JUDGES' RETIREMENT SYSTEM OF ILLINOIS

ACTUARIAL VALUATION AS OF JUNE 30, 2003

GOLDSTEIN & ASSOCIATES

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October 7, 2003

Board of Trustees
Judges' Retirement System of Illinois
2101 South Veterans Parkway
P.O. Box 19255
Springfield, Illinois 62794-9255

Re: **Actuarial Valuation as of June 30, 2003**

Dear Board Members:

I am pleased to submit our actuarial report on the financial position and funding requirements of the Judges' Retirement System of Illinois based on the actuarial valuation as of June 30, 2003.

The report consists of 12 Sections and 2 Appendices as follows:

I would be pleased to discuss any aspects of this report with you and other interested persons.

Respectfully submitted,

Sandor Goldstein, F.S.A.
Consulting Actuary

A. PURPOSE AND SUMMARY

We have carried out an actuarial valuation of the Judges' Retirement System of Illinois as of June 30, 2003. The purpose of the valuation was to determine the financial position and funding requirements of the retirement system. This report is intended to present the results of the valuation. The results are summarized below:

1.	Total actuarial liability	$1,076,231,965
2.	Actuarial value of assets	330,053,560
3.	Unfunded actuarial liability	746,178,405
4.	Funded Ratio	30.7%
5.	State contribution requirement for FY 05 under Public Act 88-0593	$ 31,991,000
6.	Annual required contribution for FY 05 under GASB Statement No. 25	$ 57,749,460

B. DATA USED FOR THE VALUATION

Participant Data. The participant data required to carry out the valuation was supplied by the retirement system. The membership of the system as of June 30, 2003, on which the valuation was based, is summarized in Exhibit 1. It can be seen that there were 920 active members, 539 members receiving retirement annuities, and 325 members receiving survivor's annuities included in the valuation. The total active payroll as of June 30, 2003 was $123,047,253.

Exhibit 1

Summary of Membership Data

1.	Number of Members	
	(a) Active Members	
	(i) Vested	660
	(ii) Non-vested	260
	(b) Members Receiving	
	(i) Retirement Annuities	539
	(ii) Survivor's Annuities	325
	(c) Inactive Members	42
2.	Annual Salaries (Active Members)	
	(a) Total Salary	$ 123,047,253
	(b) Average Salary	133,747
3.	Total Accumulated Employee Contributions of Active Members	$ 105,653,689
4.	Annual Annuity Payments	
	(a) Retirement Annuities	$ 45,967,251
	(b) Survivor's Annuities	12,587,512

Assets. In November of 1994, the Governmental Accounting Standards Board (GASB) issued GASB Statement No. 25, which establishes standards of financial reporting for governmental pension plans. The statement is effective for periods beginning after June 15, 1996. Under GASB Statement No. 25, the actuarial value of assets to be used for determining a plan's funded status and annual required contribution needs to be market related.

The asset value used for the valuation was based on the asset information contained in the statement of assets as of June 30, 2003 prepared by the system. For purposes of the valuation, the market value of the assets of the system, less the amount of liabilities, was used. The resulting actuarial value of assets was $330,053,560. The development of this value is outlined in Exhibit 2.

Exhibit 2

Actuarial Value of Assets

1.	Cash	$ 7,324,152
2.	Receivables	5,362,571
3.	Investments - Held in the Illinois State Board of Investment Commingled Fund, at Market	317,541,091
4.	Equipment	2,306
5.	Total Assets	$ 330,230,120
6.	Liabilities	176,560
7.	Actuarial Value of Assets (5 – 6)	$ 330,053,560

C. RETIREMENT SYSTEM PROVISIONS

The actuarial valuation was based on the provisions of the retirement system in effect as of June 30, 2003 as provided in Article 18 of the Illinois Pension Code. Since the effective date of our last valuation, there have been no changes to the provisions of the System. A summary of the principal provisions of the system in effect as of June 30, 2003 is provided in Appendix 1.

D. ACTUARIAL ASSUMPTIONS AND COST METHOD

Actuarial Assumptions

The assumptions used for the June 30, 2003 actuarial valuation are the same as those used for the June 30, 2002 actuarial valuation. These actuarial assumptions are based on an experience analysis of the system for the five-year period 1996 through 2001. The major actuarial assumptions used for the current valuation are summarized below:

Mortality Rates. For active and retired members: the UP-1994 Mortality Table for Males, rated down 1 year. For spouses: the UP-1994 Mortality Table for Females, rated down 2 years.

