

**Minnesota State Retirement System
Correctional Employees Retirement Fund**

*Actuarial Valuation and Review
as of July 1, 2007*

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

November 30, 2007

*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, 2007. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2008 and analyzes the preceding year's experience.

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

Sincerely,

THE SEGAL COMPANY

By:   

Thomas D. Levy, FSA, MAAA, EA Andre Latia, FSA, MAAA, EA Brad E. Ramirez, FSA, MAAA, EA
Senior Vice President and Chief Actuary Senior Vice President and Consulting Actuary Consulting Actuary

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

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SECTION 1: Valuation Summary for the Correctional Employees Retirement Fund

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, 2007. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- 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, 2007 provided by the Fund;
- The assets of the Fund as of June 30, 2007, provided by the Fund;
- 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 Correctional Employees Retirement Fund

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 15.50% of payroll compared to the required contribution rate under Chapter 356 of 24.44% of payroll. Therefore, the contribution deficiency is 8.94% of payroll or \$16,753,482. Each year there is a contribution deficiency leads to an increased deficiency in all future years. The FY2007 shortfall increased the required rate for FY2008 (and each succeeding year through FY 2023) by 0.69% of payroll.
- The Annual Required Employer Contribution for the year ended June 30, 2007 is \$29,115,156, which increased from the prior year of \$16,870,946. This increase is primarily due to the change in actuarial assumptions and employee contribution rates, effective July 1, 2006.
- The Employee and Employer contribution rates (as a percentage of salary) will change as shown in the schedule below:

<u>Date of Increase</u>	<u>Employee</u>	<u>Employer</u>
Current	6.40%	9.10%
July 1, 2008	7.00%	10.10%
July 1, 2009	7.70%	11.10%
July 1, 2010	8.60%	12.10%

- The report shows that the statutory funding rate is significantly less than the required rate. In the absence of exceptionally favorable future experience, this difference is expected to increase over time. We strongly recommend that this shortfall be addressed promptly, so that the funded position does not continue to deteriorate.
- There were no changes in plan provisions or actuarial assumptions since the prior valuation.
- The only change in actuarial cost methods since the prior valuation was a modification to the asset valuation method, effective with the July 1, 2007 valuation. Assets allocated to the Minnesota Post Retirement Investment Fund (MPRIF) must equal the Market Value of Assets on the valuation date. This change resulted in a decrease to the Actuarial Value of Assets and increase to the Unfunded Actuarial Accrued Liability of \$23,466,416. The Supplemental Contribution increased by \$1,929,283, which directly impacted the Contribution Deficiency, resulting in total deficiency of 8.94% of payroll.

SECTION 1: Valuation Summary for the Correctional Employees Retirement Fund

- The actuarial accrued liability funded ratio based on the actuarial value of assets under the new asset valuation method as of July 1, 2007 is 79.04% compared to 82.68% as of July 1, 2006. The funded ratio based on this calculation under the old asset valuation method would have decreased to 82.36% as of July 1, 2007; hence, the decrease in the funded ratio from 82.36% to 79.04% is entirely attributable to the asset valuation method change. This ratio is a measure of funding status, and its history is a measure of funding progress.

SECTION 1: Valuation Summary for the Correctional Employees Retirement Fund

Summary of Key Valuation Results

	2007*	2006
Contributions (% of payroll) for plan year beginning July 1:		
Statutory – Chapter 352	15.50%	13.67%
Required – Chapter 356	24.44%	23.34%
Sufficiency/(Deficiency)	-8.94%	-9.67%
Funding elements for plan year beginning July 1:		
Normal cost	\$33,124,289	\$28,786,714
Market value of assets	595,057,508	549,986,069
Actuarial value of assets (AVA)	559,851,700	535,356,819
Actuarial accrued liability (AAL)	708,291,710	647,480,269
Unfunded/(Overfunded) actuarial accrued liability	148,440,010	112,123,450
Funded ratios:		
<u>Accrued Benefit Funded Ratio</u>	83.80%	87.43%
Current assets (AVA)	\$559,851,700	\$535,356,819
Current benefit obligations	668,085,847	612,358,420
<u>Projected Benefit Funded Ratio</u>	73.22%	78.89%
Current and expected future assets	\$719,591,721	\$700,031,747
Current and expected future benefit obligations (Present Value of Benefits)	982,817,410	887,336,773
GASB 25/27 for plan year beginning July 1:		
Annual required employer contributions	\$29,115,156	\$16,870,946
Accrued Liability Funded Ratio (AVA/AAL)	79.04%	82.68%
Covered actual payroll**	\$167,727,409	\$145,879,208
Demographic data for plan year beginning July 1:		
Number of pensioners and beneficiaries	1,502	1,375
Number of vested terminated participants	851	817
Number of other non-vested terminated participants	494	388
Number of active participants	4,332	3,910
Total projected payroll***	\$187,309,014	\$162,744,640
Average projected compensation	43,238	41,623

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

** Reflects actual pay for the period July 1, 2006 to June 30, 2007.

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

SECTION 2: Valuation Results for the Correctional Employees Retirement Fund

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 six valuations can be seen in this chart.

