purpose

This report has been prepared by The Segal Company to present a valuation of the Public Employees Retirement Association of Minnesota as of July 1, 2007. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- Section 356.215 of the Minnesota Statutes;
- The benefit provisions of the Retirement Association as administered by the PERA;
- The data as provided and confirmed by the PERA staff;
- The characteristics of covered active members, inactive vested members, pensioners and beneficiaries as of July 1, 2007, provided by the Association;
- The assets of the Association as of June 30, 2007, provided by the Association;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The statutory contribution rate under Chapter 353 is equal to 12.26% of payroll compared to the required contribution rate under Chapter 356 of 13.32% of payroll. Therefore, the contribution deficiency is 1.06% of payroll or $52,007,571. Each year there is a contribution deficiency leads to an increased deficiency in all future years. The FY2007 shortfall increased the required rate for FY2008 (and each succeeding year through FY 2031) by 0.10% of payroll.
- The Coordinated member and employer contribution rates (as a percentage of salary) will change as shown in the schedule below:

Date of Increase	Member	Employer
Current	5.75%	6.25%
January 2008	6.00%	6.50%
January 2009	6.00%	6.75%
January 2010	6.00%	7.00%

  In addition, the 2009 and/or 2010 rate increases will not be implemented if the July 1, 2008 or July 1, 2009 actuarial valuations result in full funding or a contribution sufficiency has occurred.

  The effective dates of the rates increases are January 1st of each year. However, benefits are valued as of the July 1st valuation date prior to each corresponding increase date.

- There were no changes in plan provisions or actuarial assumptions since the prior valuation.
- The only change in actuarial cost methods since the prior valuation was a modification to the asset valuation method, effective with the July 1, 2007 valuation. Assets allocated to the Minnesota Post Retirement Investment Fund (MPRIF) must equal the Market Value of Assets on the valuation date. This change resulted in a decrease to the Actuarial Value of Assets and increase to the Unfunded Actuarial Accrued Liability of $514,700,630. The Supplemental Contribution increased by $28,755,181, which directly impacted the Contribution Deficiency, resulting in total deficiency of 1.06% of payroll.
- The actuarial accrued liability funded ratio based on the actuarial value of assets under the new asset valuation method as of July 1, 2007 is 73.34% compared to 74.65% as of July 1, 2006. The funded ratio based on this calculation under the old asset valuation method would have increased to 76.25% as of July 1, 2007, hence the decrease in the funded ratio from 76.25% to 73.34% is entirely attributable to the asset valuation method change. The majority of the funded ratio increase from 2006 to 2007 is due to investment gain, increasing the market and actuarial value of assets as of June 30, 2007.

Summary of Key Valuation Results

	2007*	2006
Contributions (% of payroll) for plan year beginning July 1:		
Statutory – Chapter 353**	12.26%	11.76%
Required – Chapter 356	13.32%	12.90%
Sufficiency/(Deficiency)	-1.06%	-1.14%
Funding elements for plan year beginning July 1:		
Normal cost	$385,359,657	$366,059,040
Market value of assets	13,718,459,059	12,828,990,072
Actuarial value of assets (AVA)	12,985,324,048	12,495,207,148
Actuarial accrued liability (AAL)	17,705,626,649	16,737,756,758
Unfunded/(Overfunded) actuarial accrued liability	4,720,302,601	4,242,549,610
Funded ratios:		
Accrued Benefit Funded Ratio	78.14%	79.67%
Current assets (AVA)	$12,985,324,048	$12,495,207,148
Current benefit obligations	16,619,016,580	15,683,352,490
Projected Benefit Funded Ratio	95.52%	95.04%
Current and expected future assets	$19,949,849,096	$18,814,687,765
Current and expected future benefit obligations (Present Value of Benefits)	20,884,998,401	19,795,615,905
GASB 25/27 for plan year beginning July 1:		
Annual required employer contributions	$335,697,323	$327,265,390
Accrued Liability Funded Ratio (AVA/AAL)	73.34%	74.65%
Covered actual payroll	$4,448,954,370	$4,247,108,957
Demographic data for plan year beginning July 1:		
Number of pensioners and beneficiaries	61,436	59,078
Number of vested terminated members	39,722	37,476
Number of other non-vested terminated members	109,599	105,590
Number of active members	146,226	144,244
Total projected payroll***	$4,957,789,826	$4,703,895,104
Average projected compensation	33,905	32,611

** The 2007 results reflect a change in the Asset Valuation Method, with MPRIF Reserves equal to Market Value.*

*** The statutory contribution rate as of July 1, 2007 is shown as a blended rate of ½ of the current rate and ½ of the rate increase effective January 1, 2008.*

**** Calculated as covered actual payroll, projected one year with salary scale.*

A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, pensioners and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, C, D, E and F.

A historical perspective of how the member population has changed over the past several valuations can be seen in this chart.

CHART 1

Member Population: 2002 – 2007

Year Ended June 30	Active Members	Vested Terminated Members*	Pensioners and Beneficiaries	Ratio of Non-Actives to Actives
2002	137,817	29,353	50,878	0.58
2003	140,066	32,128	52,563	0.60
2004	138,164	33,915	54,780	0.64
2005	142,303	35,768	56,650	0.65
2006	144,244	37,476	59,078	0.67
2007	146,226	39,722	61,436	0.69

* *Excludes terminated members due a refund of employee contributions.*

Active Members

Plan costs are affected by the age, years of service and payroll of active members. In this year's valuation, there were 146,226 active members with an average age of 46.2, average years of service of 10.1 years and average projected compensation of $33,905. The 144,244 active members in the prior valuation had an average age of 46.0, average service of 10.0 years and average projected compensation of $32,611.

Inactive Members

In this year's valuation, there were 39,722 members with a vested right to a deferred or immediate vested benefit.

In addition, there were 109,599 other non-vested terminated members entitled to a return of their employee contributions.

These graphs show a distribution of active members by age and by years of service.

CHART 2

Distribution of Active Members by Age as of June 30, 2007

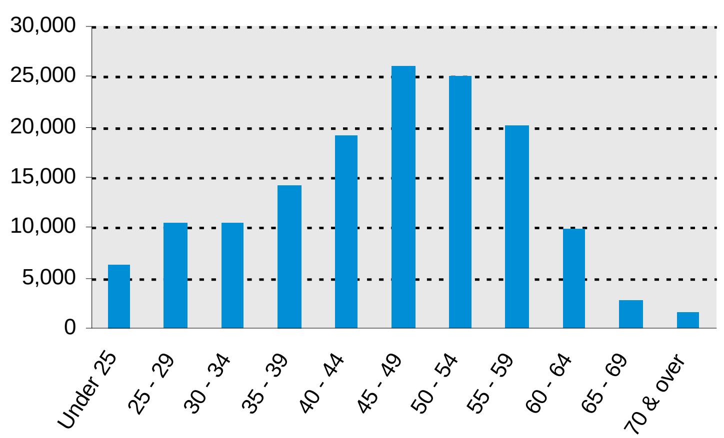
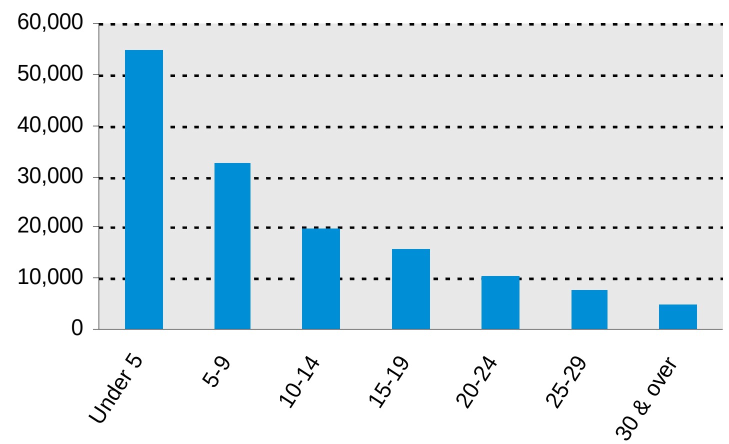


CHART 3

Distribution of Active Members by Years of Service as of June 30, 2007



Pensioners and Beneficiaries

As of June 30, 2007, 54,542 pensioners (52,554 retired and 1,988 disableds) and 6,894 beneficiaries were receiving monthly benefits of $66,109,124. For comparison, in the previous valuation, there were 52,260 pensioners (50,320 retired and 1,940 disableds) and 6,818 beneficiaries receiving monthly benefits of $62,944,327.