Termination Rates. The following is a sample of the termination rates that were used:

Age	Rate of Termination
30	.016
35	.014
40	.012
45	.010
50	.007
55	.005
60	.003
67 and over	.000

Disability Rates. The following is a sample of the disability rates that were used for the valuation:

Age	Rate of Disability
30	.00057
35	.00064
40	.00083
45	.00115
50	.00170
55 and over	.00000

Retirement Rates. Rates of retirement for each age from 55 to 80 based on the recent experience of the system were used. The following are samples of the rates of retirement that were used:

Age	Rate of Retirement
55	.080
60	.220
65	.110
70	.110
75	.200
80	1.000

The above retirement rates are equivalent to an average retirement age of approximately 65.

Salary Increase. A salary increase assumption of 5.5% per year, compounded annually, was used. This 5.5% salary increase assumption can be considered to consist of a general increase component of 4.5% per year, 4.0% of which is attributable to inflation, and a seniority/merit component of 1% per year.

Interest Rate. An interest rate assumption of 8.0% per year, compounded annually, was used. This interest rate assumption can be considered to consist of an inflation component of 4.0% per year and a real rate of return of 4.0% per year.

Marital Status. It was assumed that 75% of active members will be married at the time of retirement.

Spouse's Age. The age of the spouse was assumed to be 4 years younger than the age of the employee.

Actuarial Cost Method

The projected unit credit actuarial cost method was used for the June 30, 2003 valuation. Actuarial gains and losses are reflected in the unfunded actuarial liability. This is the same actuarial cost method that was used for the June 30, 2002 valuation.

E. ACTUARIAL LIABILITY

The actuarial liability as determined under the valuation for the various classes of members is summarized in Exhibit 3. The total actuarial liability is then compared with the actuarial value of assets in order to arrive at the unfunded actuarial liability. (The actuarial terms used in this report are defined in Appendix 2.)

As of June 30, 2003, the total actuarial liability is $1,076,231,965, the actuarial value of assets is $330,053,560, and the unfunded actuarial liability is $746,178,405. The ratio of the actuarial value of assets to the actuarial liability, or funded ratio, is 30.7%.

Exhibit 3

Actuarial Liability As of June 30, 2003

1.	Actuarial Liability For Active Members	
	(a) Basic retirement annuity	$ 295,011,344
	(b) Annual increase in retirement annuity	93,330,561
	(c) Pre-retirement survivor's annuity	27,460,812
	(d) Post-retirement survivor's annuity	35,900,380
	(e) Withdrawal benefits	5,836,357
	(f) Disability benefits	2,104,179
	(g) Total	$ 459,643,633
2.	Actuarial Liability For Members Receiving Benefits	
	(a) Retirement annuities	$ 497,243,301
	(b) Survivor annuities	109,795,488
	(c) Total	$ 607,038,789
3.	Actuarial Liability For Inactive Members	9,549,543
4.	Total Actuarial Liability	$1,076,231,965
5.	Actuarial Value of Assets	330,053,560
6.	Unfunded Actuarial Liability	$ 746,178,405
7.	Funded Ratio	30.7%

F. EMPLOYER'S NORMAL COST

The employer's share of the normal cost for the year beginning July 1, 2003 is developed in Exhibit 4. For the year beginning July 1, 2003, the total normal cost is determined to be $41,522,126. Employee contributions are estimated to be $12,665,113. The resulting employer's share of the normal cost is $28,857,013.

Based on a payroll of $123,047,253, the employer's share of the normal cost can be expressed as 23.45% of payroll.

Exhibit 4

Employer's Normal Cost For Year Beginning July 1, 2003

		Dollar Amount	Percent of Payroll
1.	Basic retirement annuity	$ 26,079,073	21.19%
2.	Annual increase in retirement annuity	8,316,288	6.76
3.	Pre-retirement survivor's annuity	2,601,376	2.11
4.	Post-retirement survivor's annuity	3,110,789	2.53
5.	Withdrawal benefits	698,298	.57
6.	Disability benefits	254,902	.21
7.	Administrative expenses	461,400	.37
8.	Total normal cost	$ 41,522,126	33.74%
9.	Employee contributions	12,665,113	10.29
10.	Employer's share of normal cost	$ 28,857,013	23.45%

Note. The above figures are based on total active payroll of $123,047,253 as of June 30, 2003.

G. STATE CONTRIBUTION REQUIREMENTS

Section 5/18-131 of the Illinois Pension Code provides for the following funding plan for the system:

For fiscal years 2011 through 2045, the minimum State contribution to the system for each fiscal year shall be an amount determined by the system to be sufficient to bring the total assets of the system up to 90% of the total actuarial liabilities by the end of fiscal year 2045. In making these determinations, the required State contribution shall be calculated as a level percentage of payroll over the years through 2045. For fiscal years 1997 through 2010, the State contribution, as a percentage of the applicable payroll shall be increased in equal annual increments so that by fiscal year 2011, the State is contributing at the required rate.

