

**Public Employees Retirement Association of Minnesota**

*Actuarial Valuation and Review  
as of July 1, 2006*

**Copyright © 2006**

**THE SEGAL GROUP, INC.,  
THE PARENT OF THE SEGAL COMPANY  
ALL RIGHTS RESERVED**



The Segal Company  
6300 S. Syracuse Way, Suite 750, Englewood, CO 80111-7302  
T 303.714.9900 F 303.714.9990 www.segalco.com

*November 10, 2006*

*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, 2006. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2007 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  
Senior Vice President and Chief Actuary*

---

*Andre Latia, FSA, MAAA, EA  
Senior Vice President and Consulting Actuary*

---

*Susan M. Hogarth, MAAA, EA  
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

Purpose .....	i
Significant Issues in Valuation Year.....	ii
Summary of Key Valuation Results.....	iii

## SECTION 2

### VALUATION RESULTS

A. Member Data .....	1
B. Financial Information.....	4
C. Actuarial Experience.....	5
D. Information Required by the GASB.....	6

## SECTION 3

### SUPPLEMENTAL INFORMATION

EXHIBIT A Table of Plan Coverage .....	7
EXHIBIT B Members in Active Service as of June 30, 2006 .....	8
EXHIBIT C Retired Participants as of June 30, 2006.....	11
EXHIBIT D Disabled Members as of June 30, 2006.....	14
EXHIBIT E Beneficiaries as of June 30, 2006 ....	17
EXHIBIT F Reconciliation of Member Data.....	20
EXHIBIT G Summary Statement of Income and Expense on a Market Value Basis for year ended June 30, 2006 .....	21
EXHIBIT H Table of Financial Information for Year Ended June 30, 2006.....	22
EXHIBIT I Development of the Fund through June 30, 2006.....	23
EXHIBIT J Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2006 .....	24
EXHIBIT K Definitions of Pension Terms .....	25

## SECTION 4

### REPORTING INFORMATION

EXHIBIT I Summary of Actuarial Valuation Results .....	27
EXHIBIT II Actuarial Balance Sheet.....	29
EXHIBIT III Supplementary Information Required by the GASB – Schedule of Employer Contributions .....	30
EXHIBIT IV Supplementary Information Required by the GASB – Schedule of Funding Progress.....	31
EXHIBIT V Determination of Contribution Sufficiency - Total.....	32
EXHIBIT VI Determination of Contribution Sufficiency - Basic .....	33
EXHIBIT VII Determination of Contribution Sufficiency - Coordinated.....	34
EXHIBIT VIII Supplementary Information Required by the GASB .....	35
EXHIBIT IX Actuarial Assumptions and Actuarial Cost Method.....	36
EXHIBIT X Summary of Plan Provisions (Basic) .....	41
EXHIBIT XI Summary of Plan Provisions (Coordinated) .....	47

## SECTION 1: Valuation Summary for the Public Employees Retirement Association of Minnesota

---

### 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, 2006. 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, 2006, provided by the Association;
- The assets of the Association as of June 30, 2006, provided by the Association;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions regarding employee terminations, retirement, death, etc.

**SECTION 1: Valuation Summary for the Public Employees Retirement Association of Minnesota**

---

**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 11.76% of payroll compared to the required contribution rate under Chapter 356 of 12.90% of payroll. Therefore, the contribution deficiency is 1.14% of payroll or \$53,451,392. Each year there is a contribution deficiency leads to an increased deficiency in all future years.
- The actuarial accrued liability funded ratio based on the actuarial value of assets over the actuarial accrued liability as of July 1, 2006 is 74.65% compared to 74.53% as of July 1, 2005. This ratio is a measure of funding status, and its history is a measure of funding progress, and is the ratio required to be reported under GASB 25.
- The Coordinated member and employer contribution rates (as a percentage of salary) will change as shown in the schedule below:

<u>Date of Increase</u>	<u>Member</u>	<u>Employer</u>
Current	5.50%	6.00%
January 2007	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 1<sup>st</sup> of each year. However, benefits are valued as of the July 1<sup>st</sup> valuation date prior to each corresponding increase date.

- There were no changes in plan provisions, actuarial assumptions, or actuarial cost methods since the prior valuation.

**SECTION 1: Valuation Summary for the Public Employees Retirement Association of Minnesota**

**Summary of Key Valuation Results**

	<b>2006</b>	<b>2005</b>
<b>Contributions (% of payroll) for plan year beginning July 1:</b>		
Statutory – Chapter 353*	11.76%	11.07%
Required – Chapter 356	12.90%	12.74%
Sufficiency/(Deficiency)	-1.14%	-1.67%
<b>Funding elements for plan year beginning July 1:</b>		
Normal cost	\$366,059,040	\$352,964,350
Market value of assets	12,828,990,072	11,901,282,333
Actuarial value of assets (AVA)	12,495,207,148	11,843,935,692
Actuarial accrued liability (AAL)	16,737,756,758	15,892,554,615
Unfunded/(Overfunded) actuarial accrued liability	4,242,549,610	4,048,618,923
<b>Funded ratios:</b>		
<u>Accrued Benefit Funded Ratio</u>	79.67%	79.72%
Current assets (AVA)	\$12,495,207,148	\$11,843,935,692
Current benefit obligations	15,683,352,490	14,857,712,393
<u>Projected Benefit Funded Ratio</u>	95.04%	92.42%
Current and expected future assets	\$18,814,687,765	\$17,461,138,168
Current and expected future benefit obligations (Present Value of Benefits)	19,795,615,905	18,892,427,972
<b>GASB 25/27 for plan year beginning July 1:</b>		
Annual required employer contributions	\$327,265,390	\$304,328,146
Accrued Liability Funded Ratio (AVA/AAL)	74.65%	74.53%
Covered actual payroll	\$4,247,108,957	\$4,096,138,282
<b>Demographic data for plan year beginning July 1:</b>		
Number of pensioners and beneficiaries	59,078	56,650
Number of vested terminated members	37,476	35,768
Number of other non-vested terminated members	105,590	100,369
Number of active members	144,244	142,303
Total projected payroll**	\$4,703,895,104	\$4,530,882,628
Average projected compensation**	32,611	31,840

\* The statutory contribution rate as of July 1, 2006 is shown as a blended rate of 1/2 of the current rate and 1/2 of the rate increase effective January 1, 2007.

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

**SECTION 2: Valuation Results for the Public Employees Retirement Association of Minnesota**

**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 five valuations can be seen in this chart.*

**CHART 1**  
**Member Population: 2002 – 2006**

<b>Year Ended June 30</b>	<b>Active Members</b>	<b>Vested Terminated Members*</b>	<b>Pensioners and Beneficiaries</b>	<b>Ratio of Non-Actives to Actives</b>
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

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

**SECTION 2: Valuation Results for the Public Employees Retirement Association of Minnesota**

**Active Members**

Plan costs are affected by the age, years of service and payroll of active members. In this year's valuation, there were 144,244 active members with an average age of 46.0, average years of service of 10.0 years and average projected compensation of \$32,611. The 142,303 active members in the prior valuation had an average age of 45.8, average service of 9.9 years and average projected compensation of \$31,840.