CHART 1
Participant Population: 2002 – 2007

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
2006	3,910	817	1,375	0.56
2007	4,332	851	1,502	0.54

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

SECTION 2: Valuation Results for the Correctional Employees Retirement Fund

Active Participants

Plan costs are affected by the age, years of service and payroll of active participants. In this year's valuation, there were 4,332 active participants with an average age of 40.1, average service of 7.0 years and average projected compensation of \$43,238. The 3,910 active participants in the prior valuation had an average age of 40.2, average service of 7.4 years and average projected payroll of \$41,623.

Inactive Participants

In this year's valuation, there were 851 participants with a vested right to a deferred or immediate vested benefit.

In addition, there were 494 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, 2007

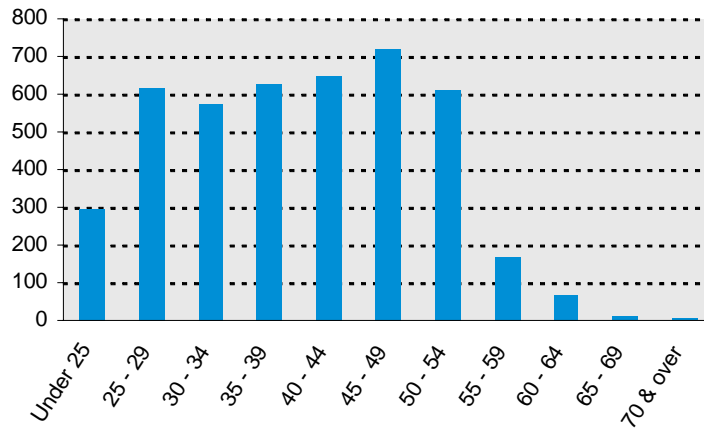
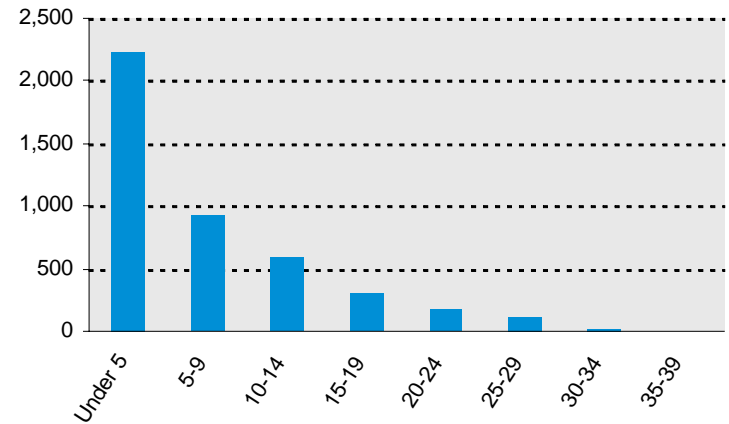


CHART 3
Distribution of Active Participants by Years of Service as of June 30, 2007



SECTION 2: Valuation Results for the Correctional Employees Retirement Fund

Pensioners and Beneficiaries

As of June 30, 2006, 1,384 pensioners (1,210 retired and 174 disabled participants) and 118 beneficiaries were receiving average monthly benefits of \$1,408. For comparison, in the previous valuation, there were 1,269 pensioners (1,101 retired and 168 disabled participants) and 106 beneficiaries receiving average monthly benefits of \$1,272.

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

CHART 4
Distribution of Pensioners and Beneficiaries by Type and by Monthly Amount as of June 30, 2007

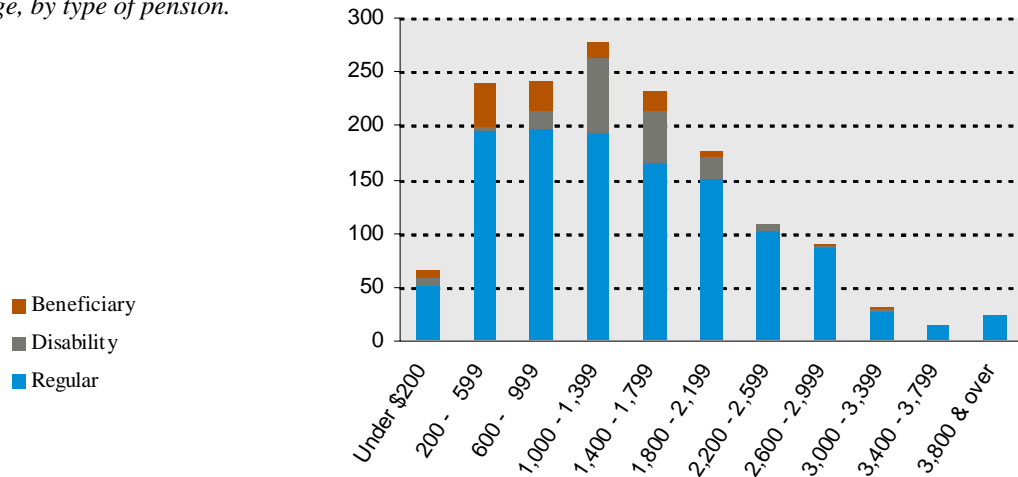
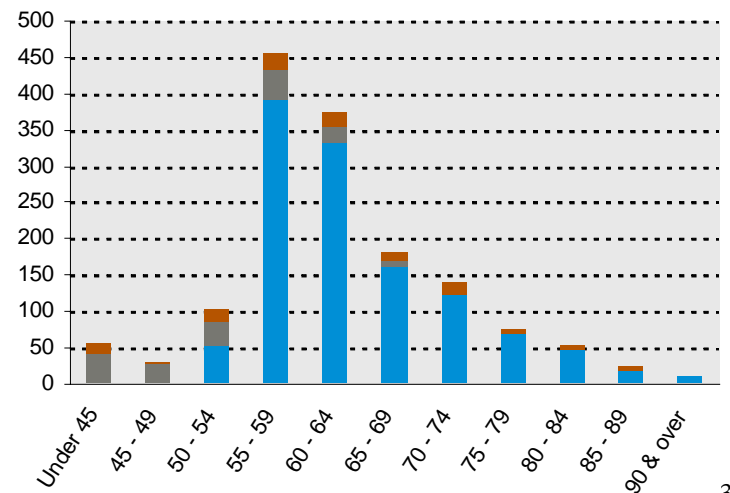