Public Act 93-0002, effective April 7, 2003, authorized the sale of $10 billion in general obligation bonds. On July 1, 2003, the Judges' Retirement System received $141,955,483 from the General Obligation Bond (GOB) proceeds. Under the changes made to the funding plan by Public Act 93-0002, the State contribution for each year shall not exceed:

1. The State contribution that would have been required had the GOB program not been in effect, reduced by
2. The total debt service for each year for the system's portion of GOB proceeds

Based on the June 30, 2003 actuarial valuation, we have determined the required State contribution for fiscal year 2005 under the funding plan as modified by Public Act 93-0002. We have also estimated required contributions for fiscal years 2006 through 2010 as well as for fiscal year 2015. The required State contribution rates and amounts are as follows:

Fiscal Year	Projected Payroll	Required State Contribution as a Percent of Payroll	Required State Contribution as a Dollar Amount
2005	$128,700,000	24.85%	$ 31,991,000
2006	135,200,000	27.86	37,672,000
2007	142,400,000	30.86	43,944,000
2008	150,300,000	33.21	49,902,000
2009	159,100,000	36.26	57,678,000
2010	167,300,000	39.25	65,652,000
2015	212,900,000	40.28	85,774,000

Additional details regarding the calculation of the required state contribution as a dollar amount are provided below:

Required State Contribution (in thousands)

Fiscal Year	(1) State Contribution Under Regular Funding Plan With GOB	(2) State Contribution Without GOB	(3) Amount of Debt Service	(4) Maximum State Contribution (2 – 3)	(5) Actual State Contribution (Lower of 1 and 4)
2005	40,404	41,617	9,626	31,991	31,991
2006	44,749	47,298	9,626	37,672	37,672
2007	49,543	53,570	9,626	43,944	43,944
2008	54,832	60,498	10,596	49,902	49,902
2009	60,753	68,250	10,572	57,678	57,678
2010	66,736	76,197	10,545	65,652	65,652
2015	87,809	96,998	11,224	85,774	85,774

Method of Calculation

The contribution requirements shown above have been determined using the actuarial assumptions, membership data and benefit provisions that were used for the regular actuarial valuation. However, in order to determine the contribution requirements, certain calculations needed to be made that are not normally required in a regular actuarial valuation. Benefit payout requirements, normal costs, and payroll were estimated over the 42-year period from 2004 through 2045 by projecting the membership of the system over the 42-year period, taking into account the impact of new entrants to the system over the 42-year period.

In order to make the required projections, assumptions needed to be made regarding the age and salary distribution of new entrants as well as the size of the active membership of the system. The assumptions regarding the profile of new entrants to the system was based on the recent experience of the system with regard to new entrants. The size of the active membership of the system was assumed to remain constant over the 42-year projection period.

H. ANNUAL REQUIRED CONTRIBUTION FOR GASB STATEMENT NO. 25

GASB Statement No. 25 requires the disclosure of the annual required employer contribution (ARC), calculated in accordance with certain parameters. Based on the results of the June 30, 2003 actuarial valuation, we have therefore calculated the annual required contribution for the fiscal year ending on June 30, 2005. In accordance with the parameters prescribed in GASB Statement No. 25, in calculating the annual required contribution, we have used market value for the actuarial value of assets and have used a 40-year level percent of payroll amortization of the unfunded liability. On this basis, the annual required contribution for Fiscal Year 2005 has been determined to be as follows:

		Fiscal Year 2005
1.	Employer's normal cost	$ 30,631,648
2.	Annual amount to amortize the unfunded liability over 40 years as a level percent of payroll	27,117,812
3.	Annual required contribution (1 + 2)	$ 57,749,460

I. RECONCILIATION OF CHANGE IN UNFUNDED LIABILITY

The net actuarial experience during the period July 1, 2002 to June 30, 2003 resulted in an increase in the system's unfunded actuarial liability of $68,990,926. This increase in unfunded liability is a result of several kinds of gains and losses as illustrated in Exhibit 5.

The employer funding requirement for the year of normal cost plus interest on the unfunded actuarial liability amounted to $80,733,349, whereas the actual employer contribution for the year amounted to $31,440,103. Thus, the employer contribution for the year fell short of meeting normal cost plus interest on the unfunded liability by $49,293,246. Had all aspects of the system's experience been in line with the actuarial assumptions, the unfunded liability would have increased by this amount.

The net rate of investment return earned by the net assets of the system, based on assets valued at market, was approximately –0.1% in comparison with the assumed rate of investment return of 8.0%. This resulted in an increase in the unfunded liability of $27,183,676. Salaries increased at an average rate of approximately 0.1%, in comparison with an assumed rate of 5.5%, resulting in a decrease in the unfunded liability of $26,392,926.

The various other aspects of the system's experience resulted in a net increase in the unfunded liability of $18,906,930. The aggregate financial experience of the system resulted in an increase in the unfunded liability of $68,990,926.