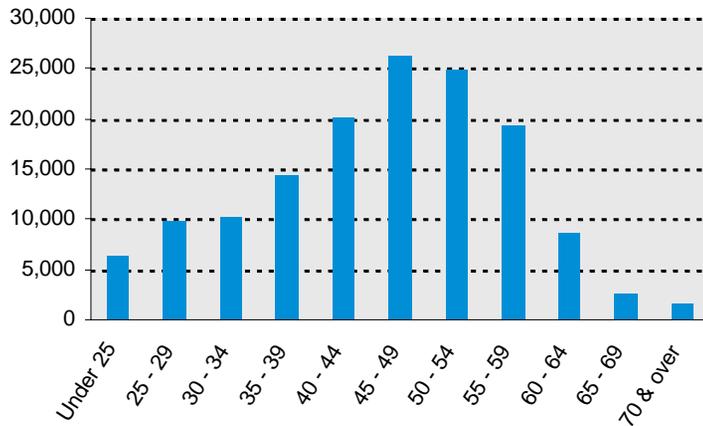
**Inactive Members**

In this year's valuation, there were 37,476 members with a vested right to a deferred or immediate vested benefit.

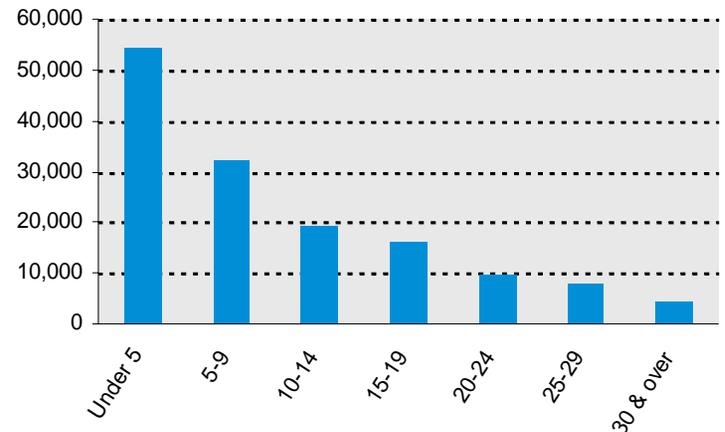
In addition, there were 105,590 other non-vested terminated members entitled to a return of their employee contributions.

*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, 2006**



**CHART 3**  
**Distribution of Active Members by Years of Service as of June 30, 2006**



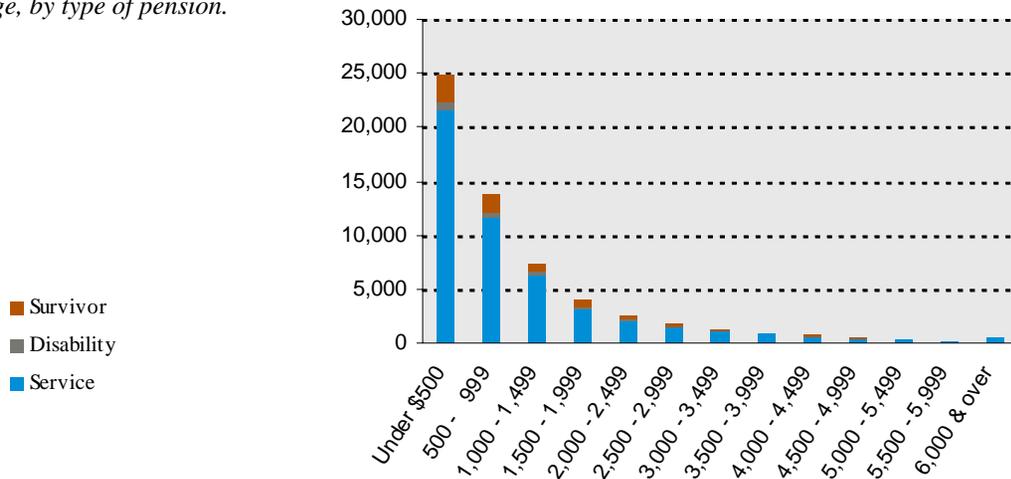
**SECTION 2: Valuation Results for the Public Employees Retirement Association of Minnesota**

**Pensioners and Beneficiaries**

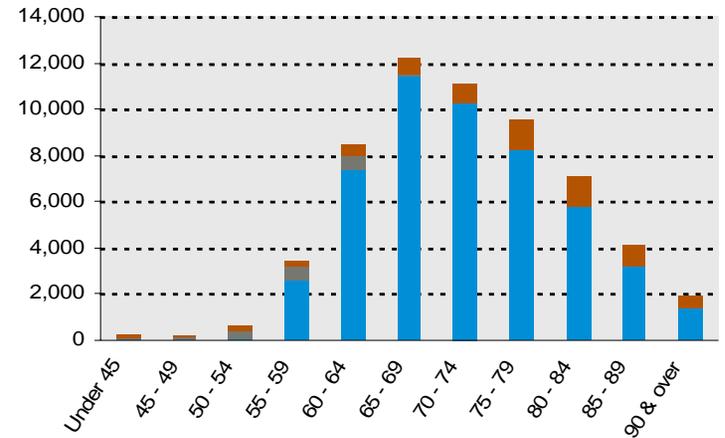
As of June 30, 2006, 52,260 pensioners (50,320 retired and 1,940 disabled) and 6,818 beneficiaries were receiving monthly benefits of \$62,944,327. For comparison, in the previous valuation, there were 50,000 pensioners (48,147 retired and 1,853 disabled) and 6,650 beneficiaries receiving monthly benefits of \$60,080,908.

*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, 2006**



**CHART 5**  
**Distribution of Pensioners and Beneficiaries by Type and by Age as of June 30, 2006**



**SECTION 2: Valuation Results for the Public Employees Retirement Association of Minnesota**

**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.

*The chart shows the determination of the actuarial value of assets as of the valuation date.*

**CHART 6  
Determination of Actuarial Value of Assets for Year Ended June 30, 2006**

	Original Amount	% Not Recognized	
1. Market value of assets available for benefits			\$12,828,990,072
2. Calculation of unrecognized return			
(a) Year ended June 30, 2006	\$211,693,949	80%	\$169,355,159
(b) Year ended June 30, 2005	131,918,065	60%	79,150,839
(c) Year ended June 30, 2004	346,876,315	40%	138,750,526
(d) Year ended June 30, 2003	-267,368,000	20%	<u>-53,473,600</u>
(e) Total unrecognized return			\$333,782,924
3. Actuarial value of assets (“Current Assets”): (1) – (2e)			<u>\$12,495,207,148</u>
4. Actuarial value as a percent of market value			<u>97.4%</u>

**SECTION 2: Valuation Results for the Public Employees Retirement Association of Minnesota**

---

**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, 2006, the total gain is \$20,850,174, including a loss of \$84,873,894 from investments and gain of \$105,724,068 from all other sources. The net experience variation from individual sources other than investments was 0.63% of the actuarial accrued liability, which is less than 1.00% of the total actuarial accrued liability, and 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, 2006**

---

1. Net gain/(loss) from investments	-\$84,873,894
2. Net gain/(loss) from other experience	<u>105,724,068</u>
3. Net experience gain/(loss): (1) + (2)	\$20,850,174

---

## SECTION 2: Valuation Results for the Public Employees Retirement Association of Minnesota

---

### **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 within the range of the GASB reporting requirements. 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.

