Gabriel Roeder Smith & Company
Consultants & Actuaries

JUDGES' RETIREMENT SYSTEM OF ILLINOIS

ANNUAL ACTUARIAL VALUATION AS OF JUNE 30, 2012

GRS Gabriel Roeder Smith & Company
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October 26, 2012

Board of Trustees
Judges' Retirement System
Springfield, IL

Re: Judges' Retirement System Actuarial Valuation as of July 1, 2012

Dear Board Members:

The results of the June 30, 2012, Annual Actuarial Valuation of the Judges' Retirement System (JRS or System) are presented in this report. The purposes of the valuation were to measure the System's funding status and to determine the employer contribution rate for the fiscal year beginning July 1, 2013, and ending June 30, 2014.

The valuation was based upon information furnished by JRS staff concerning System benefits, financial transactions, and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data.

The contribution rate has been determined under Illinois statues, in particular under 40 ILCS Section 5/18-131. The System's contribution rate for the fiscal year beginning July 1, 2013, does meet the requirements for amortizing the unfunded liability under GASB Statement No. 25.

To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of JRS as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

The undersigned actuaries are members of the American Academy of Actuaries and are independent of the plan sponsor and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

By: Alex Rivera

Alex Rivera, FSA, EA, MAAA
Senior Consultant

By: David T Kausch

David Kausch, FSA, EA, MAAA
Senior Consultant

Additional Disclosures Required by Actuarial Standards of Practice

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

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SECTION A

INTRODUCTION

Introduction

The law governing the Judges' Retirement System (JRS or System) requires the Actuary, as the technical advisor to the Board of Trustees to:

> "...make an annual valuation of the liabilities and reserves of the system, an annual determination of the amount of the required State contributions and certify the results thereof to the board (40 ILCS Section 5/18-152 (2))."

Gabriel, Roeder, Smith & Company has been retained by the Board of Trustees to perform an actuarial valuation as of June 30, 2012. In this report, we present the results of the valuation and the appropriation requirements under Public Act 88-0593, Public Act 93-0002, Public Act 93-0839, and Public Act 96-0043 for fiscal year ending June 30, 2014. For purposes of disclosure, this report also includes the annual required contribution and schedule of funding progress as required by GASB Statement No. 25 and the development of the net pension obligation in accordance with GASB Statement No. 27.

The valuation was completed based upon membership and financial data provided by the administrative staff of the System. The actuarial assumptions used were similar to the assumptions used in the previous valuation, as recommended by the prior actuary, and appear to be reasonable. The cost method used to determine the benefit liabilities is the Projected Unit Credit Cost Method. For valuation purposes, as well as projection purposes, actuarial value of assets are based on a 5-year smoothing method.

Changes Since Last Valuation

The June 30, 2012, actuarial valuation represents the first actuarial valuation of the JRS performed by GRS. As part of the transition from the prior actuary, Goldstein and Associates, GRS performed a replication of the June 30, 2011, actuarial valuation. The accrued liability calculated as part of the June 30, 2011, replication valuation performed by GRS was within 0.06 percent of the results of the June 30, 2011, valuation performed by the prior actuary. This deviation is well within a reasonable range. All results prior to June 30, 2012, are taken from the prior actuaries reports.

While GRS has retained many of the assumptions and methods utilized by the prior actuary, we do recommend a review of the assumptions prior to the June 30, 2013, valuation. One assumption that may need particular attention is the mortality assumption. The current assumption may be considered one in which retiree mortality is overstated and does not contain any provisions for future mortality improvements.

It should also be noted that the fiscal year beginning July 1, 2013, State contribution calculated in this report is based upon a level percent of capped payroll. This represents a change from the way in which the prior actuary calculated the State contributions. This change increased the fiscal year beginning July 1, 2013, State contribution by 42 percent from \$89.1 million to \$126.8 million.

Following is a summary of the key valuation results for the current and prior plan years.

Key Valuation Results

Valuation Date:	June 30, 2012	June 30, 2011*
Fiscal Year Ending:	June 30, 2014	June 30, 2013
Estimated Statutory Contributions:		
• Annual Amount	$126,808,000	$88,210,000
• Percentage of Covered Payroll	74.091%	49.834%
Annual Required Contribution (ARC):		
• Annual Amount	$125,061,595	$125,576,795
• Percentage of Covered Payroll	73.071%	70.945%
Membership		
• Number of		
- Active Members	968	968
- Members Receiving Payments	1,056	1,047
- Inactive Members	15	16
- Total	2,039	2,031
• Covered Payroll	$172,345,976	$170,742,985
• Annualized Benefit Payments	$108,097,371	$103,614,198
Assets		
• Market Value of Assets (MVA)	$577,976,367	$605,960,208
• Actuarial Value of Assets (AVA)	$601,219,999	$614,596,203
• Return on MVA	-0.01%	20.56%
• Return on AVA	2.42%	2.83%
• Ratio – AVA to MVA	104.02%	101.43%
Actuarial Information		
• Normal Cost Amount	$44,659,629	$45,302,545
• Actuarial Accrued Liability (AAL)	$2,021,715,796	$1,952,539,400
• Unfunded Actuarial Accrued Liability (UAAL)	$1,420,495,797	$1,337,943,197
• Funded Ratio based on AVA	29.74%	31.48%
• UAAL as % of Covered Payroll	824.21%	783.60%
• Funded Ratio based on MVA	28.59%	31.03%

**Valuation results as of June 30, 2011, based on information disclosed in the prior actuary's report.*

Appropriation Requirements Under P.A. 88-0593, P.A. 93-0002, P.A. 93-0839, and P.A. 96-0043

The law governing the System under P.A. 88-0593 provides that:

For fiscal years 2011 through 2045, the minimum contribution to the System for each fiscal year shall be an amount determined to be sufficient to cause the total assets of the System to equal 90 percent of the total actuarial liabilities of the System by the end of fiscal year 2045. In making these determinations, the required contribution shall be calculated each year as a level-percentage-of-payroll over the years remaining to and including fiscal year 2045 and shall be determined under the projected unit credit actuarial cost method. For fiscal years 1997 through 2010, the minimum contribution to the System, as a percentage of the payroll, shall be increased in equal annual increments so that by fiscal year 2010, the contribution rate is at the same level as the contribution rate for fiscal years 2011 through 2045.

The above calculation provides the basis for calculating the appropriation requirements under P.A. 93-0002. For fiscal years 2005 and later, the contributions under P.A. 93-0002 start with a calculation of the contribution based upon the hypothetical asset value which assumes no infusion from the proceeds of the GOB sale that were deposited July 1, 2003 (Table 4a). This contribution is then reduced by the debt service beginning in fiscal year 2005 to produce the maximum contribution. A second projection is performed to develop the P.A. 88-0593 formula rate, which includes the GOB deposit. The lower of this formula rate with the GOB assets included and the maximum contribution is the required state appropriation (Table 4b).

Pursuant to Public Act 96-0043, for the calculation of the fiscal year 2011 contribution and beyond, the value of the System's assets shall be equal to the actuarial value of the System's assets. As of June 30, 2008, the actuarial value of the System's assets shall be equal to the market value of the assets as of that date. In determining the actuarial value of the System's assets for fiscal years after June 30, 2008, any actuarial gains or losses from investment return incurred in a fiscal year shall be recognized in equal annual amounts over the five-year period following that fiscal year. Furthermore, for purposes of determining the required State contribution to the System for a particular year, the projected actuarial value of assets shall be assumed to earn a rate of return equal to the System's actuarially assumed rate of return.

The following tables outline the reconciliation of the market value of assets and the development of the hypothetical asset value as of June 30, 2012. Also, the tables show the development of the actuarial value of assets under both the market value and the hypothetical value of assets.

Market Value of Asset Reconciliation and the Development of the Actuarial Value of Assets based upon the Market Value of Assets

1.	Market Value of Assets 6/30/2011	$ 605,960,208
2.	Actual State Contribution Amount	63,644,099
3.	Employee Contribution Amount	16,444,796
4.	Benefit Payouts & Refunds	(107,239,550)
5.	Administrative Expenses	(764,090)
6.	Investment Income	(69,096)
7.	Market Value of Assets 6/30/2012	577,976,367
8.	Expected Investment Return at 7.0%	41,456,723
9.	Investment Gain/(Loss) Current Year	(41,525,819)
10.	Deferred Investment Gains and (Losses) All Years	(23,243,632)
11.	Actuarial Value of Assets 6/30/2012 (7. - 10.)	601,219,999

Development of the Hypothetical Value of Assets and the Development of the Actuarial Value of Assets based upon the Hypothetical Value of Assets

The hypothetical asset value assumes no infusion from the proceeds of the GOB sale that were deposited July 1, 2003.

1.	Hypothetical Value of Assets 6/30/2011	$ 377,600,754
2.	State Contribution Amount[1]	75,076,000
3.	Employee Contribution Amount	16,444,796
4.	Benefit Payouts & Refunds	(107,239,550)
5.	Administrative Expenses	(764,090)
6.	Investment Income[2]	(36,936)
7.	Hypothetical Value of Assets 6/30/2012	361,080,974
8.	Expected Investment Return at 7.0%	25,864,910
9.	Investment Gain/(Loss) Current Year	(25,901,846)
10.	Deferred Investment Gains and (Losses) All Years[3]	(14,205,991)
11.	Hypothetical Actuarial Value of Assets 6/30/2012 (7. - 10.)	375,286,965

[1]Represents FY 2012 no POB basic contribution.
[2]Investment income assumes hypothetical value of assets earns the Fund's actual rate of return for fiscal year 2012 of -0.01 percent.
[3]Deferred gains and losses are estimated based on hypothetical asset values disclosed in the prior actuary's reports.

The fiscal year ending June 30, 2013, certified contribution , as produced by the prior actuary,and projected future year required State contribution rates and amounts assuming deferred investments gains and losses are recognized in the assets are as follows:

Fiscal Year Ending June 30,	Base Contribution	Assumed Payroll (millions)	Total Required Contribution
2013	49.834%	$177.006	$88,210,000
2014	74.091%	171.152	126,808,000
2015	75.520%	172.898	130,572,600
2016	75.206%	174.616	131,321,400
2017	74.907%	176.164	131,958,900
2018	75.389%	177.243	133,621,500
2019	75.389%	178.238	134,371,800
2020	75.389%	179.281	135,158,500
2021	75.389%	180.177	135,833,400
2022	75.389%	180.915	136,389,700
2023	75.292%	182.026	137,051,100

For fiscal years 2014 through 2033, the base contribution is limited by the maximum contribution determined under the assumption that the proceeds of the GOB sale were not deposited; therefore, the contribution rate is not level as a percent of pay.