Exhibit 5

Reconciliation of Change in Unfunded Liability
Over the Period July 1, 2002 to June 30, 2003

1.	Unfunded actuarial liability as of 7/1/02	$ 677,187,479
2.	Employer contribution requirement of normal cost plus interest on the unfunded liability for the period 7/1/02 to 6/30/03	80,733,349
3.	Actual employer contribution for the year	31,440,103
4.	Increase in unfunded liability due to employer contributions being less than normal cost plus interest on unfunded liability	$ 49,293,246
5.	Increase in unfunded liability due to investment return on net assets lower than assumed	27,183,676
6.	Decrease in unfunded liability due to salary increases lower than assumed	(26,392,926)
7.	Increase in unfunded liability due to other sources	18,906,930
8.	Net increase in unfunded liability for the year	$ 68,990,926
9.	Unfunded actuarial liability as of 6/30/03 (1 + 8)	$ 746,178,405

J. PROJECTION OF BENEFITS, CONTRIBUTIONS, AND LIABILITIES

Based on the results of the June 30, 2003 valuation and using the actuarial assumptions used for the valuation, we have projected valuation results for a 42-year period commencing with Fiscal Year 2004. We have based State contributions on the contribution requirements in the funding plan established under Public Act 88-0593, as modified by Public Act 93-0002. The results of our projections are shown in Exhibit 7.

K. NET PENSION OBLIGATION

GASB Statement No. 27 requires governmental employers to disclose the Net Pension Obligation (NPO), the cumulative difference between the annual pension cost and the actual employer contribution. We have therefore determined the Net Pension Obligation as of June 30, 2003 in accordance with the requirements of GASB Statement No. 27. As required under GASB Statement No. 27, our calculations include all fiscal years between December 15, 1986 and June 30, 2003. For each fiscal year, an annual pension cost was determined as the annual required contribution (ARC), one year's interest on the NPO, and an adjustment to the ARC.

The results of our calculations are summarized in Exhibit 8. As can be seen from Exhibit 8, the Net Pension Obligation as of June 30, 2003 was determined to be $331,500,017.

L. CERTIFICATION

This actuarial report has been prepared in accordance with generally accepted actuarial principles and practices and to the best of our knowledge, fairly represents the financial condition of the Judges' Retirement System of Illinois as of June 30, 2003.

Respectfully submitted,

Sandor Goldstein, F.S.A.
Consulting Actuary

Carl J. Smedinghoff, A.S.A.
Associate Actuary

EXHIBIT 7

JUDGES' RETIREMENT SYSTEM OF ILLINOIS
PROJECTION OF COSTS, BENEFITS, AND LIABILITIES
(State Contributions Are Based on Public Act 88-0593 as Modified by Public Act 93-0002)
(All Dollar Amounts in Millions)

	Fiscal Year Ending 6/30					
	2004	2005	2006	2007	2008	2009
BASIC DATA						
1. Number of Active Members	920	920	920	920	920	920
2. Expected Total Payroll	$123.0	$128.7	$135.2	$142.4	$150.3	$159.1
VALUATION RESULTS						
3. Actuarial Liability	$1,081.9	$1,142.5	$1,207.5	$1,276.9	$1,349.9	$1,426.6
(Retired Lives Reserve)	(566.2)	(597.9)	(631.9)	(668.2)	(706.4)	(746.5)
4. Assets (Market Value)	$496.0	$514.6	$538.3	$567.6	$602.1	$643.7
5. Unfunded Actuarial Liabillty	$585.9	$627.9	$669.2	$709.3	$747.8	$782.9
(Funded Percentage)	(45.8)	(45.0)	(44.6)	(44.5)	(44.6)	(45.1)
6. Annual Normal Cost						
(a) Total	$41.5	$43.8	$46.3	$48.8	$51.0	$53.4
(b) Employee Contribution	12.7	13.2	13.9	14.7	15.5	16.4
(c) Employer's Share	28.8	30.6	32.4	34.1	35.5	37.0
(% of Total Payroll)	(23.45)	(23.77)	(23.97)	(23.95)	(23.64)	(23.26)
7. State Contribution	$36.5	$32.0	$37.7	$43.9	$49.9	$57.7
(% of Total Payroll)	(29.68)	(24.85)	(27.86)	(30.86)	(33.21)	(36.26)
8. Estimated Total Expenses (Benefits, Refunds and Administrative Expenses)	$62.5	$65.5	$68.5	$71.8	$75.9	$80.4
9. Accumulated Contributions (Actives and Inactives)	$121.6	$127.8	$134.5	$141.9	$150.3	$158.0

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EXHIBIT 7 (CONTINUED)

JUDGES' RETIREMENT SYSTEM OF ILLINOIS
PROJECTION OF COSTS, BENEFITS, AND LIABILITIES
(State Contributions Are Based on Public Act 88-0593 as Modified by Public Act 93-0002)
(All Dollar Amounts in Millions)

