Correctional Employees Retirement Fund

Actuarial Valuation and Review
as of July 1, 2005

SEGAL

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

January 17, 2006

Mr. Dave Bergstrom
Minnesota State Retirement System
Correctional Employees Retirement Fund
60 Empire Drive, Suite 300
St. Paul, Minnesota 55103-3000

Dear Mr. Bergstrom:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2005. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2006 and analyzes the preceding year's experience.

The census and financial information on which our calculations were based was prepared by the Minnesota State Retirement System. 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.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By:

Leslie L. Thompson, FSA, MAAA, EA	*Brad Ramirez, ASA, MAAA, EA*
Senior Vice President and Consulting Actuary	*Consulting Actuary*

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SECTION 1

VALUATION SUMMARY

SECTION 2

VALUATION RESULTS

SECTION 3

SUPPLEMENTAL INFORMATION

SECTION 4

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Purpose

This report has been prepared by The Segal Company to present a valuation of the Minnesota State Retirement System (Correctional Employees Retirement Fund) as of July 1, 2005. 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:

- Applicable Minnesota Statutes;
- The benefit provisions of the Retirement Fund, as administered by the MSRS;
- The data as provided and confirmed by the MSRS staff;
- The characteristics of covered active participants, inactive vested participants, pensioners and beneficiaries as of July 1, 2005, provided by the Fund;
- The assets of the Fund as of June 30, 2005, provided by the Fund;
- 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 352 is equal to 13.67% of payroll compared to the required contribution rate under Chapter 356 of 17.71% of payroll. Therefore, the contribution deficiency is expected to be 4.04% of payroll or $5,943,281.
- The actuarial accrued liability funded ratio based on the actuarial value of assets over the actuarial accrued liability as of July 1, 2005 is 92.21% compared to 92.83% as of July 1, 2004. 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.
- As indicated on page 4 of this report, the total unrecognized investment gain as of June 30, 2005 is $233,427. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment losses derived from future experience. This represents an improvement over last year's unrecognized loss of $20.9 million.
- There were no changes in plan provisions, actuarial assumptions or actuarial cost methods since the prior valuation.

Summary of Key Valuation Results

	2005	2004
Contributions (% of payroll) for plan year beginning July 1:		
Statutory – Chapter 352	13.67%	13.67%
Required – Chapter 356	17.71%	17.48%
Sufficiency/(Deficiency)	-4.04%	-3.81%
Funding elements for plan year beginning July 1:		
Normal cost	$22,111,459	$20,066,740
Market value of assets	503,806,699	465,703,137
Actuarial value of assets (AVA)	503,573,272	486,617,032
Actuarial accrued liability (AAL)	546,117,680	524,215,028
Unfunded/(Overfunded) actuarial accrued liability	42,544,408	37,597,996
Funded ratios:		
Accrued Benefit Funded Ratio	100.15%	100.93%
Current assets (AVA)	$503,573,272	$486,617,032
Current benefit obligations	502,823,402	482,144,107
Projected Benefit Funded Ratio	90.16%	90.65%
Current and expected future assets	$629,187,190	$600,401,802
Current and expected future benefit obligations (Present Value of Benefits)	697,892,019	662,364,192
GASB 25/27 for plan year beginning July 1:		
Annual required employer contributions	$15,189,293	$13,332,988
Accrued Liability Funded Ratio (AVA/AAL)	92.21%	92.83%
Covered actual payroll*	$132,334,733	$133,172,068
Demographic data for plan year beginning July 1:		
Number of pensioners and beneficiaries	1,279	1,188
Number of vested terminated participants	738	678
Number of other non-vested terminated participants	351	339
Number of active participants	3,607	3,326
Total projected payroll**	$147,385,402	$134,117,624
Average projected payroll**	40,861	40,324

** Reflects actual pay for the period July 1, 2004 to July 1, 2005.*
*** Calculated as covered actual payroll, projected one year with salary scale.*

A. PARTICIPANT DATA

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

This section presents a summary of significant statistical data on these participant 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 participant population has changed over the past four valuations can be seen in this chart.

CHART 1

Participant Population: 2002 – 2005

Year Ended June 30	Active Participants	Vested Terminated Participants*	Pensioners and Beneficiaries	Ratio of Non-Actives to Actives
2002	3,249	550	938	0.46
2003	3,262	601	1,060	0.51
2004	3,326	678	1,188	0.56
2005	3,607	738	1,279	0.56

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

Active Participants

Plan costs are affected by the age, years of service and payroll of active participants. In this year's valuation, there were 3,607 active participants with an average age of 40.5, average years of service of 7.7 years and average projected payroll of $40,861. The 3,326 active participants in the prior valuation had an average age of 41.0, average service of 8.1 years and average projected payroll of $40,324.

Inactive Participants

In this year's valuation, there were 738 participants with a vested right to a deferred or immediate vested benefit.

In addition there were 351 other non-vested terminated participants entitled to a return of their employee contributions.

