



**Cavanaugh Macdonald**  
CONSULTING, LLC

*The experience and dedication you deserve*

OKLAHOMA PUBLIC EMPLOYEES RETIREMENT SYSTEM

**State of Oklahoma  
Uniform Retirement System For  
Justices & Judges**

**Actuarial Valuation Report  
As of July 1, 2010**





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

October 15, 2010

Board of Trustees  
Uniform Retirement System for Justices and Judges  
5801 N. Broadway Extension, Suite 400  
P.O. Box 53007  
Oklahoma City, OK 73152-3007

Members of the Board:

In this report are submitted the results of the annual valuation of the assets and liabilities of the Uniform Retirement System for Justices and Judges, prepared as of July 1, 2010.

The purpose of this report is to provide a summary of the funded status of the System as of July 1, 2010, to provide the Annual Required Contribution (ARC) and the accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the Entry Age Normal cost method. A five-year market related value of assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll, on the assumption that payroll will increase by 4.25% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the Schedule of Funding Progress and Trend Information shown in the financial section of the Comprehensive Annual Financial Report. All historical information that references a valuation date prior to July 1, 2010 was prepared by the prior actuarial firm.

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

Future actuarial results may differ significantly from the current results 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

We have also reviewed the medical benefits provided by the System under Section 401(h) of the Internal Revenue Code and have determined that these benefits are subordinate to the retirement benefits as required.

In our opinion, in order for the System to operate in an actuarially sound manner, contributions equal to the ARC are necessary for future fiscal years. Assuming that these contributions are made to the System, from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Alisa Bennett'.

Alisa Bennett, FSA, EA, FCA, MAAA  
Principal and Senior Actuary

A handwritten signature in blue ink, appearing to read 'Patrice Beckham'.

Patrice Beckham, FSA, EA, MAAA  
Consulting Actuary



**TABLE OF CONTENTS`**

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	<b>Page</b>
<b>Executive Summary .....</b>	<b>1</b>
<b>Section 1 Summary of Results.....</b>	<b>9</b>
<b>Section 2 Assets .....</b>	<b>10</b>
<b>Section 3 System Liabilities.....</b>	<b>14</b>
<b>Section 4 Employer Contributions .....</b>	<b>18</b>
<b>Section 5 Accounting and Other Information.....</b>	<b>24</b>
<b>Appendix A Summary of System Provisions .....</b>	<b>31</b>
<b>Appendix B Actuarial Assumptions and Methods.....</b>	<b>35</b>
<b>Appendix C Data.....</b>	<b>39</b>
<b>Appendix D Glossary of Terms.....</b>	<b>43</b>
<b>Addendum .....</b>	<b>45</b>



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## OVERVIEW

The Uniform Retirement System for Justices and Judges (URSJJ) provides retirement benefits for all Justices and Judges of the Oklahoma Supreme Court, Court of Criminal Appeals, Workers' Compensation Court, Court of Appeals, and District Courts. URSJJ is administered by the Oklahoma Public Employees Retirement System and its Board of Trustees.

This report presents the results of the July 1, 2010 actuarial valuation for the System. The primary purposes of performing an actuarial valuation are to:

- Determine the employer contribution rate required to fund the System on an actuarial basis,
- Disclose asset and liability measures as of the valuation date,
- Determine the experience of the System since the last valuation date, and
- Analyze and report on trends in System contributions, assets, and liabilities.

There was no change in the basic benefit provisions that impacted the results of the July 1, 2010 valuation. However, there were several bills passed by the 2010 Oklahoma Legislature that impacted the System. They include:

- Retired judges' benefits will be suspended only if the judge goes back on the state bench.
- The authority for the OPERS Board to set the employer contribution rate was removed.

These changes in the law did not impact the results of the valuation. However, a bill that was passed by the 2009 legislature, HB1254, provided for a payment of \$6 million to be paid into the URSJJ. That payment, which was received in July 2009, is first reflected in this valuation. The payment, which was in addition to the regular contribution, increased the funded ratio and decreased the unfunded actuarial accrued liability.

There was no change in the actuarial assumptions and methods used in the valuation. This is the first valuation that was prepared by Cavanaugh Macdonald Consulting LLC. As part of our transition work, we replicated the July 1, 2009 actuarial valuation. While results were well within acceptable limits, there was a difference in the unfunded actuarial accrued liability (UAAL). Cavanaugh Macdonald's UAAL was \$2.3 million higher than that reported in the official July 1, 2009 actuarial valuation report. The difference, which is not significant as a percentage of the total actuarial liability, is due to the use of different valuation software.

The valuation results provide a snapshot view of the System's financial condition on July 1, 2010. The unfunded actuarial accrued liability for the System increased by \$13 million due to various factors. A detailed analysis of the change in the unfunded actuarial accrued liability from July 1, 2009 to July 1, 2010 is shown in this section.

## EXECUTIVE SUMMARY



The highlights of the valuation are shown below:

<b>Funded Status (\$M)</b>	<b>Actuarial Valuation Date</b>	
	<b>July 1, 2010</b>	<b>July 1, 2009</b>
Actuarial Accrued Liability	\$282.8	\$261.4
Actuarial Value of Assets	\$230.0	\$221.6
Unfunded Actuarial Accrued Liability	\$52.8	\$39.8
Funded Ratio (Actuarial Value)	81.3%	84.8%
Market Value of Assets	\$211.2	\$184.6
Funded Ratio (Market Value)	74.7%	70.6%

There was a small liability loss of \$0.6 million, which resulted in an actuarial accrued liability that was higher than expected (0.2% of expected liability). The components of this net liability loss are identified in this section.