	Fiscal Year Ending 6/30					
	2010	2015	2020	2030	2040	2045
BASIC DATA						
1. Number of Active Members	920	920	920	920	920	920
2. Expected Total Payroll	$167.3	$212.9	$268.5	$420.1	$653.7	$814.8
VALUATION RESULTS						
3. Actuarial Liability	$1,506.8	$1,963.3	$2,519.3	$4,018.5	$6,209.4	$7,707.5
(Retired Lives Reserve)	(788.5)	(1,027.4)	(1,318.3)	(2,102.6)	(3,248.9)	(4,032.7)
4. Assets (Market Value)	$692.9	$993.4	$1,401.5	$2,641.5	$4,979.3	$6,936.8
5. Unfunded Actuarial Liability	$813.9	$969.9	$1,117.8	$1,377.0	$1,230.1	$770.7
(Funded Percentage)	(46.0)	(50.6)	(55.6)	(65.7)	(80.2)	(90.0)
6. Annual Normal Cost						
(a) Total	$55.7	$69.2	$87.0	$138.3	$215.4	$268.3
(b) Employee Contribution	17.2	21.9	27.6	43.2	67.3	83.9
(c) Employer's Share	38.5	47.3	59.4	95.1	148.1	184.4
(% of Total Payroll)	(23.00)	(22.22)	(22.10)	(22.64)	(22.66)	(22.64)
7. State Contribution	$65.7	$85.8	$109.2	$170.4	$282.2	$351.8
(% of Total Payroll)	(39.25)	(40.28)	(40.68)	(40.57)	(43.18)	(43.18)
8. Estimated Total Expenses (Benefits, Refunds and Administrative Expenses)	$85.0	$113.4	$150.2	$254.8	$406.0	$502.2
9. Accumulated Contributions (Actives and Inactives)	$166.0	$210.8	$265.5	$414.9	$645.5	$804.4

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EXHIBIT 8

JUDGES' RETIREMENT SYSTEM

CALCULATION OF NET PENSION OBLIGATION AS OF JUNE 30, 2003 UNDER GASB STATEMENT NO. 27

DATE OF TRANSITION TO GASB STATEMENT NO. 27 IS JULY 1, 1996

Fiscal Year	Annual Required Contribution *	Interest on NPO	Adjustment to ARC	Pension Cost	Actual Employer Contribution	Change in NPO	Net Pension Obligation
1988	20,813,660	0	0	20,813,660	9,137,000	11,676,660	11,676,660
1989	22,698,346	875,750	891,321	22,682,775	9,918,700	12,764,075	24,440,735
1990	20,037,080	1,955,259	1,965,432	20,026,907	10,657,400	9,369,507	33,810,242
1991	25,122,404	2,704,819	2,718,892	25,108,331	10,657,400	14,450,931	48,261,173
1992	26,280,222	3,860,894	3,880,982	26,260,134	10,052,100	16,208,034	64,469,207
1993	29,037,582	5,157,537	5,184,371	29,010,748	11,099,030	17,911,718	82,380,925
1994	31,719,450	6,590,474	6,624,764	31,685,160	10,766,000	20,919,160	103,300,085
1995	32,937,148	8,264,007	8,307,004	32,894,151	10,806,000	22,088,151	125,388,236
1996	37,711,076	10,031,059	10,083,250	37,658,885	12,129,000	25,529,885	150,918,121 **
1997	26,021,939	12,073,450	6,423,141	31,672,248	13,783,328	17,888,920	168,807,041
1998	28,867,624	13,504,563	7,184,501	35,187,686	15,692,152	19,495,534	188,302,575
1999	38,631,275	15,064,206	8,014,240	45,681,241	18,688,816	26,992,425	215,295,000
2000	40,205,224	17,223,600	9,163,049	48,265,775	21,411,577	26,854,198	242,149,198
2001	42,546,928	19,371,936	10,305,975	51,612,889	24,348,926	27,263,963	269,413,161
2002	47,277,311	21,553,053	11,466,342	57,364,022	27,532,000	29,832,022	299,245,183
2003	53,470,841	23,939,615	13,715,519	63,694,937	31,440,103	32,254,834	331,500,017

* For Fiscal Years 1988 through 1996, the Annual Required Contribution was calculated as the APB-8 requirement of normal cost plus a 40-year level-dollar amortization of the unfunded liability. For Fiscal Years 1997 and after, the Annual Required Contribution was calculated as normal cost plus a 40-year level-percent-of-payroll amortization of the unfunded liability.

** Equals Net Liability at Transition.

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Appendix 1

Summary of Principal Provisions

1. Participation. Participation in the system is mandatory when a person first becomes a judge, unless an "Election Not to Participate" is filed by the judge within 30 days of the date of notification of this option.