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT A**

**Table of Plan Coverage**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2006</b>	<b>2005</b>	
<b>Active members in valuation:</b>			
Number	144,244	142,303	1.4%
Average age	46.0	45.8	N/A
Average service	10.0	9.9	N/A
Total projected payroll	\$4,703,895,104	\$4,530,882,628	3.8%
Average projected compensation	32,611	31,840	2.4%
Total active vested members	105,924	105,504	0.4%
<b>Vested terminated members</b>	37,476	35,768	4.8%
<b>Retired participants:</b>			
Number in pay status	50,320	48,147	4.5%
Average age	72.1	72.1	N/A
Average monthly benefit	\$1,062	\$1,060	0.2%
<b>Disabled members:</b>			
Number in pay status	1,940	1,853	4.7%
Average age	56.8	56.6	N/A
Average monthly benefit	\$834	\$829	0.6%
<b>Beneficiaries:</b>			
Number in pay status	6,818	6,650	2.5%
Average age	76.6	75.8	N/A
Average monthly benefit	\$1,157	\$1,129	2.5%
<b>Other non-vested terminated members</b>	105,590	100,369	5.2%

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT B-1**

**Members in Active Service as of June 30, 2006  
By Age, Years of Service, and Average Projected Compensation - Total**

Age	Years of Service							
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	6,397	6,293	104	--	--	--	--	--
	\$16,450	\$16,296	\$25,767	--	--	--	--	--
25 - 29	9,881	8,091	1,759	31	--	--	--	--
	25,943	23,805	35,587	\$36,748	--	--	--	--
30 - 34	10,258	5,886	3,639	712	21	--	--	--
	32,110	25,974	40,166	41,364	\$42,366	--	--	--
35 - 39	14,327	6,729	4,398	2,331	824	45	--	--
	32,495	22,667	38,346	44,845	46,060	\$42,172	--	--
40 - 44	20,227	7,957	5,550	2,977	2,548	1,105	90	--
	32,112	20,724	32,350	41,630	48,762	47,855	\$44,791	--
45 - 49	26,271	8,114	6,531	4,267	3,301	2,258	1,693	107
	33,085	19,721	30,280	35,646	45,730	52,479	50,093	\$47,267
50 - 54	24,790	4,828	4,984	4,336	4,048	2,522	2,661	1,411
	37,115	22,838	31,302	33,072	40,798	49,125	54,931	53,304
55 - 59	19,310	3,318	3,077	2,894	3,429	2,336	2,262	1,994
	38,072	21,194	32,071	32,522	39,007	44,300	52,039	58,725
60 - 64	8,681	1,716	1,413	1,175	1,428	1,151	1,057	741
	33,692	17,958	27,881	31,426	36,894	40,007	43,004	55,538
65 - 69	2,523	847	535	333	303	177	176	152
	23,165	10,987	20,499	26,893	33,589	34,808	34,470	44,824
70 & over	1,579	651	424	214	124	54	48	64
	14,232	8,298	13,077	18,124	24,181	23,505	28,607	31,360
Total	144,244	54,430	32,414	19,270	16,026	9,648	7,987	4,469
	\$32,611	\$21,157	\$32,948	\$36,245	\$42,357	\$47,070	\$50,785	\$55,346

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT B-2**

**Members in Active Service as of June 30, 2006  
By Age, Years of Service, and Average Projected Compensation - Basic**

Age	Years of Service							
	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	13	--	--	--	--	--	--	13
	\$45,528	--	--	--	--	--	--	\$45,528
60 - 64	28	--	--	--	--	--	--	28
	56,500	--	--	--	--	--	--	56,500
65 - 69	11	--	--	--	--	--	--	11
	43,309	--	--	--	--	--	--	43,309
70 & Over	5	--	--	--	--	--	--	5
	59,889	--	--	--	--	--	--	59,889
Total	57	--	--	--	--	--	--	57
	\$51,749	--	--	--	--	--	--	\$51,749

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT B-3**

**Members in Active Service as of June 30, 2006  
By Age, Years of Service, and Average Projected Compensation - Coordinated**

Age	Years of Service							
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	6,397	6,293	104	--	--	--	--	--
	\$16,450	\$16,296	\$25,767	--	--	--	--	--
25 - 29	9,881	8,091	1,759	31	--	--	--	--
	25,943	23,805	35,587	\$36,748	--	--	--	--
30 - 34	10,258	5,886	3,639	712	21	--	--	--
	32,110	25,974	40,166	41,364	\$42,366	--	--	--
35 - 39	14,327	6,729	4,398	2,331	824	45	--	--
	32,495	22,667	38,346	44,845	46,060	\$42,172	--	--
40 - 44	20,227	7,957	5,550	2,977	2,548	1,105	90	--
	32,112	20,724	32,350	41,630	48,762	47,855	\$44,791	--
45 - 49	26,271	8,114	6,531	4,267	3,301	2,258	1,693	107
	33,085	19,721	30,280	35,646	45,730	52,479	50,093	\$47,267
50 - 54	24,790	4,828	4,984	4,336	4,048	2,522	2,661	1,411
	37,116	22,838	31,302	33,072	40,798	49,125	54,931	53,304
55 - 59	19,297	3,318	3,077	2,894	3,429	2,336	2,262	1,981
	38,067	21,194	32,071	32,522	39,007	44,300	52,039	58,812
60 - 64	8,653	1,716	1,413	1,175	1,428	1,151	1,057	713
	33,618	17,958	27,881	31,426	36,894	40,007	43,004	55,500
65 - 69	2,512	847	535	333	303	177	176	141
	23,077	10,987	20,499	26,893	33,589	34,808	34,470	44,942
70 & Over	1,574	651	424	214	124	54	48	59
	14,087	8,298	13,077	18,124	24,181	23,505	28,607	28,942
Total	144,187	54,430	32,414	19,270	16,026	9,648	7,987	4,412
	\$32,604	\$21,157	\$32,948	\$36,245	\$42,357	\$47,070	\$50,785	\$55,392

