

Local Government Correctional Service Retirement Fund

*Actuarial Valuation and Review
as of July 1, 2004*

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January 14, 2005

*Ms. Mary Most Vanek
Public Employees Retirement Association of Minnesota
Local Government Correctional Service Retirement Fund
60 Empire Drive, Suite 200
St. Paul, Minnesota 55103-2088*

Dear Ms. Most Vanek:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2004. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2005 and analyzes the preceding year's experience.

The census and financial information on which our calculations were based was prepared by the Public Employees' Retirement Association of Minnesota. 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.

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
Senior Vice President and Actuary*

*Wally Malles, ASA, MAAA, EA
Associate 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 Local Government Correctional Service Retirement Fund

Purpose

This report has been prepared by The Segal Company to present a valuation of the Public Employees Retirement Association of Minnesota (Local Government Correctional Service Retirement Fund) as of July 1, 2004. 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 Fund;
- The characteristics of covered active participants, inactive vested participants, pensioners and beneficiaries as of July 1, 2004, provided by the Fund;
- The assets of the Fund as of June 30, 2004, 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 Local Government Correctional Service Retirement Fund

Significant Issues in Valuation Year

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

- The statutory contribution rate under Chapter 353E is equal to 14.58% of payroll compared to the required contribution rate under Chapter 356 of 13.00% of payroll. Therefore, statutory contributions are sufficient to meet the required contribution rate.
- The funded ratio based on the actuarial value of assets over the actuarial accrued liability as of July 1, 2004 is 88.59% compared to 90.32% as of July 1, 2003. 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 shown on page 4 of this report, the total unrecognized investment loss as of June 30, 2004 is \$181,387. This investment loss 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 gains derived from future experience.
- There were no changes in plan provisions, actuarial assumptions or actuarial cost methods since the prior valuation. This is the first year that The Segal Company prepared the actuarial valuation of the Fund.

SECTION 1: Valuation Summary for the Local Government Correctional Service Retirement Fund

Summary of Key Valuation Results

	2004	2003
Contributions (% of payroll) for plan year beginning July 1:		
Statutory – Chapter 353E	14.58%	14.58%
Required – Chapter 356	13.00%	14.13%
Sufficiency/(Deficiency)	1.58%	0.45%
Funding elements for plan year beginning July 1:		
Normal cost	\$14,834,390	\$15,866,000
Market value of assets	75,736,764	49,834,000
Actuarial value of assets (AVA)	75,918,151	56,487,000
Actuarial accrued liability (AAL)	85,693,412	62,542,000
Unfunded/(Overfunded) actuarial accrued liability	9,775,261	6,055,000
Funded ratios:		
<u>Accrued Benefit Funded Ratio</u>	98.40%	96.96%
Current assets (AVA)	\$75,918,151	\$56,487,000
Current benefit obligations	77,151,845	58,260,000
<u>Projected Benefit Funded Ratio</u>	113.59%	104.30%
Current and expected future assets	\$237,186,061	\$198,196,000
Current and expected future benefit obligations (Present Value of Benefits)	208,811,517	190,034,000
GASB 25/27 for plan year beginning July 1:		
Annual employer required contributions	\$8,836,786	\$9,122,000
<u>Accrued Liability Funded Ratio (AVA/AAL)</u>	88.59%	90.32%
Covered Actual Payroll	\$109,600,235	\$110,296,000
Demographic data for plan year beginning July 1:		
Number of pensioners and beneficiaries	139	100
Number of vested terminated participants	758	590
Number of other non-vested terminated participants	911	702
Number of active participants	3,251	3,155
Total projected payroll	\$120,511,319	\$116,276,000
Average projected payroll	37,069	36,855

SECTION 2: Valuation Results for the Local Government Correctional Service 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, and C.

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

CHART 1
Participant Population: 2002 – 2004

Year Ended June 30	Active Participants	Vested Terminated Participants*	Pensioners and Beneficiaries	Ratio of Non-Actives to Actives
2002	3,270	282	63	0.11
2003	3,155	590	100	0.22
2004	3,251	758	139	0.28

* Excludes terminated participants due a refund of employee contributions.

SECTION 2: Valuation Results for the Local Government Correctional Service 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 3,251 active participants with an average age of 38.6, average years of service of 3.4 years and average projected payroll of \$37,069. The 3,155 active participants in the prior valuation had an average age of 38.4, average service of 2.9 years and average projected payroll of \$36,855.

Inactive Participants

In this year's valuation, there were 758 participants with a vested right to a deferred or immediate vested benefit.