Pursuant to Public Act 96-0043, the fiscal year 2014 contribution rate is calculated assuming the actuarial value of assets as of July 1, 2012, earns a rate of return equal to the System's actuarially assumed rate of return.

The contributions for fiscal years 2015 and beyond, as presented above, are developed in Tables 4c and 4d in this report. In those projections, the actuarial valuations as of June 30 for years 2013 through 2016 have been projected as though a valuation in each of those years was performed. At each projected valuation, an additional 20 percent of the investment gains and losses are recognized. The market value of assets at June 30, 2012, is assumed to have a rate of return equal to the valuation interest rate going forward. Therefore, the actuarial value of assets is calculated by adjusting the market value at each respective valuation date by the remaining percentage of the investment gains and losses. The actuarial value of assets converges to market value in 2016, when all remaining investment gains and losses have been recognized. Because the deferred asset gains and losses are incorporated into the projections, the projections found in Tables 4c and 4d do not show a stable contribution rate until the impact of the five-year asset smoothing has been fully realized.

Method of Calculation for Appropriation Requirements

The results are based on the projected unit credit actuarial cost method, the data provided and assumptions used for the June 30, 2012, actuarial valuation. In order to determine projected contribution rates and amounts, the following additional assumptions were used:

- Projected annualized payroll of $177,000,000 for fiscal year 2013.
- Total employer contributions of $63,644,099 for fiscal year 2013, as provided by the System.
- Administrative expenses of $814,500 for fiscal year 2013, as provided by the System.
- New entrants whose average age is 46.36 and average uncapped pay is $178,143 (2012 dollars). The active member population is assumed to remain level at 968 for all years of the 33-Year projection.
- Projected benefits for members hired on or after January 1, 2011, are based on the new provisions established in P.A. 96-0889.

The average increase in total payroll for the 33-year projection period is approximately 4.0 percent per year. It is important to note that benefits for new hires are based on capped payroll which is ultimately projected to grow at 3.0 percent per year. All results in this valuation assume that State contributions will be made on capped pay.

To determine the contribution rates, the expected 2013 appropriation was converted to a percentage of the expected 2013 payroll. An amortization schedule was then determined on the assumption that:

- The ratio of total assets to total actuarial liabilities will be 90 percent by June 30, 2045.
- The actuarial value of assets shall be assumed to earn a rate of return equal to the System's actuarially assumed rate of return.
- The contribution rates for fiscal years 2010 through 2033 will not be uniform, but the rate for any one of these years will be the minimum of: the difference between the “without-GOB” contribution and the debt service, and the underlying formula rate as determined by Public Act 88-0593.
- The contribution rate for fiscal year 2013 will be 49.83 percent.
- The contribution rates for fiscal years 2034 through 2045 will be a uniform percentage of capped payroll.

GASB: Financial Accounting Information

In an effort to enhance the understandability and usefulness of the pension information that is included in the financial reports of pension plans for state and local governments, the Governmental Accounting Standards Board (GASB) has issued Statement No. 25—Financial Reporting for Defined Benefit Pension Plans and Statement No. 27—Accounting for Pensions by State and Local Governmental Employers.

GASB Statement No. 25 establishes a financial reporting framework for defined benefit plans. In addition to two required statements regarding plan assets, the statement requires two schedules and accompanying notes disclosing information relative to the funded status of the plan and contribution patterns.

- The Schedule of Funding Progress includes information about the actuarially determined funded status from a long-term ongoing plan perspective and the progress made toward accumulating sufficient assets. For JRS, the liabilities are developed based on the Projected Unit Credit Cost Method. The assets are shown as an actuarial value. The funded ratio has decreased from 31.48 percent as of June 30, 2011, to 29.74 percent as of June 30, 2012. This decrease is primarily due to the recognition of asset losses from fiscal years 2009 and 2012.

- The Schedule of Employer Contributions provides information about the annual required contribution (ARC) and the percentage of the ARC that was actually contributed. For JRS, the ARC for fiscal year 2012 is equal to the employer normal cost plus a 30-year level-percentage-of-payroll amortization of the unfunded actuarial liability. For fiscal year 2012, State contributions of $63,644,099 were approximately 57.4 percent of the ARC. The ARC for fiscal years 2013 is greater than the employer contribution required by State statute while the ARC for 2014 is slightly less than the employer contribution required by State statute.

The annual required contribution as well as the statutory contribution for fiscal years 2013 and 2014 are shown below as a percentage of payroll. The ARC percentage and statutory contribution for 2013 are based on the results of the June 30, 2011, valuation.

	Fiscal Year 2014	**Fiscal Year 2013**[1]
1. Employer normal cost	$44,659,629	$45,302,545
2. Initial amount to amortize the unfunded liability over 30 years as a level percentage of capped payroll	80,401,966	80,274,250
3. ARC [(1) + (2)]	$125,061,595	$125,576,795
4. ARC as a percentage of payroll	73.071%	70.945%
5. Estimated statutory contribution	$126,808,000	$88,210,000
6. Estimated statutory contribution as a percentage of payroll	74.091%	49.834%
7. Estimated statutory contribution as a percentage of ARC [(5) ÷ (3)]	101.396%	70.244%

[1] *As disclosed in the prior actuary's report.*

GASB Statement No. 27 establishes standards for the measurement, recognition, and disclosure of pension expense and related liabilities. Annual pension cost is measured and disclosed on the accrual basis of accounting. In general, the annual pension cost is equal to the ARC with adjustments for past under-contributions or over-contributions. These adjustments are based on the net pension obligation (NPO) that represents the cumulative difference between the annual pension cost and the actual contribution to the plan. The first adjustment is equal to interest on the NPO, which is added to the ARC. The second adjustment is an amortization of the NPO, which is deducted from the ARC. This amortization is over an open 30-year period for fiscal year 2012 (i.e., the 30-year period is restarted each fiscal year).

These Statements were adopted by JRS (and the State of Illinois) for the 1997 fiscal year. A transition pension liability (asset) was developed under Statement No. 27 equal to the cumulative difference between the actuarially determined funding requirement and the actual amount contributed for fiscal years 1988 through 1996. As of the adoption date, all outstanding pension liabilities (assets) were adjusted to equal the transition NPO. The NPO as of June 30, 2011, of $470,104,091 has increased to $523,681,472 as of June 30, 2012, due to the 2012 APC of $117,221,480 and actual 2012 employer contributions of $63,644,099.

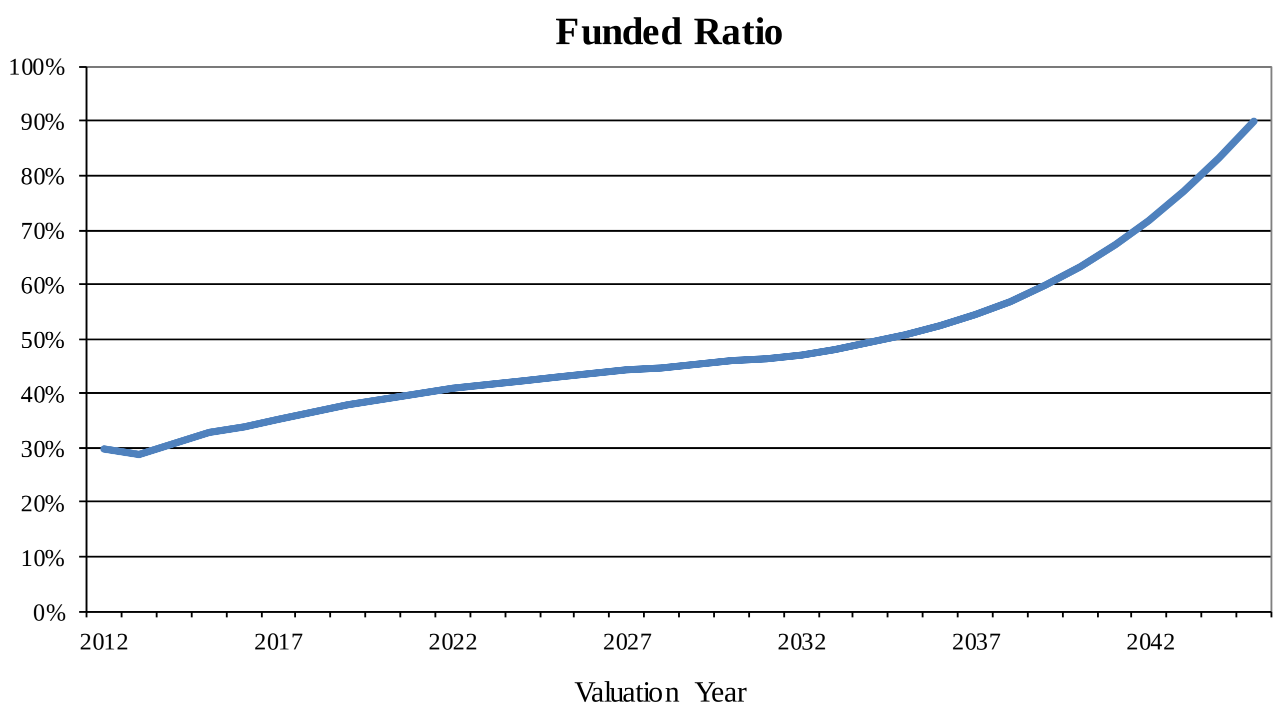
The GASB Statement Nos. 25 and 27 information is presented in draft form for review by the auditor. Please let us know if there are any changes so that we may maintain consistency with the State's financial statements.