The net return on the market value of assets was 14.6% for the year ended June 30, 2010. The actuarial value of assets is determined using a method to smooth gains and losses in order to develop more stable contribution rates. The return on the actuarial value of assets was approximately 4.0% which resulted in an actuarial loss of \$7.6 million.

The actuarial contribution rate for the employer increased from 2009 to 2010:

<b>Contribution Rate</b>	<b>Actuarial Valuation Date</b>	
	<b>July 1, 2010</b>	<b>July 1, 2009</b>
Normal Cost	31.66%	30.85%
Amortization of UAAL	11.61%	8.76%
Budgeted Expenses	<u>0.47%</u>	<u>0.49%</u>
Actuarial Contribution Rate	43.74%	40.11%
Less Estimated Member Contribution Rate	<u>8.00%</u>	<u>8.00%</u>
Employer Actuarial Contribution Rate	35.74%	32.11%
Less State Statutory Contribution Rate	10.0%	8.50%
Contribution Shortfall	25.74%	23.61%

A considerable shortfall continues to exist between the actuarial contribution rate and the statutory contribution rate. The shortfall for FY2010 was mitigated by an additional contribution of \$6 million by the State in July, 2009. However, if this level of contribution shortfall continues in the future it will result in a rapidly increasing unfunded actuarial accrued liability and a correlating decrease in the funded ratio, absent investment returns in excess of the 7.5% assumed rate.

## EXPERIENCE

### July 1, 2009 to July 1, 2010

In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is July 1, 2010. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process leads to a method of determining the contributions needed by members and employers in the future to balance the System assets and liabilities.

Changes in the System's assets and liabilities impacted the change in the actuarial contribution rates between July 1, 2009 and July 1, 2010. Each component is examined in the following discussion.



**ASSETS**

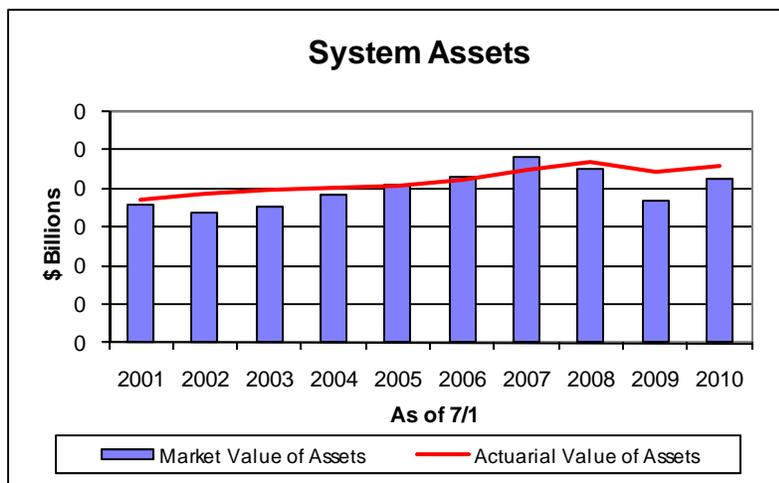
As of July 1, 2010, the System had total funds when measured on a market value basis of \$211.2 million. This was an increase of \$26.6 million from the July 1, 2009 figure of \$184.6 billion. The market value of assets is not used directly in the calculation of contribution rates. An asset valuation method, which smoothes the effect of market fluctuations, is used to determine the value of assets used in the valuation, called the “actuarial value of assets”. Differences between the actual return on the market value of assets and the assumed return on the actuarial value of assets are phased in over a five-year period. The resulting value must be no less than 80% of the market value and no more than 120% of market value, referred to as the corridor. See Table 3 for the detailed development of the actuarial value of assets as of July 1, 2010.

The actuarial value of assets as of July 1, 2010 was \$230.0 million. The annualized dollar-weighted rate of return for FY2010, measured on the actuarial value of assets, was approximately 4.0%, which produced an actuarial loss of \$7.6 million. Measured on the market value of assets, the rate of return was 14.6%, net of investment expenses.

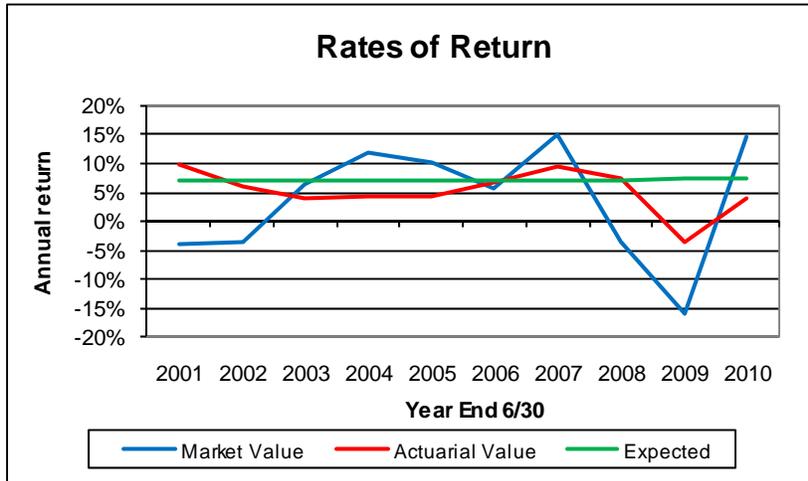
The components of the change in the market and actuarial value of assets for the System (in millions) are set forth below:

	Market Value \$(millions)	Actuarial Value \$(millions)
Net Assets, July 1, 2009	\$185	\$222
• Employer and Member Contributions	11	11
• Benefit Payments and Expenses	(12)	(12)
• Investment Income/(Loss)	27	9
Preliminary Value, July 1, 2010	211	230
Application of Corridor	N/A	N/A
Final Net Assets, July 1, 2010	\$211	\$230
Estimated Rate of Return	14.6%	4.0%

Due to the use of an asset smoothing method, there is about \$19 million of deferred investment loss that has not yet been recognized. This deferred investment experience will be reflected in the actuarial value of assets over the next few years absent investment experience above 7.5% to offset the losses.