In addition there were 911 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, 2004

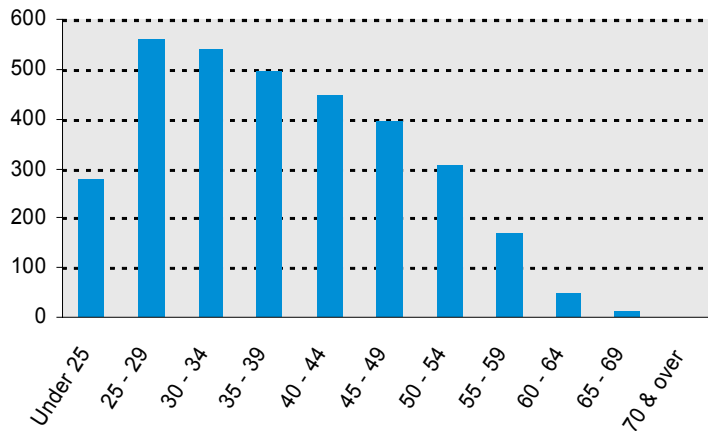
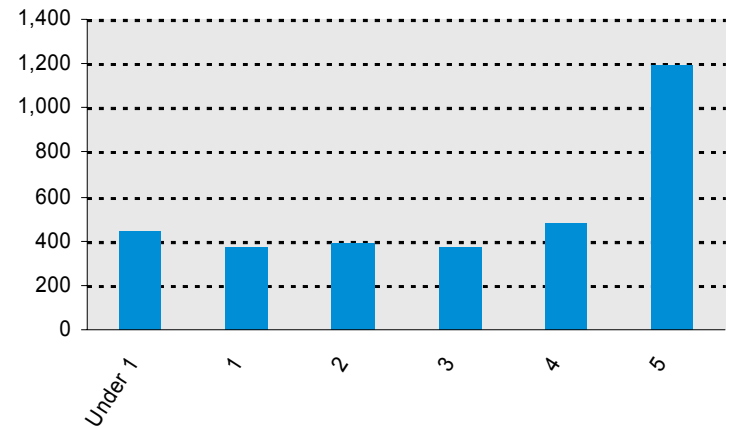


CHART 3
Distribution of Active Participants by Years of Service as of June 30, 2004



SECTION 2: Valuation Results for the Local Government Correctional Service Retirement Fund

Pensioners and Beneficiaries

As of June 30, 2004, 131 pensioners (81 retired and 50 disabled participants) and 8 beneficiaries were receiving average monthly benefits of \$540. For comparison, in the previous valuation, there were 94 pensioners (57 retired and 37 disabled participants) and 6 beneficiaries receiving average monthly benefits of \$518.

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, 2004

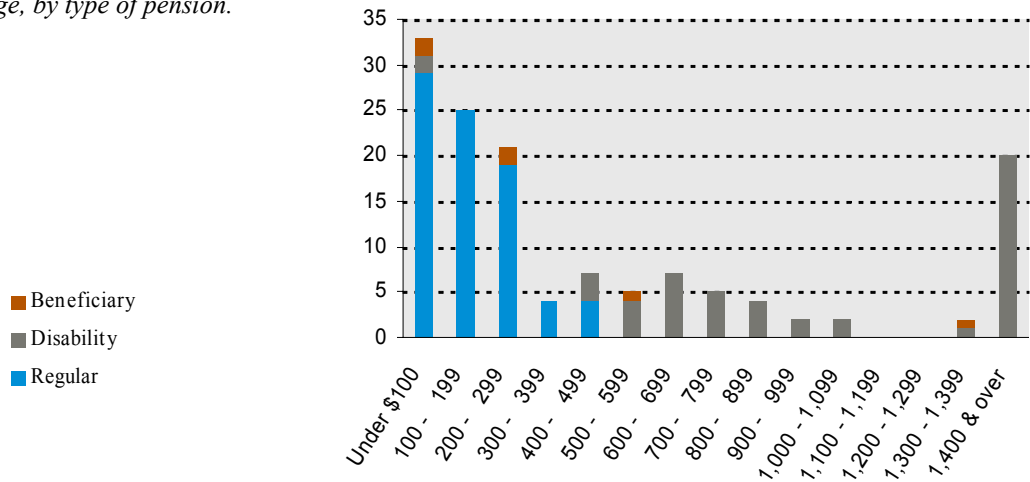
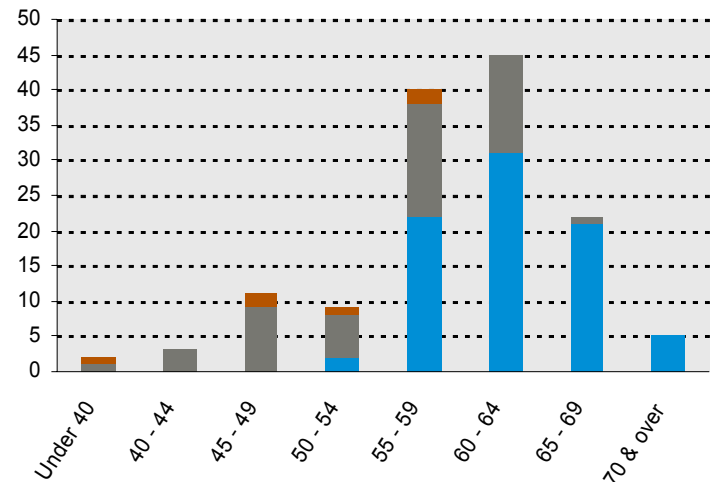


