GEORGIA JUDICIAL
RETIREMENT SYSTEM
REPORT OF THE ACTUARY
ON THE VALUATION
PREPARED AS OF JUNE 30, 2003

Mellon

Human Resources & Investor Solutions

June 17, 2004

Board of Trustees
Georgia Judicial Retirement System
Two Northside 75
Atlanta, GA 30318

Attention: Mr. Jim Larche, Interim Executive Director

Members of the Board:

Section 47-23-21 of the law governing the operation of the Georgia Judicial Retirement System provides that the actuary shall make periodic valuations of the contingent assets and liabilities of the Retirement System on the basis of regular interest and the tables last adopted by the Board of Trustees. We have submitted the report giving the results of the actuarial valuation of the System prepared as of June 30, 2003. The report indicates that annual employer contributions at the rate of 3.85% of payroll for the fiscal year ending June 30, 2005 are required to support the benefits of the System. In addition, the 3.85% contribution rate will be in effect for the fiscal year ending June 30, 2006, due to a Board decision that changes the contribution period to which the valuation applies to the fiscal year which begins 24 months after the valuation date. The June 30, 2004 valuation will determine the contribution rate for the fiscal year ending June 30, 2007. In preparing the valuation, the actuary relied on data provided by the System. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. Our firm, as actuary, is responsible for all of the actuarial trend data in the financial section of the annual report and the supporting schedules in the actuarial section of the annual report.

In our opinion the valuation is complete and accurate, and the methodology and assumptions used are reasonable as a basis for the valuation. Since the previous valuation, the assumed interest rate has been increased from 7.00% to 7.25% and the assumed rates of salary increase have been changed from 5.50% to 5.75%. The valuation takes into account the effect of amendments to the System enacted through the 2003 session of the General Assembly, as well as the 1.5% Ad Hoc COLA's effective July 1, 2003 and January 1, 2004.

The System is funded on an actuarial reserve basis. The actuarial assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System. The assumptions and methods used for funding purposes meet the parameters set for the disclosures presented in the financial section by Governmental Accounting Standards Board (GASB) Statement Nos. 25 and 27. The funding objective of the plan is that contribution rates over time will remain level as a percent of payroll. The valuation method used is the entry age normal cost method. The normal contribution rate to cover current cost has been determined as a level percent of payroll. Gains and losses are reflected in the unfunded accrued liability which is negative and being amortized as a level percent of payroll within an 11-year period.

The Retirement System is being funded in conformity with the minimum funding standard set forth in Code Section 47-20-10 of the Public Retirement Systems Standards Law. In our opinion, the system is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience is performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Sincerely,

Edward A. Macdonald
Principal, Consulting Actuary

EAM:sh

Table of Contents

GEORGIA JUDICIAL RETIREMENT SYSTEM
REPORT OF THE ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2003

Section I - Summary of the Principal Results

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	June 30, 2003	June 30, 2002
Active members:		
Number	425	428
Annual compensation	$ 38,867,399	$ 38,630,312
Retired members and beneficiaries:		
Number	150	134
Annual allowances	$ 7,346,141	$ 6,166,415
Assets:		
Market Value	$ 220,585,000	$ 213,611,000
Actuarial Value	237,683,000	228,417,000
Unfunded actuarial accrued liability	$ (51,858,127)	$ (53,262,507)
Amortization Period	11 years	10 years
For Fiscal Year Ending	**June 30, 2005***	**June 30, 2004**
Annual required employer contribution rates (ARC):		
Normal	19.70%	20.33%
Accrued liability	(15.85)	(16.48)
Total	3.85%	3.85%

*The ARC will also be payable for fiscal year ending June 30, 2006, due to a Board decision that changes the contribution period to which the valuation applies to the fiscal year which begins 24 months after the valuation date.

2. The valuation takes into account the effect of amendments of the System enacted through the 2003 session of the General Assembly. The valuation reflects the 1.5% Ad Hoc COLA's effective July 1, 2003 and January 1, 2004. The major benefit and contribution provisions of the System as reflected in the valuation are summarized in Schedule F.