Observations on Actuarial Funding and Statutory Funding

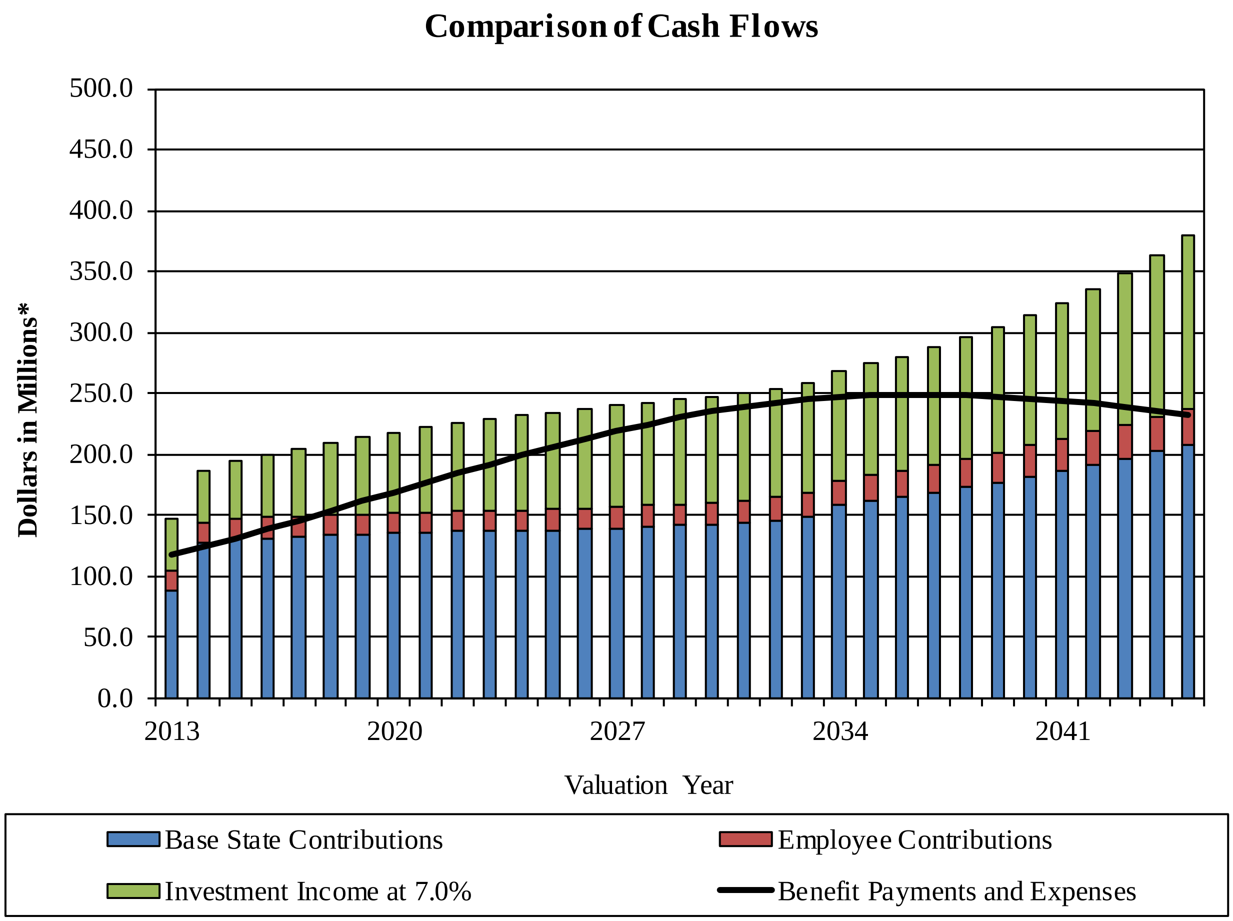
GASB Statements Nos. 25 and 27 provide guidance for retirement plans and plan sponsors on the development of an annual expense requirement to be reported in their annual financial statements. Under the GASB rules, this expense requirement is called the Annual Required Contribution (ARC). The ARC is the sum of the normal cost and amortization of the unfunded accrued liability and represents the annual employer contributions that are projected to finance benefits for current plan members over a period not to exceed 30 years.

A key objective of the ARC is to accrue costs over the working lifetime of plan members to ensure that benefit obligations are satisfied and intergenerational equity is promoted. Although the ARC is solely an accounting provision, in certain circumstances it could represent a reasonable annual funding target and therefore is used by some plan sponsors as their de facto funding requirement. Given there is no requirement that the accounting provision for pension expense must equal the annual funding requirement, some plan sponsors adopt funding policies that differ from the ARC. However, a funding policy that differs significantly from the ARC approach could result in a potential "back-loading," meaning contributions are deferred to the future. Back loading could result in an underfunding of the system.

The statutory funding policy adopted for JRS provides for level percent of pay funding that produces a funding target of 90 percent by 2045, assuming an open group projection. The following graph shows the projected funded ratio.



The following graph compares the projected benefits and expenses against employer contributions, employee contributions, and investment income.



**Future dollar amounts are based on assumed inflationary increases.*

The provisions of P.A. 96-0043 develop an actuarial value of assets based on five year smoothing that does not recognize deferred investment gains and losses in the projection of assets used to develop the statutory contribution. This policy has a tendency to defer contributions when plan assets experience a loss.

Given that JRS funded ratio at June 30, 2012, is only 29 percent on a market value of assets basis, and because the current statutory policy tends to back-load and defer contributions, we would advise strengthening the current statutory funding policy. Examples of other methods to strengthen the current funding policy include:

1. Reducing the projection period needed to reach 90 percent funding,

2. Increasing the 90 percent funding target,

3. Separating the financing of benefits for members hired before and after December 31, 2010, and,

4. Reverting back to the market value of assets when developing contribution rates.

Finally, the statutory contribution policy could also be strengthened by changing to an ARC based funding approach with an appropriate amortization policy for each respective tiered benefit structure.

SECTION B

FUNDING RESULTS

Table 1

Results of Actuarial Valuation as of June 30, 2012

1	Number of Members	
	a. Active	968
	b. Inactive:	
	i. Eligible for deferred vested pension benefits	7
	ii. Eligible for return of contributions only	8
	c. Current Benefit Recipients:	
	i. Retirement annuities	725
	ii. Survivor annuities	331
	d. Total	2,039
2	Covered Payroll	$172,345,976
3	Annualized Benefit Payments Currently Being Made	
	a. Retirement	$88,029,990
	b. Survivor	20,067,381
	d. Total	$108,097,371
4	Actuarial Liability—Annuitants	
	a. Current Benefit Recipients:	
	i. Retirement annuities	$1,108,702,441
	ii. Survivor annuities	180,378,363
	b. Total	$1,289,080,804

		Normal Cost	Actuarial Liability
5	Actuarial Liability—Inactive Members		$5,855,198
6	Active Members		
	a. Pension Benefits	$43,014,106	$524,822,298
	b. Cost-of-Living Adjustments	14,617,734	175,220,406
	c. Death Benefits	2,058,486	23,401,757
	d. Disability	192,324	1,358,560
	e. Withdrawal	287,106	1,976,773
	f. Expenses	814,500	0
	g. Total	$60,984,256	$726,779,794
7	Total Actuarial Liability (4 + 5 + 6)		$2,021,715,796
8	Market Value of Assets (MVA)		$577,976,367
9	Unfunded Actuarial Liability Based on MVA (7 – 8)		$1,443,739,429
10	Funded Percentage Based on MVA (8 ÷ 7)		28.59%
11	Actuarial Value of Assets (AVA)		$601,219,999
12	Unfunded Actuarial Liability Based on AVA (7 – 11)		$1,420,495,797
13	Funded Percentage Based on AVA (11 ÷ 7)		29.74%
14	Total Normal Cost	$60,984,256	
15	Employee Contributions	$16,324,627	
16	Annual Employer Normal Cost	$44,659,629	
	(% payroll)	25.91%	

Analysis of Change in Unfunded Accrued Actuarial Liability

In addition to the expected change in the unfunded accrued actuarial liability, changes in membership demographics, and fund assets have affected the valuation results. The increase in the unfunded accrued actuarial liability (UAAL) after accounting for the change in actuary of $81,428,330 was due to the following:

1	UAAL at 06/30/2011	$	1,337,943,197
2	Change in UAAL due to new actuary		1,124,270
3	Adjusted UAAL at 06/30/2011	$	1,339,067,467
4	Contributions		
	a. Contributions due		
	i interest on 1)	$	93,734,723
	ii members contributions		16,444,796
	iii employer normal cost		45,835,688
	iv interest on ii and iii		2,142,950
	v total due	$	158,158,157
	b. Contributions paid		
	i member contributions	$	16,444,796
	ii state agencies		63,644,099
	iii interest on i and ii		2,755,702
	iv total paid	$	82,844,597
	c. Expected increase in UAAL	$	75,313,560
5	Expected UAAL at 06/30/2012	$	1,414,381,027
6	(Gains)/Losses		
	a. investment income	$	27,522,701
	b. demographic		(21,407,931)
	c. total	$	6,114,770
7	Plan Provision Changes	$	-
8	Assumption Changes	$	-
9	Total Change in UAAL	$	81,428,330
10	UAAL at 06/30/2012	$	1,420,495,797

Analysis of Financial Gains and Losses in Unfunded Accrued Actuarial Liability for Fiscal Year Ending June 30, 2012

	Activity		(Gain) Loss	% of 06/30/2011 AAL
1	Actuarial (Gain)/Loss			
	a. Retirements	$	(10,758,561)	-0.54%
	b. Incidence of Disability		(186,364)	-0.01%
	c. In-Service Mortality		1,107,330	0.06%
	d. Retiree Mortality		5,285,389	0.27%
	e. Salary Increases		(19,671,785)	-1.01%
	f. Terminations		(2,292,659)	-0.12%
	g. Investment		27,522,701	1.41%
	h. New Entrant Liability		356,156	0.02%
	i. Other		4,752,563	0.24%
	j. Total Actuarial (Gain)/Loss	$	6,114,770	0.32%
2	Plan Provision Changes	$	-	0.00%
3	Assumption Changes	$	-	0.00%
4	Contribution (Excess)/Shortfall	$	75,313,560	3.86%
5	Total Financial (Gain)/Loss	$	81,428,330	4.18%

Table 4a

33-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 96-0043
Maximum Contribution Calculation: Without GOB Proceeds
Rate of Return on Assets = 7.0%

(All Dollar Amounts in Millions)