*Due to investment experience lower than the assumed rate of return for much of the last decade, the actuarial value of assets has been higher than the market value in most years.*



*Rates of return on the market value of assets are very volatile. The return on the actuarial value of assets illustrates the advantage of using an asset smoothing method.*

**SYSTEM LIABILITIES**

The actuarial accrued liability is that portion of the present value of future benefits that will not be paid by future costs or member contributions. The difference between this liability and the asset values at the same date is referred to as the unfunded actuarial accrued liability (UAAL). The unfunded actuarial accrued liability will be reduced if the employer’s contributions exceed the employer’s normal cost for the year, after allowing for interest earned on the previous balance of the unfunded actuarial accrued liability. Benefit improvements, experience gains/losses, and changes in the actuarial assumptions and methods will also impact the total actuarial accrued liability and the unfunded portion thereof.

The unfunded actuarial accrued liability as of July 1, 2010 is:

Actuarial Accrued Liability	\$282,765,405
Actuarial Value of Assets	<u>230,010,299</u>
Unfunded Actuarial Accrued Liability	\$ 52,755,106

See Table 5 for the detailed development of the Actuarial Accrued Liability and Table 8 for the calculation of the Unfunded Actuarial Accrued Liability.

Other factors influencing the UAAL from year to year include actual experience versus that expected based on the actuarial assumptions (both asset and liability), changes in the actuarial assumptions, procedures or methods and changes in benefit provisions. The actual experience measured in this valuation is that which occurred during the prior plan year (FY2010). There was an experience loss on the actuarial value of assets and an experience loss on liabilities. The net result was an increase in the UAAL.



Between July 1, 2009 and July 1, 2010 the change in the unfunded actuarial accrued liability for the System was as follows (in millions):

	<u>\$millions</u>
Unfunded Actuarial Accrued Liability, July 1, 2009	\$39.8
• effect of contributions less than actuarial rate	2.1
• expected increase due to amortization method	0
• investment experience	7.6
• liability experience <sup>1</sup>	0.6
• other experience	0.4
• change in actuarial firms	2.3
• change in actuarial assumptions	0
• change in benefit provisions	0
Unfunded Actuarial Accrued Liability, July 1, 2010	\$52.8

<sup>1</sup> Liability loss is about 0.2% of total actuarial accrued liability.

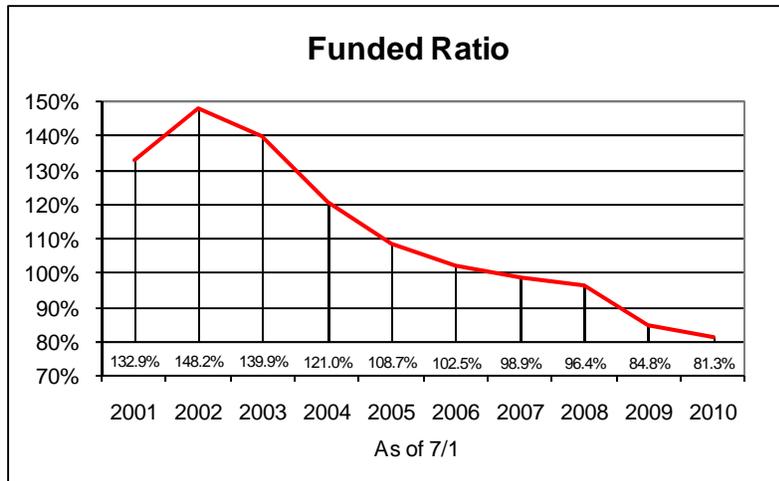
The liability loss for the System can be allocated to experience related to each actuarial assumption as follows:

Liability Source	Impact of AAL \$(millions)	% of Expected Liability
Salary Increases	\$ 0.13	0.05%
Mortality	(0.03)	(0.01)
Termination of Employment	0.31	0.11
Retirements	(1.04)	(0.37)
Disability	0.00	0.00
New entrants and rehires	0.04	0.01
Miscellaneous/data changes	1.19	0.42
Total (gain)/loss	0.60	0.21

A detailed summary of the change in the UAAL is shown in Table 10.

An evaluation of the unfunded actuarial accrued liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the unfunded actuarial accrued liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial accrued liability. The funded status information, on both an actuarial and market value basis, is shown below (in \$million).