2. Member Contributions. All members of the system are required to contribute to the system the following percentage of their salaries:

Retirement Annuity	7.5%
Automatic Annuity Increase	1.0
Survivor's Annuity	2.5
Total	11.0%

All judges who become participants after December 31, 1992 are required to make contributions toward the survivor's annuity unless they file an election not to participate in the survivor's annuity benefit, in which case the total participant contribution rate is 8.5% of salary.

3. Discontinuance of Contributions. A participant who becomes eligible to receive the maximum rate of annuity may elect to discontinue contributions and have his or her benefits "fixed" based upon the final rate of salary immediately prior to the effective date of such election. This election, once made, is irrevocable.

4. Election to Contribute Only on Increases in Salary. A participant who has attained age 60 and continues to serve as a judge after becoming eligible to receive the maximum rate of annuity and has not elected to discontinue contributing to the system may elect to make contributions based only on the amount of the increases in salary received by the judge on or after the date of the election.

5. Retirement Annuity - Eligibility. A judge who has at least 10 years of service may retire with an unreduced retirement annuity upon attainment of age 60. A judge with at least 6 years of service may retire with an unreduced retirement annuity upon attainment of age 62.

A judge with at least 10 years of service may retire upon attainment of age 55, with the amount of the retirement annuity reduced 1/2 of 1% for each month that the judge is under age 60 if the judge has less than 28 years of service. This penalty for retirement before age 60 is reduced by 5/12 of 1% for every month of service in the System in excess of 20 years.

6. Retirement Annuity - Amount. The retirement annuity is determined according to the following formula based upon the final rate of salary:

- 3 1/2% for each of the first 10 years of service; plus
- 5% for each year of service in excess of 10

The maximum retirement annuity is 85% of the final rate of salary.

7. Automatic Increase In Retirement Annuity. Annual automatic increases of 3% of the current amount of retirement annuity are provided. The initial increase is effective in the month of January of the year next following the year in which the first anniversary of retirement occurs.

8. Temporary Total Disability. A member with at least 2 years of service who becomes totally disabled and unable to perform his or her duties as a judge is entitled to a temporary disability benefit equal to 50% of salary payable during the period of disability but not beyond the end of the term of office.

9. Total and Permanent Disability. A member with at least 10 years of service who becomes totally and permanently disabled while serving as a judge is eligible to commence receiving his or her retirement annuity without reduction regardless of age.

10. Survivor's Annuity - Participation and Eligibility. A married judge, an unmarried judge who becomes a participant after December 31, 1992, or a judge who marries after becoming a participant is subject to the provisions relating to the survivor's annuity unless he or she files a written notice of election not to participate in the survivor's annuity.

An active judge who is not contributing for the survivor's annuity and later marries or remarries may receive partial credit for the survivor's annuity thereby providing a prorated benefit for his or her spouse by contributing to the survivor's annuity benefit prospectively from the date of marriage.

A surviving spouse without children is eligible for survivor benefits at age 50 or over provided marriage to the member had been in effect for at least 1 year immediately prior to the member's death.

A surviving spouse with unmarried eligible children of the member is eligible for a survivor's annuity benefit at any age provided the above marriage requirements have been met. When all children are disqualified because of death, marriage or attainment of age 18, or age 22 in the case of a full-time student, the spouse's benefit is suspended if the spouse is under age 50 until the attainment of such age.

Children of the member who are under age 18 or under age 22 and a full-time student or who are over age 18 and dependent because of a physical or mental disability are eligible for survivor benefits.

If the member dies in service as a judge, the member must have at least 1 1/2 years of service credit for survivor's annuity eligibility. If death occurs after termination of service, the deceased member must have at least 10 years of service credit for survivor's annuity eligibility.

11. Survivor's Annuity - Amount. (a) Upon the death of an annuitant, his or her surviving spouse shall be entitled to a survivor's annuity of 66 2/3% of the annuity the annuitant was receiving immediately prior to his or her death.

(b) Upon the death of a judge while in service, the surviving spouse shall receive a survivor's annuity of 66 2/3% of the annuity earned by the judge as of the date of death, or 7 1/2% of the judge's last salary, whichever is greater.

(c) Upon the death of a former judge who had terminated service with at least 10 years of service, his or her surviving spouse shall be entitled to a survivor's annuity of 66 2/3% of the annuity earned by the deceased member as of the date of death.

(d) Upon the death of an annuitant, a judge in service, or a former judge who had terminated service with at least 10 years of service, each surviving child unmarried and under the age of 18, or age 22 in the case of a full-time student, or disabled shall be entitled to a child's annuity in an amount equal to 5% of the decedent's final salary, not to exceed in total for all such children the greater of 20% of final salary or 66 2/3% of the earned retirement annuity.

(e) Survivor's annuities are subject to annual automatic increases of 3% of the current amount of annuity.