							Annual Normal Cost				State Contribution		
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Total	Employee Cont.	Balance	Percent of Pay	Amount	Percent of Pay	Total Expenses
2013	968	$2,105.63	$401.42	$1,704.21	19.06%	$177.01	$60.98	$16.32	$44.66	25.23%	$100.33	56.69%	$116.79
2014	968	2,187.13	465.15	1,721.98	21.27%	171.15	60.01	16.22	43.79	25.59%	142.01	82.97%	123.78
2015	968	2,265.82	527.81	1,738.01	23.29%	172.90	58.95	16.56	42.39	24.52%	143.46	82.97%	130.93
2016	968	2,341.07	588.63	1,752.44	25.14%	174.62	57.75	16.55	41.20	23.59%	144.89	82.98%	138.35
2017	968	2,411.91	647.18	1,764.73	26.83%	176.16	56.01	16.57	39.44	22.39%	146.17	82.97%	145.97
2018	968	2,477.88	702.49	1,775.39	28.35%	177.24	54.33	16.36	37.97	21.42%	147.07	82.98%	153.75
2019	968	2,539.00	754.83	1,784.17	29.73%	178.24	52.80	16.49	36.31	20.37%	147.89	82.97%	161.33
2020	968	2,594.34	803.76	1,790.58	30.98%	179.28	50.93	16.56	34.37	19.17%	148.76	82.98%	169.10
2021	968	2,643.28	848.95	1,794.33	32.12%	180.18	48.84	16.70	32.14	17.84%	149.50	82.97%	176.90
2022	968	2,686.13	890.24	1,795.89	33.14%	180.91	47.25	16.74	30.51	16.86%	150.11	82.97%	184.39
2023	968	2,722.70	927.87	1,794.83	34.08%	182.03	45.71	16.86	28.85	15.85%	151.04	82.97%	191.76
2024	968	2,752.95	961.99	1,790.96	34.94%	183.32	44.33	16.96	27.37	14.93%	152.11	82.99%	198.88
2025	968	2,776.59	992.83	1,783.76	35.76%	184.82	42.97	17.23	25.74	13.93%	153.35	82.98%	205.87
2026	968	2,793.51	1,020.48	1,773.03	36.53%	186.42	41.68	17.47	24.21	12.99%	154.68	82.97%	212.61
2027	968	2,803.91	1,045.41	1,758.50	37.28%	188.19	40.64	17.82	22.82	12.13%	156.15	82.97%	218.92
2028	968	2,807.89	1,067.80	1,740.09	38.03%	190.22	39.74	17.89	21.85	11.49%	157.84	82.99%	224.83
2029	968	2,806.14	1,088.50	1,717.64	38.79%	192.55	39.19	17.97	21.22	11.02%	159.77	82.98%	229.99
2030	968	2,798.83	1,108.31	1,690.52	39.60%	195.26	38.72	18.19	20.53	10.51%	162.02	82.98%	234.71

Normal cost rate includes administrative expenses.
State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 94-0004, and Public Act 96-0043.
Total expenses shown include benefit payments, refunds and administrative expenses.
Actuarial accrued liability and assets are measured at Plan Year End.
Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

33-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 96-0043
Maximum Contribution Calculation: Without GOB Proceeds
Rate of Return on Assets = 7.0%

(All Dollar Amounts in Millions)

							Annual Normal Cost				State Contribution		
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Total	Employee Cont.	Balance	Percent of Pay	Amount	Percent of Pay	Total Expenses
2031	968	$2,786.54	$1,128.47	$1,658.07	40.50%	$198.25	$38.49	$18.68	$19.81	9.99%	$164.50	82.98%	$238.70
2032	968	2,769.62	1,149.57	1,620.05	41.51%	201.60	38.41	18.91	19.50	9.67%	167.28	82.98%	242.16
2033	968	2,748.79	1,173.36	1,575.43	42.69%	205.23	38.55	19.77	18.78	9.15%	170.29	82.98%	244.85
2034	968	2,724.64	1,201.06	1,523.58	44.08%	209.25	38.85	20.61	18.24	8.72%	173.63	82.98%	246.87
2035	968	2,697.86	1,233.97	1,463.89	45.74%	213.61	39.31	21.45	17.86	8.36%	177.24	82.97%	248.15
2036	968	2,668.96	1,273.42	1,395.54	47.71%	218.38	39.85	22.28	17.57	8.05%	181.20	82.97%	248.85
2037	968	2,638.56	1,320.76	1,317.80	50.06%	223.46	40.50	23.11	17.39	7.78%	185.42	82.98%	248.94
2038	968	2,607.25	1,377.45	1,229.80	52.83%	228.89	41.23	23.94	17.29	7.55%	189.92	82.97%	248.44
2039	968	2,575.68	1,445.03	1,130.65	56.10%	234.63	42.06	24.78	17.28	7.36%	194.69	82.98%	247.34
2040	968	2,544.34	1,525.02	1,019.32	59.94%	240.71	42.92	25.62	17.30	7.19%	199.73	82.98%	245.82
2041	968	2,513.92	1,619.10	894.82	64.41%	247.06	43.89	26.48	17.41	7.05%	205.00	82.98%	243.73
2042	968	2,484.92	1,728.93	755.99	69.58%	253.78	44.91	27.34	17.57	6.92%	210.57	82.97%	241.30
2043	968	2,457.97	1,856.30	601.67	75.52%	260.74	46.03	28.22	17.81	6.83%	216.35	82.98%	238.43
2044	968	2,433.61	2,003.07	430.54	82.31%	268.04	47.20	29.12	18.08	6.75%	222.41	82.98%	235.26
2045	968	2,412.29	2,171.07	241.22	90.00%	275.63	48.43	30.03	18.40	6.68%	228.71	82.98%	231.88

Normal cost rate includes administrative expenses.
State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 94-0004, and Public Act 96-0043.
Total expenses shown include benefit payments, refunds and administrative expenses.
Actuarial accrued liability and assets are measured at Plan Year End.
Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

33-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 93-0002, Public Act 96-0043
Rate of Return on Assets = 7.0%

(All Dollar Amounts in Millions)

							Annual Normal Cost				Required State Contribution						
											(a)	(b)	(c)=(a)-(b)	(d)	Minimum of (c) and (d)		
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Total	Employee Cont.	Balance	Percent of Pay	Without GOB Cont.	Debt Service	Maximum Cont.	Formula Rate With GOB	Required Cont.	Percent of Pay	Total Expenses
2013	968	$2,105.63	$630.63	$1,475.00	29.95%	$177.01	$60.98	$16.32	$44.66	25.23%	$100.33	$11.38	$88.95	$88.21	$88.21	49.83%	$116.79
2014	968	2,187.13	694.68	1,492.45	31.76%	171.15	60.01	16.22	43.79	25.59%	142.01	11.30	130.71	126.81	126.81	74.09%	123.78
2015	968	2,265.82	757.51	1,508.31	33.43%	172.90	58.95	16.56	42.39	24.52%	143.46	11.22	132.24	128.10	128.10	74.09%	130.93
2016	968	2,341.07	818.37	1,522.70	34.96%	174.62	57.75	16.55	41.20	23.59%	144.89	11.15	133.74	129.37	129.37	74.09%	138.35
2017	968	2,411.91	876.81	1,535.10	36.35%	176.16	56.01	16.57	39.44	22.39%	146.17	11.54	134.63	130.52	130.52	74.09%	145.97
2018	968	2,477.88	931.91	1,545.97	37.61%	177.24	54.33	16.36	37.97	21.42%	147.07	11.93	135.14	131.32	131.32	74.09%	153.75
2019	968	2,539.00	983.92	1,555.08	38.75%	178.24	52.80	16.49	36.31	20.37%	147.89	12.28	135.61	132.06	132.06	74.09%	161.33
2020	968	2,594.34	1,032.41	1,561.93	39.79%	179.28	50.93	16.56	34.37	19.17%	148.76	13.09	135.67	132.83	132.83	74.09%	169.10
2021	968	2,643.28	1,077.05	1,566.23	40.75%	180.18	48.84	16.70	32.14	17.84%	149.50	13.84	135.66	133.49	133.49	74.09%	176.90
2022	968	2,686.13	1,117.69	1,568.44	41.61%	180.91	47.25	16.74	30.51	16.86%	150.11	14.54	135.57	134.04	134.04	74.09%	184.39
2023	968	2,722.70	1,154.51	1,568.19	42.40%	182.03	45.71	16.86	28.85	15.85%	151.04	15.21	135.83	134.86	134.86	74.09%	191.76
2024	968	2,752.95	1,187.63	1,565.32	43.14%	183.32	44.33	16.96	27.37	14.93%	152.11	16.30	135.81	135.82	135.81	74.08%	198.88
2025	968	2,776.59	1,216.36	1,560.23	43.81%	184.82	42.97	17.23	25.74	13.93%	153.35	17.31	136.04	136.93	136.04	73.61%	205.87
2026	968	2,793.51	1,241.28	1,552.23	44.43%	186.42	41.68	17.47	24.21	12.99%	154.68	17.75	136.93	138.12	136.93	73.45%	212.61
2027	968	2,803.91	1,262.89	1,541.02	45.04%	188.19	40.64	17.82	22.82	12.13%	156.15	18.16	137.99	139.43	137.99	73.33%	218.92
2028	968	2,807.89	1,280.86	1,527.03	45.62%	190.22	39.74	17.89	21.85	11.49%	157.84	19.00	138.84	140.94	138.84	72.99%	224.83
2029	968	2,806.14	1,296.02	1,510.12	46.19%	192.55	39.19	17.97	21.22	11.02%	159.77	19.76	140.01	142.66	140.01	72.71%	229.99
2030	968	2,798.83	1,308.71	1,490.12	46.76%	195.26	38.72	18.19	20.53	10.51%	162.02	20.93	141.09	144.67	141.09	72.26%	234.71

Normal cost rate includes administrative expenses.
State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 93-0002, Public Act 94-0004, and Public Act 96-0043.
Total expenses shown include benefit payments, refunds and administrative expenses.
Actuarial accrued liability and assets are measured at Plan Year End.
Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

33-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 93-0002, Public Act 96-0043
Rate of Return on Assets = 7.0%

(All Dollar Amounts in Millions)