These graphs show a distribution of the current pensioners and beneficiaries based on their monthly amount and age, by type of pension.

CHART 4

Distribution of Pensioners and Beneficiaries by Type and by Monthly Amount as of June 30, 2007

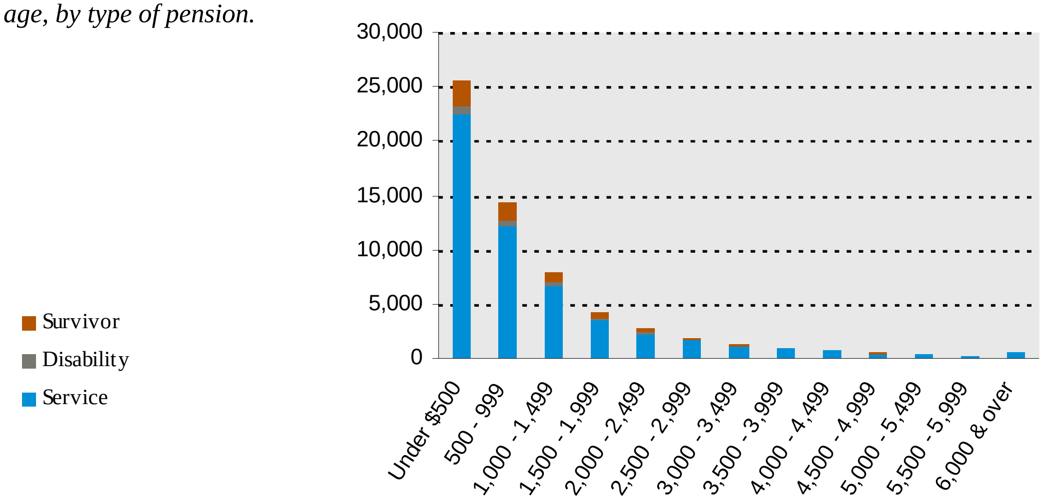
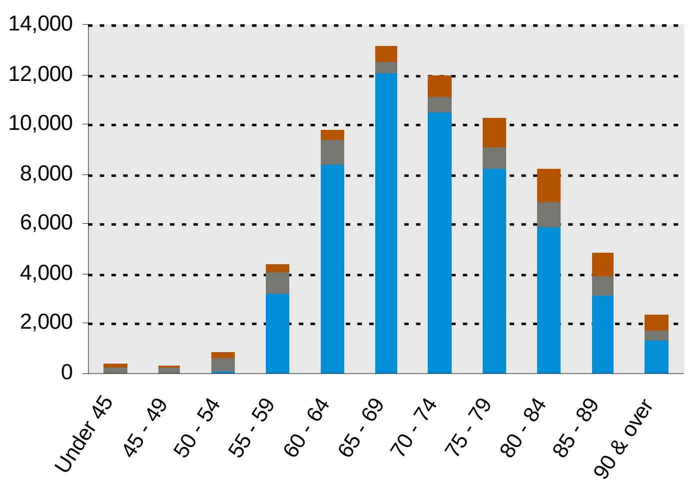


CHART 5

Distribution of Pensioners and Beneficiaries by Type and by Age as of June 30, 2007



B. FINANCIAL INFORMATION

It is desirable to have level and predictable plan costs from one year to the next. For this reason, Minnesota Statutes require an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Both the actuarial value and market value of assets are representations of the Association's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the Association's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

Effective with the July 1, 2007 valuation, the Asset Valuation Method was changed such that assets allocated to the Minnesota Post Retirement Investment Fund (MPRIF) must equal the Market Value of Assets on the valuation date. The next page summarizes the determination of the Actuarial Value of Assets for the Year ended June 30, 2007, before and after this method change.

The chart shows the determination of the actuarial value of assets as of the valuation date, before the asset valuation method change.

CHART 6A

Determination of Actuarial Value of Assets for Year Ended June 30, 2007 – Before Asset Valuation Method Change

1.	Market value of assets available for benefits			$14,233,159,689
		Original Amount	% Not Recognized	
2.	Calculation of unrecognized return			
	(a) Year ended June 30, 2007	$604,970,191	80%	$483,976,153
	(b) Year ended June 30, 2006	211,693,949	60%	127,016,369
	(c) Year ended June 30, 2005	131,918,065	40%	52,767,226
	(d) Year ended June 30, 2004	346,876,315	20%	69,375,263
	(e) Total unrecognized return			$733,135,011
3.	Actuarial value of assets (“Current Assets”): (1) – (2e)			$13,500,024,678
4.	Actuarial value as a percent of market value			94.8%

The chart shows the determination of the actuarial value of assets as of the valuation date, after the asset valuation method change.

CHART 6B

Determination of Actuarial Value of Assets for Year Ended June 30, 2007 – After Asset Valuation Method Change

1.	Market value of assets available for benefits			$13,718,459,059
		Original Amount	% Not Recognized	
2.	Calculation of unrecognized return			
	(a) Year ended June 30, 2007	$604,970,191	80%	$483,976,153
	(b) Year ended June 30, 2006	211,693,949	60%	127,016,369
	(c) Year ended June 30, 2005	131,918,065	40%	52,767,226
	(d) Year ended June 30, 2004	346,876,315	20%	69,375,263
	(e) Total unrecognized return			$733,135,011
3.	Actuarial value of assets (“Current Assets”): (1) – (2e)			$12,985,324,048
4.	Actuarial value as a percent of market value			94.7%

C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions.

For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

For the year ended June 30, 2007, the total gain is $227,278,298, including a gain of $205,886,745 from investments and gain of $21,391,553 from all other sources. The net experience variation from individual sources other than investments was 0.12% of the actuarial accrued liability, which includes age/service retirements, disability, mortality (pre and post-retirement), withdrawal and salary increases.

This chart provides a summary of the actuarial experience during the past year.

CHART 7

Actuarial Experience for Year Ended June 30, 2007

1.	Net gain from investments	$205,886,745
2.	Net gain from other experience	21,391,553
3.	Net experience gain: (1) + (2)	$227,278,298

D. INFORMATION REQUIRED BY THE GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to GASB is the historical comparison of the GASB required contribution to the actual contributions. This comparison demonstrates whether a plan is being funded in accordance with the GASB actuarially required contributions. Section 4, Exhibit III presents a schedule of this information of the Association.

The other critical piece of information regarding the Association's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors.

GASB requires that the actuarial value of assets be used to determine the funded ratio, as shown in Section 4, Exhibit IV.

EXHIBIT A

Table of Plan Coverage

Category	Year Ended June 30 2007	Year Ended June 30 2006	Change From Prior Year
Active members in valuation:			
Number	146,226	144,244	1.4%
Average age	46.2	46.0	N/A
Average service	10.1	10.0	N/A
Total projected payroll*	4,957,789,826	$4,703,895,104	5.4%
Average projected compensation	33,905	32,611	4.0%
Total active vested members	106,073	105,924	0.1%
Vested terminated members	39,722	37,476	6.0%
Retired participants:			
Number in pay status	52,554	50,320	4.4%
Average age	72.2	72.1	N/A
Average monthly benefit	$1,072	$1,062	0.9%
Disabled members:			
Number in pay status	1,988	1,940	2.5%
Average age	57.0	56.8	N/A
Average monthly benefit	$837	$834	0.4%
Beneficiaries:			
Number in pay status	6,894	6,818	1.2%
Average age	76.8	76.6	N/A
Average monthly benefit	$1,181	$1,157	2.1%
Other non-vested terminated members	109,599	105,590	3.8%

** Calculated as covered actual payroll, projected one year with salary scale.*

EXHIBIT B-1

Members in Active Service as of June 30, 2007
By Age, Years of Service, and Average Projected Compensation - Total