CHART 5
Distribution of Pensioners and Beneficiaries by Type and by Age as of June 30, 2007



SECTION 2: Valuation Results for the Correctional Employees Retirement Fund

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.

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

SECTION 2: Valuation Results for the Correctional Employees Retirement Fund

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

CHART 6A

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

	Original Amount	% Not Recognized	
1. Market value of assets available for benefits			\$618,523,924
2. Calculation of unrecognized return			
(a) Year ended June 30, 2007	\$29,893,651	80%	\$23,914,921
(b) Year ended June 30, 2006	9,447,186	60%	5,668,312
(c) Year ended June 30, 2005	5,634,248	40%	2,253,699
(d) Year ended June 30, 2004	16,844,381	20%	<u>3,368,876</u>
(e) Total unrecognized return			\$35,205,808
3. Actuarial value of assets ("Current Assets"): (1) – (2e)			<u>\$583,318,116</u>
4. Actuarial value as percent of market value			<u>94.3%</u>

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

CHART 6B

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

	Original Amount	% Not Recognized	
1. Market value of assets available for benefits			\$595,057,508
2. Calculation of unrecognized return			
(a) Year ended June 30, 2007	\$29,893,651	80%	\$23,914,921
(b) Year ended June 30, 2006	9,447,186	60%	5,668,312
(c) Year ended June 30, 2005	5,634,248	40%	2,253,699
(d) Year ended June 30, 2004	16,844,381	20%	<u>3,368,876</u>
(e) Total unrecognized return			\$35,205,808
3. Actuarial value of assets ("Current Assets"): (1) – (2e)			<u>\$559,851,700</u>
4. Actuarial value as percent of market value			<u>94.1%</u>

SECTION 2: Valuation Results for the Correctional Employees Retirement Fund

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, 2007, the total gain is \$2,936,058, including a gain of \$10,188,061 from investments, a gain of \$170,390 from salary increases, a and a loss of \$7,422,393 from all other sources. The net experience variation from individual sources other than investments and salary increases was 1.05% 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, 2007

1. Net (loss) from investments	\$10,188,061
2. Net gain from salary increases	170,390
3. Net gain from other experience	<u>-7,422,393</u>
4. Net experience gain: (1) + (2) + (3)	\$2,936,058

SECTION 2: Valuation Results for the Correctional Employees Retirement Fund

D. INFORMATION REQUIRED BY THE GASB

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

Critical information to GASB is the historical comparison of the GASB required contribution to the actual contributions. This comparison demonstrates whether a plan is being funded in accordance with the GASB actuarially required contributions. Section 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 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 Correctional Employees Retirement Fund

EXHIBIT A

Table of Plan Coverage

Category	Year Ended June 30		Change From Prior Year
	2007	2006	
Active participants in valuation:			
Number	4,332	3,910	10.8%
Average age	40.1	40.2	N/A
Average service	7.0	7.4	N/A
Total projected payroll*	\$187,309,014	\$162,744,640	15.1%
Average projected compensation	43,238	41,623	3.9%
Total active vested participants	2,558	2,468	3.6%
Vested terminated participants	851	817	4.2%
Retired participants:			
Number in pay status	1,210	1,101	9.9%
Average age	63.9	64.1	N/A
Average monthly benefit	\$1,461	\$1,457	0.3%
Disabled participants:			
Number in pay status	174	168	3.6%
Average age	51.4	50.6	N/A
Average monthly benefit	\$1,380	\$1,371	0.7%
Beneficiaries:			
Number in pay status	118	106	11.3%
Average age	59.6	60.7	N/A
Average monthly benefit	\$909	\$886	2.6%
Other non-vested terminated participants	494	388	27.3%