CHART 5
Distribution of Pensioners and Beneficiaries by Type and by Age as of June 30, 2004



SECTION 2: Valuation Results for the Local Government Correctional Service Retirement Fund

B. FINANCIAL INFORMATION

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the 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, 2004

	Original Amount	% Not Recognized	
1. Market value of assets available for benefits			\$75,736,764
2. Calculation of unrecognized return			
(a) Year ended June 30, 2004	\$5,402,016	80%	\$4,321,613
(b) Year ended June 30, 2003	-3,608,000	60%	-2,164,800
(c) Year ended June 30, 2002	-4,776,000	40%	-1,910,400
(d) Year ended June 30, 2001	-2,139,000	20%	<u>-427,800</u>
(e) Total unrecognized return			-\$181,387
3. Actuarial value of assets (“Current Assets”): (1) – (2e)			<u>\$75,918,151</u>

SECTION 2: Valuation Results for the Local Government Correctional Service 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, 2004, the total loss is \$3,401,826, including a loss of \$1,725,461 from investments and a loss of \$1,676,365 from all other sources. The net experience variation from individual sources other than investments was 1.96% of the 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, 2004

1. Net gain/(loss) from investments	-\$1,725,461
2. Net gain/(loss) from other experience	<u>-1,676,365</u>
3. Net experience gain/(loss): (1) + (2)	-\$3,401,826

SECTION 2: Valuation Results for the Local Government Correctional Service 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 on an actuarially sound basis and in accordance with the GASB funding requirements. Section 4, 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.

SECTION 3: Supplemental Information for the Local Government Correctional Service Retirement Fund

EXHIBIT A

Table of Plan Coverage

Category	Year Ended June 30		Change From Prior Year
	2004	2003	
Active participants in valuation:			
Number	3,251	3,155	3.0%
Average age	38.6	38.4	N/A
Average service	3.4	2.9	N/A
Total projected payroll	\$120,511,319	\$116,276,000	3.6%
Average projected payroll	37,069	36,855	0.6%
Total active vested participants	2,042	2,075	-1.6%
Vested terminated participants	758	590	28.5%
Retired participants:			
Number in pay status	81	57	42.1%
Average age	62.6	62.7	N/A
Average monthly benefit	\$163	\$126	29.4%
Disabled participants:			
Number in pay status	50	37	35.1%
Average age	54.7	53.8	N/A
Average monthly benefit	\$1,167	\$1,156	1.0%
Beneficiaries:			
Number in pay status	8	6	33.3%
Average age	44.4	42.2	N/A
Average monthly benefit	\$431	\$306	40.8%
Other non-vested terminated participants	911	702	29.8%

SECTION 3: Supplemental Information for the Local Government Correctional Service Retirement Fund

EXHIBIT B

**Participants in Active Service as of June 30, 2004
By Age, Years of Service, and Average Projected Payroll**

Age	Years of Service						
	Total	Under 1	1	2	3	4	5
Under 25	276	141	79	43	10	3	--
	\$20,242	\$13,527	\$24,250	\$29,651	\$34,554	\$47,744	--
25 - 29	559	107	98	118	96	82	58
	30,065	15,924	25,760	31,282	36,528	37,098	\$40,310
30 - 34	541	65	63	69	83	110	151
	36,453	20,637	26,270	34,158	37,571	39,529	45,701
35 - 39	495	52	47	58	59	79	200
	39,548	15,004	31,159	35,955	37,845	37,622	50,207
40 - 44	446	35	36	48	45	69	213
	42,333	30,171	30,436	38,182	36,958	39,442	49,349
45 - 49	394	26	23	20	48	64	213
	42,425	23,903	23,693	33,595	37,464	39,055	49,669
50 - 54	308	16	16	19	23	37	197
	42,490	13,698	23,430	32,400	35,460	37,356	49,135
55 - 59	171	4	7	11	6	30	113
	44,663	23,942	32,985	29,031	27,717	39,402	49,938
60 - 64	49	1	3	3	--	8	34
	42,412	27,777	22,733	16,667	--	39,316	47,578
65 - 69	11	--	--	--	1	1	9
	37,536	--	--	--	11,512	26,158	41,692
70 & over	1	--	--	1	--	--	--
	10,728	--	--	10,728	--	--	--
Total	3,251	447	372	390	371	483	1,188
	\$37,069	\$17,345	\$26,544	\$33,100	\$36,815	\$38,574	\$48,558