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

CHART 2

Distribution of Active Participants by Age as of June 30, 2005

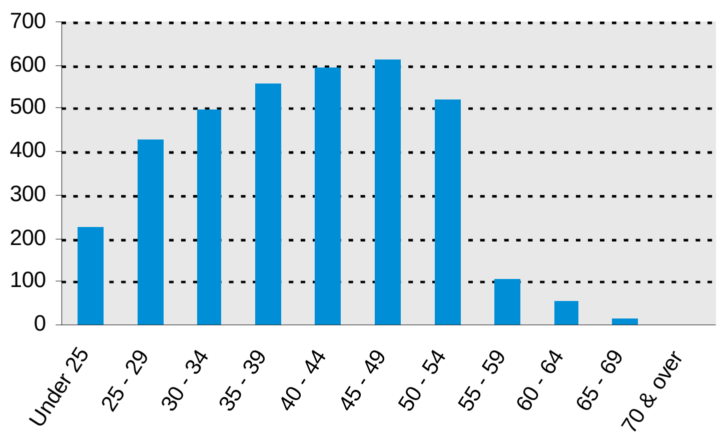
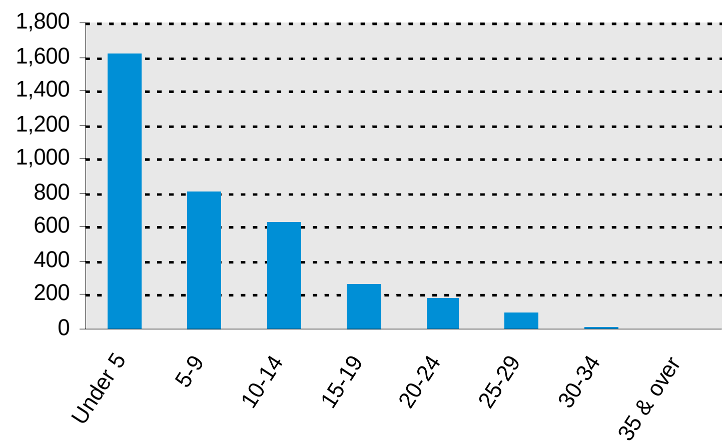


CHART 3

Distribution of Active Participants by Years of Service as of June 30, 2005



Pensioners and Beneficiaries
As of June 30, 2005, 1,175 pensioners (1,025 retired and 150 disabled participants) and 104 beneficiaries were receiving average monthly benefits of $1,601. For comparison, in the previous valuation, there were 1,097 pensioners (943 retired and 154 disabled participants) and 91 beneficiaries receiving average monthly benefits of $1,558.

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, 2005

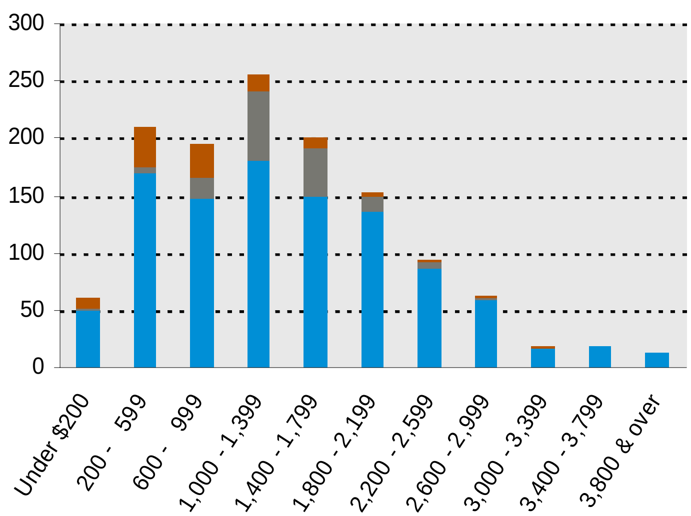
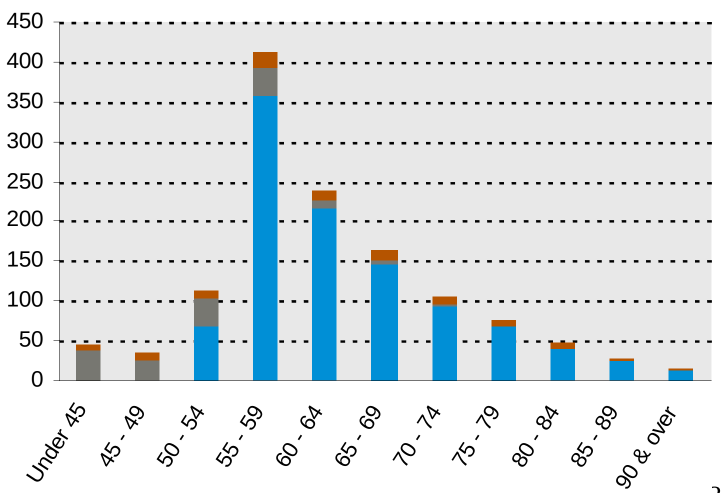


CHART 5

Distribution of Pensioners and Beneficiaries by Type and by Age as of June 30, 2005



Beneficiary
Disability
Regular

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 Fund'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 Fund'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, 2005

			Original Amount	% Not Recognized	
1.	Market value of assets available for benefits				$503,806,699
2.	Calculation of unrecognized return				
	(a)	Year ended June 30, 2005	$5,634,248	80%	$4,507,398
	(b)	Year ended June 30, 2004	16,844,381	60%	10,106,629
	(c)	Year ended June 30, 2003	-15,234,000	40%	-6,093,600
	(d)	Year ended June 30, 2002	-41,435,000	20%	-8,287,000
	(e)	Total unrecognized return			$233,427
3.	Actuarial value of assets ("Current Assets"): (1) – (2e)				$503,573,272

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 plan year ended June 30, 2005 the total gain is $257,381, including a gain of $7,648,751 from investments, a gain of $7,904,270 from salary increases, and a loss of $15,295,640 from all other sources. The net experience variation from individual sources other than investments and salary increases was 2.80% of the total actuarial accrued liability.