		Years of Service						
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 & Over**
Under 25	6,391	6,294	97	--	--	--	--	--
	$18,391	$18,255	$27,184	--	--	--	--	--
25 - 29	10,473	8,640	1,792	41	--	--	--	--
	27,105	25,050	36,826	$35,303	--	--	--	--
30 - 34	10,483	6,088	3,626	748	21	--	--	--
	33,035	26,792	41,344	43,446	$37,108	--	--	--
35 - 39	14,267	6,792	4,242	2,482	714	37	--	--
	33,975	23,933	40,100	46,773	47,707	$51,485	--	--
40 - 44	19,146	7,618	5,264	2,929	2,257	1,030	48	--
	33,356	21,776	33,786	43,566	50,448	49,821	$44,228	--
45 - 49	25,956	7,910	6,553	4,317	3,204	2,336	1,520	116
	34,386	21,061	31,133	36,645	47,810	54,167	51,598	$47,964
50 - 54	25,116	4,834	5,163	4,355	3,971	2,781	2,516	1,496
	38,161	23,697	32,295	34,390	41,206	50,623	55,869	55,085
55 - 59	20,073	3,402	3,364	2,919	3,504	2,599	2,139	2,146
	39,378	22,114	33,370	33,887	39,544	46,165	54,453	60,118
60 - 64	9,926	1,854	1,620	1,290	1,575	1,481	1,146	960
	35,653	18,595	29,909	32,755	38,163	41,918	44,970	57,280
65 - 69	2,731	895	577	364	343	219	172	161
	24,196	11,792	20,976	26,451	34,020	34,630	39,203	48,449
70 & Over	1,664	622	492	240	117	83	43	67
	15,234	8,743	13,268	18,394	26,251	27,068	29,229	35,741
Total	146,226	54,949	32,790	19,685	15,706	10,566	7,584	4,946
	$33,905	$22,379	$34,053	$37,634	$43,227	$48,498	$52,364	$57,050

EXHIBIT B-2

Members in Active Service as of June 30, 2007
By Age, Years of Service, and Average Projected Compensation - Basic

		Years of Service						
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
30 - 34	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
35 - 39	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
40 - 44	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
45 - 49	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
50 - 54	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
55 - 59	4	--	--	--	--	--	--	4
	$46,759	--	--	--	--	--	--	$46,759
60 - 64	25	--	--	--	--	--	--	25
	53,906	--	--	--	--	--	--	53,906
65 - 69	7	--	--	--	--	--	--	7
	54,650	--	--	--	--	--	--	54,650
70 & Over	5	--	--	--	--	--	--	5
	54,168	--	--	--	--	--	--	54,168
Total	41	--	--	--	--	--	--	41
	$53,367	--	--	--	--	--	--	$53,367

EXHIBIT B-3

Members in Active Service as of June 30, 2007
By Age, Years of Service, and Average Projected Compensation - Coordinated

		Years of Service						
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	6,391	6,294	97	--	--	--	--	--
	$18,391	$18,255	$27,184	--	--	--	--	--
25 - 29	10,473	8,640	1,792	41	--	--	--	--
	27,105	25,050	36,826	$35,303	--	--	--	--
30 - 34	10,483	6,088	3,626	748	21	--	--	--
	33,035	26,792	41,344	43,446	$37,108	--	--	--
35 - 39	14,267	6,792	4,242	2,482	714	37	--	--
	33,975	23,933	40,100	46,773	47,707	$51,485	--	--
40 - 44	19,146	7,618	5,264	2,929	2,257	1,030	48	--
	33,356	21,776	33,786	43,566	50,448	49,821	$44,228	--
45 - 49	25,956	7,910	6,553	4,317	3,204	2,336	1,520	116
	34,386	21,061	31,133	36,645	47,810	54,167	51,598	$47,964
50 - 54	25,116	4,834	5,163	4,355	3,971	2,781	2,516	1,496
	38,161	23,697	32,295	34,390	41,206	50,623	55,869	55,085
55 - 59	20,069	3,402	3,364	2,919	3,504	2,599	2,139	2,142
	39,377	22,114	33,370	33,887	39,544	46,165	54,453	60,143
60 - 64	9,901	1,854	1,620	1,290	1,575	1,481	1,146	935
	35,607	18,595	29,909	32,755	38,163	41,918	44,970	57,370
65 - 69	2,724	895	577	364	343	219	172	154
	24,118	11,792	20,976	26,451	34,020	34,630	39,203	48,167
70 & Over	1,659	622	492	240	117	83	43	62
	15,117	8,743	13,268	18,394	26,251	27,068	29,229	34,255
Total	146,185	54,949	32,790	19,685	15,706	10,566	7,584	4,905
	$33,899	$22,379	$34,053	$37,634	$43,227	$48,498	$52,364	$57,081

EXHIBIT C-1

Retired Participants as of June 30, 2007
By Age, Years Retired and Average Annual Benefit - Total

		Years Retired							
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	2	--	1	1	--	--	--	--	--
	$21,480	--	$36,792	$6,167	--	--	--	--	--
45 - 49	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
50 - 54	72	72	--	--	--	--	--	--	--
	12,016	$12,016	--	--	--	--	--	--	--
55 - 59	3,117	3,047	68	2	--	--	--	--	--
	11,232	11,127	16,215	1,607	--	--	--	--	--
60 - 64	8,322	5,318	2,982	22	--	--	--	--	--
	11,543	11,979	10,650	27,325	--	--	--	--	--
65 - 69	12,014	4,753	5,233	1,942	70	12	3	1	--
	11,040	9,565	11,035	14,329	$18,490	$19,062	$23,426	$9,174	--
70 - 74	10,461	1,009	4,367	3,805	1,225	45	9	1	--
	12,601	6,829	10,026	15,717	16,319	25,675	18,649	29,052	--
75 - 79	8,224	370	884	3,575	2,553	824	15	2	1
	14,238	4,024	7,547	13,615	14,776	26,940	19,652	17,494	$8,025
80 - 84	5,854	133	227	650	2,664	2,080	86	12	2
	15,892	3,786	5,100	11,795	12,109	23,733	21,959	14,681	9,115
85 - 89	3,158	27	60	135	365	1,965	588	18	--
	15,772	2,434	3,981	10,094	8,725	17,227	18,412	15,518	--
90 & Over	1,330	2	4	14	33	230	779	245	23
	14,684	19,984	2,970	2,890	4,809	12,335	15,610	16,663	8,641
Total	52,554	14,731	13,826	10,146	6,910	5,156	1,480	279	26
	$12,861	$10,381	$10,307	$14,388	$13,692	$21,264	$17,167	$16,527	$8,653

EXHIBIT C-2
Retired Participants as of June 30, 2007
By Age, Years Retired and Average Annual Benefit - Basic

		Years Retired								
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35 & Over**
Under 45	1	--	1	--	--	--	--	--	--
	$36,792	--	$36,792	--	--	--	--	--	--
45 - 49	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
50 - 54	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
55 - 59	61	46	15	--	--	--	--	--	--
	37,043	$38,393	32,902	--	--	--	--	--	--
60 - 64	415	76	322	17	--	--	--	--	--
	34,878	32,952	35,457	$32,526	--	--	--	--	--
65 - 69	907	70	408	406	18	4	1	--	--
	36,804	27,549	34,498	40,836	$35,867	$24,972	$53,319	--	--
70 - 74	1,383	19	215	743	377	21	7	1	--
	37,261	38,018	26,795	39,914	37,918	43,545	22,129	$29,052	--
75 - 79	1,660	1	52	504	620	471	10	2	--
	34,163	3,972	25,424	32,290	31,604	40,825	25,180	17,494	--
80 - 84	1,764	3	9	88	522	1,062	69	10	1
	32,479	17,194	27,650	34,314	25,366	36,530	25,381	17,384	$11,648
85 - 89	1,310	--	1	13	54	831	396	15	--
	26,805	--	11,849	41,732	23,949	28,579	23,409	16,529	--
90 & Over	759	--	--	--	2	72	465	199	21
	20,538	--	--	--	5,455	27,173	21,126	18,164	8,704
Total	8,260	215	1,023	1,771	1,593	2,461	948	227	22
	$32,251	$32,450	$32,616	$37,620	$30,810	$34,435	$22,474	$18,064	$8,838

EXHIBIT C-3
Retired Participants as of June 30, 2007
By Age, Years Retired and Average Annual Benefit - Coordinated

		Years Retired								
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35 & Over**
Under 45	1	--	--	1	--	--	--	--	--
	$6,167	--	--	$6,167	--	--	--	--	--
45 - 49	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
50 - 54	72	72	--	--	--	--	--	--	--
	12,016	$12,016	--	--	--	--	--	--	--
55 - 59	3,056	3,001	53	2	--	--	--	--	--
	10,716	10,709	$11,492	1,607	--	--	--	--	--
60 - 64	7,907	5,242	2,660	5	--	--	--	--	--
	10,318	11,675	7,647	9,644	--	--	--	--	--
65 - 69	11,107	4,683	4,825	1,536	52	8	2	1	--
	8,936	9,296	9,051	7,323	$12,475	$16,107	$8,480	$9,174	--
70 - 74	9,078	990	4,152	3,062	848	24	2	--	--
	8,844	6,230	9,158	9,846	6,716	10,038	6,468	--	--
75 - 79	6,564	369	832	3,071	1,933	353	5	--	1
	9,199	4,024	6,430	10,550	9,379	8,414	8,595	--	$8,025
80 - 84	4,090	130	218	562	2,142	1,018	17	2	1
	8,739	3,477	4,169	8,269	8,878	10,382	8,072	1,164	6,581
85 - 89	1,848	27	59	122	311	1,134	192	3	--
	7,952	2,434	3,848	6,723	6,082	8,909	8,106	10,467	--
90 & Over	571	2	4	14	31	158	314	46	2
	6,902	19,984	2,970	2,890	4,767	5,574	7,441	10,167	7,978
Total	44,294	14,516	12,803	8,375	5,317	2,695	532	52	4
	$9,245	$10,054	$8,525	$9,476	$8,563	$9,236	$7,712	$9,819	$7,641