SECTION 3: Supplemental Information for the Local Government Correctional Service Retirement Fund

EXHIBIT C

Reconciliation of Participant Data

	Active Participants	Vested Terminated Participants	Other Non- Vested Terminated Participants	Disableds	Retired Participants	Beneficiaries	Total
Number as of July 1, 2003	3,155	590	702	37	57	6	4,547
Changes	<u>96</u>	<u>168</u>	<u>209</u>	<u>13</u>	<u>24</u>	<u>2</u>	<u>512</u>
Number as of July 1, 2004	3,251	758	911	50	81	8	5,059

SECTION 3: Supplemental Information for the Local Government Correctional Service Retirement Fund

EXHIBIT D

Summary Statement of Income and Expenses on a Market Value Basis for Year Ended June 30, 2004

	Non-MPRIF Assets	MPRIF Reserve	Market Value
A. Assets available at beginning of period	\$48,622,000	\$1,212,000	\$49,834,000
B. Operating revenues:			
1. Member contributions	\$6,671,647	\$0	\$6,671,647
2. Employer contributions	10,029,408	0	10,029,408
3. MPRIF income	0	592,284	592,284
4. Net investment income			
(a) Interest and dividends	\$1,613,912	\$0	\$1,613,912
(b) Net appreciation/(depreciation)	8,610,205	0	8,610,205
(c) Securities lending income	23,624	0	23,624
(d) Investment expenses	<u>-82,200</u>	0	<u>-82,200</u>
(e) Net subtotal	\$10,165,541	0	\$10,165,541
5. Other	<u>3,628</u>	<u>0</u>	<u>3,628</u>
6. Total additions	\$26,870,224	\$592,284	\$27,462,508
C. Operating expenses:			
1. Benefits	\$160,791	\$644,012	\$804,803
2. Refunds	587,729	0	587,729
3. Administrative expenses	161,861	0	161,861
4. Other	<u>5,351</u>	<u>0</u>	<u>5,351</u>
5. Total operating expenses	\$915,732	\$644,012	\$1,559,744
D. Other changes in reserves:			
1. Annuities awarded	-\$861,018	\$861,018	\$0
2. Mortality gain/(loss)	-84,781	84,781	0
3. Change in MPRIF assumptions	<u>0</u>	<u>0</u>	<u>0</u>
4. Total other changes	-\$945,799	\$945,799	\$0
E. Assets available at end of period	\$73,630,693	\$2,106,071	\$75,736,764
F. Determination of current year unrecognized asset return (UAR)			
1. Average balance:			
(a) Non-MPRIF Assets available at BOY: (A)			\$48,622,000
(b) Non-MPRIF Assets available at EOY*: (E) – (D.2)			73,715,474
(c) Average balance: [(F.1(a)) + (F.1(b)) – (B.4(e)) – (B.5)]/2			56,084,153
2. Expected return: 8.50% x (F.1(c))			4,767,153
3. Actual return: (B.4(e)) + (B.5)			<u>10,169,169</u>
4. Current year UAR: (F.3) – (F.2)			\$5,402,016

* Before adjustment for MPRIF Mortality Gain / Loss.

SECTION 3: Supplemental Information for the Local Government Correctional Service Retirement Fund