	7/1/06	7/1/07	7/1/08	7/1/09	7/1/10
<b>Using Actuarial Value of Assets:</b>					
Funded Ratio	102.5%	98.9%	96.4%	84.8%	81.3%
Unfunded Actuarial Accrued Liability (UAAL)	\$(5)	\$2	\$9	\$40	\$53
<b>Using Market Value of Assets:</b>					
Funded Ratio	104.1%	105.8%	92.6%	70.6%	74.7%
Unfunded Actuarial Accrued Liability (UAAL)	\$(8)	\$(13)	\$18	\$77	\$72



*Until recently, the funded ratio has been above or near 100%, but has been steadily declining. Several factors have contributed to the decline in the funded ratio including changes in the benefit provisions, contributions less than the actuarial rate, changes in actuarial assumptions, demographic experience, and investment experience.*

## CONTRIBUTION RATES

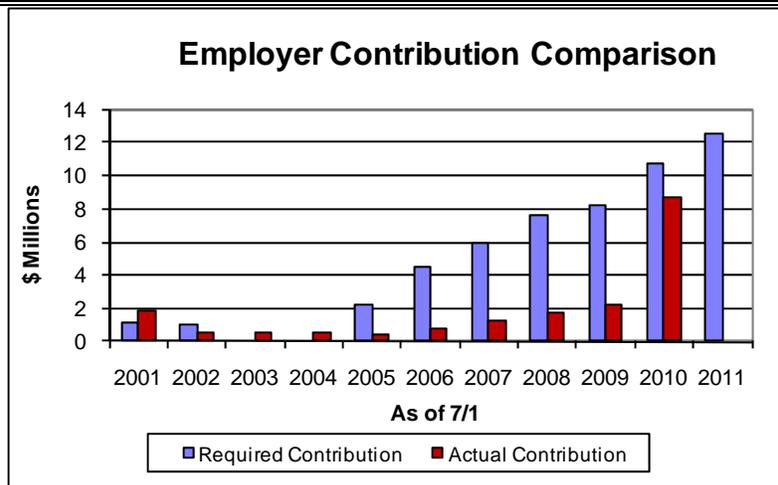
The funding objective of the System is to pay the normal cost rate plus an amount that will pay off the unfunded actuarial accrued liability over a 20 year period commencing July 1, 2007.

Under the Entry Age Normal cost method, the actuarial contribution rate consists of:

- A “normal cost” for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date,
- An “unfunded actuarial accrued liability contribution” for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

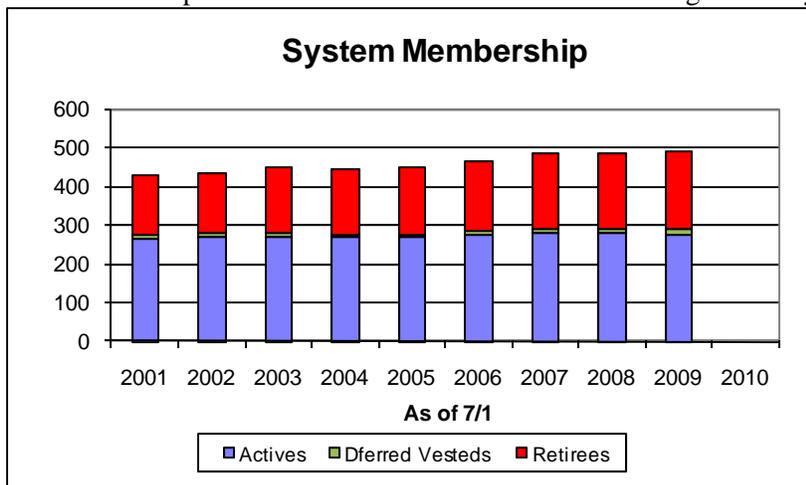
Contributions to the Retirement System are made by the members and their employers. Members pay 8.0% of compensation. The employer rate is scheduled to increase each year until it reaches 22.0% for the fiscal year ending June 30, 2019. The ultimate employer contribution rate of 22.0% plus the member’s contribution rate of 8.0% is less than the normal cost rate of 31.66%. This means that the total contributions to the plan are not sufficient to cover the cost of benefits for the current year. As a result, there is no contribution left to finance the UAAL. Consequently, the UAAL is projected to increase indefinitely if all assumptions are met.

The following graph shows the total required employer contribution compared to the amount actually received each year. The funding policy contribution equals the System’s normal cost, budgeted expenses, and an amortization of the unfunded actuarial accrued liability over a 20 year closed period beginning July 1, 2007. As of July 1, 2010, 17 years remain in the amortization period.

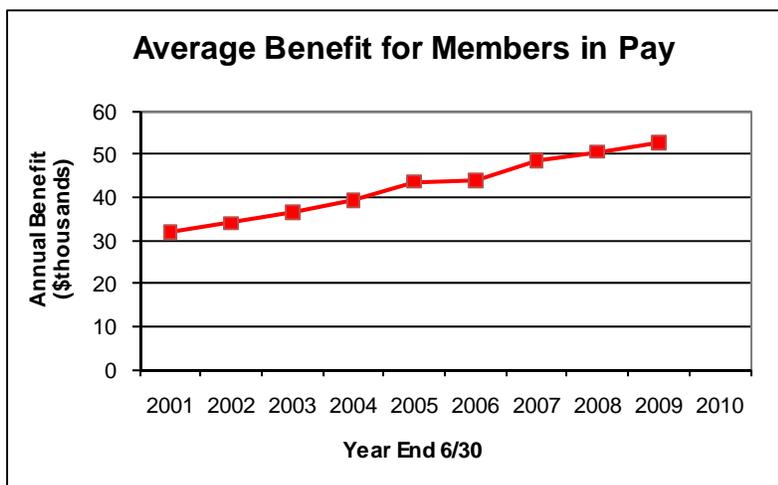


## MEMBER INFORMATION

The number of active members included in the valuation decreased from 274 in 2009 to 271 in the 2010 valuation. The retired member count increased by ten and the average retirement benefit amount increased. There were 210 retirees and beneficiaries in the 2010 valuation, with an average benefit of \$4,683 per month. This represents about a 6.0% increase in the average monthly benefit from the previous year.