3. Since the previous valuation, the assumed interest rate has been increased from 7.00% to 7.25% and the assumed rates of salary increase have been changed from 5.50% to 5.75%. Schedule D of this report outlines the full set of actuarial assumptions and methods used.

4. The entry age actuarial cost method was used to prepare the valuation. Schedule E contains a brief description of the actuarial cost method.

5. Comments on the valuation results as of June 30, 2003 are given in Section IV, and further discussion of the contributions is set out in Section V.

Section II - Membership Data

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The valuation included 425 active members, with annual compensation of $38,867,399.

2. The following table shows the number of retired members and beneficiaries on the roll as of June 30, 2003, together with the amount of their annual allowances payable under the System as of that date.

The Number and Annual Retirement Allowances of Retired Members and Beneficiaries on the Roll As of June 30, 2003

Group	Number	Annual Retirement Allowances
Service Retirements	107	$ 5,996,126
Disability Retirements	1	47,247
Beneficiaries of Deceased Members	42	1,302,768
Total	150*	$ 7,346,141

* In addition, there are 4 spouses who are eligible to receive death benefits from the System

3. Tables 1 and 2 of Schedule G give the distribution by age and by years of creditable service of the number of active members included in the valuation, while Table 3 gives the number and annual retirement allowances of retired members and beneficiaries included in the valuation, distributed by age.

Section III - Assets

1. As of June 30, 2003 the total market value of assets amounted to $220,585,000 as reported by the independent Auditor of the System. The actuarial value of assets at June 30, 2003 is $237,683,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2003.
2. Schedule C shows the receipts and disbursements of the System for the two years preceding the valuation date and a reconciliation of the fund balances.

Section IV - Comments on Valuation

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2003. The valuation was prepared in accordance with the actuarial assumptions and methods set forth in Schedule D and the actuarial cost method which is described in Schedule E.
2. The valuation balance sheet shows that the System has total prospective liabilities of $277,609,834, of which $63,798,829 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits, and $213,811,005 is for the prospective benefits payable on account of present active members. Against these liabilities, the System has total present assets of $237,683,000 as of June 30, 2003. The difference of $39,926,834 between the total liabilities and the total present assets represents the present value of contributions to be made in the future. Of this amount, $26,164,635 is the present value of future contributions expected to be made by or on behalf of members, and the balance of $13,762,199 represents the present value of future contributions payable by the employers.

3. The employers' contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that annual employer normal contributions at the rate of 19.70% of active members' compensation are required to provide the currently accruing benefits of the System.

4. Prospective normal contributions at the rate of 19.70% of active members' compensation have a present value of $65,620,326. When this amount is subtracted from $13,762,199, which is the present value of the total future contributions to be made by the employers, the result is a prospective unfunded actuarial accrued liability of $(51,858,127).

Section V - Contributions Payable by Employers

1. The contributions of employers consist of a normal contribution and an accrued liability contribution as determined by actuarial valuation.

2. The normal contribution rate is calculated as the level percentage rate which, if applied to the compensation of the average member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf. On the basis of the valuation the normal contribution rate was determined to be 19.70% of active members' compensation.

3. The accrued liability contribution at the rate of (15.85)% of active members' compensation is sufficient to amortize the unfunded actuarial accrued liability within 11 years following the valuation date assuming that the amount of accrued liability payment increases 3.75% each year.

4. The following table summarizes the employer contribution rates which were determined by the June 30, 2003 valuation and are recommended for use.

Annual Required Employer Contribution Rates (ARC)
For Fiscal Year Ending June 30, 2005*

Contribution	Percentage of Active Members' Compensation
Normal	19.70%
Accrued Liability	(15.85)
Total	3.85%

*The ARC will also be payable for fiscal year ending June 30, 2006, due to a Board decision that changes the contribution period to which the valuation applies to the fiscal year which begins 24 months after the valuation date.