EXHIBIT E

Table of Financial Information for Year Ended June 30, 2004

	Market Value	Cost Value
Assets in trust		
Cash, equivalents, short-term securities:	\$3,743,848	\$3,743,848
Fixed income	15,238,046	15,704,656
Equity	45,715,237	41,863,579
Equity in MPRIF	2,106,071	2,106,071
Invested securities lending collateral	8,013,653	8,013,653
SBI alternative	<u>9,052,209</u>	<u>8,875,129</u>
Total assets in trust	\$83,869,064	\$80,306,936
Assets receivable	\$67,190	\$67,190
Total assets	\$83,936,254	\$80,374,126
Amounts currently payable		
Securities lending collateral	-\$8,013,653	-\$8,013,653
Other	<u>-185,837</u>	<u>-185,837</u>
Total amounts currently payable	-\$8,199,490	-\$8,199,490
Assets available for benefits		
MPRIF reserves	\$2,106,071	\$2,106,071
Member reserves	23,610,487	23,610,487
Other non-MPRIF reserves	<u>50,020,206</u>	<u>46,458,078</u>
Net Assets at Market/Cost Value	<u>\$75,736,764</u>	<u>\$72,174,636</u>
Net Assets at Actuarial Value	<u>\$75,918,151</u>	<u>\$75,918,151</u>

SECTION 3: Supplemental Information for the Local Government Correctional Service Retirement Fund

EXHIBIT F

Development of the Fund Through June 30, 2004

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2002	\$8,830,000	\$5,882,000	\$1,126,000	\$137,000	\$610,000	\$40,105,000
2003	9,645,000	6,430,000	1,424,000	149,000	968,000	56,487,000
2004	10,029,408	6,671,647	4,284,489	161,861	1,392,532	75,918,151

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

SECTION 3: Supplemental Information for the Local Government Correctional Service Retirement Fund

EXHIBIT G

Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2004

1. Unfunded/(Overfunded) actuarial accrued liability at beginning of year		\$6,055,000
2. Normal cost at beginning of year		15,866,000
3. Total contributions		16,701,055
4. Interest		1,153,490
5. Expected unfunded/(overfunded) actuarial accrued liability (1) + (2) – (3) + (4)		6,373,435
6. Changes due to:		
(a) Salary increases	\$207,896	
(b) Investments	1,725,461	
(c) MPRIF Mortality	84,781	
(d) Mortality of other benefit recipients	9,347	
(e) Other experience	1,374,341	
(f) Total changes		<u>3,401,826</u>
7. Unfunded/(Overfunded) actuarial accrued liability at end of year		<u>\$9,775,261</u>

SECTION 3: Supplemental Information for the Local Government Correctional Service Retirement Fund

EXHIBIT H

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 Local Government Correctional Service 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 Local Government Correctional Service Retirement Fund

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 8 beneficiaries in pay status)		139
2. Participants inactive during year ended June 30, 2004 with vested rights		758
3. Participants active during the year ended June 30, 2004		3,251
Fully vested	2,042	
Not vested	1,209	

The actuarial factors as of the valuation date are as follows:

1. Normal cost		\$14,834,390
2. Present value of future benefits		208,811,517
3. Present value of future normal costs		123,118,105
4. Actuarial accrued liability		85,693,412
Pensioners and beneficiaries	\$10,597,649	
Inactive participants with vested rights	5,807,162	
Participants due refunds	836,121	
Active participants	68,452,480	
5. Actuarial value of assets (\$75,736,764 at market value)		75,918,151
6. Unfunded actuarial accrued liability		\$9,775,261

SECTION 4: Reporting Information for the Local Government Correctional Service Retirement Fund

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) Retirement benefits	\$131,904,971	\$80,897,966	\$51,007,005
(b) Disability benefits	21,971,750	15,071,119	6,900,631
(c) Death benefits	6,457,367	4,264,299	2,193,068
(d) Withdrawal benefits	<u>31,236,497</u>	<u>22,884,721</u>	<u>8,351,776</u>
(e) Total	\$191,570,585	\$123,118,105	\$68,452,480
2. Vested terminated participants	\$5,807,162	\$0	\$5,807,162
3. Other non-vested terminated participants	836,121	0	836,121
4. Annuitants in MPRIF	2,106,071	0	2,106,071
5. Annuitants not in MPRIF	<u>8,491,578</u>	<u>0</u>	<u>8,491,578</u>
6. Total	\$208,811,517	\$123,118,105	\$85,693,412
B. Determination of Unfunded Actuarial Accrued Liability			
1. Actuarial Accrued Liability			\$85,693,412
2. Actuarial Value of Assets			<u>75,918,151</u>
3. Unfunded Actuarial Accrued Liability: (1) – (2)			\$9,775,261
C. Determination of Supplemental Contribution Rate			
1. Present value of future payrolls through amortization date of July 1, 2023			\$1,791,070,634
2. Supplemental contribution rate: (B.3) / (C.1)			0.55%
D. Determination of GASB Amortization Rate			
1. Present value of future payrolls through amortization date of July 1, 2023			\$1,657,719,210
2. Supplemental contribution rate: (B.3) / (D.1)			0.59%