12. Refund of Contributions. A participant who ceases to be a judge may apply for and receive a refund of his or her total contributions to the system, provided he or she is not then eligible to receive a retirement annuity.

A participant who becomes unmarried, either before or after retirement, is entitled to a refund of contributions made for the survivor's annuity.

Appendix 2

Glossary of Terms used in Report

1. Actuarial Present Value. The value of an amount or series of amounts payable at various times, determined as of a given date by the application of a particular set of actuarial assumptions.

2. Actuarial Cost Method or Funding Method. A procedure for determining the actuarial present value of pension plan benefits and for determining an actuarially equivalent allocation of such value to time periods, usually in the form of a normal cost and an actuarial accrued liability.

3. Normal Cost. That portion of the actuarial present value of pension plan benefits, which is allocated to a valuation year by the actuarial cost method.

4. Actuarial Liability or Accrued Liability. That portion, as determined by a particular actuarial cost method, of the actuarial present value of pension benefits which is not provided for by future normal costs.

5. Actuarial Value of Assets. The value assigned by the actuary to the assets of the pension plan for purposes of an actuarial valuation.

6. Unfunded Actuarial Liability. The excess of the actuarial liability over the actuarial value of assets.

7. Projected Unit Credit Actuarial Cost Method. A cost method under which the projected benefits of each individual included in an actuarial valuation are allocated by a consistent formula to valuation years. The actuarial present value of benefits allocated to a valuation year is called the normal cost. The actuarial present value of benefits allocated to all periods prior to a valuation year is called the actuarial liability.

Under this method, the actuarial gains (losses), as they occur, generally reduce (increase) the unfunded actuarial liability.

8. Actuarial Assumptions. Assumptions as to future events affecting pension costs.

9. Actuarial Valuation. The determination, as of a valuation date, of the normal cost, actuarial liability, actuarial value of assets, and related actuarial present values for a pension plan.

4/30/2003

Judges' Retirement System
Funding Projections to End of 2045 - State Contributions Based on Public Act 88-0593
All Dollar Amounts in Millions