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT C-1**

**Retired Participants as of June 30, 2006**

**By Age, Years Retired and Average Annual Benefit - Total**

Age	Years Retired								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	2	--	1	1	--	--	--	--	--
	\$20,956	--	\$35,895	\$6,017	--	--	--	--	--
45 - 49	1	1	--	--	--	--	--	--	--
	9,775	\$9,775	--	--	--	--	--	--	--
50 - 54	79	79	--	--	--	--	--	--	--
	12,195	12,195	--	--	--	--	--	--	--
55 - 59	3,138	3,084	52	2	--	--	--	--	--
	11,021	10,961	14,572	11,846	--	--	--	--	--
60 - 64	7,687	4,773	2,903	11	--	--	--	--	--
	11,131	11,324	10,725	34,326	--	--	--	--	--
65 - 69	11,584	4,458	5,211	1,837	66	11	1	--	--
	11,181	9,110	11,314	15,609	\$15,781	\$21,478	\$8,950	--	--
70 - 74	10,079	923	4,190	3,828	1,097	32	7	2	--
	12,583	6,514	10,019	15,601	16,547	25,094	17,062	\$17,333	--
75 - 79	8,039	327	854	3,566	2,620	654	15	1	2
	14,489	3,992	7,018	13,956	15,068	30,006	17,257	23,161	\$12,507
80 - 84	5,533	120	202	690	2,683	1,740	84	12	2
	15,554	3,295	4,181	11,029	13,373	22,560	22,878	10,877	10,174
85 - 89	2,942	26	45	113	420	1,857	462	17	2
	15,084	3,646	3,468	9,364	9,713	16,335	18,183	13,100	15,297
90 & Over	1,236	1	4	9	33	227	746	195	21
	13,703	3,022	2,993	2,570	7,883	9,301	15,471	14,308	9,312
Total	50,320	13,792	13,462	10,057	6,919	4,521	1,315	227	27
	\$12,746	\$9,951	\$10,390	\$14,642	\$14,293	\$20,430	\$16,921	\$14,102	\$10,056

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT C-2  
Retired Participants as of June 30, 2006  
By Age, Years Retired and Average Annual Benefit - Basic**

Age	Years Retired								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	1	--	1	--	--	--	--	--	--
	\$35,895	--	\$35,895	--	--	--	--	--	--
45 - 49	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
50 - 54	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
55 - 59	94	81	12	1	--	--	--	--	--
	34,076	\$35,803	23,339	\$23,027	--	--	--	--	--
60 - 64	495	99	388	8	--	--	--	--	--
	34,297	30,714	35,026	43,318	--	--	--	--	--
65 - 69	1,060	87	526	423	20	4	--	--	--
	36,667	25,271	34,987	41,590	\$27,180	\$32,367	--	--	--
70 - 74	1,452	18	237	796	376	19	4	2	--
	35,334	34,507	25,987	37,648	36,568	35,445	\$24,658	\$17,333	--
75 - 79	1,782	5	50	575	726	415	9	1	1
	33,758	25,186	27,264	31,231	31,694	42,034	23,949	23,161	\$17,184
80 - 84	1,788	2	5	79	692	931	68	9	2
	30,515	17,820	23,787	34,947	26,198	33,916	26,453	13,537	10,174
85 - 89	1,320	--	1	12	80	879	331	15	2
	24,450	--	7,226	31,661	25,563	25,242	22,408	13,734	15,297
90 & Over	723	--	--	--	4	69	476	156	18
	18,764	--	--	--	39,918	19,793	19,911	15,294	9,869
Total	8,715	292	1,220	1,894	1,898	2,317	888	183	23
	\$31,090	\$30,555	\$32,752	\$36,446	\$30,367	\$31,669	\$21,405	\$15,145	\$10,685

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT C-3**

**Retired Participants as of June 30, 2006**

**By Age, Years Retired and Average Annual Benefit - Coordinated**

Age	Years Retired								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	1	--	--	1	--	--	--	--	--
	\$6,017	--	--	\$6,017	--	--	--	--	--
45 - 49	1	1	--	--	--	--	--	--	--
	9,775	\$9,775	--	--	--	--	--	--	--
50 - 54	79	79	--	--	--	--	--	--	--
	12,195	12,195	--	--	--	--	--	--	--
55 - 59	3,044	3,003	40	1	--	--	--	--	--
	10,309	10,291	\$11,942	664	--	--	--	--	--
60 - 64	7,192	4,674	2,515	3	--	--	--	--	--
	9,536	10,913	6,976	10,348	--	--	--	--	--
65 - 69	10,524	4,371	4,685	1,414	46	7	1	--	--
	8,614	8,788	8,656	7,836	\$10,825	\$15,256	\$8,950	--	--
70 - 74	8,627	905	3,953	3,032	721	13	3	--	--
	8,754	5,958	9,061	9,813	6,105	9,966	6,934	--	--
75 - 79	6,257	322	804	2,991	1,894	239	6	--	1
	9,001	3,663	5,759	10,635	8,696	9,121	7,219	--	\$7,829
80 - 84	3,745	118	197	611	1,991	809	16	3	--
	8,410	3,049	3,684	7,937	8,916	9,491	7,683	\$2,897	--
85 - 89	1,622	26	44	101	340	978	131	2	--
	7,462	3,646	3,383	6,715	5,984	8,329	7,509	8,350	--
90 & Over	513	1	4	9	29	158	270	39	3
	6,570	3,022	2,993	2,570	3,465	4,720	7,644	10,365	5,973
Total	41,605	13,500	12,242	8,163	5,021	2,204	427	44	4
	\$8,903	\$9,506	\$8,161	\$9,583	\$8,217	\$8,615	\$7,596	\$9,764	\$6,437

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT D-1  
Disabled Members as of June 30, 2006  
By Age, Years Disabled and Average Annual Benefit - Total**

Age	Years Disabled								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	71	50	14	7	--	--	--	--	--
	\$5,358	\$5,861	\$3,774	\$4,929	--	--	--	--	--
45 - 49	196	119	53	17	7	--	--	--	--
	7,008	7,717	5,912	6,359	\$4,811	--	--	--	--
50 - 54	371	193	110	56	11	1	--	--	--
	9,379	9,975	9,120	8,505	6,411	\$4,542	--	--	--
55 - 59	633	363	185	53	27	4	1	--	--
	10,610	10,974	10,316	11,104	7,497	5,570	\$11,122	--	--
60 - 64	659	290	254	91	20	2	2	--	--
	11,286	10,734	11,669	11,008	14,797	25,633	5,861	--	--
65 - 69	10	3	7	--	--	--	--	--	--
	3,615	4,839	3,091	--	--	--	--	--	--
70 - 74	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
75 - 79	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
80 - 84	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
85 - 89	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
90 & Over	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Total	1,940	1,018	623	224	65	7	3	--	--
	\$10,012	\$10,066	\$10,054	\$9,862	\$9,270	\$11,156	\$7,614	--	--

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT D-2  
Disabled Members as of June 30, 2006  
By Age, Years Disabled and Average Annual Benefit - Basic**

Age	Years Disabled								
	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	6	--	3	2	--	--	1	--	--
60 - 64	\$46,935	--	\$54,247	\$53,874	--	--	\$11,122	--	--
65 - 69	13	2	5	3	2	1	--	--	--
70 - 74	30,268	\$18,253	38,845	7,719	\$51,123	\$37,347	--	--	--
75 - 79	--	--	--	--	--	--	--	--	--
80 - 84	--	--	--	--	--	--	--	--	--
85 - 89	--	--	--	--	--	--	--	--	--
90 & Over	--	--	--	--	--	--	--	--	--
Total	19	2	8	5	2	1	1	--	--
	\$35,531	\$18,253	\$44,621	\$26,181	\$51,123	\$37,347	\$11,122	--	--