SECTION 4: Reporting Information for the Local Government Correctional Service Retirement Fund

EXHIBIT II

Actuarial Balance Sheet

A. Current Assets				\$75,918,151
B. Expected Future Assets				
1. Present Value of Expected Future Statutory Supplemental Contributions				\$38,149,805
2. Present Value of Future Normal Costs				<u>123,118,105</u>
3. Total Expected Future Assets				\$161,267,910
C. Total Current and Expected Future Assets				\$237,186,061
D. Current Benefit Obligations	<u>Non-Vested</u>	<u>Vested</u>		<u>Total</u>
1. Benefit recipients:				
(a) Retirement annuities	\$0	\$1,758,734		\$1,758,734
(b) Disability benefits	0	8,491,578		8,491,578
(c) Beneficiaries	0	347,337		347,337
2. Vested terminated participants	0	5,807,162		5,807,162
3. Other non-vested terminated participants	0	836,121		836,121
4. Active participants	<u>4,791,897</u>	<u>55,119,016</u>		<u>59,910,913</u>
5. Total Current Benefit Obligations	\$4,791,897	\$72,359,948		\$77,151,845
E. Expected Future Benefit Obligations				<u>131,659,672</u>
F. Total Current and Expected Future Benefit Obligations - Present Value of Benefits: (D.5 + E)				\$208,811,517
G. Current Unfunded Actuarial Liability (D.5 - A)				\$1,233,694
H. Current and Future Unfunded Actuarial Liability (F - C)				-\$28,374,544

SECTION 4: Reporting Information for the Local Government Correctional Service Retirement Fund

EXHIBIT III

Supplementary Information Required by the GASB – Schedule of Employer Contributions

Year Ended June 30	Actuarially Required Contribution Rate⁽²⁾ (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)
2000	15.03%	\$70,690,000	\$4,382,000	\$6,243,000	\$6,487,000	103.91%
2001	14.36% ⁽³⁾	91,025,000	5,308,000	7,763,000	8,054,000	103.75%
2002	14.21%	101,309,000	5,882,000	8,514,000	8,830,000	103.71%
2003	14.10% ⁽⁴⁾	110,296,000	6,430,000	9,122,000	9,645,000	105.74%
2004	14.15%	109,600,235	6,671,647	8,836,786	10,029,408	113.50%
2005	13.04%					

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

⁽²⁾ Actuarially Required Contribution Rate calculated according to parameters of GASB 25 with no assumption for growth of covered population.

⁽³⁾ Actuarially Required Contribution Rate prior to change in Asset Valuation Method is 14.38%.

⁽⁴⁾ Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 14.08%.

SECTION 4: Reporting Information for the Local Government Correctional Service 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)
07/01/2000	\$11,116,000	\$10,195,000	-\$921,000	109.03%	\$70,690,000	-1.30%
07/01/2001	25,014,000	25,453,000	439,000	98.28%	91,025,000	0.48%
07/01/2002	40,105,000	42,144,000	2,039,000	95.16%	101,309,000	2.01%
07/01/2003	56,487,000	62,542,000	6,055,000	90.32%	110,296,000	5.49%
07/01/2004	75,918,151	85,693,412	9,775,261	88.59%	109,600,235	8.92%

SECTION 4: Reporting Information for the Local Government Correctional Service Retirement Fund

EXHIBIT V

Determination of Contribution Sufficiency

	July 1, 2004	
	Percent of Payroll	Dollar Amount
A. Statutory Contributions – Chapter 353E		
1. Member Contributions	5.83%	\$7,025,810
2. Employer Contributions	<u>8.75%</u>	<u>10,544,740</u>
3. Total	<u>14.58%</u>	<u>\$17,570,550</u>
B. Required Contributions – Chapter 356		
1. Normal Cost		
(a) Retirement Benefits	8.34%	\$10,052,991
(b) Disability Benefits	1.54%	1,856,908
(c) Survivors	0.39%	471,284
(d) Deferred Retirement Benefits	<u>2.04%</u>	<u>2,453,207</u>
(e) Total	12.31%	\$14,834,390
2. Amortization of Supplemental Contribution UAAL	0.55%	662,812
3. Allowance for Expenses	<u>0.14%</u>	<u>168,716</u>
4. Total	<u>13.00%</u>	<u>\$15,665,918</u>
C. Contribution Sufficiency (Deficiency) (A.3 – B.4)	1.58%	\$1,904,632
D. Projected annual payroll for fiscal year beginning on the valuation date		\$120,511,319

SECTION 4: Reporting Information for the Local Government Correctional Service Retirement Fund

EXHIBIT VI

Supplementary Information Required by the GASB

Valuation date	July 1, 2004
Actuarial cost method	Entry Age Normal
Amortization method	Level percentage of payroll
Remaining amortization period	19 years remaining as of July 1, 2004
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	8.50% per annum (payment of earnings on retired reserves in excess of 6.00% accounted for by 6.00% post-retirement assumption)

Plan membership:

Pensioners and beneficiaries receiving benefits	139
Terminated participants entitled to, but not yet receiving benefits	758
Other non-vested terminated participants	911
Active participants	<u>3,251</u>
Total	5,059

SECTION 4: Reporting Information for the Local Government Correctional Service 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 6.00% post-retirement assumptions.