EXHIBIT D-1
Disabled Members as of June 30, 2007
By Age, Years Disabled and Average Annual Benefit - Total

		Years Disabled							
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35 & Over**
Under 45	62	41	17	3	1	--	--	--	--
	$5,635	$5,771	$5,823	$3,703	$2,637	--	--	--	--
45 - 49	194	115	54	17	8	--	--	--	--
	6,737	7,667	5,073	5,681	6,846	--	--	--	--
50 - 54	383	208	112	49	14	--	--	--	--
	9,131	9,900	8,177	8,489	7,577	--	--	--	--
55 - 59	633	338	198	61	30	5	1	--	--
	10,364	10,996	9,915	9,575	8,758	$4,455	$11,400	--	--
60 - 64	698	304	261	106	19	7	1	--	--
	11,707	10,850	12,601	11,561	13,779	12,531	9,136	--	--
65 - 69	18	11	6	1	--	--	--	--	--
	4,844	6,180	2,659	3,261	--	--	--	--	--
70 - 74	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
75 - 79	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
80 - 84	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
85 - 89	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
90 & Over	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Total	1,988	1,017	648	237	72	12	2	--	--
	$10,046	$10,089	$10,118	$9,858	$9,556	$9,166	$10,268	--	--

EXHIBIT D-2
Disabled Members as of June 30, 2007
By Age, Years Disabled and Average Annual Benefit - Basic

		Years Disabled							
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
45 - 49	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
50 - 54	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
55 - 59	2	--	1	--	--	--	1	--	--
	$31,250	--	$51,101	--	--	--	$11,400	--	--
60 - 64	13	1	6	2	3	1	--	--	--
	42,403	$1,534	47,978	$55,221	$37,704	$38,280	--	--	--
65 - 69	1	1	--	--	--	--	--	--	--
	35,883	35,883	--	--	--	--	--	--	--
70 - 74	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
75 - 79	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
80 - 84	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
85 - 89	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
90 & Over	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Total	16	2	7	2	3	1	1	--	--
	$40,601	$18,709	$48,424	$55,221	$37,704	$38,280	$11,400	--	--

EXHIBIT D-3
Disabled Members as of June 30, 2007
By Age, Years Disabled and Average Annual Benefit - Coordinated

		Years Disabled							
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35 & Over**
Under 45	62	41	17	3	1	--	--	--	--
	$5,635	$5,771	$5,823	$3,703	$2,637	--	--	--	--
45 - 49	194	115	54	17	8	--	--	--	--
	6,737	7,667	5,073	5,681	6,846	--	--	--	--
50 - 54	383	208	112	49	14	--	--	--	--
	9,131	9,900	8,177	8,489	7,577	--	--	--	--
55 - 59	631	338	197	61	30	5	--	--	--
	10,297	10,996	9,706	9,575	8,758	$4,455	--	--	--
60 - 64	685	303	255	104	16	6	1	--	--
	11,124	10,880	11,768	10,721	9,294	8,240	$9,136	--	--
65 - 69	17	10	6	1	--	--	--	--	--
	3,019	3,210	2,659	3,261	--	--	--	--	--
70 - 74	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
75 - 79	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
80 - 84	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
85 - 89	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
90 & Over	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Total	1,972	1,015	641	235	69	11	1	--	--
	$9,798	$10,072	$9,700	$9,472	$8,332	$6,520	$9,136	--	--

EXHIBIT E-1

Beneficiaries as of June 30, 2007
By Age, Years Since Death and Average Annual Benefit - Total

		Years Since Death							
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35 & Over**
Under 45	91	49	17	13	8	3	--	--	1
	$7,858	$7,799	$7,320	$7,000	$11,044	$3,683	--	--	$18,040
45 - 49	161	78	43	26	12	2	--	--	--
	7,709	8,151	6,036	7,530	10,434	12,390	--	--	--
50 - 54	209	110	59	26	9	2	3	--	--
	9,118	8,909	7,822	9,768	15,114	15,515	$14,394	--	--
55 - 59	323	180	83	35	18	5	2	--	--
	10,823	9,632	10,947	13,279	13,628	18,439	25,660	--	--
60 - 64	439	196	123	63	33	12	6	6	--
	12,283	10,611	11,464	14,047	17,160	20,133	15,804	$19,117	--
65 - 69	623	234	176	102	67	26	11	5	2
	13,191	10,804	12,437	15,809	14,328	22,073	23,751	16,473	5,473
70 - 74	880	243	260	170	117	48	19	15	8
	15,523	15,618	14,323	16,527	13,438	21,679	21,089	18,336	5,320
75 - 79	1,228	347	293	244	177	94	24	19	30
	16,828	15,503	18,053	17,468	15,146	22,507	19,481	15,995	5,496
80 - 84	1,382	366	310	263	195	111	53	37	47
	16,210	16,273	16,843	16,287	15,978	17,769	18,617	16,761	5,255
85 - 89	983	217	177	182	131	105	73	38	60
	14,156	14,738	14,833	14,275	14,725	13,689	16,392	15,532	5,670
90 & Over	575	59	75	93	74	80	65	38	91
	10,581	12,578	11,245	11,213	11,598	12,552	10,559	10,490	5,586
Total	6,894	2,079	1,616	1,217	841	488	256	158	239
	$14,171	$13,184	$14,268	$15,200	$14,598	$17,510	$16,361	$15,095	$5,573

EXHIBIT E-2
Beneficiaries as of June 30, 2007
By Age, Years Since Death and Average Annual Benefit - Basic

		Years Since Death							
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35 & Over**
Under 45	4	--	--	2	1	--	--	--	1
	$11,201	--	--	$5,531	$15,700	--	--	--	$18,040
45 - 49	7	2	1	1	2	1	--	--	--
	15,046	$7,094	$2,065	8,003	30,872	$19,320	--	--	--
50 - 54	11	2	4	--	3	1	1	--	--
	16,691	17,899	7,178	--	28,699	25,171	$7,831	--	--
55 - 59	30	9	6	4	5	4	2	--	--
	23,737	18,396	18,586	39,455	26,872	22,882	25,660	--	--
60 - 64	79	20	15	14	13	6	6	5	--
	25,556	22,556	27,176	28,246	28,677	30,760	15,804	$22,517	--
65 - 69	171	45	36	30	24	18	11	5	2
	26,611	24,285	28,369	30,006	28,432	27,739	23,751	16,473	5,473
70 - 74	328	91	86	50	29	30	19	15	8
	27,369	26,176	28,310	34,551	27,972	30,115	21,089	18,336	5,320
75 - 79	551	115	126	113	72	53	23	19	30
	27,493	31,207	29,738	28,222	25,943	34,473	19,991	15,995	5,496
80 - 84	722	159	149	118	99	71	42	37	47
	23,073	26,550	25,876	24,583	21,985	24,228	21,840	16,761	5,255
85 - 89	590	112	94	90	73	64	60	37	60
	18,703	20,680	22,306	22,112	19,737	17,786	18,801	15,802	5,670
90 & Over	432	35	42	62	58	58	52	34	91
	11,778	16,524	15,117	12,554	13,651	14,025	11,502	11,320	5,586
Total	2,925	590	559	484	379	306	216	152	239
	$22,059	$25,163	$25,653	$24,914	$22,272	$23,602	$18,144	$15,550	$5,573

EXHIBIT E-3

Beneficiaries as of June 30, 2007
By Age, Years Since Death and Average Annual Benefit - Coordinated