Section VI - Accounting Information

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members
as of June 30, 2003

Group	Number
Retirees and beneficiaries receiving benefits	150
Terminated plan members entitled to benefits but not yet receiving benefits	42
Active plan members	425
Total	617

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress
(Dollar Amounts in Thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/1998	$160,171	$117,771	$(42,400)	136.0%	$26,226	(161.7)%
6/30/1999	183,249	129,233	(54,016)	141.8	29,594	(182.5)
6/30/2000	204,136	138,427	(65,709)	147.5	34,856	(188.5)
6/30/2001	219,288	156,083	(63,205)	140.5	37,688	(167.7)
6/30/2002	228,417	175,154	(53,263)	130.4	38,630	(137.9)
6/30/2003	237,683	185,825	(51,858)	127.9	38,867	(133.4)

3. The following shows the schedule of employer contributions (dollar amounts in thousands):

Year Ending	Annual Required Contribution	Percentage Contributed
6/30/1999	$ 694	100%
6/30/2000	834	100
6/30/2001	1,741	11
6/30/2002	0	N/A
6/30/2003	0	N/A

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2003.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2003

(a)	Employer annual required contribution	$ 0
(b)	Interest on net pension obligation	104,000
(c)	Adjustment to annual required contribution	180,000
(d)	Annual pension cost (a) + (b) – (c)	$ (76,000)
(e)	Employer contributions made for fiscal year ending 6/30/03	0
(f)	Increase (decrease) in net pension obligation (d) – (e)	$ (76000)
(g)	Net pension obligation beginning of fiscal year	1,486,000
(h)	Net pension obligation end of fiscal year (f) + (g)	$ 1,410,000

Trend Information
(Dollar amounts in thousands)

Year Ending	Annual Pension Cost (APC)	Percentage Of APC Contributed	Net Pension Obligation (NPO)
June 30, 2001	$ 1,741	11%	$ 1,541
June 30, 2002	(55)	0	1,486
June 30, 2003	(76)	0	1,410

5. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2003. Additional information as of this actuarial valuation follows.

Valuation date	6/30/2003
Actuarial cost method	Entry age
Amortization method	Level percent of pay, open
Remaining amortization period	11 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.25%
Projected salary increases*	5.75%
Cost-of-living adjustments	None
*Includes inflation at	3.75%

SCHEDULE A

Valuation Balance Sheet

Present and Prospective Assets and Liabilities as of June 30, 2003

Actuarial Liabilities

Present value of prospective benefits payable on account of:			
(1)	Present retired members and beneficiaries of deceased members, and members entitled to deferred vested benefits		$ 63,798,829
(2)	Present active members		213,811,005
(3)	Total Actuarial Liabilities		$ 277,609,834

Present and Prospective Assets

(4)	Actuarial Value of Assets:		$ 237,683,000
(5)	Present value of total future contributions = (3) – (4)	$ 39,926,834	
(6)	Present value of future member contributions		26,164,635
(7)	Present value of future employer contributions = (5) – (6)	$ 13,762,199	
(8)	Employer normal contribution rate	19.70%	
(9)	Present value of future payroll (1%)	$ 3,330,981	
(10)	Prospective normal contributions = (8) x (9)		65,620,326
(11)	Prospective unfunded actuarial accrued liability contributions = (7) – (10)		(51,858,127)
(12)	Total Present and Prospective Assets		$ 277,609,834

SCHEDULE B

Development of the June 30, 2003 Actuarial Value of Assets

		Total
(1)	Actuarial Value of Assets on June 30, 2002	$ 228,417,000
(2)	2002/2003 Net Cash Flow	
	a. Contributions	4,187,000
	b. Disbursements	6,553,000
	c. Net Cash Flow (2)a – (2)b	(2,366,000)
(3)	Expected Investment Return [(1) x .07] + [(2)c. x .035]	15,906,000
(4)	Expected Actuarial Value of Assets on June 30, 2003 (1) + (2)c + (3)	241,957,000
(5)	Market Value of Assets on June 30, 2003	220,585,000
(6)	Excess of Market Value over Expected Actuarial Value (5) – (4)	(21,372,000)
(7)	20% Adjustment towards Market .20 x (6)	(4,274,000)
(8)	Actuarial Value of Assets on June 30, 2003 (4) + (7)	$ 237,683,000