							Annual Normal Cost				Required State Contribution						
											(a)	(b)	(c)=(a)-(b)	(d)	Minimum of (c) and (d)		
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Total	Employee Cont.	Balance	Percent of Pay	Without GOB Cont.	Debt Service	Maximum Cont.	Formula Rate With GOB	Required Cont.	Percent of Pay	Total Expenses
2031	968	$2,786.54	$1,320.14	$1,466.40	47.38%	$198.25	$38.49	$18.68	$19.81	9.99%	$164.50	$22.01	$142.49	$146.88	$142.49	71.88%	$238.70
2032	968	2,769.62	1,331.38	1,438.24	48.07%	201.60	38.41	18.91	19.50	9.67%	167.28	22.50	144.78	149.37	144.78	71.82%	242.16
2033	968	2,748.79	1,344.70	1,404.09	48.92%	205.23	38.55	19.77	18.78	9.15%	170.29	22.43	147.86	152.06	147.86	72.05%	244.85
2034	968	2,724.64	1,365.15	1,359.49	50.10%	209.25	38.85	20.61	18.24	8.72%	173.63	0.00	N/A	155.04	155.04	74.09%	246.87
2035	968	2,697.86	1,389.93	1,307.93	51.52%	213.61	39.31	21.45	17.86	8.36%	177.24	0.00	N/A	158.27	158.27	74.09%	248.15
2036	968	2,668.96	1,420.23	1,248.73	53.21%	218.38	39.85	22.28	17.57	8.05%	181.20	0.00	N/A	161.80	161.80	74.09%	248.85
2037	968	2,638.56	1,457.30	1,181.26	55.23%	223.46	40.50	23.11	17.39	7.78%	185.42	0.00	N/A	165.57	165.57	74.09%	248.94
2038	968	2,607.25	1,502.52	1,104.73	57.63%	228.89	41.23	23.94	17.29	7.55%	189.92	0.00	N/A	169.59	169.59	74.09%	248.44
2039	968	2,575.68	1,557.29	1,018.39	60.46%	234.63	42.06	24.78	17.28	7.36%	194.69	0.00	N/A	173.84	173.84	74.09%	247.34
2040	968	2,544.34	1,623.01	921.33	63.79%	240.71	42.92	25.62	17.30	7.19%	199.73	0.00	N/A	178.35	178.35	74.09%	245.82
2041	968	2,513.92	1,701.24	812.68	67.67%	247.06	43.89	26.48	17.41	7.05%	205.00	0.00	N/A	183.05	183.05	74.09%	243.73
2042	968	2,484.92	1,793.50	691.42	72.18%	253.78	44.91	27.34	17.57	6.92%	210.57	0.00	N/A	188.02	188.02	74.09%	241.30
2043	968	2,457.97	1,901.44	556.53	77.36%	260.74	46.03	28.22	17.81	6.83%	216.35	0.00	N/A	193.18	193.18	74.09%	238.43
2044	968	2,433.61	2,026.73	406.88	83.28%	268.04	47.20	29.12	18.08	6.75%	222.41	0.00	N/A	198.59	198.59	74.09%	235.26
2045	968	2,412.29	2,171.06	241.23	90.00%	275.63	48.43	30.03	18.40	6.68%	228.71	0.00	N/A	204.22	204.22	74.09%	231.88

Normal cost rate includes administrative expenses.
State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 93-0002, Public Act 94-0004, and Public Act 96-0043.
Total expenses shown include benefit payments, refunds and administrative expenses.
Actuarial accrued liability and assets are measured at Plan Year End.
Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

Table 4c

33-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 96-0043
Maximum Contribution Calculation: Without GOB Proceeds
Rate of Return on Assets = 7.0%
Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets

(All Dollar Amounts in Millions)

							Annual Normal Cost				State Contribution		
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Total	Employee Cont.	Balance	Percent of Pay	Amount	Percent of Pay	Total Expenses
2013	968	$2,105.63	$383.17	$1,722.46	18.20%	$177.01	$60.98	$16.32	$44.66	25.23%	$100.33	56.68%	$116.79
2014	968	2,187.13	451.20	1,735.93	20.63%	171.15	60.01	16.22	43.79	25.59%	142.01	82.97%	123.78
2015	968	2,265.82	516.99	1,748.83	22.82%	172.90	58.95	16.56	42.39	24.52%	144.82	83.76%	130.93
2016	968	2,341.07	572.50	1,768.57	24.45%	174.62	57.75	16.55	41.20	23.59%	145.84	83.52%	138.35
2017	968	2,411.91	630.70	1,781.21	26.15%	176.16	56.01	16.57	39.44	22.39%	146.93	83.41%	145.97
2018	968	2,477.88	686.08	1,791.80	27.69%	177.24	54.33	16.36	37.97	21.42%	148.25	83.65%	153.75
2019	968	2,539.00	738.51	1,800.49	29.09%	178.24	52.80	16.49	36.31	20.37%	149.09	83.64%	161.33
2020	968	2,594.34	787.53	1,806.81	30.36%	179.28	50.93	16.56	34.37	19.17%	149.96	83.65%	169.10
2021	968	2,643.28	832.84	1,810.44	31.51%	180.18	48.84	16.70	32.14	17.84%	150.71	83.64%	176.90
2022	968	2,686.13	874.25	1,811.88	32.55%	180.91	47.25	16.74	30.51	16.86%	151.32	83.65%	184.39
2023	968	2,722.70	912.02	1,810.68	33.50%	182.03	45.71	16.86	28.85	15.85%	152.25	83.65%	191.76
2024	968	2,752.95	946.30	1,806.65	34.37%	183.32	44.33	16.96	27.37	14.93%	153.33	83.65%	198.88
2025	968	2,776.59	977.32	1,799.27	35.20%	184.82	42.97	17.23	25.74	13.93%	154.59	83.64%	205.87
2026	968	2,793.51	1,005.17	1,788.34	35.98%	186.42	41.68	17.47	24.21	12.99%	155.93	83.65%	212.61
2027	968	2,803.91	1,030.33	1,773.58	36.75%	188.19	40.64	17.82	22.82	12.13%	157.41	83.65%	218.92
2028	968	2,807.89	1,052.99	1,754.90	37.50%	190.22	39.74	17.89	21.85	11.49%	159.11	83.65%	224.83
2029	968	2,806.14	1,073.97	1,732.17	38.27%	192.55	39.19	17.97	21.22	11.02%	161.05	83.65%	229.99
2030	968	2,798.83	1,094.12	1,704.71	39.09%	195.26	38.72	18.19	20.53	10.51%	163.33	83.65%	234.71

Normal cost rate includes administrative expenses.
State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 94-0004, and Public Act 96-0043.
Total expenses shown include benefit payments, refunds and administrative expenses.
Actuarial accrued liability and assets are measured at Plan Year End.
Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

33-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 96-0043
Maximum Contribution Calculation: Without GOB Proceeds
Rate of Return on Assets = 7.0%
Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets

(All Dollar Amounts in Millions)

							Annual Normal Cost				State Contribution		
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Total	Employee Cont.	Balance	Percent of Pay	Amount	Percent of Pay	Total Expenses
2031	968	$2,786.54	$1,114.66	$1,671.88	40.00%	$198.25	$38.49	$18.68	$19.81	9.99%	$165.82	83.64%	$238.70
2032	968	2,769.62	1,136.19	1,633.43	41.02%	201.60	38.41	18.91	19.50	9.67%	168.63	83.65%	242.16
2033	968	2,748.79	1,160.46	1,588.33	42.22%	205.23	38.55	19.77	18.78	9.15%	171.67	83.65%	244.85
2034	968	2,724.64	1,188.70	1,535.94	43.63%	209.25	38.85	20.61	18.24	8.72%	175.03	83.65%	246.87
2035	968	2,697.86	1,222.23	1,475.63	45.30%	213.61	39.31	21.45	17.86	8.36%	178.67	83.64%	248.15
2036	968	2,668.96	1,262.37	1,406.59	47.30%	218.38	39.85	22.28	17.57	8.05%	182.67	83.65%	248.85
2037	968	2,638.56	1,310.48	1,328.08	49.67%	223.46	40.50	23.11	17.39	7.78%	186.91	83.64%	248.94
2038	968	2,607.25	1,368.03	1,239.22	52.47%	228.89	41.23	23.94	17.29	7.55%	191.45	83.64%	248.44
2039	968	2,575.68	1,436.58	1,139.10	55.77%	234.63	42.06	24.78	17.28	7.36%	196.26	83.65%	247.34
2040	968	2,544.34	1,517.64	1,026.70	59.65%	240.71	42.92	25.62	17.30	7.19%	201.34	83.64%	245.82
2041	968	2,513.92	1,612.91	901.01	64.16%	247.06	43.89	26.48	17.41	7.05%	206.65	83.64%	243.73
2042	968	2,484.92	1,724.06	760.86	69.38%	253.78	44.91	27.34	17.57	6.92%	212.27	83.64%	241.30
2043	968	2,457.97	1,852.90	605.07	75.38%	260.74	46.03	28.22	17.81	6.83%	218.09	83.64%	238.43
2044	968	2,433.61	2,001.29	432.32	82.24%	268.04	47.20	29.12	18.08	6.75%	224.20	83.64%	235.26
2045	968	2,412.29	2,171.07	241.22	90.00%	275.63	48.43	30.03	18.40	6.68%	230.55	83.64%	231.88

Normal cost rate includes administrative expenses.
State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 94-0004, and Public Act 96-0043.
Total expenses shown include benefit payments, refunds and administrative expenses.
Actuarial accrued liability and assets are measured at Plan Year End.
Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

33-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 93-0002, Public Act 96-0043
Rate of Return on Assets = 7.0%
Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets

(All Dollar Amounts in Millions)