		Years Since Death							
Age	**Total**	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35 & Over**
Under 45	87	49	17	11	7	3	--	--	--
	$7,704	$7,799	$7,320	$7,267	$10,378	$3,683	--	--	--
45 - 49	154	76	42	25	10	1	--	--	--
	7,376	8,179	6,131	7,512	6,346	5,460	--	--	--
50 - 54	198	108	55	26	6	1	2	--	--
	8,697	8,743	7,869	9,768	8,322	5,858	$17,675	--	--
55 - 59	293	171	77	31	13	1	--	--	--
	9,501	9,171	10,351	9,901	8,535	667	--	--	--
60 - 64	360	176	108	49	20	6	--	1	--
	9,370	9,253	9,282	9,990	9,674	9,507	--	$2,117	--
65 - 69	452	189	140	72	43	8	--	--	--
	8,114	7,594	8,340	9,894	6,455	9,325	--	--	--
70 - 74	552	152	174	120	88	18	--	--	--
	8,483	9,297	7,410	9,016	8,648	7,621	--	--	--
75 - 79	677	232	167	131	105	41	1	--	--
	8,147	7,719	9,237	8,191	7,742	7,040	7,753	--	--
80 - 84	660	207	161	145	96	40	11	--	--
	8,703	8,379	8,484	9,535	9,783	6,304	6,312	--	--
85 - 89	393	105	83	92	58	41	13	1	--
	7,328	8,400	6,370	6,609	8,417	7,294	5,273	5,542	--
90 & Over	143	24	33	31	16	22	13	4	--
	6,964	6,824	6,317	8,531	4,159	8,667	6,785	3,434	--
Total	3,969	1,489	1,057	733	462	182	40	6	--
	$8,357	$8,438	$8,247	$8,787	$8,303	$7,266	$6,732	$3,566	--

EXHIBIT F

Reconciliation of Member Data

	Active Members	Vested Terminated Members	Other Non-Vested Terminated Members	Disableds	Retired Participants	Beneficiaries	Total
A. Number as of July 1, 2006	144,244	37,476	105,590	1,940	50,320	6,818	346,388
B. Data Adjustments*	-23	-94	13	-5	--	--	-109
C. Additions	17,088	4,505	7,320	263	3,638	473	33,287
D. Deletions:							
1. Terminated - Nonvested	-7,952	-43	-1,927	--	--	--	-9,922
2. Terminated - Vested	-4,305	--	--	--	--	--	-4,305
3. Retirements	-2,429	-1,091	--	-130	--	--	-3,650
4. Disability	-204	-49	--	--	--	--	-253
5. Death	-193	-78	-136	-72	-1,404	-364	-2,247
6. Return to Active	--	-904	-1,261	-7	--	--	-2,172
7. Other Deletions	--	--	--	-1	--	-33	-34
E. Number as of July 1, 2007	146,226	39,722	109,599	1,988	52,554	6,894	356,983

** Adjustments made by PERA to the 2006 data subsequent to the 2006 actuarial valuation.*

EXHIBIT G

Summary Statement of Income and Expenses on a Market Value Basis for Year Ended June 30, 2007

				Non-MPRIF Assets	MPRIF Reserve	Market Value
A.	Assets available at beginning of year (BOY)			$6,037,843,673	$6,791,146,399	$12,828,990,072
B.	Operating revenues:					
	1.	Member contributions		$260,907,458	--	$260,907,458
	2.	Employer contributions		283,418,793	--	283,418,793
	3.	MPRIF income		--	$564,180,900	564,180,900
	4.	Net investment income				
		(a)	Interest and dividends	$196,581,585	--	$196,581,585
		(b)	Net appreciation/(depreciation)	930,678,558	--	930,678,558
		(c)	Securities lending income	4,856,274	--	4,856,274
		(d)	Investment expenses	-18,945,836	--	-18,945,836
		(e)	Net subtotal	$1,113,170,581	--	$1,113,170,581
	5.	Other		4,228,820	--	4,228,820
	6.	Total additions		$1,661,725,652	$564,180,900	$2,225,906,552
C.	Operating expenses:					
	1.	Benefits		$32,280,253	$751,733,180	$784,013,433
	2.	Refunds		25,744,372	--	25,744,372
	3.	Administrative expenses		9,060,892	--	9,060,892
	4.	Other		2,918,238	--	2,918,238
	5.	Total operating expenses		$70,003,755	$751,733,180	$821,736,935
D.	Other changes in reserves:					
	1.	Annuities awarded		-$492,851,968	$492,851,968	--
	2.	Mortality gain/(loss)		-25,060,644	25,060,644	--
	3.	Change in MPRIF Asset Valuation Method		--	-514,700,630	-$514,700,630
	4.	Total other changes		-$517,912,612	$3,211,982	-$514,700,630
E.	Assets available at end of year (EOY)			$7,111,652,958	$6,606,806,101	$13,718,459,059
F.	Determination of current year unrecognized asset return (UAR)					
	1.	Average balance:				
		(a)	Non-MPRIF Assets available at BOY: (A)			$6,037,843,673
		(b)	Non-MPRIF Assets available at EOY:* (E) – (D.2)			7,136,713,602
		(c)	Average balance: [(F.1.(a)) + (F.1.(b)) – (B.4.(e)) – (B.5)]/2			6,028,578,937
	2.	Expected return: 8.50% x (F.1.(c))				512,429,210
	3.	Actual return: (B.4.(e)) + (B.5)				1,117,399,401
	4.	Current year UAR: (F.3) – (F.2)				$604,970,191

* *Before adjustment for MPRIF Mortality Gain (Loss).*

EXHIBIT H

Table of Financial Information for Year Ended June 30, 2007

	Market Value	Cost Value
Assets in trust		
Cash, equivalents, short-term securities:	$90,238,281	$90,238,281
Fixed income	1,579,946,823	1,634,639,841
Equity	4,687,397,689	4,181,202,477
Real estate	10,785,164	10,785,164
Equity in MPRIF*	6,606,806,101	6,606,806,101
Invested securities lending collateral	2,172,945,711	2,172,945,711
SBI alternative	766,626,282	672,011,660
Other	115,100	115,100
Total assets in trust	$15,914,861,151	$15,368,744,335
Assets receivable	$17,566,411	$17,566,411
Total assets	$15,932,427,562	$15,386,310,746
Amounts currently payable		
Securities lending collateral	-$2,172,945,711	-$2,172,945,711
Other	-41,022,792	-41,022,792
Total amounts currently payable	-$2,213,968,503	-$2,213,968,503
Assets available for benefits		
MPRIF reserves	$6,606,806,101	$6,606,806,101
Member reserves	1,974,733,790	1,974,733,790
Other non-MPRIF reserves	5,136,919,168	4,590,802,352
Total assets available for benefits	$13,718,459,059	$13,172,342,243
Net Assets at Market/Cost Value	$13,718,459,059	$13,172,342,243

**The Cost Value of the Equity in the MPRIF is stated as Market Value in the MPRIF. The actual liability of the MPRIF Reserve is $7,121,506,731.*

EXHIBIT I

Actuarial Value of Assets Calculation History Through June 30, 2007

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return*	Change in Asset Method	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2002	$206,982,000	$191,422,000	$11,288,400,000	--	$8,680,000	$660,710,000	$11,017,414,000
2003	221,689,000	205,963,000	442,165,000	--	8,628,000	682,701,000	11,195,902,000
2004	225,744,509	215,696,700	559,127,828	--	8,830,215	709,679,961	11,477,960,861
2005	232,963,374	216,700,643	665,423,839	--	9,117,813	739,995,212	11,843,935,692
2006	255,530,941	235,901,258	943,711,175	--	9,029,035	774,842,883	12,495,207,148
2007	283,418,793	260,907,458	1,279,309,976	-$514,700,630	9,060,892	809,757,805	12,985,324,048

* *Net Investment Return on an Actuarial Value of Assets basis and net of investment fees.*

EXHIBIT J

Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2007

1. Unfunded/(Overfunded) actuarial accrued liability at beginning of year		$4,242,549,610
2. Normal cost at beginning of year		366,059,040
3. Total contributions		544,326,251
4. Interest		368,597,870
5. Expected unfunded/(overfunded) actuarial accrued liability (1) + (2) – (3) + (4)		$4,432,880,269
6. Changes due to (gain)/loss from:		
(a) Investments	-$205,886,745	
(b) MPRIF mortality	25,060,644	
(c) Salary increases	-101,197,698	
(d) Other demographics*	54,745,501	
(e) Total changes due to (gain)/loss		-227,278,298
7. Changes due to change in asset valuation method		$514,700,630
8. Unfunded/(Overfunded) actuarial accrued liability at end of year		$4,720,302,601

** Includes (gain)/loss due to age/service retirements, disability, mortality (pre and post-retirement) and withdrawal.*

EXHIBIT K

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Association is calculated including:

(a) Investment return — the rate of investment yield that the Association will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Association exceeds the assets of the Association. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded Actuarial Accrued Liability: Payments made over a period of years equal in value to the Association's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Association from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

Accrued Benefit Funded Ratio: A current year funded status that measures the percent of benefits covered by Current Assets. This ratio is based on benefits earned to the valuation date (accrued service) and includes future salary increases to retirement. The liability for these benefits is defined as the Current Benefit Obligations. The Accrued Benefit Funded Ratio is calculated as the Actuarial Value of Assets (Current Assets) divided by the Current Benefit Obligations.