Year	No. of Active Members	Payroll	Actuarial Liability	Retired Lives Reserve	Assets	Unfunded Liability	Funded Ratio	Total Normal Cost	Employee Contributions	Employer's Normal Cost	ERNC As % of Payroll	State Contribution	State Contribution As % of Pay	Estimated Benefit Payout	Accumulated Contributions
2004	920	123	1,081.90	566.2	496	585.9	45.80%	41.5	12.7	28.8	23.45%	36.5	29.68%	62.5	121.6
2005	920	128.7	1,142.50	597.9	514.6	627.9	45.00%	43.8	13.2	30.6	23.77%	32	24.85%	65.5	127.8
2006	920	135.2	1,207.50	631.9	538.3	669.2	44.60%	46.3	13.9	32.4	23.97%	37.7	27.86%	68.5	134.5
2007	920	142.4	1,276.90	668.2	567.6	709.3	44.50%	48.8	14.7	34.1	23.95%	43.9	30.86%	71.8	141.9
2008	920	150.3	1,349.90	706.4	602.1	747.8	44.60%	51	15.5	35.5	23.64%	49.9	33.21%	75.9	150.3
2009	920	159.1	1,426.60	746.5	643.7	782.9	45.10%	53.4	16.4	37	23.26%	57.7	36.26%	80.4	158
2010	920	167.3	1,506.80	788.5	692.9	813.9	46.00%	55.7	17.2	38.5	23.00%	65.7	39.25%	85	166
2011	920	175.7	1,591.00	832.5	746	845	46.90%	58.3	18.1	40.2	22.89%	69.5	39.57%	89.8	174.2
2012	920	184.4	1,678.50	878.3	801.8	876.7	47.80%	60.7	19	41.7	22.62%	72.5	39.34%	95.3	182.9
2013	920	193.6	1,769.80	926.1	861.6	908.2	48.70%	63.5	19.9	43.6	22.51%	76.8	39.68%	101	191.8
2014	920	203.1	1,864.60	975.7	925.3	939.3	49.60%	66.2	20.9	45.3	22.31%	81.2	39.99%	107.1	201.2
2015	920	212.9	1,963.30	1,027.40	993.4	969.9	50.60%	69.2	21.9	47.3	22.22%	85.8	40.28%	113.4	210.8
2016	920	223.2	2,065.90	1,081.10	1,065.90	1,000.00	51.60%	72.4	23	49.4	22.13%	90.5	40.56%	120.2	220.9
2017	920	233.9	2,172.60	1,137.00	1,142.80	1,029.80	52.60%	75.7	24.1	51.6	22.09%	95	40.62%	127.1	231.4
2018	920	244.9	2,283.50	1,195.00	1,224.20	1,059.30	53.60%	79.2	25.2	54	22.05%	99.6	40.68%	134.5	242.3
2019	920	256.5	2,399.00	1,255.40	1,310.50	1,088.50	54.60%	83	26.4	56.6	22.07%	104.6	40.76%	142.2	253.7
2020	920	268.5	2,519.30	1,318.30	1,401.50	1,117.80	55.60%	87	27.6	59.4	22.10%	109.2	40.68%	150.2	265.5
2021	920	281	2,644.70	1,383.90	1,497.70	1,147.00	56.60%	91.3	28.9	62.4	22.20%	114.2	40.63%	158.4	277.8
2022	920	294.1	2,775.30	1,452.20	1,599.40	1,175.90	57.60%	95.7	30.3	65.4	22.25%	119.4	40.61%	167.2	290.6
2023	920	307.7	2,911.00	1,523.20	1,706.70	1,204.30	58.60%	100.2	31.7	68.5	22.29%	124.9	40.61%	176.4	304.1
2024	920	321.9	3,052.10	1,597.00	1,819.60	1,232.50	59.60%	105	33.1	71.9	22.34%	130.3	40.49%	186.2	318
2025	920	336.6	3,198.50	1,673.60	1,938.40	1,260.10	60.60%	110	34.6	75.4	22.39%	136	40.41%	196.5	332.4
2026	920	351.9	3,350.70	1,753.20	2,064.10	1,286.60	61.60%	115.3	36.2	79.1	22.47%	142.5	40.51%	207	347.6
2027	920	367.9	3,508.80	1,835.90	2,197.20	1,311.60	62.60%	120.8	37.9	82.9	22.53%	149.4	40.62%	218.1	363.3
2028	920	384.5	3,672.60	1,921.60	2,337.40	1,335.20	63.60%	126.3	39.6	86.7	22.55%	156.2	40.61%	229.9	379.7
2029	920	401.9	3,842.40	2,010.40	2,485.40	1,357.00	64.70%	132.2	41.4	90.8	22.59%	163.3	40.64%	242.2	396.8
2030	920	420.1	4,018.50	2,102.60	2,641.50	1,377.00	65.70%	138.3	43.2	95.1	22.64%	170.4	40.57%	254.8	414.9
2031	920	439.2	4,201.40	2,198.30	2,806.60	1,394.80	66.80%	144.7	45.2	99.5	22.65%	178.1	40.54%	267.8	433.5
2032	920	458.9	4,391.10	2,297.50	2,981.70	1,409.40	67.90%	151.3	47.2	104.1	22.67%	186.5	40.65%	281.4	453.1
2033	920	479.6	4,587.90	2,400.50	3,168.30	1,419.60	69.10%	158.2	49.4	108.8	22.69%	196	40.88%	295.4	473.6
2034	920	501.3	4,792.50	2,507.50	3,378.40	1,414.10	70.50%	165.4	51.6	113.8	22.70%	216.5	43.18%	309.8	495.1
2035	920	524.1	5,005.20	2,618.80	3,602.50	1,402.70	72.00%	172.9	53.9	119	22.69%	226.3	43.18%	324.6	517.4
2036	920	547.7	5,226.60	2,734.60	3,841.90	1,384.70	73.50%	180.7	56.4	124.3	22.69%	236.5	43.18%	339.9	540.8
2037	920	572.5	5,457.10	2,855.20	4,097.70	1,359.40	75.10%	188.8	58.9	129.9	22.69%	247.2	43.18%	355.7	565.2
2038	920	598.3	5,697.30	2,980.90	4,371.50	1,325.80	76.70%	197.3	61.6	135.7	22.68%	258.3	43.18%	372	590.8
2039	920	625.4	5,947.80	3,112.00	4,664.80	1,283.00	78.40%	206.2	64.4	141.8	22.67%	270	43.18%	388.7	617.5
2040	920	653.7	6,209.40	3,248.90	4,979.30	1,230.10	80.20%	215.4	67.3	148.1	22.66%	282.2	43.18%	406	645.5
2041	920	683.2	6,482.80	3,391.90	5,316.90	1,165.90	82.00%	225.1	70.3	154.8	22.66%	295	43.18%	423.8	674.5
2042	920	714	6,768.60	3,541.40	5,679.30	1,089.30	83.90%	235.2	73.5	161.7	22.65%	308.3	43.18%	442.3	704.9
2043	920	746.1	7,067.40	3,697.80	6,068.60	998.8	85.90%	245.7	76.8	168.9	22.64%	322.2	43.18%	461.6	736.6
2044	920	779.7	7,380.10	3,861.40	6,486.90	893.2	87.90%	256.8	80.3	176.5	22.64%	336.7	43.18%	481.5	769.8
2045	920	814.8	7,707.50	4,032.70	6,936.80	770.7	90.00%	268.3	83.9	184.4	22.64%	351.8	43.18%	502.2	804.4