							Annual Normal Cost				Required State Contribution						
											(a)	(b)	(c)=(a)-(b)	(d)	Minimum of (c) and (d)		
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Total	Employee Cont.	Balance	Percent of Pay	Without GOB Cont.	Debt Service	Maximum Cont.	Formula Rate With GOB	Required Cont.	Percent of Pay	Total Expenses
2013	968	$2,105.63	$602.09	$1,503.54	28.59%	$177.01	$60.98	$16.32	$44.66	25.23%	$100.33	$11.38	$88.95	$88.21	$88.21	49.83%	$116.79
2014	968	2,187.13	670.80	1,516.33	30.67%	171.15	60.01	16.22	43.79	25.59%	142.01	11.30	130.71	126.81	126.81	74.09%	123.78
2015	968	2,265.82	739.90	1,525.92	32.65%	172.90	58.95	16.56	42.39	24.52%	144.82	11.22	133.60	130.57	130.57	75.52%	130.93
2016	968	2,341.07	792.65	1,548.42	33.86%	174.62	57.75	16.55	41.20	23.59%	145.84	11.15	134.69	131.32	131.32	75.21%	138.35
2017	968	2,411.91	850.78	1,561.13	35.27%	176.16	56.01	16.57	39.44	22.39%	146.93	11.55	135.38	131.96	131.96	74.91%	145.97
2018	968	2,477.88	906.43	1,571.45	36.58%	177.24	54.33	16.36	37.97	21.42%	148.25	11.92	136.33	133.62	133.62	75.39%	153.75
2019	968	2,539.00	959.06	1,579.94	37.77%	178.24	52.80	16.49	36.31	20.37%	149.09	12.29	136.80	134.37	134.37	75.39%	161.33
2020	968	2,594.34	1,008.21	1,586.13	38.86%	179.28	50.93	16.56	34.37	19.17%	149.96	13.09	136.87	135.16	135.16	75.39%	169.10
2021	968	2,643.28	1,053.58	1,589.70	39.86%	180.18	48.84	16.70	32.14	17.84%	150.71	13.84	136.87	135.83	135.83	75.39%	176.90
2022	968	2,686.13	1,094.99	1,591.14	40.76%	180.91	47.25	16.74	30.51	16.86%	151.32	14.54	136.78	136.39	136.39	75.39%	184.39
2023	968	2,722.70	1,132.49	1,590.21	41.59%	182.03	45.71	16.86	28.85	15.85%	152.25	15.20	137.05	137.23	137.05	75.29%	191.76
2024	968	2,752.95	1,165.34	1,587.61	42.33%	183.32	44.33	16.96	27.37	14.93%	153.33	16.30	137.03	138.20	137.03	74.75%	198.88
2025	968	2,776.59	1,193.78	1,582.81	42.99%	184.82	42.97	17.23	25.74	13.93%	154.59	17.31	137.28	139.33	137.28	74.28%	205.87
2026	968	2,793.51	1,218.42	1,575.09	43.62%	186.42	41.68	17.47	24.21	12.99%	155.93	17.76	138.17	140.54	138.17	74.12%	212.61
2027	968	2,803.91	1,239.72	1,564.19	44.21%	188.19	40.64	17.82	22.82	12.13%	157.41	18.16	139.25	141.87	139.25	73.99%	218.92
2028	968	2,807.89	1,257.39	1,550.50	44.78%	190.22	39.74	17.89	21.85	11.49%	159.11	19.00	140.11	143.41	140.11	73.66%	224.83
2029	968	2,806.14	1,272.24	1,533.90	45.34%	192.55	39.19	17.97	21.22	11.02%	161.05	19.76	141.29	145.16	141.29	73.38%	229.99
2030	968	2,798.83	1,284.62	1,514.21	45.90%	195.26	38.72	18.19	20.53	10.51%	163.33	20.94	142.39	147.21	142.39	72.92%	234.71

Normal cost rate includes administrative expenses.
State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 93-0002, Public Act 94-0004, and Public Act 96-0043.
Total expenses shown include benefit payments, refunds and administrative expenses.
Actuarial accrued liability and assets are measured at Plan Year End.
Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

33-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 93-0002, Public Act 96-0043
Rate of Return on Assets = 7.0%
Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets

(All Dollar Amounts in Millions)

							Annual Normal Cost				Required State Contribution						
											(a)	(b)	(c)=(a)-(b)	(d)	Minimum of (c) and (d)		
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Total	Employee Cont.	Balance	Percent of Pay	Without GOB Cont.	Debt Service	Maximum Cont.	Formula Rate With GOB	Required Cont.	Percent of Pay	Total Expenses
2031	968	$2,786.54	$1,295.73	$1,490.81	46.50%	$198.25	$38.49	$18.68	$19.81	9.99%	$165.82	$22.00	$143.82	$149.46	$143.82	72.54%	$238.70
2032	968	2,769.62	1,306.65	1,462.97	47.18%	201.60	38.41	18.91	19.50	9.67%	168.63	22.50	146.13	151.98	146.13	72.49%	242.16
2033	968	2,748.79	1,319.66	1,429.13	48.01%	205.23	38.55	19.77	18.78	9.15%	171.67	22.43	149.24	154.72	149.24	72.72%	244.85
2034	968	2,724.64	1,341.18	1,383.46	49.22%	209.25	38.85	20.61	18.24	8.72%	175.03	0.00	N/A	157.75	157.75	75.39%	246.87
2035	968	2,697.86	1,367.14	1,330.72	50.67%	213.61	39.31	21.45	17.86	8.36%	178.67	0.00	N/A	161.04	161.04	75.39%	248.15
2036	968	2,668.96	1,398.77	1,270.19	52.41%	218.38	39.85	22.28	17.57	8.05%	182.67	0.00	N/A	164.64	164.64	75.39%	248.85
2037	968	2,638.56	1,437.35	1,201.21	54.47%	223.46	40.50	23.11	17.39	7.78%	186.91	0.00	N/A	168.47	168.47	75.39%	248.94
2038	968	2,607.25	1,484.23	1,123.02	56.93%	228.89	41.23	23.94	17.29	7.55%	191.45	0.00	N/A	172.56	172.56	75.39%	248.44
2039	968	2,575.68	1,540.88	1,034.80	59.82%	234.63	42.06	24.78	17.28	7.36%	196.26	0.00	N/A	176.89	176.89	75.39%	247.34
2040	968	2,544.34	1,608.69	935.65	63.23%	240.71	42.92	25.62	17.30	7.19%	201.34	0.00	N/A	181.47	181.47	75.39%	245.82
2041	968	2,513.92	1,689.23	824.69	67.20%	247.06	43.89	26.48	17.41	7.05%	206.65	0.00	N/A	186.26	186.26	75.39%	243.73
2042	968	2,484.92	1,784.05	700.87	71.80%	253.78	44.91	27.34	17.57	6.92%	212.27	0.00	N/A	191.32	191.32	75.39%	241.30
2043	968	2,457.97	1,894.82	563.15	77.09%	260.74	46.03	28.22	17.81	6.83%	218.09	0.00	N/A	196.57	196.57	75.39%	238.43
2044	968	2,433.61	2,023.25	410.36	83.14%	268.04	47.20	29.12	18.08	6.75%	224.20	0.00	N/A	202.07	202.07	75.39%	235.26
2045	968	2,412.29	2,171.03	241.26	90.00%	275.63	48.43	30.03	18.40	6.68%	230.55	0.00	N/A	207.80	207.80	75.39%	231.88

Normal cost rate includes administrative expenses.
State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 93-0002, Public Act 94-0004, and Public Act 96-0043.
Total expenses shown include benefit payments, refunds and administrative expenses.
Actuarial accrued liability and assets are measured at Plan Year End.
Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

SECTION C

FUND ASSETS

Judges' Retirement System of Illinois
Statement of Plan Net Assets
Years ended June 30, 2012 and 2011

	2012	2011
Assets		
Cash	$ 10,690,635	$ 18,015,766
Receivables:		
Contributions:		
Participants	$ 1,691	$ 1,194
Employer - GRF Fund	7,953,510	-
Other accounts	256,373	220,122
	$ 8,211,574	$ 221,316
Investments - held in the Illinois State Board of Investment Commingled Fund at fair value	$ 559,139,279	$ 587,794,578
Securities lending collateral with State Treasurer	5,945,000	7,261,000
Property and equipment, net of accumulated depreciation	$ 9,326	$ 3,377
Total Assets	$ 583,995,814	$ 613,296,037
Liabilities		
Benefits payable	$ 711	$ 5,331
Refunds payable	-	527
Administrative expenses payable	73,736	68,971
Participants' deferred service credit accounts	-	-
Due to the State of Illinois	-	-
Securities lending collateral with State Treasurer	5,945,000	7,261,000
Total Liabilities	$ 6,019,447	$ 7,335,829
Net assets held in trust for pension benefits	$ 577,976,367	$ 605,960,208

Judges' Retirement System of Illinois
Statement of Changes in Plan Net Assets
Years ended June 30, 2012 and 2011

	2012	2011
Additions:		
Contributions:		
Participants	$ 16,444,796	$ 16,725,191
Employing state agencies and appropriations	63,644,099	62,694,460
Total Contributions revenue	$ 80,088,895	$ 79,419,651
Investments income:		
Net investments income	$ 13,408,141	$ 12,025,283
Interest earned on cash balances	86,203	109,280
Net appreciation in fair value of investments	(13,563,440)	93,118,822
Total Investments income	$ (69,096)	$ 105,253,385
Other:		
Miscellaneous	$ -	$ 5,000
Total Investments income	$ -	$ 5,000
Total Additions	$ 80,019,799	$ 184,678,036
Deductions:		
Benefits:		
Retirement annuities	$ 87,161,263	$ 82,076,983
Survivors' annuities	19,491,832	18,570,146
Disability benefits	-	72,613
Lump-sum benefits	-	-
Total Benefits	$ 106,653,095	$ 100,719,742
Refunds	586,455	652,193
Administrative	764,090	622,045
Total Deductions	$ 108,003,640	$ 101,993,980
Net increase	$ (27,983,841)	$ 82,684,056
Net assets held in trust for pension benefits:		
Beginning of year	$ 605,960,208	$ 523,276,152
End of year	$ 577,976,367	$ 605,960,208

Judges' Retirement System of Illinois
DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS - ACTUAL ASSETS

Year Ending June 30	2012	2013	2014	2015	2016
Beginning of Year:					
(1) Market Value of Assets	$ 605,960,208				
(2) Actuarial Value of Assets	614,596,203				
End of Year:					
(3) Market Value of Assets	577,976,367				
(4) Contributions and Disbursements					
(4a) Actual State Contribution Amount	63,644,099				
(4b) Employee Contribution Amount	16,444,796				
(4c) Benefit Payouts & Refunds	(107,239,550)				
(4d) Administrative Expenses	(764,090)				
(4e) Net of Contributions and Disbursements	(27,914,745)				
(5) Total Investment Income					
=(3)-(1)-(4e)	(69,096)				
(6) Projected Rate of Return	7.00%				
(7) Projected Investment Income					
=(1)x(6)+([1+(6)]^.5-1)x(4e)	41,456,723				
(8) Investment Income in					
Excess of Projected Income	(41,525,819)				
(9) Excess Investment Income Recognized					
This Year (5-year recognition)					
(9a) From This Year	(8,305,164)				
(9b) From One Year Ago	13,880,124	$ (8,305,164)			
(9c) From Two Years Ago	829,792	13,880,124	$ (8,305,164)		
(9d) From Three Years Ago	(33,322,934)	829,792	13,880,124	$ (8,305,164)	
(9e) From Four Years Ago	0	(33,322,934)	829,792	13,880,124	$ (8,305,163)
(9f) Total Recognized Investment Gain	(26,918,182)	(26,918,182)	6,404,752	5,574,960	(8,305,163)
(10) Change in Actuarial Value of Assets					
=(4e)+(7)+(9f)	(13,376,204)				
End of Year:					
(3) Market Value of Assets	**577,976,367**				
(11) Actuarial Value of Assets					
=(2)+(10)	**601,219,999**				