Projected Benefit Funded Ratio: A projected funded status that measures contribution sufficiency/deficiency, which is based on a present value of all plan benefits for the lifetime of all plan Members. The liability for these benefits is defined as the Current and Expected Future Benefit Obligations, or Present Value of Benefits. The Current and Expected Future Assets are determined as the sum of the Actuarial Value of Assets (Current Assets), the Present Value of Expected Future Statutory Supplemental Contributions and the Present Value of Future Normal Costs. The Projected Benefit Funded Ratio is calculated as the Current and Expected Future Assets divided by the Current and Expected Future Benefit Obligations. If the ratio is equal to or more than 100%, there is a contribution sufficiency, and if it is less than 100% there is a contribution deficiency.

EXHIBIT IA

Summary of Actuarial Valuation Data

The valuation was made with respect to the following data supplied to us:

1.	Pensioners as of the valuation date (including 6,894 beneficiaries in pay status)		61,436
2.	Members inactive during year ended June 30, 2007 with vested rights		39,722
3.	Members active during the year ended June 30, 2007		146,226
	Fully vested	106,073	
	Not vested	40,153	
4.	Other non-vested terminated members as of June 30, 2007		109,599

EXHIBIT IB

Summary of Actuarial Valuation Results (Before Asset Valuation Method Change)

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
A. Determination of Actuarial Accrued Liability			
1. Active members:			
(a) Death benefits	$165,892,729	$58,565,736	$107,326,993
(b) Disability benefits	412,877,809	151,935,854	260,941,955
(c) Withdrawal benefits	842,574,804	560,999,769	281,575,035
(d) Retirement benefits	10,089,120,559	2,407,870,393	7,681,250,166
(e) Total	$11,510,465,901	$3,179,371,752	$8,331,094,149
2. Vested terminated members	$1,865,444,110	--	$1,865,444,110
3. Other non-vested terminated members	64,836,883	--	64,836,883
4. Annuitants in MPRIF	7,121,506,731	--	7,121,506,731
5. Annuitants not in MPRIF	322,744,776	--	322,744,776
6. Total	$20,884,998,401	$3,179,371,752	$17,705,626,649
B. Determination of Unfunded Actuarial Accrued Liability			
1. Actuarial Accrued Liability			$17,705,626,649
2. Actuarial Value of Assets			13,500,024,678
3. Unfunded Actuarial Accrued Liability: (B.1) – (B.2)			$4,205,601,971
C. Determination of Supplemental Contribution Rate			
1. Present value of future payrolls through the amortization date of June 30, 2031			$88,232,011,553
2. Supplemental contribution rate: (B.3) / (C.1)			4.77%
D. Determination of GASB Amortization Rate			
1. Present value of future payrolls through the amortization date of June 30, 2031			$80,126,488,046
2. Supplemental contribution rate: (B.3) / (D.1)			5.25%

EXHIBIT IC

Summary of Actuarial Valuation Results (After Asset Valuation Method Change)

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
A. Determination of Actuarial Accrued Liability			
1. Active members:			
(a) Death benefits	$165,892,729	$58,565,736	$107,326,993
(b) Disability benefits	412,877,809	151,935,854	260,941,955
(c) Withdrawal benefits	842,574,804	560,999,769	281,575,035
(d) Retirement benefits	10,089,120,559	2,407,870,393	7,681,250,166
(e) Total	$11,510,465,901	$3,179,371,752	$8,331,094,149
2. Vested terminated members	$1,865,444,110	--	$1,865,444,110
3. Other non-vested terminated members	64,836,883	--	64,836,883
4. Annuitants in MPRIF	7,121,506,731	--	7,121,506,731
5. Annuitants not in MPRIF	322,744,776	--	322,744,776
6. Total	$20,884,998,401	$3,179,371,752	$17,705,626,649
B. Determination of Unfunded Actuarial Accrued Liability			
1. Actuarial Accrued Liability			$17,705,626,649
2. Actuarial Value of Assets			12,985,324,048
3. Unfunded Actuarial Accrued Liability: (B.1) – (B.2)			$4,720,302,601
C. Determination of Supplemental Contribution Rate			
1. Present value of future payrolls through the amortization date of June 30, 2031			$88,232,011,553
2. Supplemental contribution rate: (B.3) / (C.1)			5.35%
D. Determination of GASB Amortization Rate			
1. Present value of future payrolls through the amortization date of June 30, 2031			$80,126,488,046
2. Supplemental contribution rate: (B.3) / (D.1)			5.89%

EXHIBIT II
Actuarial Balance Sheet

A.	Current Assets				$12,985,324,048
B.	Expected Future Assets				
	1.	Present Value of Expected Future Statutory Supplemental Contributions			$3,785,153,296
	2.	Present Value of Future Normal Costs			3,179,371,752
	3.	Total Expected Future Assets			$6,964,525,048
C.	Total Current and Expected Future Assets				$19,949,849,096
D.	Current Benefit Obligations		**Non-Vested**	**Vested**	**Total**
	1.	Benefit recipients:			
		(a) Retirement annuities	--	$6,429,377,158	$6,429,377,158
		(b) Disability benefits	--	240,794,169	240,794,169
		(c) Beneficiaries	--	774,080,180	774,080,180
	2.	Vested terminated members	--	1,865,444,110	1,865,444,110
	3.	Other non-vested terminated members	--	64,836,883	64,836,883
	4.	Active members	$80,184,294	7,164,299,786	7,244,484,080
	5.	Total Current Benefit Obligations	$80,184,294	$16,538,832,286	$16,619,016,580
E.	Expected Future Benefit Obligations				4,265,981,821
F.	Total Current and Expected Future Benefit Obligations - Present Value of Benefits: (D.5 + E)				$20,884,998,401
G.	Current Unfunded Actuarial Liability (D.5 - A)				$3,633,692,532
H.	Current and Future Unfunded Actuarial Liability (F - C)				$935,149,305

EXHIBIT III

Supplementary Information Required by the GASB – Schedule of Employer Contributions

Plan Year Ended June 30	Actuarially Required Contribution Rate[1] (a)	Actual Covered Payroll (b)	Actual Member Contributions (c)	Annual Required Employer Contributions [(a) x (b)] – (c) = (d)	Actual Employer Contributions[2] (e)	Percentage Contributed (e) / (d)
1991	10.04%	$2,124,409,000	$94,413,000	$118,878,000	$101,907,000	85.72%
1992	9.44%	2,299,532,000	101,655,000	115,421,000	109,203,000	94.61%
1993	9.95%	2,403,558,000	106,359,000	132,795,000	113,183,000	85.23%
1994	9.58%	2,557,522,000	112,940,000	132,071,000	119,390,000	90.40%
1995	9.76%	2,679,069,000	115,986,000	145,491,000	123,984,000	85.22%
1996	9.61%	2,814,126,000	121,525,000	148,913,000	129,738,000	87.12%
1997	9.75%	2,979,260,000	128,234,000	162,244,000	136,686,000	84.25%
1998	9.62%[3]	3,271,737,000	140,385,000	174,356,000	151,499,000	86.89%
1999	9.63%[3]	3,302,808,000	158,475,000	159,585,000	173,370,000	108.64%
2000	9.22%[3]	3,437,954,000	171,073,000	145,906,000	186,637,000	127.92%
2001	11.84%[3], [4]	3,466,587,000	173,380,000	237,064,000	188,208,000	79.39%
2002	11.85%[3]	3,809,864,000	191,422,000	260,047,000	206,982,000	79.59%
2003	11.52%[3], [5]	4,387,649,000	205,963,000	299,494,000	221,689,000	74.02%
2004	12.25%[3]	3,968,034,367	215,696,700	270,387,510	225,744,509	83.49%
2005	12.72%[3]	4,096,138,282	216,700,643	304,328,146	232,963,374	76.55%
2006	13.26%[3]	4,247,108,957	235,901,258	327,265,390	255,530,941	78.08%
2007	13.41%[3]	4,448,954,370	260,907,458	335,697,323	283,418,793	84.43%
2008	13.86%[6]					