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT D-3  
Disabled Members as of June 30, 2006  
By Age, Years Disabled and Average Annual Benefit - Coordinated**

Age	Years Disabled								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	71	50	14	7	--	--	--	--	--
	\$5,358	\$5,861	\$3,774	\$4,929	--	--	--	--	--
45 - 49	196	119	53	17	7	--	--	--	--
	7,008	7,717	5,912	6,359	\$4,811	--	--	--	--
50 - 54	371	193	110	56	11	1	--	--	--
	9,379	9,975	9,120	8,505	6,411	\$4,542	--	--	--
55 - 59	627	363	182	51	27	4	--	--	--
	10,263	10,974	9,592	9,427	7,497	5,570	--	--	--
60 - 64	646	288	249	88	18	1	2	--	--
	10,904	10,682	11,123	11,120	10,761	13,919	\$5,861	--	--
65 - 69	10	3	7	--	--	--	--	--	--
	3,615	4,839	3,091	--	--	--	--	--	--
70 - 74	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
75 - 79	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
80 - 84	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
85 - 89	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
90 & Over	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Total	1,921	1,016	615	219	63	6	2	--	--
	\$9,760	\$10,050	\$9,604	\$9,490	\$7,942	\$6,791	\$5,861	--	--

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT E-1**

**Beneficiaries as of June 30, 2006**

**By Age, Years Since Death and Average Annual Benefit - Total**

Age	Years Since Death								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	153	71	45	20	14	2	--	1	--
	\$7,453	\$7,538	\$7,284	\$5,193	\$9,263	\$13,081	--	\$17,600	--
45 - 49	101	50	29	16	6	--	--	--	--
	7,754	7,854	6,688	8,522	10,033	--	--	--	--
50 - 54	193	110	48	20	12	3	--	--	--
	9,688	8,804	8,952	12,992	14,146	14,043	--	--	--
55 - 59	300	162	84	33	17	2	2	--	--
	10,981	9,853	10,879	14,689	12,352	19,793	\$25,035	--	--
60 - 64	446	196	127	64	35	11	7	5	1
	12,182	10,597	11,653	14,237	15,717	17,564	17,253	19,142	\$5,238
65 - 69	650	255	179	103	68	23	14	7	1
	13,491	11,398	13,157	15,069	16,448	17,864	23,938	12,582	3,288
70 - 74	910	291	261	164	117	40	22	7	8
	15,095	14,282	15,034	16,055	13,043	22,469	19,906	16,739	5,441
75 - 79	1,287	376	288	249	197	98	27	22	30
	16,874	16,484	17,364	16,550	17,052	20,892	18,566	14,964	5,313
80 - 84	1,321	339	293	251	192	104	58	31	53
	15,309	15,934	15,857	14,669	15,681	17,076	17,066	14,334	5,147
85 - 89	913	173	181	148	141	92	72	45	61
	13,359	14,211	13,539	14,284	15,079	12,788	14,389	10,978	5,587
90 & Over	544	58	70	99	72	77	54	29	85
	10,122	10,778	12,498	10,224	11,132	11,593	9,737	10,773	5,432
Total	6,818	2,081	1,605	1,167	871	452	256	147	239
	\$13,885	\$13,126	\$14,079	\$14,576	\$14,996	\$16,600	\$15,613	\$12,915	\$5,384

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT E-2**

**Beneficiaries as of June 30, 2006**

**By Age, Years Since Death and Average Annual Benefit - Basic**

Age	Years Since Death								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	6	--	1	1	2	1	--	1	--
	\$15,196	--	\$4,050	\$6,743	\$21,967	\$18,849	--	\$17,600	--
45 - 49	7	2	2	2	1	--	--	--	--
	14,400	\$6,921	7,879	19,716	31,769	--	--	--	--
50 - 54	11	1	4	1	4	1	--	--	--
	19,140	11,534	5,606	61,360	26,897	7,640	--	--	--
55 - 59	31	10	6	5	7	1	2	--	--
	24,535	24,397	24,397	31,000	18,758	33,860	\$25,035	--	--
60 - 64	93	22	20	18	13	8	7	4	1
	25,952	26,643	28,132	28,107	28,545	21,011	17,253	23,412	\$5,238
65 - 69	193	57	44	29	26	15	14	7	1
	26,668	26,737	27,718	29,942	28,887	23,831	23,938	12,582	3,288
70 - 74	335	92	89	51	38	28	22	7	8
	26,682	26,146	28,182	31,900	25,926	29,075	19,906	16,739	5,441
75 - 79	628	136	138	119	96	61	26	22	30
	25,936	30,945	27,163	25,805	25,746	29,584	19,032	14,964	5,313
80 - 84	688	144	138	110	97	63	52	31	53
	21,814	25,540	24,661	23,558	22,648	23,327	18,315	14,334	5,147
85 - 89	593	97	97	84	89	63	61	41	61
	16,818	19,167	19,983	19,849	19,341	15,919	15,844	11,625	5,587
90 & Over	421	33	45	70	58	61	42	27	85
	11,158	14,646	14,800	12,070	12,724	12,257	10,864	11,091	5,432
Total	3,006	594	584	490	431	302	226	140	239
	\$21,167	\$25,276	\$24,375	\$23,343	\$22,157	\$21,274	\$16,876	\$13,330	\$5,384

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT E-3**

**Beneficiaries as of June 30, 2006**

**By Age, Years Since Death and Average Annual Benefit - Coordinated**

Age	Years Since Death								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	147	71	44	19	12	1	--	--	--
	\$7,137	\$7,538	\$7,358	\$5,112	\$7,146	\$7,313	--	--	--
45 - 49	94	48	27	14	5	--	--	--	--
	7,259	7,892	6,599	6,923	5,685	--	--	--	--
50 - 54	182	109	44	19	8	2	--	--	--
	9,117	8,779	9,256	10,447	7,770	17,244	--	--	--
55 - 59	269	152	78	28	10	1	--	--	--
	9,419	8,896	9,839	11,776	7,868	5,726	--	--	--
60 - 64	353	174	107	46	22	3	--	1	--
	8,554	8,568	8,573	8,810	8,137	8,371	--	\$2,066	--
65 - 69	457	198	135	74	42	8	--	--	--
	7,927	6,982	8,411	9,240	8,747	6,678	--	--	--
70 - 74	575	199	172	113	79	12	--	--	--
	8,344	8,796	8,231	8,903	6,846	7,054	--	--	--
75 - 79	659	240	150	130	101	37	1	--	--
	8,238	8,290	8,350	8,079	8,787	6,562	\$6,451	--	--
80 - 84	633	195	155	141	95	41	6	--	--
	8,238	8,841	8,018	7,734	8,567	7,471	6,242	--	--
85 - 89	320	76	84	64	52	29	11	4	--
	6,949	7,886	6,099	6,979	7,784	5,987	6,317	4,347	--
90 & Over	123	25	25	29	14	16	12	2	--
	6,576	5,673	8,355	5,766	4,538	9,060	5,793	6,482	--
Total	3,812	1,487	1,021	677	440	150	30	7	--
	\$8,143	\$8,273	\$8,190	\$8,230	\$7,981	\$7,189	\$6,097	\$4,631	--