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

CHART 7

Actuarial Experience for Year Ended June 30, 2005

1.	Net gain/(loss) from investments	$7,648,751
2.	Net gain/(loss) from salary increases	7,904,270
3.	Net gain/(loss) from other experience	-15,295,640
4.	Net experience gain/(loss): (1) + (2) + (3)	$257,381

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 on an actuarially sound basis and in accordance with the GASB funding requirements. Section IV, Exhibit III presents a schedule of this information of the Fund.

The other critical piece of information regarding the Fund'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 changes.

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 2005	2004	Change From Prior Year
Active participants in valuation:			
Number	3,607	3,326	8.4%
Average age	40.5	41.0	N/A
Average service	7.7	8.1	N/A
Total projected payroll*	$147,385,402	$134,117,624	4.7%
Average projected payroll*	40,861	40,324	-3.5%
Total active vested participants	2,464	2,393	3.0%
Vested terminated participants	738	678	8.8%
Retired participants:			
Number in pay status	1,025	943	8.7%
Average age	64.0	64.2	N/A
Average monthly benefit	$1,708	$1,643	4.0%
Disabled participants:			
Number in pay status	150	154	-2.6%
Average age	50.4	49.6	N/A
Average monthly benefit	$1,348	$1,428	-5.6%
Beneficiaries:			
Number in pay status	104	91	14.3%
Average age	61.9	61.6	N/A
Average monthly benefit	$911	$900	1.2%
Other non-vested terminated participants	351	339	3.5%

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

EXHIBIT B

Participants in Active Service as of June 30, 2005
By Age, Years of Service, and Average Projected Payroll

		Years of Service							
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 25	227	227	- -	- -	- -	- -	- -	- -	- -
	$25,422	$25,422	- -	- -	- -	- -	- -	- -	- -
25 - 29	428	381	47	- -	- -	- -	- -	- -	- -
	31,000	29,933	$39,653	- -	- -	- -	- -	- -	- -
30 - 34	499	272	183	44	- -	- -	- -	- -	- -
	36,253	31,449	40,809	$47,004	- -	- -	- -	- -	- -
35 - 39	556	207	154	169	26	- -	- -	- -	- -
	41,037	33,068	41,017	48,646	$55,154	- -	- -	- -	- -
40 - 44	593	190	127	143	107	26	- -	- -	- -
	43,514	33,787	42,889	47,492	53,414	$55,034	- -	- -	- -
45 - 49	613	156	133	140	66	90	28	- -	- -
	45,776	34,516	45,128	47,627	51,436	56,244	$55,349	- -	- -
50 - 54	520	116	115	108	48	56	67	9	1
	48,650	40,413	46,523	49,623	50,760	55,450	55,183	$64,083	$84,759
55 - 59	104	54	23	11	8	6	- -	2	- -
	47,437	42,209	49,485	57,212	53,052	57,016	- -	60,103	- -
60 - 64	54	13	25	10	4	1	1	- -	- -
	51,893	52,394	50,257	52,656	58,517	55,407	48,644	- -	- -
65 & Over	13	4	3	2	2	1	- -	1	- -
	41,642	21,222	46,243	45,548	60,165	43,961	- -	62,348	- -
Total	3,607	1,620	810	627	261	180	96	12	1
	$40,861	$32,168	$43,186	$48,413	$52,718	$55,775	$55,164	$63,275	$84,759

EXHIBIT C

Retired Participants as of June 30, 2005
By Age, Years Since Retirement, and Average Annual Benefit

		Years Since Retirement							
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
50 - 54	75	4	4	12	12	21	18	4	- -
	$22,669	$2,913	$5,186	$13,494	$19,997	$22,989	$33,862	$43,399	- -
55 - 59	380	40	63	68	46	73	72	17	1
	20,898	3,577	8,050	14,745	21,096	27,828	35,337	41,416	$38,216
60 - 64	200	32	33	26	36	32	30	11	- -
	20,599	3,307	7,948	13,632	21,741	32,611	38,309	38,341	- -
65 - 69	141	16	13	34	23	37	15	3	- -
	19,201	2,910	7,435	13,536	19,710	26,770	36,884	35,619	- -
70 - 74	90	7	12	19	16	14	17	5	- -
	19,029	3,027	9,489	10,768	17,885	24,294	30,410	45,955	- -
75 - 79	63	2	5	8	13	12	14	9	- -
	23,170	412	5,390	10,462	17,862	23,866	34,897	37,898	- -
80 - 84	40	- -	1	7	8	15	7	2	- -
	21,229	- -	4,653	9,356	16,647	20,262	35,313	47,349	- -
85 - 89	24	- -	2	3	4	9	2	4	- -
	17,159	- -	4,442	7,660	10,258	17,648	21,212	34,416	- -
90 & Over	12	- -	1	5	3	- -	3	- -	- -
	9,241	- -	3,113	6,517	8,135	- -	16,927	- -	- -
Total	1,025	101	134	182	161	213	178	55	1
	$20,500	$3,259	$7,793	$13,124	$19,648	$26,467	$34,844	$40,173	$38,216