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

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

EXHIBIT B

**Participants in Active Service as of June 30, 2007
By Age, Years of Service, and Average Payroll**

Age	Years of Service								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & over
Under 25	295	295	--	--	--	--	--	--	--
	\$29,234	\$29,234	--	--	--	--	--	--	--
25 - 29	618	552	66	--	--	--	--	--	--
	34,400	33,625	\$40,883	--	--	--	--	--	--
30 - 34	572	363	180	29	--	--	--	--	--
	38,454	34,876	43,294	\$53,197	--	--	--	--	--
35 - 39	625	278	173	151	23	--	--	--	--
	42,548	35,841	44,196	50,685	\$57,787	--	--	--	--
40 - 44	646	231	151	130	104	29	1	--	--
	46,534	38,509	44,382	52,620	55,702	\$61,153	\$57,065	--	--
45 - 49	723	219	150	136	103	83	31	1	--
	49,312	41,657	46,233	50,775	55,294	61,592	58,009	\$83,500	--
50 - 54	609	182	131	100	64	51	71	10	--
	50,731	43,947	49,255	50,984	57,261	57,602	58,207	61,069	--
55 - 59	167	81	43	23	8	7	4	--	1
	49,902	47,955	47,592	55,126	54,635	57,310	60,571	--	\$54,473
60 - 64	66	29	22	9	4	2	--	--	--
	51,424	45,135	59,121	53,860	49,676	50,472	--	--	--
65 - 69	8	3	1	3	--	--	--	1	--
	55,079	46,783	70,623	54,951	--	--	--	64,802	--
70 & over	3	2	--	1	--	--	--	--	--
	20,316	9,642	--	41,664	--	--	--	--	--
Total	4,332	2,235	917	582	306	172	107	12	1
	\$43,238	\$36,321	\$45,413	\$51,546	\$55,941	\$60,032	\$58,227	\$63,249	\$54,473

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

EXHIBIT C

Retired Participants as of June 30, 2007

By Age, Years Since Retirement, and Average Annual Benefit

Age	Years Since Retirement								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & over
Under 45	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
45 - 49	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
50 - 54	69	6	4	12	9	18	15	5	--
	\$17,242	\$2,506	\$7,759	\$10,092	\$15,295	\$17,977	\$27,220	\$30,592	--
55 - 59	424	37	72	94	52	68	70	30	1
	16,133	3,390	6,560	11,531	16,555	21,363	25,917	32,717	\$49,503
60 - 64	303	48	60	30	42	64	47	11	1
	16,460	2,970	6,983	12,395	18,035	24,548	28,478	32,518	29,380
65 - 69	159	22	24	36	24	27	20	6	--
	18,678	2,954	7,646	12,759	20,236	29,869	37,872	35,422	--
70 - 74	114	11	13	25	21	22	17	5	--
	19,534	2,948	8,950	13,767	19,494	25,625	31,740	44,245	--
75 - 79	69	4	7	13	15	11	10	9	--
	21,631	2,338	7,089	10,550	20,328	25,931	33,559	41,185	--
80 - 84	43	--	1	6	11	13	10	2	--
	23,894	--	4,889	8,551	16,851	24,433	36,310	52,576	--
85 - 89	21	--	1	3	1	12	2	2	--
	18,353	--	3,720	6,961	9,983	18,051	22,286	44,825	--
90 & over	8	--	--	3	2	1	2	--	--
	11,773	--	--	5,149	10,493	17,215	20,266	--	--
Total	1,210	128	182	222	177	236	193	70	2
	\$17,532	\$3,045	\$7,035	\$11,735	\$17,922	\$23,535	\$29,232	\$35,591	\$39,442

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

EXHIBIT D

**Disabled Participants as of June 30, 2007
By Age, Years of Service Since Disability, and Average Annual Benefit**

Age	Years Since Retirement								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & over
Under 45	41	2	7	2	20	10	--	--	--
	\$14,627	\$13,344	\$11,380	\$20,599	\$14,543	\$16,130	--	--	--
45 - 49	29	5	2	1	5	16	--	--	--
	17,580	10,415	13,517	20,902	17,167	20,248	--	--	--
50 - 54	32	4	4	2	16	4	2	--	--
	16,855	9,781	17,982	15,918	15,311	25,101	\$25,552	--	--
55 - 59	40	3	1	3	20	8	4	1	--
	16,675	6,706	17,915	15,984	13,740	19,064	30,231	\$32,783	--
60 - 64	20	--	4	3	8	5	--	--	--
	18,869	--	19,996	14,711	17,231	23,082	--	--	--
65 - 69	7	1	--	--	6	--	--	--	--
	15,759	7,630	--	--	17,114	--	--	--	--
70 - 74	1	--	--	--	1	--	--	--	--
	21,666	--	--	--	21,666	--	--	--	--
75 - 79	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
80 - 84	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
85 - 89	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
90 & over	4	--	--	--	1	3	--	--	--
	14,282	--	--	--	13,505	14,540	--	--	--
Total	174	15	18	11	77	46	6	1	--
	\$16,565	\$9,709	\$15,362	\$16,911	\$15,223	\$19,505	\$28,671	\$32,783	\$0

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

EXHIBIT E

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

Age	Years Since Retirement								
	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & over
Under 45	6	3	--	1	2	--	--	--	--
	\$6,275	\$5,596	--	\$309	\$10,277	--	--	--	--
45 - 49	7	1	1	1	2	1	--	1	--
	10,027	3,698	\$11,420	5,057	13,172	\$19,439	--	\$4,234	--
50 - 54	15	--	1	3	3	4	3	1	--
	10,146	--	2,876	5,157	10,552	20,594	\$4,408	6,597	--
55 - 59	23	4	2	5	4	2	5	1	--
	9,776	1,330	6,403	9,394	9,398	6,781	19,890	9,143	--
60 - 64	20	2	4	3	2	2	7	--	--
	11,993	11,338	6,335	8,951	18,144	14,522	14,236	--	--
65 - 69	11	2	1	3	2	3	--	--	--
	14,201	10,122	36,019	10,565	11,637	14,994	--	--	--
70 - 74	14	2	--	2	2	5	2	1	--
	15,843	7,435	--	9,777	7,792	15,877	35,567	21,283	--
75 - 79	7	1	--	2	4	--	--	--	--
	7,647	2,931	--	8,391	8,455	--	--	--	--
80 - 84	4	--	1	--	--	2	--	1	--
	12,771	--	1,494	--	--	16,050	--	17,489	--
85 - 89	4	--	--	--	2	1	--	1	--
	9,193	--	--	--	9,744	3,487	--	13,798	--
90 & over	7	1	--	6	--	--	--	--	--
	6,096	3,287	--	6,564	--	--	--	--	--
Total	118	16	10	26	23	20	17	6	--
	\$10,906	\$5,613	\$8,995	\$7,772	\$10,635	\$15,219	\$16,674	\$12,091	\$0