*The number of active members has been fairly stable over this time period. The number of retirees has increased slightly, which is expected in an ongoing retirement system.*



*The average benefit for retirees has climbed steadily over the past 10 years as new retirees leave with higher salaries and, therefore, higher benefits than those already retired. In addition, effective July 1, 2004, the maximum benefit was increased from 72.5% to 100% of pay. Ad hoc COLAs granted by the Legislature have also increased the average benefit during this period.*



**General Comments**

The economy and financial markets have undergone significant turmoil over the last two years. The valuation results presented as of July 1, 2009 reflected the large loss on the market value of assets and noted that the asset smoothing mechanism would recognize this over the coming years. The results this year do indeed reflect the continued recognition of past losses. As a result, the funded ratio of the System declined from 85% to 81%, despite an additional contribution of \$6 million by the State.

The employer contribution rate is scheduled to increase to an ultimate rate of 22% in FY2019. The member contribution rate is 8%. As noted earlier in the report, the actuarial contribution rate of 35.74% exceeds what is currently being funded. Unless there are further increases in the contribution rate or substantial future investment gains, the financial health of the System will deteriorate and at some point may reach a point of severe problems. We encourage interested parties to be diligent in monitoring the financial health of the System and to consider what steps might be prudent to ensure the ability to deliver the promised benefits to members over the long term. The more quickly state leaders act to provide adequate funding to the System according to actuarial requirements, the lower the annual required contribution rate will be in the future.

This report reflects the first valuation performed by Cavanaugh Macdonald Consulting. We are grateful to the System for their help in this transition.



## SECTION 1 – SUMMARY OF RESULTS

For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below. The remainder of this section discusses some of the most significant results and trends.

	7/1/2010 Valuation	7/1/2009 Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	271	274	(1.1)
Retired and Disabled Members and Beneficiaries	210	200	5.0
Inactive Members	12	13	(7.7)
Total members	<u>493</u>	<u>487</u>	1.2
Projected Annual Salaries of Active Members	\$ 35,023,262	\$ 33,579,668	4.3
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 11,801,981	\$ 10,545,466	11.9
<b>2. ASSETS AND LIABILITIES</b>			
Total Actuarial Accrued Liability	\$ 282,765,405	\$ 261,396,022	8.2
Market Value of Assets	\$ 211,180,555	\$ 184,646,816	14.4
Actuarial Value of Assets	\$ 230,010,299	\$ 221,576,179	3.8
Unfunded Actuarial Accrued Liability	\$ 52,755,106	\$ 39,819,843	32.5
Funded Ratio	81.3%	84.8%	(4.1)
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost Rate	31.66%	30.86%	
Amortization of Unfunded Actuarial Accrued Liability	11.61%	8.76%	
Budgeted Expenses	0.47%	0.49%	
Total Actuarial Required Contribution Rate	<u>43.74%</u>	<u>40.11%</u>	
<b>Less</b> Estimated Member Contribution Rate	<u>8.00%</u>	<u>8.00%</u>	
Employer Actuarial Required Contribution Rate	35.74%	32.11%	
<b>Less</b> Statutory State Employer contribution Rate	<u>10.00%</u>	<u>8.50%</u>	
Contribution Shortfall	25.74%	23.61%	



### **Market Value of Assets**

The current market value represents the "snapshot" or "cash-out" value of System assets as of the valuation date. In addition, market values of assets provide a basis for measuring investment performance from time to time. At July 1, 2010 the market value of assets for the System was \$211 million. Table 1 is a comparison, at market values, of System assets as of July 1, 2010, and July 1, 2009, in total and by investment category. Table 2 summarizes the change in the market value of assets from July 1, 2009 to June 30, 2010.

### **Actuarial Value of Assets**

Neither the market value of assets, representing a "cash-out" value of System assets, nor the book value of assets, representing the cost of investments, may be the best measure of the System's ongoing ability to meet its obligations.

To arrive at a suitable value for the actuarial valuation, a technique for determining the actuarial value of assets is used, which dampens swings in the market value while still indirectly recognizing market values.

The actuarial value of assets is based on a five-year moving average of expected and actual market values determined as follows:

- at the beginning of each fiscal year, a preliminary expected actuarial asset value is calculated as the sum of the previous year's actuarial value increased with a year's interest at the System valuation rate plus net cash flow adjusted for interest (at the same rate) to the end of the previous fiscal year;
- the expected actuarial asset value is set equal to the preliminary expected actuarial value plus the unrecognized investment gains and losses as of the beginning of the previous fiscal year;
- the difference between the expected actuarial asset value and the market value is the investment gain or loss for the previous fiscal year;
- the (final) actuarial asset value is the preliminary value plus 20% of the investment gains and losses for each of the five previous fiscal years, but in no case more than 120% of the market value or less than 80% of the market value.

Table 3 shows the development of the actuarial value of assets (AVA) as of the valuation date.