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.

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.

SECTION 4: Reporting Information for the Local Government Correctional Service Retirement Fund

Retirement Rates:

Age-related table as follows:

Ages:	50-53	2.00%
	54	5.00
	55	25.00
	56-59	10.00
	60-61	20.00
	62-64	40.00
	65-69	50.00
	70 & Over	100.00

Withdrawal Rates:

Graded rates based on actual experience developed by the June 30, 1997 experience analysis for the Correctional Employees Retirement Fund. Rates are shown in rate table.

Disability:

Rates as shown in the 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 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% of members are assumed to be married.

Age of Spouse:

Females are assumed to be three years younger than males.

SECTION 4: Reporting Information for the Local Government Correctional Service Retirement Fund

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.
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 the fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year). Transition rules apply between July 1, 2001 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 6.00% per annum.
Accrued Liability:	If there is a negative Unfunded Actuarial Accrued Liability, the surplus amount shall be amortized over 30 years as a level percentage of payroll.

SECTION 4: Reporting Information for the Local Government Correctional Service Retirement Fund

Summary of Rates: Shown below for selected ages:

<u>Age</u>	<u>Rate (%)</u>					
	<u>Death</u>		<u>Withdrawal</u>		<u>Disability</u>	<u>Salary Increases</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>		
20	0.04%	0.02%	24.00%	16.00%	0.04%	7.75%
25	0.04	0.03	14.70	14.20	0.06	7.00
30	0.06	0.03	9.10	13.50	0.08	7.00
35	0.08	0.05	6.00	12.90	0.11	7.00
40	0.11	0.07	4.40	10.40	0.18	6.50
45	0.19	0.10	3.40	6.40	0.29	5.75
50	0.35	0.16	2.40	4.70	0.50	5.50
55	0.57	0.25	1.40	3.30	0.88	5.25
60	0.84	0.42	0.00	0.00	1.41	5.25
65	1.29	0.71	0.00	0.00	0.00	5.25
70	2.48	1.24	0.00	0.00	0.00	5.25

Changes in Actuarial Assumptions and Actuarial Cost Methods:

There have been no changes in the actuarial assumptions or actuarial cost methods since the prior valuation.

SECTION 4: Reporting Information for the Local Government Correctional Service 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:	Effective July 1, 1999
Eligibility:	Local government employees in covered correctional service for a county-administered jail or correctional facility or in a regional correctional facility administered by multiple counties, spends at least 95% of working time in direct contact with persons confined in the jail or facility, and is not a member of the Public Employees Police and Fire Fund.
Contributions:	
<i>Member:</i>	5.83% of salary.
<i>Employer:</i>	8.75% of salary.
Allowable Service:	Local Government Correctional 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 a 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 Local Government Correctional Service Retirement Fund

Retirement:

Normal Retirement Benefit:

Age/Service Requirement: Age 55 and three years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.

Amount: 1.9% 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 to the actuarial equivalent of the benefit that would be payable if the member deferred the benefit until age 55.

Form of Payment: Life annuity. Actuarially equivalent options are:
25%, 50%, 75%, or 100% joint and survivor with bounce back feature without additional reduction.

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

Occupational Benefit:

Age/Service Requirement: Member who cannot perform duties as a direct result of a disability related to an act of duty.

Amount: 47.50% of Average Salary plus 1.90% of Average Salary for each year in excess of 25 years of Allowable Service (pro rata for completed months).
Payment begins at disability and stops at age 65 or 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.

SECTION 4: Reporting Information for the Local Government Correctional Service Retirement Fund

Non-Occupational Disability:

<i>Age/Service Requirement:</i>	At least one year of Allowable Service and disability not related to covered employment.
<i>Amount:</i>	Normal Retirement Benefit based on Allowable Service (minimum of 10 years) and Average Salary at disability.
<i>Form of Payment:</i>	Payment begins at disability and stops at age 65 or 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.
<i>Benefit Increases:</i>	Adjusted by PERA to provide same increase as MPRIF.