SCHEDULE C

Summary of Receipts and Disbursements
(Market Value)

	Year Ending	
	June 30, 2003 ($ thousand)	June 30, 2002 ($ thousand)
Receipts for the Year		
Contributions:		
Members	$ 3,814	$ 3,527
Employers*	373	20
Total	$ 4,187	$ 3,547
Investment earnings	9,340	(9,128)
Administrative expense allotment	175	175
TOTAL	$ 13,702	$ (5,406)
Disbursements for the Year		
Retirement allowances	$ 6,483	$ 5,861
Refunds to members	70	120
Administrative expense	175	175
TOTAL	$ 6,728	$ 6,156
Excess of Receipts over Disbursements	$ 6,974	$ (11,562)
Reconciliation of Asset Balances		
Asset balance as of the beginning of year	$ 213,611	$ 225,173
Excess of receipts over disbursements	6,974	(11,562)
Asset balance as of the end of year	$ 220,585	$ 213,611

*Transferred to ERS for purchase of service so this amount is not considered an employer contribution for GASB purposes.

SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

Adopted by the Board June 20, 2002, with the exception of the valuation interest rate and rates of salary increases, which were adopted April 15, 2004.

VALUATION INTEREST RATE: 7.25% per annum, compounded annually, net of expenses.

SALARY INCREASES: 5.75% per annum.

SEPARATIONS BEFORE SERVICE RETIREMENT: Representative values of the assumed annual rates of separation before service retirement are as follows:

	Annual Rates of			
Age	Withdrawal	Death		Disability
		Men	Women	
20	0%	.062%	.038%	.1%
25	0	.077	.050	.1
30	0	.100	.068	.2
35	0	.139	.094	.3
40	0	.203	.135	.4
45	0	.362	.202	.7
50	0	.656	.311	1.0
55	0	1.056	.471	1.8
60	0	1.566	.750	2.9
65	0	2.307	1.241	-

RETIREMENT: 10% retire each year beginning at age 60 with 10 years of service. An additional 40% retire at 16 years of service and the balance retire at 24 years of service or age 70.

DEATHS AFTER RETIREMENT: The 1994 Group Annuity Mortality Table rated forward two years is used for the period after retirement or disability and for dependent beneficiaries. Representative values of the assumed annual rates of mortality are as follows:

Age	Men	Women	Age	Men	Women
40	.125%	.082%	65	1.803%	1.076%
45	.190	.111	70	2.848	1.651
50	.321	.173	75	4.517	2.837
55	.558	.292	80	7.553	4.915
60	1.015	.583	85	11.567	8.402

ASSET METHOD: The actuarial value of assets as developed in Schedule B. The actuarial value of assets recognizes 20% of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return.

VALUATION METHOD: Entry age actuarial cost method. See Schedule E for a brief description of this method.

SPOUSES: For members who have elected spouse coverage, husbands are assumed to be three years older than their wives.

SCHEDULE E

Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.25%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members, beneficiaries and members entitled to deferred vested benefits to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an unfunded actuarial accrued liability contribution.
3. The normal contribution is determined using the entry age actuarial cost method. Under this method, a calculation is made to determine the level amount which, if applied for the average member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded actuarial accrued liability contributions are determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets, from the present value of expected benefits to be paid from the System.

SCHEDULE F

Summary of Major System Provisions as Interpreted for Valuation Purposes

Service Retirement Benefit

Eligibility	Age 60 and 16 years of creditable service.
Benefit	Annual benefit is 66-2/3% of the annual salary plus 1% for each year of credited service over 16 years, not to exceed 24 years.

Early Retirement Benefit

Eligibility	Age 60 and 10 years of creditable service.
Benefit	A pro-rata portion of the normal retirement benefit, based on service not to exceed 16 years.

Disability Retirement Benefit

Eligibility	4 years of creditable service.
Benefit	For members with less than 10 years of creditable service: 1/2 of projected normal retirement benefit. For members with 10 or more years of creditable service: 2/3 of projected normal retirement benefit.