Judges' Retirement System of Illinois
DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS - HYPOTHETICAL ASSETS

Year Ending June 30	2012	2013	2014	2015	2016
Beginning of Year:					
(1) Hypothetical Value of Assets	$ 377,600,754				
(2) Hypothetical Actuarial Value of Assets	383,158,065				
End of Year:					
(3) Hypothetical Value of Assets	361,080,974				
(4) Contributions and Disbursements					
(4a) State Contribution Amount[1]	75,076,000				
(4b) Employee Contribution Amount	16,444,796				
(4c) Benefit Payouts & Refunds	(107,239,550)				
(4d) Administrative Expenses	(764,090)				
(4e) Net of Contributions and Disbursements	(16,482,844)				
(5) Total Investment Income[2]					
=(3)-(1)-(4e)	(36,936)				
(6) Projected Rate of Return	7.00%				
(7) Projected Investment Income					
=(1)x(6)+([1+(6)]^.5-1)x(4e)	25,864,910				
(8) Investment Income in					
Excess of Projected Income	(25,901,846)				
(9) Excess Investment Income Recognized					
This Year (5-year recognition)					
(9a) From This Year	(5,180,369)				
(9b) From One Year Ago	8,048,984	$ (5,180,368)			
(9c) From Two Years Ago	2,490,313	8,048,984	$ (5,180,368)		
(9d) From Three Years Ago	(22,612,094)	2,490,313	8,048,984	$ (5,180,368)	
(9e) From Four Years Ago	0	(22,612,094)	2,490,313	8,048,984	$ (5,180,373)
(9f) Total Recognized Investment Gain	(17,253,166)	(17,253,165)	5,358,929	2,868,616	(5,180,373)
(10) Change in Hypothetical Actuarial Value of Assets					
=(4e)+(7)+(9f)	(7,871,100)				
End of Year:					
(3) Hypothetical Market Value of Assets	**361,080,974**				
(11) Hypothetical Actuarial Value of Assets					
=(2)+(10)	**375,286,965**				

[1] *Represents 43.561 percent of payroll for the basic contribution.*

[2] *Investment income assumes hypothetical value of assets earns the Fund's actual rate of return for fiscal year 2012 of -0.01%.*

[3] *Deferred gains and losses are estimated based on hypothetical asset values disclosed in the prior actuary's reports.*

SECTION D

ACCOUNTING DISCLOSURES

This information is presented in draft form for review by the auditor. Please let us know if there are any changes so that we may maintain consistency with the State's financial statements.

Financial Accounting Information in Accordance with GASB Statement No. 25

A. Schedule of Funding Progress

	6/30/2012	6/30/2011	6/30/2010
1 Actuarial Value of Assets	$ 601,219,999	$ 614,596,203	$ 619,925,786
2 Actuarial Accrued Liability (AAL)	2,021,715,796	1,952,539,400	1,819,447,826
3 Unfunded AAL (UAAL) [(2) - (1)]	1,420,495,797	1,337,943,197	1,199,522,040
4 Funded Ratio [(1) ÷ (2)]	29.74%	31.48%	34.07%
5 Covered Payroll	172,345,976	170,742,985	165,954,337
6 UAAL as a Percentage of Covered Payroll	824.21%	783.60%	722.80%

B. Schedule of Employer Contributions for the Fiscal Year End

	6/30/2012	6/30/2011	6/30/2010
1 Annual Required Contribution (ARC) per GASB 25			
(a) Percentage of payroll	64.361%	55.926%	52.374%
(b) Covered payroll for fiscal year	$172,345,976	$170,742,985	$165,954,337
(c) ARC for fiscal year	110,923,357	95,490,182	86,916,418
2 Total Employer Contribution	63,644,099	62,694,460	78,509,810
3 Percentage of ARC Contributed [(2) ÷ (1)]	57.38%	65.66%	90.33%
4 Annual Contribution Required per State Statute			
(a) Percentage of payroll	36.919%	36.533%	47.502%
(b) Covered payroll for fiscal year	172,345,976	170,742,985	165,954,337
(c) Total required contribution	63,628,000	62,377,000	78,832,000
5 Employer Contribution	63,644,099	62,694,460	78,509,810
6 Percentage of (4) Contributed [(5) ÷ (4)]	100.03%	100.51%	99.59%

C. Notes to Required Schedules

1. The cost method used to determine the ARC is the Projected Unit Credit Cost Method. The ARC (as percentage of payroll) for the 2012 fiscal year was determined as of June 30, 2010, based on the assumptions then in effect.
2. The assets are shown at actuarial value.
3. Economic assumptions include an inflation rate of 3.0 percent; an investment return rate of 8.0 percent through the June 30, 2009, valuation and 7.00 percent thereafter; salary increase rates based on age-related productivity and merit rates plus inflation; and postretirement benefit increases of 3.0 percent.
4. The amortization method is an open 30-year period, level percent of projected capped payroll.

Development of Net Pension Obligation in Accordance with GASB Statement No. 27 (Date of Transition is July 1, 1996)

Fiscal Year	Annual Required Contribution*	Beginning of Year NPO	Interest on NPO	Amortization of NPO	Annual Pension Cost (APC) (2 + 4 - 5)	Actual Contribution**	Increase in NPO (6 - 7)	End of Year NPO (3 + 8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7/1/90 - 6/30/91	-	-	-	-	-	-	-	$ 48,261,173
7/1/91 - 6/30/92	26,280,222	48,261,173	3,860,894	3,880,982	26,260,134	10,052,100	16,208,034	64,469,207
7/1/92 - 6/30/93	29,037,582	64,469,207	5,157,537	5,184,371	29,010,748	11,099,030	17,911,718	82,380,925
7/1/93 - 6/30/94	31,719,450	82,380,925	6,590,474	6,624,764	31,685,160	10,766,000	20,919,160	103,300,085
7/1/94 - 6/30/95	32,937,148	103,300,085	8,264,007	8,307,004	32,894,151	10,806,000	22,088,151	125,388,236
7/1/95 - 6/30/96	37,711,076	125,388,236	10,031,059	10,083,250	37,658,885	12,129,000	25,529,885	150,918,121
7/1/96 - 6/30/97	26,021,939	150,918,121	12,073,450	6,423,141	31,672,248	13,783,328	17,888,920	168,807,041
7/1/97 - 6/30/98	28,867,624	168,807,041	13,504,563	7,184,501	35,187,686	15,692,152	19,495,534	188,302,575
7/1/98 - 6/30/99	38,631,275	188,302,575	15,064,206	8,014,240	45,681,241	18,688,816	26,992,425	215,295,000
7/1/99 - 6/30/00	40,205,224	215,295,000	17,223,600	9,163,049	48,265,775	21,411,577	26,854,198	242,149,198
7/1/00 - 6/30/01	42,546,928	242,149,198	19,371,936	10,305,975	51,612,889	24,348,926	27,263,963	269,413,161
7/1/01 - 6/30/02	47,277,311	269,413,161	21,553,053	11,466,342	57,364,022	27,532,000	29,832,022	299,245,183
7/1/02 - 6/30/03	53,470,841	299,245,183	23,939,615	13,715,519	63,694,937	31,440,103	32,254,834	331,500,017
7/1/03 - 6/30/04	63,261,895	331,500,017	26,520,001	15,193,877	74,588,019	178,593,095	(104,005,076)	227,494,941
7/1/04 - 6/30/05	57,749,460	227,494,941	18,199,595	10,426,938	65,522,117	32,043,009	33,479,108	260,974,049
7/1/05 - 6/30/06	62,927,993	260,974,049	20,877,924	11,961,410	71,844,507	29,337,911	42,506,596	303,480,645
7/1/06 - 6/30/07	73,371,653	303,480,645	24,278,452	16,224,573	81,425,532	35,236,800	46,188,732	349,669,377
7/1/07 - 6/30/08	75,134,070	349,669,377	27,973,550	19,791,113	83,316,507	46,977,961	36,338,546	386,007,923
7/1/08 - 6/30/09	78,386,597	386,007,923	30,880,634	21,847,856	87,419,375	59,983,000	27,436,375	413,444,298
7/1/09 - 6/30/10	86,916,418	413,444,298	33,075,544	23,400,741	96,591,221	78,509,810	18,081,411	431,525,709
7/1/10 - 6/30/11	95,490,182	431,525,709	30,206,800	24,424,140	101,272,842	62,694,460	38,578,382	470,104,091
7/1/11 - 6/30/12	110,923,357	470,104,091	32,907,286	26,609,163	117,221,480	63,644,099	53,577,381	523,681,472

* The annual required contributions for FYE 6/30/1988 through 6/30/1996 were determined based on the APB8 percentages provided by the System. Thereafter, the annual required contribution was obtained by adding the normal cost and an amortization over the period disclosed in column (6) (constant percent of payroll) of the UAAL (AAL - MVA) at the valuation date shown in column (2). The resulting percentage of payroll is applied to the actual covered payroll for the applicable fiscal year.

** The actual contributions for FYE 6/30/1988 through 6/30/2011 were obtained from the June 30, 2011 actuarial valuation. The actual contribution for FYE 6/30/2012 was provided by the System.