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

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, 2006	3,910	817	388	168	1,101	106	6,490
New participants	818	N/A	3	N/A	N/A	N/A	821
Terminations – with vested rights	-98	111	-5	0	0	0	8
Terminations – without vested rights	-191	0	191	N/A	N/A	N/A	0
Retirements	-108	-21	0	N/A	132	N/A	3
New disabilities	-13	0	0	14	N/A	N/A	1
Return to work	53	-44	-9	0	0	N/A	0
Died with beneficiary	0	0	0	0	-14	14	0
Died without beneficiary	-8	-1	0	-8	-23	-2	-42
Transferred to Fund	0	0	-42	0	0	0	-42
Refund	-96	-12	-31	0	0	N/A	-139
Certain period expired	N/A	N/A	0	0	0	0	0
Data adjustments	<u>65</u>	<u>1</u>	<u>-1</u>	<u>0</u>	<u>14</u>	<u>0</u>	<u>79</u>
Valuation number as of July 1, 2007	4,332	851	494	174	1,210	118	7,179

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

EXHIBIT G

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

	Non-MPRIF Assets	MPRIF Reserve	Market Value
A. Assets available at beginning of year (BOY)	\$259,616,389	\$290,369,680	\$549,986,069
B. Operating revenues:			
1. Member contributions	\$10,032,421	-	\$10,032,421
2. Employer contributions	13,927,172	-	13,927,172
3. MPRIF income	-	\$23,101,088	23,101,088
4. Net investment income			
(a) Interest and dividends	\$39,792,537	-	\$39,792,537
(b) Net appreciation/(depreciation)	11,990,045	-	11,990,045
(c) Investment expenses	<u>-356,898</u>	<u>-</u>	<u>-356,898</u>
(d) Net subtotal	\$51,425,685	-	\$51,425,685
5. Other	<u>131,018</u>	<u>-</u>	<u>131,018</u>
6. Total additions	\$75,516,296	\$23,101,088	\$98,617,383
C. Operating expenses:			
1. Benefits	-	\$28,564,915	\$28,564,915
2. Refunds	\$752,077	-	752,077
3. Administrative expenses	405,205	-	405,205
4. Other	<u>357,332</u>	<u>-</u>	<u>357,332</u>
5. Total operating expenses	\$1,514,614	\$28,564,915	\$30,079,528
D. Other changes in reserves			
1. Annuities awarded	-\$31,958,897	\$31,958,897	-
2. Mortality gain/(loss)	-2,947,950	2,947,950	-
3. Change in MPRIF assumptions	<u>-</u>	<u>-23,466,416</u>	<u>-23,466,416</u>
4. Total other changes	-\$34,906,847	\$11,440,431	-\$23,466,416
E. Assets available at end of year (EOY)	\$298,711,224	\$296,346,284	\$595,057,508
F. Determination of current year unrecognized asset return (UAR)			
1. Average balance:			
(a) Non-MPRIF assets available at BOY: (A)			\$259,616,389
(b) Non-MPRIF assets available at EOY*: (E) – (D.2) – (D.3)			301,659,174
(c) Average balance: [(F.1(a)) + (F.1(b)) – (B.4(d)) – B.5)]/2			254,859,430
2. Expected return: 8.50% x (F.1(c))			21,663,052
3. Actual return: (B.4(d)) + (B.5)			<u>51,556,703</u>
4. Current year UAR: (F.3) – (F.2)			\$29,893,651

**Before adjustment for MPRIF Mortality gain/loss*

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

EXHIBIT H

Table of Financial Information for Year Ended June 30, 2007

	Market Value	Cost Value
Assets in trust		
Cash, equivalents, short-term securities:	\$3,399,011	\$3,399,011
Fixed income	66,801,239	69,473,631
Equity	230,686,824	208,166,678
Real estate	0	0
Equity in MPRIF*	296,346,284	296,346,284
Other	<u>0</u>	<u>0</u>
Total assets in trust	\$597,233,358	\$577,385,604
Assets receivable	\$1,260,440	\$1,260,440
Total assets	\$598,493,798	\$578,646,044
Amounts currently payable	-\$3,436,291	-\$3,436,291
Assets available for benefits		
MPRIF reserves	\$296,346,284	\$296,346,284
Member reserves	72,258,680	72,258,680
Other non-MPRIF reserves	<u>226,452,544</u>	<u>230,071,205</u>
Net Assets Available for Benefits	<u>\$595,057,508</u>	<u>\$598,676,169</u>
Net Assets at Market/Cost Value	<u>\$595,057,508</u>	<u>\$598,676,169</u>