Retirement Benefits:

<i>Age/Service Requirement:</i>	Age 65 with continued disability.
<i>Amount:</i>	Any optional annuity continues. Otherwise, the larger of the disability benefit paid before age 65 or the normal retirement benefit available at age 65, or an actuarially equivalent optional annuity.
<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 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 50, the appropriate early retirement formula described above applies except that one-half the monthly reduction factor is used from age 50 to the commencement age. 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).

SECTION 4: Reporting Information for the Local Government Correctional Service Retirement Fund

Benefit Increases: Adjusted by PERA to provide same increase 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 survivor annuity payable to the later of age 20 or five years. The amount is to 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 6.00% interest.

Termination:

Refund of Contributions:

Age/Service Requirement: Termination of local government service.

Amount: Member's contributions with 6.00% interest compounded annually. A deferred annuity may be elected in lieu of a refund if three or more years of Allowable Service.

Deferred Annuity:

Age/Service Requirement: Three years of Allowable Service.

Amount: Benefit computed under law in effect at termination and increased by 3.00% compounded annually until January 1 of the year following attainment of age 55 and 5.00% thereafter until the annuity begins.

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

Data Section (do not touch)

StringBookmarks	
PlanNameLong	Local Government Correctional Service Retirement Fund
PlanNameShort	Fund
OfficeAddr1	60 Empire Drive, Suite 200
OfficeAddr2	St. Paul, Minnesota 55103
ClientContact	Public Employees Retirement Association of Minnesota
FinanSource	Bank
ActuaryName	Wally Malles
ActuaryTitle	Associate Actuary
ActuaryCredential	ASA, MAAA, EA
ActuaryNumber	99-1234
Assumptions	Board
ConsultantName	Leslie L. Thompson, FSA, MAAA, EA
ConsultantTitle	Senior Vice President and Actuary
SegalAddr1	6300 S. Syracuse Way, Suite 750
SegalAddr2	Englewood, CO 80111
SegalPhone	303.714.9900
SegalFax	303.714.9990
ParticipantName	Participant
ParticipantPlural	Participants
RetireeName	Retired participant
RetireePlural	Retired participants
AuditorCompany	Some Bank
FMWording	Entry Age Normal
ValDate	"7/1/2004"
ValDateEOY	"6/30/2005"
FiscalDate	"7/1/2004"
CensusDate	"7/1/2004"
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FiscalDate1	"7/1/2003"
CreditRef	Years of Service
CreditRefSingle	Year of Service
PayRef	Payroll
PayRefSingle	Payroll
GLText	loss
GLAdminText	loss
OtherGLText	loss
GLInvText	loss
HistYearsText	one
EmpName	Employer

Data Section (do not touch)

OptCategory1 Optional
OptCategory2 Disableds
OptRow Optional
InactNonText

Data Section (do not touch)

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MVIntActual1	0.0000	“#.00%”
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DollarLimit1	140,000	“#,###”
Valcycle	1	“#”
Fiscal	0	“#”
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ActNumTot1	0	“#,###”
ActNumUnknown	0	“#,###”
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ActAge1	0.0	“#,###”
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BenNum	0	“#,###”
BenNum1	0	“#,###”
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RDBft	0	“#,###”
RDBft1	0	“#,###”
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TotalCount1	0	“##.##”
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AstAct	0	“#,###.##”
AstAct1	0	“#,###”
InvGL	0	“#,###”
AstActAve	0	“#,###”

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OtherGL	0	“#,###”
ExpGL	0	“#,###”
TotalGl	0	“#,###”
AdminExp	1	“#”
ActAL	0	“#,###”
ActOPExpDol	0	“#,###”
AsmExpDolPer	0	“#,###”
AsmExpDolPer1	0	“#,###”
SchAmtYrs	25	“#,###”
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RecContDec	0	“#,###”
RecContInc	0	“#,###”
RecContPct	0.0000	“#.00%”
RecContPctDec	0.0000	“#.00%”
RecContPctInc	0.0000	“#.00%”

	First
Chart1First	2003
Chart6First	10000
Chart8First	2002
Chart11First	2002
Chart12First	2003

	Last
Chart1Last	2003
Chart6Last	
Chart8Last	2002
Chart11Last	2003
Chart12Last	2003

	Num
Chart1Num	1
Chart6Num	
Chart8Num	1
Chart11Num	2
Chart12Num	1

Results of last import: Last Import reported ERRORS!
 Type of import: Import All!
 Spreadsheet imported from:
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 Date and time of import: 11/18/2004 3:48:21 PM