EXHIBIT D

Disabled Participants as of June 30, 2005
By Age, Years Since Disability, and Average Annual Benefit

		Years Since Disability							
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Under 45	34	4	7	2	14	7	- -	- -	- -
	$14,616	$11,129	$13,363	$21,746	$14,331	$16,394	- -	- -	- -
45 - 49	25	2	2	1	7	13	- -	- -	- -
	17,468	11,760	16,003	11,782	14,724	20,487	- -	- -	- -
50 - 54	35	5	3	2	16	6	3	- -	- -
	16,045	10,369	17,376	16,720	13,709	22,674	$22,931	- -	- -
55 - 59	32	1	1	5	16	6	2	1	- -
	16,095	2,913	7,645	13,122	15,342	15,816	33,653	$31,203	- -
60 - 64	12	1	2	1	4	4	- -	- -	- -
	19,426	7,413	25,452	14,065	15,821	24,361	- -	- -	- -
65 - 69	5	- -	- -	- -	5	- -	- -	- -	- -
	16,143	- -	- -	- -	16,143	- -	- -	- -	- -
70 - 74	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
75 - 79	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
80 - 84	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
85 - 89	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
90 & Over	7	- -	- -	- -	1	6	- -	- -	- -
	14,572	- -	- -	- -	12,182	14,970	- -	- -	- -
Total	150	13	15	11	63	42	5	1	- -
	$16,174	$10,016	$15,748	$15,308	$14,678	$19,031	$27,220	$31,203	$0

EXHIBIT E

Beneficiaries as of June 30, 2005
By Age, Years Since Death, and Average Annual Benefit

		Years Since Death							
Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30 - 34	35 & Over
Under 45	2	1	- -	1	- -	- -	- -	- -	- -
	$6,889	$13,483	- -	$294	- -	- -	- -	- -	- -
45 - 49	11	1	2	2	3	1	2	- -	- -
	10,578	3,519	$6,804	5,567	$11,822	$39,245	$6,693	- -	- -
50 - 54	12	2	- -	3	2	2	3	- -	- -
	9,536	842	- -	9,547	5,865	12,924	15,511	- -	- -
55 - 59	23	3	2	6	3	2	6	1	- -
	10,463	8,218	3,588	9,948	11,335	7,297	15,214	$8,738	- -
60 - 64	11	- -	3	1	3	1	3	- -	- -
	13,644	- -	6,893	5,503	22,416	7,955	16,235	- -	- -
65 - 69	15	4	1	3	2	3	1	1	- -
	15,981	8,355	34,283	10,602	13,155	20,786	37,371	14,163	- -
70 - 74	9	1	- -	2	2	2	1	1	- -
	10,121	2,790	- -	9,306	7,417	9,941	14,715	20,257	- -
75 - 79	7	- -	1	2	3	1	- -	- -	- -
	9,681	- -	2,024	7,986	8,819	23,318	- -	- -	- -
80 - 84	7	- -	1	- -	3	1	- -	2	- -
	9,203	- -	1,422	- -	8,662	7,235	- -	14,890	- -
85 - 89	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
90 & Over	7	- -	- -	7	- -	- -	- -	- -	- -
	5,456	- -	- -	5,456	- -	- -	- -	- -	- -
Total	104	12	10	27	21	13	16	5	- -
	$10,932	$6,629	$7,919	$7,688	$11,525	$15,418	$15,749	$14,588	$0

EXHIBIT F

Reconciliation of Participant Data

	Active Participants	Vested Former Participants	Other Non-Vested Terminated Participants	Disableds	Retired Participants	Beneficiaries	Total
Number as of July 1, 2004	3,326	678	339	154	943	91	5,531
New participants	624	N/A	0	N/A	N/A	N/A	624
Terminations – with vested rights	-97	97	0	0	0	0	0
Terminations – without vested rights	-177	-7	184	N/A	N/A	N/A	0
Retirements	-88	-8	0	N/A	96	N/A	0
New disabilities	-10	-2	0	12	N/A	N/A	0
Return to work	20	-17	0	-3	0	N/A	0
Died with beneficiary	-5	0	0	-1	-3	9	0
Died without beneficiary	-1	0	0	-4	-17	-1	-23
Lump sum payoffs	0	0	0	0	0	0	0
Rehired	0	0	0	0	0	N/A	0
Certain period expired	N/A	N/A	0	0	0	0	0
Data adjustments	15	-3	-172	-8	6	5	-157
Valuation number as of July 1, 2005	3,607	738	351	150	1,025	104	5,975

EXHIBIT G

Summary Statement of Income and Expenses on a Market Value Basis for Year Ended June 30, 2005