**The Cost Value of the Equity in the MPRIF is stated as Market Value in the MPRIF. The actual liability of the MPRIF Reserve is \$319,812,700.*

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

EXHIBIT I

Actuarial Value of Assets Calculation History Through June 30, 2007

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return*	Change in Asset Method	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
2006	12,151,508	8,964,262	37,895,464	--	336,221	26,891,466	535,356,819
2007	13,927,172	10,032,421	53,723,901	-\$23,466,416	405,205	29,316,992	559,851,700

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

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

EXHIBIT J

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

1. Unfunded/(Overfunded) actuarial accrued liability at beginning of year		\$112,123,450
2. Normal cost at beginning of year		28,786,714
3. Total contributions		-23,959,593
4. Interest		<u>10,959,081</u>
5. Expected unfunded/(overfunded) actuarial accrued liability (1) + (2) – (3) + (4)		\$127,909,652
6. Changes due to (gain)/loss from:		
(a) Investments	-\$10,188,061	
(b) Salary increases	-170,390	
(c) MPRIF mortality	2,947,950	
(d) Other experience	<u>4,474,443</u>	
(e) Total changes due to (gain)/loss		<u>-\$2,936,058</u>
7. Assumption changes		<u>\$0</u>
8. Changes due to change in asset valuation method		<u>\$23,466,416</u>
9. Unfunded/(Overfunded) actuarial accrued liability at end of year		<u>\$148,440,010</u>

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

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.

SECTION 3: Supplemental Information for the Correctional Employees Retirement Fund

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.

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

EXHIBIT IA

Summary of Actuarial Valuation Data

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

1. Pensioners as of the valuation date (including 118 beneficiaries in pay status)		1,502
2. Participants inactive during year ended June 30, 2007 with vested rights		851
3. Participants active during the year ended June 30, 2007		4,332
Fully vested	2,558	
Not vested	1,774	
4. Other non-vested terminated participants as of June 30, 2007		494

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

EXHIBIT IB

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

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
A. Determination of Actuarial Accrued Liability			
1. Active participants:			
(a) Death benefits	\$10,567,410	\$3,311,548	\$7,255,862
(b) Disability benefits	64,732,245	44,602,739	20,129,506
(c) Withdrawal benefits	25,749,639	12,508,215	13,241,424
(d) Retirement benefits	496,911,511	200,709,514	296,201,997
(e) Refunds	<u>8,558,079</u>	<u>13,393,684</u>	<u>-4,835,605</u>
(f) Total	\$606,518,884	\$274,525,700	\$331,993,184
2. Vested terminated participants	\$55,757,649	0	\$55,757,649
3. Other non-vested terminated participants	728,177	0	728,177
4. Annuitants in MPRIF	319,812,700	0	319,812,700
5. Annuitants not in MPRIF	<u>0</u>	<u>0</u>	<u>0</u>
6. Total	\$982,817,410	\$274,525,700	\$708,291,710
B. Determination of Unfunded Actuarial Accrued Liability			
1. Actuarial Accrued Liability			\$708,291,710
2. Actuarial Value of Assets			<u>583,318,116</u>
3. Unfunded Actuarial Accrued Liability: (B.1) – (B.2)			\$124,973,594
C. Determination of Supplemental Contribution Rate			
1. Present value of future payrolls through the amortization date of June 30, 2023			\$2,268,491,642
2. Supplemental contribution rate: (B.3) / (C.1)			5.51%

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

EXHIBIT IC

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

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
A. Determination of Actuarial Accrued Liability			
1. Active participants:			
(a) Death benefits	\$10,567,410	\$3,311,548	\$7,255,862
(b) Disability benefits	64,732,245	44,602,739	20,129,506
(c) Withdrawal benefits	25,749,639	12,508,215	13,241,424
(d) Retirement benefits	496,911,511	200,709,514	296,201,997
(e) Refunds	<u>8,558,079</u>	<u>13,393,684</u>	<u>-4,835,605</u>
(f) Total	\$606,518,884	\$274,525,700	\$331,993,184
2. Vested terminated participants	\$55,757,649	0	\$55,757,649
3. Other non-vested terminated participants	728,177	0	728,177
4. Annuitants in MPRIF	319,812,700	0	319,812,700
5. Annuitants not in MPRIF	<u>0</u>	<u>0</u>	<u>0</u>
6. Total	\$982,817,410	\$274,525,700	\$708,291,710
B. Determination of Unfunded Actuarial Accrued Liability			
1. Actuarial Accrued Liability			\$708,291,710
2. Actuarial Value of Assets			<u>559,851,700</u>
3. Unfunded Actuarial Accrued Liability: (B.1) – (B.2)			\$148,440,010
C. Determination of Supplemental Contribution Rate			
1. Present value of future payrolls through the amortization date of June 30, 2023			\$2,268,491,642
2. Supplemental contribution rate: (B.3) / (C.1)			6.54%