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT F**

**Reconciliation of Member Data**

	<b>Active Members</b>	<b>Vested Terminated Members</b>	<b>Other Non- Vested Terminated Members</b>	<b>Disableds</b>	<b>Retired Participants</b>	<b>Beneficiaries</b>	<b>Total</b>
A. Number as of July 1, 2005	142,303	35,768	100,369	1,853	48,147	6,650	335,090
B. Data Adjustments	-28	-866	771	-2	-1	-	-126
C. Additions	17,725	4,713	8,163	293	3,536	488	34,918
D. Deletions:							
1. Terminated - Nonvested	-8,511	-33	-	-	-	-	-8,544
2. Terminated - Vested	-4,602	-	-	-	-	-	-4,602
3. Retirements	-2,273	-1,122	-56	-122	-	-	-3,573
4. Disability	-232	-51	-3	-	-	-	-286
5. Died with Beneficiary	-50	-12	-	-	-	-	-62
6. Died without Beneficiary	-88	-27	-73	-73	-1,362	-286	-1,909
7. Return to Active	-	-894	-1,249	-1	-	-	-2,144
8. Other Deletions	=	=	<u>-2,332</u>	<u>-8</u>	=	<u>-34</u>	<u>-2,374</u>
E. Number as of July 1, 2006	144,244	37,476	105,590	1,940	50,320	6,818	346,388

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT G**

**Summary Statement of Income and Expenses on a Market Value Basis for Year Ended June 30, 2006**

	Non-MPRIF Assets	MPRIF Reserve	Market Value
A. Assets available at beginning of period	\$5,388,225,532	\$6,513,056,801	\$11,901,282,333
B. Operating revenues:			
1. Member contributions	\$235,901,258	-	\$235,901,258
2. Employer contributions	255,530,941	-	255,530,941
3. MPRIF income	-	\$553,477,813	553,477,813
4. Net investment income			
(a) Interest and dividends	\$174,217,835	-	\$174,217,835
(b) Net appreciation/(depreciation)	504,034,356	-	504,034,356
(c) Securities lending income	4,164,553	-	4,164,553
(d) Investment expenses	<u>-16,747,802</u>	<u>-</u>	<u>-16,747,802</u>
(e) Net subtotal	\$665,668,942	-	\$665,668,942
5. Other	<u>4,093,749</u>	<u>-</u>	<u>4,093,749</u>
6. Total additions	\$1,161,194,890	\$553,477,813	\$1,714,672,703
C. Operating expenses:			
1. Benefits	\$32,978,049	\$715,412,457	\$748,390,506
2. Refunds	26,452,377	-	26,452,377
3. Administrative expenses	9,029,035	-	9,029,035
4. Other	<u>3,093,046</u>	<u>-</u>	<u>3,093,046</u>
5. Total operating expenses	\$71,552,507	\$715,412,457	\$786,964,964
D. Other changes in reserves:			
1. Annuities awarded	-\$418,242,718	\$418,242,718	-
2. Mortality gain/(loss)	-21,781,524	21,781,524	-
3. Change in MPRIF assumptions	<u>-</u>	<u>-</u>	<u>-</u>
4. Total other changes	-\$440,024,242	\$440,024,242	-
E. Assets available at end of period	\$6,037,843,673	\$6,791,146,399	\$12,828,990,072
F. Determination of current year unrecognized asset return (UAR)			
1. Average balance:			
(a) Non-MPRIF Assets available at BOY: (A)			\$5,388,225,532
(b) Non-MPRIF Assets available at EOY:* (E) – (D.2)			6,059,625,197
(c) Average balance: [(F.1.(a)) + (F.1.(b)) – (B.4.(e)) – (B.5)]/2			5,389,044,019
2. Expected return: 8.50% x (F.1.(c))			458,068,742
3. Actual return: (B.4.(e)) + (B.5)			<u>669,762,691</u>
4. Current year UAR: (F.3) – (F.2)			\$211,693,949

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

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT H**

**Table of Financial Information for Year Ended June 30, 2006**

	<b>Market Value</b>	<b>Cost Value</b>
<b>Assets in trust</b>		
Cash, equivalents, short-term securities:	\$61,862,815	\$61,862,815
Fixed income	1,404,243,323	1,469,642,287
Equity	3,912,992,716	3,761,382,231
Real estate	11,204,752	11,204,752
Equity in MPRIF	6,791,146,399	6,791,146,399
Invested securities lending collateral	1,413,072,149	1,413,072,149
SBI alternative	672,689,606	568,468,012
Other	<u>120,104</u>	<u>120,104</u>
Total assets in trust	\$14,267,331,864	\$14,076,898,749
<b>Assets receivable</b>	-\$8,917,997	-\$8,917,997
<b>Total assets</b>	\$14,258,413,867	\$14,067,980,752
<b>Amounts currently payable</b>		
Securities lending collateral	-\$1,413,072,149	-\$1,413,072,149
Other	<u>-16,351,646</u>	<u>-16,351,646</u>
Total amounts currently payable	-\$1,429,423,795	-\$1,429,423,795
<b>Assets available for benefits</b>		
MPRIF reserves	\$6,791,146,399	\$6,791,146,399
Member reserves	1,841,422,812	1,841,422,812
Other non-MPRIF reserves	<u>4,196,420,861</u>	<u>4,005,987,746</u>
<b>Total Assets Available for Benefits</b>	<u>\$12,828,990,072</u>	<u>\$12,638,556,957</u>
<b>Net Assets at Market/Cost Value</b>	<u>\$12,828,990,072</u>	<u>\$12,638,556,957</u>

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT I**

**Development of the Fund Through June 30, 2006**

<b>Year Ended June 30</b>	<b>Employer Contributions</b>	<b>Member Contributions</b>	<b>Net Investment Return*</b>	<b>Administrative Expenses</b>	<b>Benefit Payments</b>	<b>Actuarial Value of Assets at End of Year</b>
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

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

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

---

**EXHIBIT J**

**Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2006**

---

1. Unfunded/(Overfunded) actuarial accrued liability at beginning of year		\$4,048,618,923
2. Normal cost at beginning of year		352,964,350
3. Total contributions		491,432,199
4. Interest		<u>353,248,710</u>
5. Expected unfunded/(overfunded) actuarial accrued liability (1) + (2) – (3) + (4)		\$4,263,399,784
6. Changes due to (gain)/loss from:		
(a) Investments	\$84,873,894	
(b) MPRIF mortality	21,781,524	
(c) Salary increases	-146,764,055	
(d) Other demographics*	<u>19,258,463</u>	
(e) Total changes due to (gain)/loss		<u>-20,850,174</u>
7. Unfunded/(Overfunded) actuarial accrued liability at end of year		<u>\$4,242,549,610</u>