## Uniform Retirement System For Justices & Judges

### Table 1

#### Analysis of Net Assets at Market Value

	June 30, 2010		June 30, 2009	
	Amount (\$Millions)	% of Total	Amount (\$Millions)	% of Total
Cash & Equivalents	\$ 3.0	1.4%	\$ 1.2	0.6%
Short-term investments	1.5	0.7%	0.5	0.3%
Government Obligations	48.4	22.4%	42.3	22.4%
Corporate Bonds	33.5	15.5%	29.8	15.7%
Domestic Equity	83.2	38.4%	74.1	39.1%
International Equity	46.8	21.6%	41.4	21.9%
Subtotal	\$ 216.4	100.0%	\$ 189.3	100.0%
Net receivables/(payables)	(5.2)		(4.7)	
Net Assets	\$ 211.2		\$ 184.6	



## Uniform Retirement System For Justices & Judges

### Table 2

#### Statement of Changes in Net Assets

	Fiscal Year Ended June 30	
	2010	2009
1. Market Value of Net Assets at Beginning of Year	\$ 184,646,816	\$ 225,924,669
2. Contributions		
a. Members	\$ 2,599,341	\$ 2,774,837
b. State and Local Agencies	8,704,232	2,243,701
c. Total Contributions (2a) + (2b)	\$ 11,303,573	\$ 5,018,538
3. Net Investment Income		
a. Net appreciation (depreciation) in fair value of investments	\$ 24,390,695	\$ (39,396,611)
b. Interest	2,832,603	3,862,007
c. Dividends	0	5,208
d. Securities lending activities	32,665	(149,298)
e. Other	0	34,594
f. Total investment income/(loss) (3a) + (3b) + (3c) + (3d) + (3e)	\$ 27,255,963	\$ (35,644,100)
g. Investment expenses	(139,481)	(95,588)
h. Net investment income/(loss) (3f) + (3g)	27,116,482	(35,739,688)
i. Total additions/(subtractions) (2c) + (3h)	\$ 38,420,055	\$ (30,721,150)
4. Deductions		
a. Retirement, death, and survivor benefits	\$ 11,705,265	\$ 10,430,301
b. Refunds and withdrawals	66,389	9,321
c. Administrative expenses	114,662	117,081
d. Total deductions (4a) + (4b) + (4c)	\$ 11,886,316	\$ 10,556,703
5. Net Change in Assets (3i) - (4d)	26,533,739	(41,277,853)
6. Market Value of Net Assets at End of Year (1) + (5)	\$ 211,180,555	\$ 184,646,816



## Uniform Retirement System For Justices & Judges

### Table 3

#### Determination of Actuarial Value of Assets

##### Schedule of Asset Gains/(Losses)

Year End	Original Amount	Recognized in Prior Years	Recognized in This Year	Recognized in Future Years
2006	\$ (1,271,724)	\$ (1,017,379)	\$ (254,345)	\$ 0
2007	16,819,375	10,091,625	3,363,875	3,363,875
2008	(24,818,650)	(9,927,460)	(4,963,730)	(9,927,460)
2009	(53,183,041)	(10,636,608)	(10,636,608)	(31,909,825)
2010	24,554,582	0	4,910,916	19,643,666
Total	\$ (37,899,458)	\$ (11,489,822)	\$ (7,579,892)	\$ (18,829,744)

##### Development of Actuarial Value of Assets

1. Actuarial Value as of July 1, 2009	\$ 221,576,179
2. Contributions	
a. Member	\$ 2,599,341
b. Employer	8,704,232
c. Total (a) + (b)	\$ 11,303,573
3. Decreases during year	
a. Benefit payments	\$ (11,705,265)
b. Refunds and withdrawals	(66,389)
c. Administrative expenses	(114,662)
d. Total (a) + (b) + (c)	\$ (11,886,316)
4. Expected return at 7.5% on:	
a. Item 1	\$ 16,618,213
b. Item 2 (one-half year)	416,221
c. Item 3 (one-half year)	(437,679)
d. Total (a) + (b) + (c)	\$ 16,596,755
5. Expected actuarial value as of June 30, 2010 (1) + (2) + (3) + (4)	\$ 237,590,191
6. Unrecognized asset gain/(loss) as of June 30, 2010	\$ (50,964,218)
7. Expected actuarial value as of June 30, 2010, plus previous year's unrecognized gain/(loss) (5) + (6)	\$ 186,625,973
8. Market Value as of June 30, 2010	\$ 211,180,555
9. Year end 2010 asset gain/(loss) (8) - (7)	\$ 24,554,582
10. Asset gain/(loss) to be recognized as of June 30, 2010	\$ (7,579,892)
11. Initial Actuarial Value as of June 30, 2010 (5) + (10)	\$ 230,010,299
12. Constraining values:	
a. 80% of market value (8) x 0.8	\$ 168,944,444
b. 120% of market value (8) x 1.2	\$ 253,416,666
13. Actuarial Value as of June 30, 2010	\$ 230,010,299
(11), but not less than (12a), nor greater than (12b)	



## SECTION 3 – SYSTEM LIABILITIES

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In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of assets of the System as of the valuation date, July 1, 2010. In this section, the discussion will focus on the commitments of the System, which are referred to as its liabilities.

Table 4 contains an analysis of the actuarial present value of all future benefits (PVFB) for contributing members, inactive members, retirees and their beneficiaries. The analysis is provided for each group.

The liabilities summarized in Table 4 include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits expected to be earned. For all members, active and retired, the value extends over benefits earnable and payable for the rest of their lives and, if an optional benefit is chosen, for the lives of the surviving beneficiaries.

The actuarial assumptions used to determine liabilities are based on the results of an Experience Study based on the three year period ended June 30, 2007. This set of assumptions, as shown in Appendix C, was first used for the July 1, 2008 valuation. The liabilities reflect the benefit structure in place as of July 1, 2010. Additionally, the liabilities shown in the report assume a 2% annual COLA will be granted by the Legislature in future years.