(1) *Actuarially Required Contributions determined for years ended 1995, 1996, 1997 did not comply with the parameters of GASB Statement No. 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 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 Asset 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%.*

EXHIBIT IV

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded 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	$3,570,304,000	$4,988,671,000	$1,418,367,000	71.57%	$2,124,409,000	66.77%
07/01/1992	3,978,110,000	5,439,953,000	1,461,843,000	73.13%	2,299,532,000	63.57%
07/01/1993	4,374,459,000	5,784,318,000	1,409,859,000	75.63%	2,403,558,000	58.66%
07/01/1994	4,747,128,000	6,223,622,000	1,476,494,000	76.28%	2,557,522,000	57.73%
07/01/1995	5,138,461,000	6,622,069,000	1,483,608,000	77.60%	2,679,069,000	55.38%
07/01/1996	5,786,398,000	7,270,073,000	1,483,675,000	79.59%	2,814,126,000	52.72%
07/01/1997	6,658,410,000	8,049,666,000	1,391,256,000	82.72%	2,979,260,000	46.70%
07/01/1998	7,636,668,000	8,769,303,000	1,132,635,000	87.08%	3,271,737,000	34.62%
07/01/1999	8,489,177,000	9,443,678,000	954,501,000	89.89%	3,302,808,000	28.90%
07/01/2000	9,609,367,000	11,133,682,000	1,524,315,000	86.31%	3,437,954,000	44.34%
07/01/2001	10,527,270,000	12,105,337,000	1,578,067,000	86.96%	3,466,587,000	45.52%
07/01/2002	11,017,414,000	12,958,105,000	1,940,691,000	85.02%	3,809,864,000	50.94%
07/01/2003	11,195,902,000	13,776,198,000	2,580,296,000	81.27%	4,387,649,000	58.81%
07/01/2004	11,477,960,861	14,959,464,879	3,481,504,018	76.73%	3,968,034,367	87.74%
07/01/2005	11,843,935,692	15,892,554,615	4,048,618,923	74.53%	4,096,138,282	98.84%
07/01/2006	12,495,207,148	16,737,756,758	4,242,549,610	74.65%	4,247,108,957	99.89%
07/01/2007	12,985,324,048	17,705,626,649	4,720,302,601	73.34%	4,448,954,370	106.10%

EXHIBIT VA

Determination of Contribution Sufficiency – Total (Before Asset Valuation Method Change)

	July 1, 2007	
A. Statutory Contributions* – Chapter 353	**Percent of Payroll**	**Dollar Amount**
1. Member Contributions	5.88%	$291,588,497
2. Employer Contributions	6.38%	316,425,146
3. Total	12.26%	$608,013,643
B. Required Contributions – Chapter 356		
1. Normal Cost		
(a) Retirement benefits	6.08%	$301,203,523
(b) Disability benefits	0.35%	17,441,725
(c) Death	0.14%	6,912,257
(d) Withdrawal Benefits	1.21%	59,802,152
(e) Total	7.78%	$385,359,657
2. Amortization of Supplemental Contribution UAAL	4.77%	236,486,575
3. Allowance for Administrative Expenses	0.19%	9,419,801
4. Total	12.74%	$631,266,033
C. Contribution Sufficiency (Deficiency) (A.3 – B.4)	-0.48%	-$23,252,390
Projected annual payroll for fiscal year beginning on the valuation date**		$4,957,789,826

** The statutory contribution rates as of July 1, 2007 are shown as a blended rate of ½ of the current rate and ½ of the rate increase effective January 1, 2008.*

*** Calculated as covered actual payroll, projected one year with salary scale.*

EXHIBIT VB

Determination of Contribution Sufficiency – Total (After Asset Valuation Method Change)

	July 1, 2007	
A. Statutory Contributions* – Chapter 353	**Percent of Payroll**	**Dollar Amount**
1. Member Contributions	5.88%	$291,588,497
2. Employer Contributions	6.38%	316,425,146
3. Total	12.26%	$608,013,643
B. Required Contributions – Chapter 356		
1. Normal Cost		
(a) Retirement benefits	6.08%	$301,203,523
(b) Disability benefits	0.35%	17,441,725
(c) Death	0.14%	6,912,257
(d) Withdrawal Benefits	1.21%	59,802,152
(e) Total	7.78%	$385,359,657
2. Amortization of Supplemental Contribution UAAL		
(a) Before asset valuation method change	4.77%	236,486,575
(b) Cost impact due to asset valuation method change	0.58%	28,755,181
3. Allowance for Administrative Expenses	0.19%	9,419,801
4. Total	13.32%	$660,021,214
C. Contribution Sufficiency (Deficiency) (A.3 – B.4)	-1.06%	-$52,007,571
Projected annual payroll for fiscal year beginning on the valuation date**		$4,957,789,826

* *The statutory contribution rates as of July 1, 2007 are shown as a blended rate of ½ of the current rate and ½ of the rate increase effective January 1, 2008.*

** *Calculated as covered actual payroll, projected one year with salary scale.*

EXHIBIT VI

Determination of Contribution Sufficiency – Basic

		July 1, 2007	
A.	**Statutory Contributions – Chapter 353**	**Percent of Payroll**	**Dollar Amount**
1.	Member Contributions	9.10%	$199,114
2.	Employer Contributions	11.78%	257,754
3.	Total	20.88%	$456,868
B.	**Required Contributions – Chapter 356**		
1.	Normal Cost		
	(a) Retirement benefits	7.72%	$168,972
	(b) Disability benefits	0.34%	7,483
	(c) Death	0.26%	5,741
	(d) Withdrawal Benefits	2.83%	61,918
	(e) Total	11.15%	$244,114
Projected annual payroll* for fiscal year beginning on the valuation date			$2,188,066

** Calculated as covered actual payroll, projected one year with salary scale.*

EXHIBIT VII

Determination of Contribution Sufficiency - Coordinated

		July 1, 2007	
A.	**Statutory Contributions* – Chapter 353**	**Percent of Payroll**	**Dollar Amount**
1.	Member Contributions	5.88%	$291,389,383
2.	Employer Contributions	6.38%	316,167,392
3.	Total	12.26%	$607,556,775
B.	**Required Contributions – Chapter 356**		
1.	Normal Cost		
	(a) Retirement benefits	6.07%	$301,034,551
	(b) Disability benefits	0.35%	17,434,242
	(c) Death	0.14%	6,906,516
	(d) Withdrawal Benefits	1.21%	59,740,234
	(e) Total	7.77%	$385,115,543
Projected annual payroll for fiscal year beginning on the valuation date**			$4,955,601,760

** The statutory contribution rates as of July 1, 2007 are shown as a blended rate of ½ of the current rate and ½ of the rate increase effective January 1, 2008.*

*** Calculated as covered actual payroll, projected one year with salary scale.*

EXHIBIT VIII

Supplementary Information Required by the GASB

Valuation date	July 1, 2007
Actuarial cost method	Entry Age Normal
Amortization method	Level percentage of payroll, assuming payroll increases at 5.00% per annum
Remaining amortization period	24 years remaining as of July 1, 2007
Asset valuation method	MPRIF Reserve: Market Value
	Non-MPRIF Assets: Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during that fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year).
Actuarial assumptions:	
Investment rate of return:	
Pre-retirement	8.50% per annum
Post-retirement	8.50% per annum (payment of earnings on retired reserves in excess of 6.00% accounted for by 6.00% post-retirement assumption)
Plan membership:	
Pensioners and beneficiaries receiving benefits	61,436
Terminated vested members entitled to, but not yet receiving benefits	39,722
Other non-vested terminated members	109,599
Active members	146,226
Total	356,983

EXHIBIT IX

Actuarial Assumptions and Actuarial Cost Method

Net Investment Return:		
Pre-Retirement:	8.50% per annum	
Post-Retirement:	8.50% per annum (Payment of earnings on retired reserves in excess of 6.00% accounted for by 6.00% post-retirement assumption.)	
Benefit Increases After Retirement:	Payment of earnings on retired reserves in excess of 6.00% accounted for by 6.00% post-retirement assumption.	
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 rate table. During a ten year select period, 0.30% x (10-T) where T is completed years of service is added to the ultimate rate.	
Mortality Rates:		
Healthy Pre-Retirement:	Male:	1983 Group Annuity Mortality Table for males set back eight years.
	Female:	1983 Group Annuity Mortality Table for females set back seven years.
Healthy Post-Retirement:	Male:	1983 Group Annuity Mortality Table for males set back one year.
	Female:	1983 Group Annuity Mortality Table for females set back one year.
Disabled:	Male:	1965 RRB through age 54. For ages 55 to 64, graded rates between 1965 RRB and the healthy post-retirement mortality table. For ages 65 and later, the healthy post-retirement mortality table.
	Female:	1965 RRB through age 54. For ages 55 to 64, graded rates between 1965 RRB and the healthy post-retirement mortality table. For ages 65 and later, the healthy post-retirement mortality table.