SECTION E

PARTICIPANT DATA

Active Age and Service Distribution
June 30, 2012

Age Group	Years of Service 0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Up	Total	Percentage of Total
Under 20											
20-24											
25-29											
30-34											
35-39	1	4								5	1%
40-44	4	26	9	1						40	4%
45-49	6	46	44	10	1					107	11%
50-54	9	46	62	24	17	1				159	16%
55-59	5	40	65	66	65	18	1			260	27%
60-64	5	29	52	42	47	33	10	3		221	23%
65-69		20	30	16	23	12	5	6	5	117	12%
70 & Over		2	9	7	10	8	11	4	8	59	6%
Total	30	213	271	166	163	72	27	13	13	968	100%
Percentage of Total	3%	22%	28%	17%	17%	8%	3%	1%	1%	100%	

Retirees and Beneficiaries by Type of Benefit Being Paid
June 30, 2012

Type of Benefit Being Paid	Count		Monthly Payment		Annual Payment		Average Annual Payment
Retirement Annuity	725	$	7,335,832.47	$	88,029,989.64	$	121,420.68
Survivors	331		1,672,281.77		20,067,381.24		60,626.53
Total	**1,056**	**$**	**9,008,114.24**	**$**	**108,097,370.88**	**$**	**102,364.93**

SECTION F

ACTUARIAL METHODS AND ASSUMPTIONS

Actuarial Methods and Assumptions

Actuarial Cost Method

The projected unit credit normal cost method is used. Under this method, the projected pension at retirement age is first calculated and the value thereof at the individual member's current or attained age is determined. The normal cost for the member for the current year is equal to the value so determined divided by the member's projected service at retirement. The normal cost for the plan for the year is the sum of the individual normal costs.

The actuarial liability at any point in time is the value of the projected pensions at that time less the value of future normal costs.

For ancillary benefits for active members, in particular death and survivor benefits, termination benefits, and the postretirement increases, the same procedure as outlined above is followed.

Estimated annual administrative expenses are added to the normal cost.

For valuation purposes, as well as projection purposes, an actuarial value of assets is used.

Actuarial Assumptions

Mortality

Post-Retirement Mortality

For active and retired members: the UP-1994 Mortality Table for Males, rated down 3 years. For spouses: the UP-1994 Mortality Table for Females, rated down 2 year. No adjustment is made for post-disabled mortality. The mortality table used is a static table with no provision for future mortality improvement.

Interest

7.00 percent per annum, compounded annually.

General Inflation

3.00 percent per annum, compounded annually.

Marriage Assumption

75.0 percent of active participants are assumed to be married. Actual marital status at benefit commencement is used for retirees.

Termination

Illustrative rates of withdrawal from the plan are as follows:

Age Based Withdrawal	
	Males
30	0.0128
35	0.0110
40	0.0094
45	0.0076
50	0.0058
55	0.0042
60	0.0024
65	0.0007

It is assumed that terminated employees will not be rehired. The rates apply only to employees who have not fulfilled the service requirement necessary for retirement at any given age.

Salary Increases

A salary increase assumption of 4.0% per year, compounded annually, was used. This 4.0% salary increase assumption includes an inflation component of 3.0% per year and a seniority/merit component of 1.0% per year.

Disability

Illustrative rates of disability are as follows:

Age Based Disability	
Age	Males
30	0.00057
35	0.00064
40	0.00083
45	0.00115
50	0.00170
55	0.00000

Population Projection

For purposes of determining annual appropriation as a percent of total covered payroll, the size of the active group is assumed to remain level at the number of actives as of the valuation date. New entrants are assumed to enter with an average age of 46.36 and average uncapped pay of $178,143 (2012 dollars). The new entrant profile is based on the averages for all current active members. The average increase in uncapped payroll for the projection period is 4.0 percent per annum.

Retirement

Employees are assumed to retire in accordance with the rates shown below. The rates apply only to employees who have fulfilled the service requirement necessary for retirement at any given age.

Retirement Rates	
Age	Males
60	22.00%
61 - 70	11.00%
71	12.00%
72	14.00%
73	16.00%
74	18.00%
75 - 79	20.00%
80	100.00%

Early Retirement Rates	
Age	Males
55	8.00%
56	8.00%
57	8.00%
58	8.00%
59	8.00%

Assets

Assets available for benefits are used as described on page 41 of the most recent valuation report.

Expenses

As estimated and advised by JRS staff, based on current expenses and are expected to increase in relation to the projected capped payroll.

Spouse's Age

The spouse is assumed to be four years younger than employee /retiree.

Decrement Timing

All decrements are assumed to occur beginning of year.

Decrement Relativity

Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.

Decrement Operation

Disability and turnover decrements do not operate after member reaches retirement eligibility.

Eligibility Testing

Eligibility for benefits is determined based upon the age nearest birthday and service on the date the decrement is assumed to occur.

Assumptions as a result of Public Act 96-0889

Members hired after December 31, 2010, are assumed to make contributions on salary up to the final average compensation cap in a given year until this plan provision or administrative procedure is clarified. State contributions, expressed as a percentage of pay, are calculated based upon capped pay. Retirement rates for tier two members to account for the change in retirement age, as follows:

Retirement Rates	
Age	Males
62	30.00%
63	10.00%
64	13.00%
65	16.00%
66	20.00%
67	30.00%
68	11.00%
69 - 71	12.00%
72	14.00%
73	16.00%
74	18.00%
75 - 79	20.00%
80	100.00%

Projection Methodology

Appropriation Requirements Under P.A. 93-0002, and P.A. 96-0043

State Contributions under P.A. 93-0002

In general, for each year during the life of the GOB program, the state contributions to the System are to be calculated as follows:

1. Calculation of the contribution maximum
   a. A projection of contributions will be made from the valuation date to June 30, 2045. Such projection will be based on hypothetical asset values determined using the following assumptions:
      i) That the System had received no portion of the general obligation bond proceeds in excess of the scheduled contributions for the remainder of fiscal 2003 and for the entirety of 2004,
      ii) That hypothetical state contributions had been made each fiscal year from 2005 through the valuation date, based on the funding process in place prior to P.A. 93-0002 (without regard to prior state minimum requirements),
      iii) That the actual amounts of member contributions and the actual cash outflows (benefit payments, refunds and administrative expenses) for each year prior to the valuation date were realized, and
      iv) That the hypothetical fund earned returns in each prior fiscal year equal to the rate of total return actually earned by the retirement fund in that year.
   b. The hypothetical asset values developed in a., above, will not exceed the actual assets of the fund.
   c. A projection of maximum contributions for each year of the GOB program will be performed each year, by reducing the contributions produced in a., above, by the respective amount of debt service allocated to the System for each year.
2. Calculation of the contribution with GOB proceeds
   a. The basic projection of state contributions from the valuation date through June 30, 2045, will be made, taking into account all assets of the System, including the GOB proceeds.
   b. State contribution rates (expressed as a percentage of covered pay), in the pattern required by the funding sections of the statutes, are calculated.
   c. In those projections, the dollars of state contributions which are added to assets each year during the GOB program are limited by the contribution maximum. Because the bonds are to be liquidated by the end of fiscal 2033, there is no contribution maximum thereafter.

State Contributions under P.A. 96-0043

The following is an excerpt from the Illinois Compiled statutes 40 ILCS 5/18-131:

> (d) For purposes of determining the required State contribution to the System, the value of the System's assets shall be equal to the actuarial value of the System's assets, which shall be calculated as follows:
>
> > As of June 30, 2008, the actuarial value of the System's assets shall be equal to the market value of the assets as of that date. In determining the actuarial value of the System's assets for fiscal years after June 30, 2008, any actuarial gains or losses from investment return incurred in a fiscal year shall be recognized in equal annual amounts over the 5-year period following that fiscal year.
>
> (e) For purposes of determining the required State contribution to the system for a particular year, the actuarial value of assets shall be assumed to earn a rate of return equal to the system's actuarially assumed rate of return.

SECTION G

PLAN PROVISIONS

Summary of Retirement System Plan (As of June 30, 2012)

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. Legally adopted children are eligible for survivor benefits on the same basis as other children.

    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.

<u>Judges Who First Become Participants On or After January 1, 2011</u>

The following changes to the above provisions apply to judges who first become participants on or after January 1,2011:

1. The highest salary for annuity purposes is equal to the average monthly salary obtained by dividing the participant's total salary during the 96 consecutive months of service within the last 120 months of service in which the total compensation was the highest by the number of months in that period.

2. For 2011, the highest salary for annuity purposes to $106,800. Limitations for future years shall annually thereafter be increased by the lesser of 3% or the annual unadjusted percentage increase (but not less than zero) in the Consumer Price Index-U for the twelve months ending September 30.

3. The required contributions shall not exceed the contributions that would be due on the highest salary for annuity purposes.

4. A participant is eligible to retire with unreduced benefits after attainment of age 67 with at least 8 years of service credit. However, a participant may elect to retire at age 62 with at least 8 years of service credit and receive a retirement annuity reduced by one-half of 1% for each month that his or her age is under 67.

5. The annual retirement annuity provided is equal to 3% of the participant's final average salary for each year of service. The maximum retirement annuity payable shall be 60% of the participant's final average salary.

6. Automatic annual increases are provided in the retirement annuity then being paid equal to 3% or the annual change in the Consumer Price Index for all Urban Consumers, whichever is less. Such increases are payable in the January next following attainment of age 67 and in January of each year thereafter.

7. Automatic annual increases are provided in the survivor annuity then being paid equal to 3% or the annual change in the Consumer Price Index for all Urban Consumers,

whichever is less. Such increases are payable on each January 1 occurring on or after attainment of age 67.

8. The retirement annuity being paid is suspended when an annuitant accepts full time employment in a position covered under the Judges' Retirement System or any other article of the Illinois Pension Code. Upon termination of the employment, the retirement annuity shall resume and, if appropriate, be recalculated.

SECTION H

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL)	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
Actuarial Assumptions	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
Actuarial Cost Method	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of future Normal Costs and the Actuarial Accrued Liability.
Actuarial Equivalent	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value (APV)	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
Actuarial Present Value of Future Benefits (APVFB)	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial Valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 25, such as the Funded Ratio and the Annual Required Contribution (ARC).
Actuarial Value of Assets	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution (ARC).

Glossary (cont'd)

Amortization Method A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.

Amortization Payment That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Amortization Period The period used in calculating the Amortization Payment.

Annual Required Contribution (ARC) The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB No. 25. The ARC consists of the Employer Normal Cost and Amortization Payment.

Closed Amortization Period A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.

Employer Normal Cost The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.

Equivalent Single Amortization Period For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.

Experience Gain/Loss A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

Glossary (cont'd)

Funded Ratio	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
GASB	Governmental Accounting Standards Board.
GASB No. 25 and GASB No. 27	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 27 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 25 sets the rules for the systems themselves.
Normal Cost	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
Open Amortization Period	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
Unfunded Actuarial Accrued Liability	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
Valuation Date	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.