### **Actuarial Liabilities**

A fundamental principle in financing the liabilities of a retirement program is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. An actuarial cost method is a mathematical technique that allocates the present value of future benefits into annual costs. In order to do this allocation, it is necessary for the funding method to “breakdown” the present value of future benefits into two components:

- (1) that which is attributable to the past, and
- (2) that which is attributable to the future.

Actuarial terminology calls the part attributable to the past the “past service liability” or the “actuarial accrued liability”. The portion allocated to the future is known as the present value of future normal costs, with the specific piece of it allocated to the current year being called the “normal cost”. Table 5 contains the calculation of actuarial liabilities for all groups.

The System uses an assumption of a 2% annual COLA each year in developing liabilities and contribution rates even though the System does not have an automatic COLA provision. Ad hoc COLAs have historically been granted by the Legislature every other year. In order to avoid actuarial gains in the year in which a COLA is not granted and an actuarial loss in the years in which a COLA is granted, the System’s liabilities include a “COLA Reserve”. The COLA Reserve is included in the actuarial accrued liability to account for expected cost of living adjustments to the benefits of retired participants that have not been granted by the valuation date. Any ad hoc increase granted will decrease the reserve amount by the cost of the increase. When the cost of an ad hoc increase is greater than the amount of the reserve, the reserve is set to zero and the period for calculating ungranted increases is set to the valuation date.



## Uniform Retirement System For Justices & Judges

**Table 4**

### Present Value of Future Benefits

	Total
1. Active Employees	
a. Retirement Benefit	\$ 209,565,779
b. Withdrawal Benefit	8,525,424
c. Pre-Retirement Death Benefit	4,429,588
d. Return of Member Contributions	345,621
e. Supplemental Medical Benefit	1,663,615
f. Subtotal	\$ 224,530,027
2. Inactive Nonvested Members	\$ 521,580
3. Inactive Vested Members	3,850,775
4. Disabled Members	1,140,680
5. Retirees	114,401,377
6. Beneficiaries	11,498,305
7. Supplemental Medical Benefit for Retirees and Inactive Vested Members	1,273,017
8. COLA Reserve	5,934,168
9. Total PVFB	\$ 363,149,929



## Uniform Retirement System For Justices & Judges

**Table 5**

### Actuarial Accrued Liability

	Total
1. Present Value of Future Benefits for Active Members	
a. Retirement Benefit	\$ 209,565,779
b. Withdrawal Benefit	8,525,424
c. Pre-Retirement Death Benefit	4,429,588
d. Return of Member Contributions	345,621
e. Supplemental Medical Benefit	1,663,615
f. Subtotal	\$ 224,530,027
2. Present Value of Future Normal Costs for Active Members	
a. Retirement Benefit	\$ 70,983,288
b. Withdrawal Benefit	6,396,294
c. Pre-Retirement Death Benefit	1,764,615
d. Return of Member Contributions	609,145
e. Supplemental Medical Benefit	631,182
f. Subtotal	\$ 80,384,524
3. Present Value of Future Benefits for Inactive Members	138,619,902
4. Total Actuarial Accrued Liability (1f) - (2f) + (3)	\$ 282,765,405

**Uniform Retirement System For Justices & Judges****Table 6****Development of COLA Reserve**

1. Reserve as of July 1, 2009	\$	3,156,615
2. Interest at 7.5%		236,746
3. Reserve increment		<u>2,540,807</u>
4. Expected reserve as of July 1, 2010 (1) + (2) + (3)	\$	5,934,168
5. Ad hoc cost of living increase during year ended June 30, 2010		<u>0</u>
6. Actual reserve as of July 1, 2010 (4) - (5), but not less than \$0	\$	5,934,168



## SECTION 4 – EMPLOYER CONTRIBUTIONS

---

In the previous two sections, attention has been focused on the assets and the present value of all future benefits of the System. A comparison of Tables 3 and 4 indicates that there is a shortfall in current actuarial assets to meet the present value of all future benefits for current members and beneficiaries.

In an active system, there will always be a difference between the assets and the present value of all future benefits. An actuarial valuation sets a schedule of future contributions that will deal with this funding in an orderly fashion.

The method used to determine the incidence of the contributions in various years is called the actuarial cost method. Under an actuarial cost method, the contributions required to meet the difference between current assets and current liabilities are allocated each year between two elements: (1) the normal cost and (2) the payment on the unfunded actuarial accrued liability.

The term “fully funded” is often applied to a system in which contributions at the normal cost rate are sufficient to pay for the benefits of existing employees as well as for those of new employees. More often than not, systems are not fully funded, either because of past benefit improvements that have not been completely funded and/or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated. Under these circumstances, an unfunded actuarial accrued liability (UAAL) exists.

### **Description of Rate Components**

The actuarial cost method used by the System is the traditional Entry Age Normal (EAN) – level percent of pay cost method. Under the EAN cost method, the actuarial present value of each member’s projected benefit is allocated on a level basis over the member’s compensation between the entry age of the member and the assumed exit ages. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The actuarial present value of benefits allocated to prior years of service is called the actuarial accrued liability. The unfunded actuarial accrued liability represents the difference between the actuarial accrued liability and the actuarial value of assets as of the valuation date. The unfunded actuarial accrued liability is calculated each year and reflects experience gains/losses.

Effective with the July 1, 2008 valuation, the UAAL is amortized as a level percent of payroll over a closed 20-year period commencing July 1, 2007. Prior to 2008, the unfunded actuarial accrued liability was amortized as a level dollar amount over a 40-year period from July 1, 1987. Given a stable active workforce, the level percent of payroll amortization method is expected to produce a payment stream that is constant as a percent of covered payroll.