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

**EXHIBIT II
Actuarial Balance Sheet**

A. Current Assets				\$559,851,700
B. Expected Future Assets				
1. Present Value of Expected Future Statutory Supplemental Contributions				-\$114,785,679
2. Present Value of Future Normal Costs				<u>274,525,700</u>
3. Total Expected Future Assets				\$159,740,021
C. Total Current and Expected Future Assets				\$719,591,721
D. Current Benefit Obligations	<u>Non-Vested</u>	<u>Vested</u>		<u>Total</u>
1. Benefit recipients:				
(a) Retirement annuities	\$0	\$264,819,157		\$264,819,157
(b) Disability benefits	0	39,452,310		39,452,310
(c) Beneficiaries	0	15,541,233		15,541,233
2. Vested terminated participants	0	55,757,649		55,757,649
3. Other non-vested terminated participants	0	728,177		728,177
4. Active participants	<u>13,393,272</u>	<u>278,394,049</u>		<u>291,787,321</u>
5. Total Current Benefit Obligations	\$13,393,272	\$654,692,575		\$668,085,847
E. Expected Future Benefit Obligations				<u>314,731,563</u>
F. Total Current and Expected Future Benefit Obligations - Present Value of Benefits: (D.5 + E)				\$982,817,410
G. Current Unfunded Actuarial Liability (D.5 - A)				\$108,234,147
H. Current and Future Unfunded Actuarial Liability (F - C)				\$263,225,689

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

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%	145,879,208	8,964,262	16,870,946	12,151,508	72.03%
2007	23.34% ⁽⁵⁾	167,727,409	10,032,421	29,115,156	13,927,172	47.83%
2008	24.44% ⁽⁶⁾					

⁽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%.

⁽⁵⁾ Actuarially Required Contribution Rate prior to change in Actuarial Assumptions and employee contribution rates is approximately 22.10%.

⁽⁶⁾ Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 23.41%.

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

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%
07/01/2006	535,356,819	647,480,269	112,123,450	82.68%	145,879,208	76.86%
07/01/2007	559,851,700	708,291,710	148,440,010	79.04%	167,727,409	88.50%

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

EXHIBIT VA

Determination of Contribution Sufficiency (Before Asset Valuation Method Change)

	July 1, 2007	
	Percent of Payroll	Dollar Amount
A. Statutory Contributions – Chapter 352		
1. Member Contributions	6.40%	\$11,987,777
2. Employer Contributions	<u>9.10%</u>	<u>17,045,120</u>
3. Total	<u>15.50%</u>	<u>\$29,032,897</u>
B. Required Contributions – Chapter 356		
1. Normal Cost		
(a) Retirement Benefits	12.98%	\$24,314,658
(b) Disability Benefits	3.15%	5,898,691
(c) Survivors	0.20%	365,693
(d) Deferred Retirement Benefits	0.65%	1,226,585
(e) Refunds	<u>0.70%</u>	<u>1,318,662</u>
(f) Total	17.68%	\$33,124,289
2. Amortization of Supplemental Contribution UAAL	5.51%	10,320,727
3. Allowance for Expenses	<u>0.22%</u>	<u>412,080</u>
4. Total	<u>23.41%</u>	<u>\$43,857,096</u>
C. Contribution Sufficiency (Deficiency) (A.3 – B.4)	-7.91%	-\$14,824,199
D. Projected* annual payroll for fiscal year beginning on the valuation date		\$187,309,014

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

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

EXHIBIT VB

Determination of Contribution Sufficiency (After Asset Valuation Method Change)

	July 1, 2007	
	Percent of Payroll	Dollar Amount
A. Statutory Contributions – Chapter 352		
1. Member Contributions	6.40%	\$11,987,777
2. Employer Contributions	<u>9.10%</u>	<u>17,045,120</u>
3. Total	<u>15.50%</u>	<u>\$29,032,897</u>
B. Required Contributions – Chapter 356		
1. Normal Cost		
(a) Retirement Benefits	12.98%	\$24,314,658
(b) Disability Benefits	3.15%	5,898,691
(c) Survivors	0.20%	365,693
(d) Deferred Retirement Benefits	0.65%	1,226,585
(e) Refunds	<u>0.70%</u>	<u>1,318,662</u>
(f) Total	17.68%	\$33,124,289
2. Amortization of Supplemental Contribution UAAL		
(a) Before change in Asset Valuation Method	5.51%	10,320,727
(b) Cost Impact due to change in Asset Valuation Method	1.03%	1,929,283
3. Allowance for Expenses	<u>0.22%</u>	<u>412,080</u>
4. Total	<u>24.44%</u>	<u>\$45,786,379</u>
C. Contribution Sufficiency (Deficiency) (A.3 – B.4)	-8.94%	-\$16,753,482
D. Projected* annual payroll for fiscal year beginning on the valuation date		\$187,309,014

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

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

EXHIBIT VI

Supplementary Information Required by the GASB

Valuation date	July 1, 2007
Actuarial cost method	Entry Age Normal
Amortization method	Level percentage of payroll , assuming payroll increases at 5.00% per annum
Remaining amortization period	16 years remaining as of July 1, 2007
Asset valuation method	MPRIF Reserve: Market Value Non-MPRIF Assets: Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during that fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year).
Actuarial assumptions:	
Investment rate of return:	
Pre-retirement	8.50% per annum
Post-retirement	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	1,502
Terminated participants entitled to, but not yet receiving benefits	851
Other non-vested terminated participants due a refund of contributions	494
Active participants	<u>4,332</u>
Total	7,179

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

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.

Mortality Rates:

Healthy Pre-Retirement: Male - 1983 Group Annuity Mortality Table for males set back five years.

Female - 1983 Group Annuity Mortality Table for females set back two years.

Healthy Post-Retirement: Male - 1983 Group Annuity Mortality Table for males set back two years.