---

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

**SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota**

---

**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.

### SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

---

#### **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.

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

**EXHIBIT I**

**Summary of Actuarial Valuation Results**

---

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

1. Pensioners as of the valuation date (including 6,818 beneficiaries in pay status)		59,078
2. Members inactive during year ended June 30, 2006 with vested rights		37,476
3. Members active during the year ended June 30, 2006		144,244
Fully vested	105,924	
Not vested	38,320	
4. Other non-vested terminated members as of June 30, 2006		105,590

---

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT I (continued)**

**Summary of Actuarial Valuation Results**

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
<b>A. Determination of Actuarial Accrued Liability</b>			
1. Active members:			
(a) Death benefits	\$157,614,179	\$55,667,860	\$101,946,319
(b) Disability benefits	394,331,939	144,979,596	249,352,343
(c) Withdrawal benefits	820,683,653	539,353,698	281,329,955
(d) Retirement benefits	<u>9,555,660,011</u>	<u>2,317,857,993</u>	<u>7,237,802,018</u>
(e) Total	\$10,928,289,782	\$3,057,859,147	\$7,870,430,635
2. Vested terminated members	\$1,694,334,307	-	\$1,694,334,307
3. Other non-vested terminated members	59,782,640	-	59,782,640
4. Annuitants in MPRIF	6,791,146,399	-	6,791,146,399
5. Annuitants not in MPRIF	<u>322,062,777</u>	<u>-</u>	<u>322,062,777</u>
6. Total	\$19,795,615,905	\$3,057,859,147	\$16,737,756,758
<b>B. Determination of Unfunded Actuarial Accrued Liability</b>			
1. Actuarial Accrued Liability			\$16,737,756,758
2. Actuarial Value of Assets			<u>12,495,207,148</u>
3. Unfunded Actuarial Accrued Liability: (B.1) – (B.2)			\$4,242,549,610
<b>C. Determination of Supplemental Contribution Rate</b>			
1. Present value of future payrolls through the amortization date of June 30, 2031			\$86,286,282,283
2. Supplemental contribution rate: (B.3) / (C.1)			4.92%
<b>D. Determination of GASB Amortization Rate</b>			
1. Present value of future payrolls through the amortization date of June 30, 2031			\$78,072,377,963
2. Supplemental contribution rate: (B.3) / (D.1)			5.43%

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT II  
Actuarial Balance Sheet**

A. Current Assets				\$12,495,207,148
B. Expected Future Assets				
1. Present Value of Expected Future Statutory Supplemental Contributions				\$3,261,621,470
2. Present Value of Future Normal Costs				<u>3,057,859,147</u>
3. Total Expected Future Assets				\$6,319,480,617
C. Total Current and Expected Future Assets				\$18,814,687,765
D. Current Benefit Obligations	<b><u>Non-Vested</u></b>	<b><u>Vested</u></b>	<b><u>Total</u></b>	
1. Benefit recipients:				
(a) Retirement annuities	-	\$6,116,179,726	\$6,116,179,726	
(b) Disability benefits	-	235,226,722	235,226,722	
(c) Beneficiaries	-	761,802,728	761,802,728	
2. Vested terminated members	-	1,694,334,307	1,694,334,307	
3. Other non-vested terminated members	-	59,782,640	59,782,640	
4. Active members	<u>\$67,447,491</u>	<u>6,748,578,876</u>	<u>6,816,026,367</u>	
5. Total Current Benefit Obligations	\$67,447,491	\$15,615,904,999	\$15,683,352,490	
E. Expected Future Benefit Obligations				<u>4,112,263,415</u>
F. Total Current and Expected Future Benefit Obligations - Present Value of Benefits: (D.5 + E)				\$19,795,615,905
G. Current Unfunded Actuarial Liability (D.5 - A)				\$3,188,145,342
H. Current and Future Unfunded Actuarial Liability (F - C)				\$980,928,140

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT III**

**Supplementary Information Required by the GASB – Schedule of Employer Contributions**

<b>Plan Year Ended June 30</b>	<b>Actuarially Required Contribution Rate<sup>(1)</sup> (a)</b>	<b>Actual Covered Payroll (b)</b>	<b>Actual Member Contributions (c)</b>	<b>Annual Required Employer Contributions [(a) x (b)] – (c) = (d)</b>	<b>Actual Employer Contributions<sup>(2)</sup> (e)</b>	<b>Percentage Contributed (e) / (d)</b>
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% <sup>(3)</sup>	3,271,737,000	140,385,000 <sup>(3)</sup>	174,356,000	151,499,000	86.89%
1999	9.63% <sup>(3)</sup>	3,302,808,000	158,475,000	159,585,000	173,370,000	108.64%
2000	9.22% <sup>(3)</sup>	3,437,954,000	171,073,000	145,906,000	186,637,000	127.92%
2001	11.84% <sup>(3), (4)</sup>	3,466,587,000	173,380,000	237,064,000	188,208,000	79.39%
2002	11.85% <sup>(3)</sup>	3,809,864,000	191,422,000 <sup>(3)</sup>	260,047,000	206,982,000	79.59%
2003	11.52% <sup>(3), (5)</sup>	4,387,649,000	205,963,000	299,494,000	221,689,000	74.02%
2004	12.25% <sup>(3)</sup>	3,968,034,367	215,696,700	270,387,510	225,744,509	83.49%
2005	12.72% <sup>(3)</sup>	4,096,138,282	216,700,643	304,328,146	232,963,374	76.55%
2006	13.26% <sup>(3)</sup>	4,247,108,957	235,901,258	327,265,390	255,530,941	78.08%
2007	13.41% <sup>(3)</sup>					

<sup>(1)</sup> 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.

<sup>(2)</sup> Includes contributions from other sources (if applicable).

<sup>(3)</sup> Actuarially Required Contributions calculated according to parameters of GASB 25 with no assumption for growth of covered population.

<sup>(4)</sup> Actuarially Required Contribution Rate prior to change in Actuarial Assumptions and Asset Valuation Method is 11.41%.

<sup>(5)</sup> Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 11.86%.

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT IV**

**Supplementary Information Required by the GASB – Schedule of Funding Progress**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded AAL (UAAL) (b) – (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Actual Covered Payroll (Previous FY) (c)</b>	<b>UAAL as a Percentage of Covered Payroll [(b) – (a)] / (c)</b>
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%

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT V**

**Determination of Contribution Sufficiency - Total**

	July 1, 2006	
	Percent of Payroll	Dollar Amount
<b>A. Statutory Contributions* – Chapter 353</b>		
1. Member Contributions	5.63%	\$264,931,649
2. Employer Contributions	<u>6.13%</u>	<u>288,515,428</u>
3. Total	<u>11.76%</u>	<u>\$553,447,077</u>
<b>B. Required Contributions – Chapter 356</b>		
1. Normal Cost		
(a) Retirement benefits	6.08%	\$285,972,932
(b) Disability benefits	0.35%	16,494,592
(c) Death	0.14%	6,509,642
(d) Withdrawal benefits	<u>1.21%</u>	<u>57,081,874</u>
(e) Total	7.78%	\$366,059,040
2. Amortization of Supplemental Contribution UAAL	4.92%	231,431,639
3. Allowance for Administrative Expenses	<u>0.20%</u>	<u>9,407,790</u>
4. Total	<u>12.90%</u>	<u>\$606,898,469</u>
<b>C. Contribution Sufficiency (Deficiency) (A.3 – B.4)</b>	-1.14%	-\$53,451,392

**Projected annual payroll\*\* for fiscal year beginning on the valuation date** \$4,703,895,104

\* The statutory contribution rates as of July 1, 2006 are shown as a blended rate of 1/2 of the current rate and 1/2 of the rate increase effective January 1, 2007.