Retirement Rates:

Graded rates beginning at age 55 as shown in below. Members who have attained the highest assumed retirement age are assumed to retire in one year.

	Retirement	
Age	Rule of 90 Eligible	Other
55	40.00%	7.00%
56	40.00	7.00
57	40.00	7.00
58	40.00	7.00
59	40.00	9.00
60	40.00	9.00
61	40.00	20.00
62	40.00	20.00
63	40.00	20.00
64	40.00	20.00
65	40.00	40.00
66	25.00	25.00
67	25.00	25.00
68	25.00	25.00
69	25.00	25.00
70	25.00	25.00
71	100.00	100.00

Withdrawal Rates:	Select and ultimate rates are 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:	Rates as shown in the rate table.
Allowance for Combined Service Annuity:	Liabilities for active Members are increased by 0.80% and liabilities for former Members not currently receiving payments are increased by 60.00% to account for the effect of some participants having eligibility for a combined service annuity.
Return of Contributions:	All employees withdrawing after becoming eligible for a deferred benefit were assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit.
Percent Married:	85% of male Members and 65% of female Members are assumed to be married.
Age of Spouse:	Females are assumed to be four years younger than males.
Eligible Children:	Assume Members have no children.
Special Consideration:	Married Members are assumed to elect subsidized joint and survivor form of annuity as follows:

	Males	Females
25% J & S option	10.00%	5.00%
50% J & S option	20.00%	5.00%
75% J & S option	10.00%	5.00%
100% J & S option	30.00%	15.00%

Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are expressed as a level percentage of payroll, with Normal Cost determined as if the current benefit accrual rate had always been in effect.
Asset Valuation Method:	MPRIF Reserve: Market Value Non-MPRIF Assets: Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during the fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year).
Payment on the Unfunded Actuarial Accrued Liability:	A level percentage of payroll each year to the statutory amortization date assuming payroll increases of 6.00% 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. For GASB compliance, assumes payroll increases of 5.00% per annum is used for this calculation in determining the actuarially required contribution rate.

Summary of Rates: Shown for selected ages:

	Rate(%)						
	Death		Withdrawal		Disability		Ultimate Rate of Salary Increases
Age	Male	Female	Male	Female	Male	Female	
20	0.03%	0.01%	8.40%	8.40%	0.01%	0.01%	6.40%
25	0.03	0.02	6.90	6.90	0.01	0.01	6.40
30	0.04	0.02	5.40	5.40	0.02	0.02	6.20
35	0.05	0.03	3.90	4.20	0.05	0.04	6.00
40	0.07	0.04	3.00	3.50	0.09	0.06	5.80
45	0.10	0.06	2.50	3.00	0.14	0.09	5.60
50	0.15	0.08	2.00	2.50	0.23	0.16	5.40
55	0.28	0.14	0.00	0.00	0.49	0.26	5.20
60	0.48	0.21	0.00	0.00	0.82	0.46	5.00
65	0.71	0.35	0.00	0.00	0.00	0.00	5.00
70	1.11	0.58	0.00	0.00	0.00	0.00	5.00

Changes in Actuarial Assumptions and Actuarial Cost Methods:

There have been no changes made to the actuarial assumptions since the prior valuation.

The only change in actuarial cost methods since the last valuation was a modification to the asset valuation method, effective with the July l, 2007 valuation. Assets allocated to the Minnesota Post Retirement Investment Fund (MPRIF) must equal the Market Value of Assets as of the valuation date.

EXHIBIT X

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 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:	
Member:	9.10% of salary.
Employer:	9.10% of total salary. Additional 2.68% is repealed at full funding.
Allowable Service:	Service during which Member contributions were 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:

<u>*Normal Retirement Benefit*</u>*:*	
Age/Service Requirement:	Age 65 and three years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.
Amount:	The greater of (a) or (b): (a) 2.20% of Average Salary for each of the first 10 years of Allowable Service and 2.70% of Average Salary for each subsequent year; (b) 2.70% of Average Salary for each year of Allowable Service.
<u>*Early Retirement Benefit*</u>*:*	
Age/Service Requirement:	(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.
Amount:	The greater of (a) or (b): (a) 2.20% of Average Salary for each of the first 10 years of Allowable Service and 2.70% 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 age 62 if 30 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:	Benefits may be increased each January 1 depending on the investment performance of the Minnesota Post Retirement Investment Fund (MPRIF). A benefit recipient who has been receiving a benefit for at least 12 full months as of June 30 will receive a full increase. Members receiving benefits for at least one full month but less than 12 full

months will receive a partial 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 the 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 MPRIF. Effective January 1, 2002, annual lump sum payment is divided by 12 and paid as a monthly life annuity in the annuity form elected.

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 at 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 became 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 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 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:	Adjusted by PERA to provide same increase as MPRIF.
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 Benefit:	
Age/Service Requirement:	Active Member with 18 months of Allowable Service or Member 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 became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits 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%. Surviving spouse optional annuity may be elected in lieu of this benefit.
Surviving Dependent Child Benefit:	
Age/Service Requirement:	Active Member with 18 months of Allowable Service or Member 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 became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits 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%.
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 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 became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits 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:	Adjusted by PERA to provide same increase as MPRIF.
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.

Deferred Benefit:

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% 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 augmentation at the rate of 5.50% compounded annually through the year the Member turns age 55 and 7.50% thereafter until the annuity begins. Amount is payable at a normal or early retirement. If a Member terminated employment prior to July 1, 1997 but was not eligible to commence their pension before July 1, 1997, an actuarial increase shall be made for the change in the post-retirement interest rates from 5.00% to 6.00%.

Changes in Plan Provisions:	There have been no changes in plan provisions since the prior valuation.

EXHIBIT XI

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 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	5.75%	6.25%
January 2008	6.00%	6.50%
January 2009	6.00%	6.75%
January 2010	6.00%	7.00%

In addition, the 2009 and/or 2010 rate increases will not be implemented if the July 1, 2008 or July 1, 2009 actuarial valuations result in full funding or a contribution sufficiency has occurred.

Allowable Service: Service during which Member contributions were 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 salary. Average salary is based on all Allowable Service if less than five years.

Retirement:

<u>*Normal Retirement Benefit*</u>*:*

Age/Service Requirement:	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:	The greater of (a) or (b): (a) 1.20% of Average Salary for each of the first 10 years of Allowable Service and 1.70% of Average Salary for each subsequent year; (b) 1.70% of Average Salary for each year of Allowable Service.
Age/Service Requirement:	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.

<u>*Early Retirement Benefit*</u>*:*

Age/Service Requirement:	First hired before July 1, 1989: (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. 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 10 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 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 the age eligible for full Social Security retirement benefits at 3.00% per year and actuarial reduction for each month the Member is under the Social Security retirement age, but no later than age 66.

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: Benefits may be increased each January 1 depending on the investment performance of the Minnesota Post Retirement Investment Fund (MPRIF). A benefit recipient who has been receiving a benefit for at least 12 full months as of June 30 will receive a full increase. Benefit recipients receiving benefits for at least one full month but less than 12 full months will receive a partial 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 MPRIF.

Disability:

<u>Disability Benefit</u>:	
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 became 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:	Adjusted by PERA to provide same increase as MPRIF.
<u>Retirement After Disability</u>:	
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 actuarial 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 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 became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits 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:	Adjusted by PERA to provide same increase as MPRIF.

Refund of Member's 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.

Deferred Benefit:

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% thereafter until the annuity begins. Members active with a public employers the day prior to the privatization of the employer become vested immediately and receive augmentation at the rate of 4.00% compounded annually through the year the member turns age 55 and 6.00% thereafter until the annuity begins. Amount is payable at normal or early retirement. If a Member terminated employment prior to July 1, 1997 but was not eligible to commence their pension before July 1, 1997, 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%.
Changes in Plan Provisions:	There have been no changes in plan provisions since the prior valuation.

4028849v1/05776.075