	Non-MPRIF Assets	MPRIF Reserve	Market Value
A. Assets available at beginning of period	$242,463,896	$223,239,241	$465,703,137
B. Operating revenues:			
1. Member contributions	$7,942,818	$0	$7,942,818
2. Employer contributions	11,015,887	0	11,015,887
3. MPRIF income	0	18,498,423	18,498,423
4. Net investment income			
(a) Interest and dividends	$21,322,449	$0	$21,322,449
(b) Net appreciation/(depreciation)	4,618,305	0	4,618,305
(c) Investment expenses	-255,672	0	-255,672
(d) Net subtotal	$25,685,082	$0	$25,685,082
5. Other	1,207	0	1,207
6. Total additions	$44,644,994	$18,498,423	$63,143,417
C. Operating expenses:			
1. Benefits	$0	$23,816,375	$23,816,375
2. Refunds	648,726	0	648,726
3. Administrative expenses	298,358	0	298,358
4. Other	276,396	0	276,396
5. Total operating expenses	$1,223,480	$23,816,375	$25,039,855
D. Other changes in reserves			
1. Annuities awarded	-$30,850,285	$30,850,285	$0
2. Mortality gain/(loss)	25,227,649	-25,227,649	0
3. Change in MPRIF assumptions	0	0	0
4. Total other changes	-$5,622,636	$5,622,636	$0
E. Assets available at end of period	$280,262,774	$223,543,925	$503,806,699
F. Determination of current year unrecognized asset return (UAR)			
1. Average balance:			
(a) Non-MPRIF assets available at BOY: (A)			$242,463,896
(b) Non-MPRIF assets available at EOY*: (E) – (D.2)			255,035,125
(c) Average balance: [(F.1(a)) + (F.1(b)) – (B.4(d)) – B.5)]/2			235,906,366
2. Expected return: 8.50% x (F.1(c))			20,052,041
3. Actual return: (B.4(d)) + (B.5)			25,686,289
4. Current year UAR: (F.3) – (F.2)			$5,634,248

**Before adjustment for MPRIF Mortality gain/loss*

EXHIBIT H

Table of Financial Information for Year Ended June 30, 2005

	Market Value	Cost Value
Assets in trust		
Cash, equivalents, short-term securities:	$3,020,830	$3,020,830
Fixed income	59,814,447	60,752,592
Equity	191,661,410	188,153,684
Real estate	0	0
Equity in MPRIF	223,543,925	223,543,925
Other	0	0
Total assets in trust	$478,040,612	$475,471,031
Assets receivable	$26,139,092	$26,139,092
Total assets	$504,179,704	$501,610,123
Amounts currently payable	-$373,005	-$373,005
Assets available for benefits		
MPRIF reserves	223,543,925	223,543,925
Member reserves	62,573,341	62,573,341
Other non-MPRIF reserves	217,689,433	215,119,852
Net Assets Available for Benefits	$503,806,699	$501,237,118
Net Assets at Market/Cost Value	$503,806,699	$501,237,118

EXHIBIT I

Development of the Fund Through June 30, 2005

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2003	$10,480,000	$7,610,000	$15,359,000	$286,000	$19,863,000	$470,716,000
2004	10,627,131	7,748,150	19,821,058	275,310	22,019,997	486,617,032
2005	11,015,887	7,942,818	22,760,994	298,358	24,465,101	503,573,272

** 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, 2005

1.	Unfunded/(Overfunded) actuarial accrued liability at beginning of year		$37,597,996
2.	Normal cost at beginning of year		20,066,740
3.	Total contributions		18,958,705
4.	Interest		4,095,758
5.	Expected unfunded/(overfunded) actuarial accrued liability (1) + (2) – (3) + (4)		$42,801,789
6.	Changes due to (gain)/loss from:		
	(a) Investments	-$7,648,751	
	(b) Salary increases	-7,904,270	
	(c) MPRIF mortality	-25,227,649	
	(d) Other experience	40,523,289	
	(e) Total changes due to (gain)/loss		-257,381
7.	Unfunded/(Overfunded) actuarial accrued liability at end of year		$42,544,408

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 Fund is calculated including:

(a) Investment return — the rate of investment yield that the Fund 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 Fund exceeds the assets of the Fund. 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 Fund's unfunded actuarial accrued liability.

Investment Return: The rate of earnings of the Fund 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 often 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 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 104 beneficiaries in pay status)		1,279
2.	Participants inactive during year ended June 30, 2005 with vested rights		738
3.	Participants active during the year ended June 30, 2005		3,607
	Fully vested	2,464	
	Not vested	1,143	
4.	Other non-vested terminated participants as of June 30, 2005		351

EXHIBIT I (continued)

Summary of Actuarial Valuation Results

			Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
A.	Determination of Actuarial Accrued Liability				
1.	Active participants:				
	(a)	Death benefits	$9,681,673	$2,437,029	$7,244,644
	(b)	Disability benefits	25,027,680	15,332,193	9,695,487
	(c)	Withdrawal benefits	30,672,565	12,492,734	18,179,831
	(d)	Retirement benefits	355,028,897	108,872,211	246,156,686
	(e)	Refunds	9,509,440	12,640,172	-3,130,732
	(f)	Total	$429,920,255	$151,774,339	$278,145,916
2.	Vested terminated participants		$43,886,639	$0	$43,886,639
3.	Other non-vested terminated participants		541,200	0	541,200
4.	Annuitants in MPRIF		223,543,925	0	223,543,925
5.	Annuitants not in MPRIF		0	0	0
6.	Total		$697,892,019	$151,774,339	$546,117,680
B.	Determination of Unfunded Actuarial Accrued Liability				
1.	Actuarial Accrued Liability				$546,117,680
2.	Actuarial Value of Assets				503,573,272
3.	Unfunded Actuarial Accrued Liability: (B.1) – (B.2)				$42,544,408
C.	Determination of Supplemental Contribution Rate				
1.	Present value of future payrolls through the amortization date of June 30, 2020				$1,698,728,303
2.	Supplemental contribution rate: (B.3) / (C.1)				2.50%