Female - 1983 Group Annuity Mortality Table for females set back one year.

Disabled: Male - Combined Annuity Mortality Table for males up to age 40, grading to healthy mortality for ages 60 and over.

Female - Combined Annuity Mortality Table for females up to age 40, grading to healthy mortality for ages 60 and over.

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

Retirement Rates:	Age-related table as follows: <table border="0"> <tr> <td>Ages:</td> <td>50-54</td> <td>5.00%</td> </tr> <tr> <td></td> <td>55</td> <td>60.00</td> </tr> <tr> <td></td> <td>56-61</td> <td>10.00</td> </tr> <tr> <td></td> <td>62-64</td> <td>25.00</td> </tr> <tr> <td></td> <td>65 & over</td> <td>100.00</td> </tr> </table>	Ages:	50-54	5.00%		55	60.00		56-61	10.00		62-64	25.00		65 & over	100.00
Ages:	50-54	5.00%														
	55	60.00														
	56-61	10.00														
	62-64	25.00														
	65 & over	100.00														
Withdrawal Rates:	Graded rates based on actual experience, including a three-year select period, developed by the most recent 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.															

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

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:	MPRIF Reserve: Market Value Non-MPRIF Assets: 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).
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. The additional cost, for 2006 and all future years, due to the change in the plan and assumptions effective July 1, 2007 will be amortized over 30 years, as a level percentage of payroll each year assuming payroll increase of 5.00% per annum.

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

Summary of Rates:

Shown below for selected ages:

Rates (%)								
Age	Healthy Pre-Retirement Mortality		Healthy Post-Retirement Mortality		Disabled Mortality		Withdrawal*	
	Male	Female	Male	Female	Male	Female	Male	Female
20	0.03%	0.02%	0.04%	0.02%	0.21%	0.21%	12.00%	8.00%
25	0.04	0.02	0.04	0.02	0.22	0.22	7.35	7.00
30	0.05	0.03	0.05	0.03	0.24	0.24	4.55	6.75
35	0.06	0.04	0.07	0.04	0.31	0.31	3.00	6.45
40	0.09	0.06	0.10	0.06	0.46	0.46	2.20	5.20
45	0.12	0.08	0.17	0.09	0.58	0.48	1.70	3.20
50	0.22	0.14	0.31	0.15	0.69	0.49	1.20	2.35
55	0.39	0.21	0.52	0.23	0.80	0.51	0.70	1.65
60	0.61	0.34	0.77	0.38	0.92	0.52	0.00	0.00
65	0.92	0.58	1.24	0.64	1.56	0.87	0.00	0.00
70	1.56	0.97	2.22	1.09	2.75	1.62	0.00	0.00

* For the first three years of participation, employee withdrawal is assumed to be 10.0%.

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

Salary Increases:

Reported salary at valuation date increased according to the rate table below, to current fiscal year and annually for each future year. Prior fiscal year salary is annualized for new members.

Summary of Rates: (continued)

Shown below for selected ages:

Rates (%)

Age	<u>Disability Retirement</u>		<u>Retirement</u>		<u>Salary Increases</u>
	Male	Female	Male	Female	
20	0.05%	0.08%	0.00%	0.00%	7.25%
25	0.08	0.12	0.00	0.00	7.00
30	0.11	0.16	0.00	0.00	7.00
35	0.15	0.22	0.00	0.00	7.00
40	0.24	0.36	0.00	0.00	6.50
45	0.39	0.58	0.00	0.00	5.75
50	0.67	1.00	5.00	5.00	5.50
55	1.17	1.76	60.00	60.00	5.25
60	1.88	2.82	10.00	10.00	5.25
65	0.00	0.00	100.00	100.00	5.25
70	0.00	0.00	100.00	100.00	0.00

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

Changes in Actuarial Assumptions and Cost Methods:

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

The only change in actuarial cost methods since the last valuation was a modification to the asset valuation method, effective with the July 1, 2007 valuation. Assets allocated to the Minnesota Post Retirement Investment Fund (MPRIF) must equal the Market Value of Assets as of the valuation date.

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

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: Shown as percent of salary:

<u>Date of Increase</u>	<u>Employee</u>	<u>Employer</u>
Current	6.40%	9.10%
July 1, 2008	7.00%	10.10%
July 1, 2009	7.70%	11.10%
July 1, 2010	8.60%	12.10%

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.

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

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.

Early Retirement Benefit:

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.

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

Disability:

Occupational Disability:

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.

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

Retirement Disability:

<i>Age/Service Requirement:</i>	Age 62 with continued disability.
<i>Amount:</i>	Benefit computed as a normal retirement benefit under General Plan based on same Allowable Service and without reduction for age.
<i>Form of Payment:</i>	Same as for retirement.
<i>Benefit Increases:</i>	Same as for retirement.

Death:

Surviving Spouse Benefit:

<i>Age/Service Requirement:</i>	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.
<i>Amount:</i>	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).
<i>Benefit Increases:</i>	Adjusted by MSRS to provide same income as MPRIF.

Surviving Dependent Children's Benefit:

<i>Age/Service Requirement:</i>	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.
<i>Amount:</i>	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.

SECTION 4: Reporting Information for the Correctional Employees Retirement Fund

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: The only changes in plan provisions since the prior valuation are the future employee and employer contribution rates previously stated.