Death Benefit

Eligibility	10 years of creditable service during which the member has contributed for spouse coverage.
Benefit	50% of benefit which member was receiving if retired, or would have received had he retired on the date of his death. If under age 60, and the member was a member of a Predecessor Retirement System, an immediate benefit equal to 50% of the benefit which member would have received had he remained employed and retired at age 60. If under age 60 and not a member of a Predecessor Retirement System, an immediate benefit equal to 50% of the benefit which the member would have received if the member were age 60 on the date of death. If member rejects spouse coverage or dies before contributing for spouse's coverage for at least 10 years, death benefit is return of member's contributions with interest.

Deferred Vested Retirement Benefit

Eligibility	10 years of creditable service.
Benefit	Accrued benefit deferred to age 60.
Termination Benefit	If a member terminates for reasons other than retirement, he or his beneficiary is entitled to a return of the member's accumulated contributions with interest in lieu of any other benefit.
Contributions	Members contribute 7-1/2% of salary, plus 2-1/2% of salary for up to 16 years if spouse benefit is not rejected. Employer contributions are actuarially determined and approved and certified by the Board.
Cost-of-Living Allowance (COLA)	There is no automatic provision. The Board or Legislature can make ad hoc increases.

SCHEDULE G

Table 1

The Number of Members Distributed by Age as of June 30, 2003

Age	Men	Women
32	2	
33	2	
34	3	1
35	2	
36	2	
37	1	1
38	2	1
39		2
40	3	
41	7	
42	5	4
43	9	4
44	9	2
45	8	4
46	7	5
47	13	5
48	15	5
49	24	5
50	14	7
51	20	4
52	16	2
53	15	3
54	21	
55	22	1
56	22	1
57	21	1
58	10	2
59	10	2
60	11	
61	11	
62	14	1
63	11	1
64	3	1
65	4	1
66		1
67	2	1
68	5	
69	3	
70	1	
74	2	
75	1	
76	1	
77	1	
78	1	
79	1	
Total	357	68

Table 2

The Number of Members Distributed by Years of Creditable Service as of June 30, 2003

Years of Service	Men	Women
0	6	2
1	19	4
2	11	8
3	20	8
4	13	3
5	24	4
6	14	2
7	36	7
8	22	4
9	11	4
10	10	3
11	20	6
12	7	2
13	6	2
14	7	
15	15	1
16	8	1
17	18	2
18	8	
19	18	3
20	7	1
21	17	
22	13	
23	11	1
24	3	
25	5	
26	2	
27	3	
28	1	
31	1	
33	1	
Total	357	68

Table 3

The Distribution of the Number and Annual
Retirement Allowances of Retirees
Distributed by Age as of June 30, 2003

Members and Beneficiaries of the Retirement System

	Men		Women	
Age	Number	Amount	Number	Amount
48			1	$ 4,893
52			1	39,476
54	1	$ 4,568		
57	1	5,396	3	67,201
60	2	79,230		
61	3	234,398		
62	4	249,939		
63	5	303,015		
64	4	185,715		
65	2	163,925	1	2,181
66	2	105,345	1	13,977
67	2	173,952	1	31,197
68	5	377,648	1	7,281
69	4	319,617	3	150,953
70	6	426,939		
71	6	338,090		
72	6	336,596	2	89,856
73	6	303,098	1	8,642
74	4	169,559	2	48,928
75	5	304,797	1	72,174
76	3	182,834		
77	4	211,455	1	29,572
78	2	41,145	5	221,167
79	6	356,387	2	48,911
80	5	166,237	2	80,216
81	2	24,177	3	146,471
82	8	432,082		
83	3	103,323	3	143,720
84	1	60,132	1	76,505
85	1	62,232	2	76,200
86	1	20,238	2	27,970
87	1	20,830	1	49,671
88	1	54,863	1	20,733
89	1	41,672		
90	1	21,927		
92	1	6,885		
Total	109	$ 5,888,246	41	$ 1,457,895