EXHIBIT II
Actuarial Balance Sheet

A. Current Assets				$503,573,272
B. Expected Future Assets				
1. Present Value of Expected Future Statutory Supplemental Contributions				-$26,160,421
2. Present Value of Future Normal Costs				151,774,339
3. Total Expected Future Assets				$125,613,918
C. Total Current and Expected Future Assets				$629,187,190
D. Current Benefit Obligations	**Non-Vested**	**Vested**	**Total**	
1. Benefit recipients:				
(a) Retirement annuities	$0	$182,495,999	$182,495,999	
(b) Disability benefits	0	30,030,414	30,030,414	
(c) Beneficiaries	0	11,017,512	11,017,512	
2. Vested terminated participants	0	43,886,639	43,886,639	
3. Other non-vested terminated participants	0	541,200	541,200	
4. Active participants	5,742,011	229,109,627	234,851,638	
5. Total Current Benefit Obligations	$5,742,011	$497,081,391	$502,823,402	
E. Expected Future Benefit Obligations				195,068,617
F. Total Current and Expected Future Benefit Obligations - Present Value of Benefits: (D.5 + E)				$697,892,019
G. Current Unfunded Actuarial Liability (D.5 - A)				-$749,870
H. Current and Future Unfunded Actuarial Liability (F - C)				$68,704,829

EXHIBIT III

Supplementary Information Required by the GASB – Schedule of Employer Contributions

Year Ended June 30	Actuarially Required Contribution Rate (a)	Actual Covered Payroll (b)	Actual Member Contributions (c)	Annual Required Employer Contributions [(a) x (b)] – (c) = (d)	Actual Employer Contributions[(1)] (e)	Percentage Contributed (e) / (d)
1991	10.73%	$43,429,000	$2,128,000	$2,532,000	$2,731,000	107.86%
1992	10.82%	47,592,000	2,332,000	2,817,000	2,955,000	104.90%
1993	11.41%	52,122,000	2,554,000	3,393,000	3,217,000	94.81%
1994	10.97%	54,673,000	2,679,000	3,319,000	3,355,000	101.08%
1995	11.30%	66,939,000	3,280,000	4,284,000	4,195,000	97.92%
1996	11.11%	72,959,000	3,575,000	4,531,000	4,559,000	100.62%
1997	11.21%	112,408,000	5,508,000	7,093,000	9,129,000	128.70%
1998	12.49%	105,796,000	5,954,000	7,260,000	8,146,000	112.20%
1999	12.99%	106,131,000	6,378,000	7,408,000	8,172,000	110.31%
2000	13.66%[(2)]	112,587,000	6,526,000	8,853,000	8,984,000	101.48%
2001	13.72%[(3)]	120,947,000	6,996,000	9,598,000	9,652,000	100.56%
2002	13.81%	124,373,000	7,207,000	9,969,000	9,925,000	99.56%
2003	14.73%[(4)]	131,328,000	7,610,000	11,735,000	10,480,000	89.31%
2004	15.83%	133,172,068	7,748,150	13,332,988	10,627,131	79.71%
2005	17.48%	132,334,733	7,942,818	15,189,293	11,015,887	72.52%
2006	17.71%					

(1) *Includes contributions from other sources (if applicable).*

(2) *Actuarially Required Contribution Rate calculated according to parameters of GASB 25 using a 30-year amortization of the negative unfunded accrued liability.*

(3) *Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 13.34%.*

(4) *Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 14.46%.*

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	$105,925,000	$112,171,000	$6,246,000	94.43%	$43,429,000	14.38%
07/01/1992	121,051,000	123,515,000	2,464,000	98.01%	47,592,000	5.18%
07/01/1993	135,939,000	134,280,000	-1,659,000	101.24%	52,122,000	-3.18%
07/01/1994	148,163,000	152,702,000	4,539,000	97.03%	54,673,000	8.30%
07/01/1995	165,427,000	153,491,000	-11,936,000	107.78%	66,939,000	-17.83%
07/01/1996	193,833,000	170,959,000	-22,874,000	113.38%	72,959,000	-31.35%
07/01/1997	241,916,000	212,638,000	-29,278,000	113.77%	112,408,000	-26.05%
07/01/1998	295,291,000	261,869,000	-33,422,000	112.76%	105,796,000	-31.59%
07/01/1999	335,408,000	307,408,000	-28,000,000	109.11%	106,131,000	-26.38%
07/01/2000	386,964,000	359,885,000	-27,079,000	107.52%	112,587,000	-24.05%
07/01/2001	431,134,000	398,633,000	-32,501,000	108.15%	120,947,000	-26.87%
07/01/2002	457,416,000	446,426,000	-10,990,000	102.46%	124,373,000	-8.84%
07/01/2003	470,716,000	484,974,000	14,258,000	97.06%	131,328,000	10.86%
07/01/2004	486,617,032	524,215,028	37,597,996	92.83%	133,172,068	28.23%
07/01/2005	503,573,272	546,117,680	42,544,408	92.21%	132,334,733	32.15%