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

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT VI**

**Determination of Contribution Sufficiency - Basic**

	July 1, 2006	
	Percent of Payroll	Dollar Amount
<b>A. Statutory Contributions – Chapter 353</b>		
1. Member Contributions	9.10%	\$268,424
2. Employer Contributions	<u>11.78%</u>	<u>347,476</u>
3. Total	<u>20.88%</u>	<u>\$615,900</u>
<b>B. Required Contributions – Chapter 356</b>		
1. Normal Cost		
(a) Retirement benefits	7.69%	\$226,846
(b) Disability benefits	0.35%	10,437
(c) Death	0.29%	8,564
(d) Withdrawal benefits	<u>2.77%</u>	<u>81,680</u>
(e) Total	<u>11.10%</u>	<u>\$327,527</u>
<b>Projected annual payroll* for fiscal year beginning on the valuation date</b>		\$2,949,715

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

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

**EXHIBIT VII**

**Determination of Contribution Sufficiency - Coordinated**

		<b>July 1, 2006</b>	
<b>A. Statutory Contributions* – Chapter 353</b>		<b>Percent of Payroll</b>	<b>Dollar Amount</b>
1.	Member Contributions	5.63%	\$264,663,225
2.	Employer Contributions	<u>6.13%</u>	<u>288,167,952</u>
3.	Total	<u>11.76%</u>	<u>\$552,831,177</u>
<b>B. Required Contributions – Chapter 356</b>			
1.	Normal Cost		
	(a) Retirement benefits	6.08%	\$285,746,086
	(b) Disability benefits	0.35%	16,484,155
	(c) Death	0.14%	6,501,078
	(d) Withdrawal benefits	<u>1.21%</u>	<u>57,000,194</u>
	(e) Total	<u>7.78%</u>	<u>\$365,731,513</u>
<b>Projected annual payroll** for fiscal year beginning on the valuation date</b>			<b>\$4,700,945,389</b>

\* The statutory contribution rates as of July 1, 2006 are shown as a blended rate of 1/2 of the current rate and 1/2 of the rate increase effective January 1, 2007.

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

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

**EXHIBIT VIII**

**Supplementary Information Required by the GASB**

---

<b>Valuation date</b>	July 1, 2006
<b>Actuarial cost method</b>	Entry Age Normal
<b>Amortization method</b>	Level percentage of payroll, assuming payroll increases at 5.00% per annum
<b>Remaining amortization period</b>	25 years remaining as of July 1, 2006
<b>Asset valuation method</b>	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	59,078
Terminated vested members entitled to, but not yet receiving benefits	37,476
Other non-vested terminated members	105,590
Active members	<u>144,244</u>
Total	346,388

---

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

**EXHIBIT IX**

**Actuarial Assumptions and Actuarial Cost Method**

---

**Net Investment Return:**

*Pre-Retirement:* 8.50% per annum

*Post-Retirement:* 8.50% per annum

---

**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.

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

**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.

<u>Age</u>	<u>Retirement</u>	
	<u>Rule of 90 Eligible</u>	<u>Other</u>
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

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

<b>Withdrawal Rates:</b>	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%	
<b>Disability Rates:</b>	Rates as shown in the rate table.		
<b>Allowance for Combined Service Annuity:</b>	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.		
<b>Return of Contributions:</b>	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.		
<b>Percent Married:</b>	85% of male Members and 65% of female Members are assumed to be married.		
<b>Age of Spouse:</b>	Females are assumed to be four years younger than males.		
<b>Eligible Children:</b>	Assume Members have no children.		
<b>Special Consideration:</b>	Married Members are assumed to elect subsidized joint and survivor form of annuity as follows:		
		<u>Males</u>	<u>Females</u>
	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%

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

---

<b>Actuarial Cost Method:</b>	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.
<b>Asset Valuation Method:</b>	On and after July 1, 2000, 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). Transition rules apply between July 1, 2000 and July 1, 2003, when the method is fully in effect.
<b>Payment on the Unfunded Actuarial Accrued Liability:</b>	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.

---

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

**Summary of Rates:**

Shown for selected ages:

Age	Rate(%)						Ultimate Rate of Salary Increases
	Death		Withdrawal		Disability		
	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 or actuarial cost methods since the prior valuation.

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

**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.

---

<b>Plan Year:</b>	July 1 through June 30
<b>Eligibility:</b>	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.
<b>Contributions:</b>	
<i>Member:</i>	9.10% of salary.
<i>Employer:</i>	9.10% of total salary. Additional 2.68% is repealed at full funding.
<b>Allowable Service:</b>	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.
<b>Salary:</b>	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.
<b>Average Salary:</b>	Average of the five highest successive years of annual salary. Average salary is based on all Allowable Service if less than five years.

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

**Retirement:**

Normal Retirement Benefit:

*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.

Early Retirement Benefit:

*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

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

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%

#### SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

---

	family maximum. Payments change to a retirement annuity at normal retirement age. Benefits may be reduced on resumption of partial employment.
<i>Form of Payment:</i>	Same as for retirement.
<i>Benefit Increases:</i>	Adjusted by PERA to provide same increase as MPRIF.
<i><u>Retirement After Disability:</u></i>	
<i>Age/Service Requirement:</i>	Normal retirement age.
<i>Amount:</i>	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.
<i>Benefit Increases:</i>	Same as for retirement.

---

#### **Death:**

<i><u>Surviving Spouse Benefit:</u></i>	
<i>Age/Service Requirement:</i>	Active Member with 18 months of Allowable Service or Member receiving a disability benefit.
<i>Amount:</i>	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.
<i><u>Surviving Dependent Child Benefit:</u></i>	
<i>Age/Service Requirement:</i>	Active Member with 18 months of Allowable Service or Member receiving a disability benefit.
<i>Amount:</i>	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).

## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

---

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.

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

**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.

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

**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:

<u>Date of Increase</u>	<u>Member</u>	<u>Employer</u>
Current	5.50%	6.00%
January 2007	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.

---

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

---

**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.

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

**Retirement:**

Normal Retirement Benefit:

*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.

Early Retirement Benefit:

*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

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

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.

## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

---

### **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 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.

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 actuarial equivalent optional annuity.

*Benefit Increases:*

Same as for retirement.

## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

---

### 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.

**SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota**

---

*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 5.50% compounded annually through the year the member turns age 55 and 7.50% 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.