EXHIBIT V

Determination of Contribution Sufficiency

		July 1, 2005	
A.	**Statutory Contributions – Chapter 352**	**Percent of Payroll**	**Dollar Amount**
1.	Member Contributions	5.69%	$8,386,229
2.	Employer Contributions	7.98%	11,761,355
3.	Total	13.67%	$20,147,584
B.	**Required Contributions – Chapter 356**		
1.	Normal Cost		
	(a) Retirement Benefits	11.09%	$16,343,222
	(b) Disability Benefits	1.60%	2,361,696
	(c) Survivors	0.22%	320,848
	(d) Deferred Retirement Benefits	1.05%	1,542,522
	(e) Refunds	1.05%	1,543,171
	(f) Total	15.01%	$22,111,459
2.	Amortization of Supplemental Contribution UAAL	2.50%	3,684,635
3.	Allowance for Expenses	0.20%	294,771
4.	Total	17.71%	$26,090,865
C.	**Contribution Sufficiency (Deficiency) (A.3 – B.4)**	-4.04%	-$5,943,281
D.	**Projected* annual payroll for fiscal year beginning on the valuation date**		$147,385,402

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

EXHIBIT VI

Supplementary Information Required by the GASB

Valuation date	July 1, 2005	
Actuarial cost method	Entry Age Normal	
Amortization method	Level percentage of payroll , assuming payroll increases at 5.00% per annum	
Remaining amortization period	15 years remaining as of July 1, 2005	
Asset valuation method	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	6.00% 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	1,279	
Terminated participants entitled to, but not yet receiving benefits	738	
Other non-vested terminated participants due a refund of contributions	351	
Active participants	3,607	
Total	5,975	

EXHIBIT VII
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 using a 6.00% post-retirement assumption.	
Salary Increases:	Reported salary at valuation date increased according to the rate table on page 30 to current fiscal year and annually for each future year. Prior fiscal year salary is annualized for new members.	
Mortality Rates:		
Healthy Pre-Retirement:	Male -	1983 Group Annuity Mortality Table for males set back one year.
	Female -	1983 Group Annuity Mortality Table for females.
Healthy Post-Retirement:	Male -	1983 Group Annuity Mortality Table for males set forward two years.
	Female -	1983 Group Annuity Mortality Table for females set forward two years.
Disabled:	Male -	Combined Annuity Mortality Table.
	Female -	Combined Annuity Mortality Table.

Retirement Rates:	Age-related table as follows: Ages: 50-53 2.00% 54 20.00 55 60.00 56-61 20.00 62-64 50.00 65 & over 100.00
Withdrawal Rates:	Graded rates based on actual experience developed by the June 30, 1997 experience analysis. Rates are shown in rate table.
Disability:	Rates as shown in rate table.
Allowance for Combined Service Annuity:	Liabilities for active members are increased by 0.00% and liabilities for former members are increased by 30.00% to account for the effect of some participants having eligibility for a Combined Service Annuity.
Administrative Expenses:	Prior year administration expenses expressed as percentage of prior year projected payroll.
Return of Contributions:	All employees withdrawing after becoming eligible for a deferred benefit take the larger of their contributions accumulated with interest or the value of their deferred benefit.
Percent Married:	85.00% of members are assumed to be married.
Age of Spouse:	Females are assumed to be three years younger than males.
Social Security:	Based on the present law and 6.00% retroactive salary scale. Only earnings history while in state service is used. Future Social Security benefits replace the same proportion of salary as at present.

Special Consideration:	Married members assumed to elect subsidized joint and survivor form of annuity as follows: Males - 25.00% elect 50% J&S option 25.00% elect 100% J&S option Females - 5.00% elect 50% J&S option 5.00% elect 100% J&S option
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. The actuarial cost method was changed as of July 1, 1997 to permit negative amortization of supplemental contribution surpluses.
Asset Valuation Method:	Market Value 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). Transition rules apply between July 1, 2000 and July 1, 2003, when the method is fully in effect.
Payment on the Unfunded Actuarial Accrued Liability:	A level percentage of payroll each year to the statutory amortization date assuming payroll increases of 5.00% 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.

Summary of Rates: Shown below for selected ages:

	Rates (%)							
	Healthy Pre-Retirement Mortality		Healthy Post-Retirement Mortality		Disabled Mortality		Withdrawal	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
20	0.04%	0.02%	0.04%	0.02%	0.21%	0.21%	24.00%	16.00%
25	0.04	0.03	0.05	0.03	0.22	0.22	14.70	14.20
30	0.06	0.03	0.07	0.04	0.24	0.24	9.10	13.50
35	0.08	0.05	0.10	0.05	0.34	0.34	6.00	12.90
40	0.11	0.07	0.15	0.08	0.50	0.50	4.40	10.40
45	0.19	0.10	0.28	0.12	0.75	0.75	3.40	6.40
50	0.35	0.16	0.48	0.19	1.12	1.12	2.40	4.70
55	0.57	0.25	0.71	0.31	1.67	1.67	1.40	3.30
60	0.84	0.42	1.11	0.52	2.49	2.49	0.00	0.00
65	1.39	0.71	1.98	0.87	3.71	3.71	0.00	0.00
70	2.48	1.24	3.34	1.62	5.50	5.50	0.00	0.00

Summary of Rates: (continued) Shown below for selected ages:

	Rates (%)				
	Disability Retirement		**Retirement**		**Salary Increases**
Age	**Male**	**Female**	**Male**	**Female**	
20	0.04%	0.04%	0.00%	0.00%	7.25%
25	0.06	0.06	0.00	0.00	7.00
30	0.08	0.08	0.00	0.00	7.00
35	0.11	0.11	0.00	0.00	7.00
40	0.18	0.18	0.00	0.00	6.50
45	0.29	0.29	0.00	0.00	5.75
50	0.50	0.50	2.00	2.00	5.50
55	0.88	0.88	60.00	60.00	5.25
60	1.41	1.41	20.00	20.00	5.25
65	0.00	0.00	100.00	100.00	5.25
70	0.00	0.00	100.00	100.00	0.00

Changes in Actuarial Assumptions and Actuarial Cost Methods: There have been no changes in the actuarial assumptions or the actuarial cost methods since the prior valuation.

EXHIBIT VIII

Summary of Plan Provisions

This summary of provisions reflects the interpretation of applicable Statutes for purposes of preparing this valuation. This interpretation is not intended to create or rescind any benefit rights in conflict with any Minnesota Statutes.

Plan Year:	July 1 through June 30
Eligibility:	State employees in covered correctional service.
Contributions:	
Member:	5.69% of salary.
Employer:	7.98% of salary.
Allowable Service:	Service during which member contributions were made. May also include certain leaves of absence, military service and periods while temporary Worker's Compensation is paid.
Salary:	Includes wages, allowances and fees. Excludes lump sum payments at separation and reduced salary while receiving Worker's Compensation benefits.
Average Salary:	Average of the five highest successive years of salary. Average Salary is based on all Allowable Service if less than five years.
Retirement:	
Normal Retirement Benefit:	
Age/Service Requirement:	Age 55 and three years of Allowable Service under the Correctional and General Plans. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.
Amount:	2.40% of Average Salary for each year of Allowable Service, pro rata for completed months.

<u>Early Retirement Benefit</u>:	
Age/Service Requirement:	Age 50 and three years of Allowable Service.
Amount:	Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date reduced by 2/10% per month for each month that the member is under age 55.
Form of Payment:	Life annuity. Actuarially equivalent options are: (a) 50% or 100% joint and survivor with bounce back feature without additional reduction. (b) 15 year certain and life benefits. (c) Level Social Security option either to age 62 or Social Security Retirement Age.
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.

Disability:

<u>Occupational Disability</u>:	
Age/Service Requirement:	Member who cannot perform his duties as a direct result of a disability relating to an act of duty.
Amount:	50.00% of Average Salary plus 2.40% of Average Salary for each year in excess of 20 years and 10 months of Allowable Service (pro rata for completed months). Maximum of 75.00% of Average Salary. Payment begins at disability and stops at age 65 or the five-year anniversary of the effective date of the disability benefit, whichever is later. Payments stop earlier if disability ceases or death occurs. Benefits may be paid upon re-employment but salary plus benefit cannot exceed current salary of position held at time of disability

Non-Occupational Disability:	
Age/Service Requirement:	At least one year of Correctional service and disability not related to covered employment.
Amount:	Normal Retirement Benefit based on Allowable Service (minimum of 15 years) and Average Salary at disability. Payment begins at disability and ends at age 65 or the five-year anniversary of the effective date of the disability benefit, whichever is later. Payments stop earlier if disability ceases or death occurs. Benefits may be paid upon re-employment but salary plus benefit cannot exceed current salary of position held at time of disability.
Form of Payment:	Same as for retirement.
Benefit Increases:	Adjusted by MSRS to provide same increase as MPRIF.
Retirement Disability:	
Age/Service Requirement:	Age 62 with continued disability.
Amount:	Benefit computed as a normal retirement benefit under General Plan based on same Allowable Service and without reduction for age.
Form of Payment:	Same as for retirement.
Benefit Increases:	Same as for retirement.

Death:

Surviving Spouse Benefit:	
Age/Service Requirement:	Member at any age or former member age 50 or older who dies before retirement or disability benefits commence with three years of Allowable Service. If a former member dies before age 55 and has less than 30 years of Allowable Service, benefits commence when the former member would have been age 55. If an active member dies, benefits may commence immediately, regardless of age.
Amount:	Surviving spouse receives the 100% joint and survivor benefit using the Normal Retirement formula above. If commencement is prior to age 55, the appropriate early

retirement formula described above applies except that one-half the monthly reduction factor is used from age 55 to the commencement age and the Rule of 90 does not apply. In lieu of this benefit, the surviving spouse may elect a refund of contributions with interest or an actuarially equivalent term certain annuity (lump sum payable to estate at death).

Benefit Increases: Adjusted by MSRS to provide same income as MPRIF.

Surviving Dependent Children's Benefit:

Age/Service Requirement: If no surviving spouse, all dependent children (biological or adopted) below age 20 who are dependent for more than half of their support on deceased member.

Amount: Actuarially equivalent to surviving spouse 100% joint and survivor annuity payable to the later of age 20 or five years. The amount is to be proportionally divided among surviving children.

Refund of Contributions With Interest:

Age/Service Requirement: Active employee dies and survivor benefits are not payable or a former employee dies before annuity begins. If accumulated contributions with interest exceed total payments to the surviving spouse and children, then the remainder is paid out.

Amount: The member's contributions with 5.00% interest if death occurred on or after May 16, 1989 and 6.00% interest if death occurred on or after May 16, 1989.

Termination:

Refund of Contributions:

Age/Service Requirement: Termination of state 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 Correctional and General Service.

Amount: Benefit computed under law in effect at termination.

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