### **Contribution Rate Summary**

The normal cost rate is developed in Table 7. Table 8 develops the contribution rate for amortization of the unfunded actuarial accrued liability. Table 9 develops the total actuarial contribution rate.



## Uniform Retirement System For Justices & Judges

**Table 7**

### Normal Cost Contribution Rates As Percentages of Salary

	Total	% of Pay
1. Normal Cost		
a. Retirement Benefit	\$ 9,883,937	28.21%
b. Withdrawal Benefit	770,409	2.20%
c. Pre-Retirement Death Benefit	244,349	0.70%
d. Return of Member Contributions	87,987	0.25%
e. Supplemental Medical Benefit	103,393	0.30%
f. Total	\$ 11,090,075	31.66%
2. Estimated Payroll for the Year	\$ 35,023,262	
3. Normal Cost Rate (1f)/(2)	31.66%	



**Uniform Retirement System For Justices & Judges**

**Table 8**

**Unfunded Actuarial Accrued Liability Contribution Rate**

1. Actuarial Present Value of Future Benefits	\$	363,149,929
2. Actuarial Present Value of Future Normal Costs		<u>80,384,524</u>
3. Actuarial Accrued Liability (1) - (2)	\$	282,765,405
4. Actuarial Value of Assets		<u>230,010,299</u>
5. Unfunded Actuarial Accrued Liability (UAAL) (3) - (4)	\$	52,755,106
6. Amortization of UAAL over 20 years from July 1, 2007 (assumed mid-year) *	\$	4,067,042
7. Total Estimated Payroll for Year Ending June 30, 2011	\$	35,023,262
8. Amortization as a Percent of Payroll		11.61%

\*The UAAL is amortized as a level percent of payroll, assuming payroll increases 4.25% per year



## Uniform Retirement System For Justices & Judges

### Table 9

#### Actuarial Contribution Rate

	July 1	
	2010	2009
1. Total Normal cost Rate	31.66%	30.86%
2. Amortization of UAAL <sup>1</sup>	11.61%	8.76%
3. Budgeted Expenses <sup>2</sup>	0.47%	0.49%
4. Total Actuarial Contribution Rate (1) + (2) + (3)	43.74%	40.11%
5. Estimated Member Contribution Rate	8.00%	8.00%
6. Employer Actuarial Contribution Rate (4) - (5)	35.74%	32.11%

<sup>1</sup> Amortization of UAAL is a level percent of payroll.

<sup>2</sup> Provided by the system.



## Uniform Retirement System For Justices & Judges

Table 10

### Calculation of Actuarial Gain/(Loss)

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at July 1, 2009	\$ 261,396,022
b. Normal cost at July 1, 2009	10,361,802
c. Benefit payments for fiscal year ending June 30, 2010	(11,771,654)
d. Interest on (a), (b), and (c)	19,948,380
e. Change in actuary	2,279,775
f. Change in plan provisions	-
g. Expected actuarial accrued liability as of July 1, 2010 (a) + (b) + (c) + (d) + (e) + (f)	\$ 282,214,325
2. Actuarial accrued liability at July 1, 2010	\$ 282,765,405
3. Actuarial accrued liability gain/(loss) (1g) - (2)	\$ (551,080)
4. Expected actuarial value of assets	
a. Actuarial value of assets at July 1, 2009	\$ 221,576,179
b. Contributions for fiscal year ending June 30, 2010	11,303,573
c. Benefit payments and administrative expenses for fiscal year ending June 30, 2010	(11,886,316)
d. Interest on (a), (b), and (c)	16,596,755
e. Expected actuarial value of assets as of July 1, 2010 (a) + (b) + (c) + (d)	\$ 237,590,191
5. Actuarial value of assets at July 1, 2010	\$ 230,010,299
6. Actuarial value of assets gain/(loss) (5) - (4e)	\$ (7,579,892)
7. Net actuarial gain/(loss) (3) + (6)	\$ (8,130,972)



## Uniform Retirement System For Justices & Judges

**Table 11**

### Summary of Contribution Requirements

	Actuarial Valuation as of		Percent Change
	July 1, 2010	July 1, 2009	
1. Expected annual payroll	\$ 35,023,262	\$ 33,579,668	4.3%
2. Total normal cost	\$ 11,090,075	\$ 10,361,802	7.0%
3. Unfunded actuarial accrued liability	\$ 52,755,106	\$ 39,819,843	32.5%
4. Amortization of unfunded actuarial accrued liability over 20 years from July 1, 2007*	\$ 4,067,042	\$ 2,940,101	38.3%
5. Budgeted expenses (provided by the System)	\$ 163,298	\$ 163,304	0.0%
6. Total required contribution (2) + (4) + (5)	\$ 15,320,415	\$ 13,465,207	13.8%
7. Estimated member contributions	\$ 2,801,861	\$ 2,686,373	4.3%
8. Required employer contribution (6) - (7)	\$ 12,518,554	\$ 10,778,833	16.1%
9. Previous year's actual contribution			
a. Member	\$ 2,599,341	\$ 2,774,837	-6.3%
b. Employer	8,704,232	2,243,701	287.9%
c. Total	\$ 11,303,573	\$ 5,018,538	125.2%

\*Amortization of UAAL is a level percent of payroll.



### **Uniform Retirement System For Justices & Judges**

Governmental Accounting Standards Board Statement No. 25, Financial Reporting for Defined Benefit Pension Plans as amended by GASB 50, (referred to as GASB 25), establishes financial reporting standards for defined benefit pension plans. In addition to the 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 historical contribution patterns.

- The Schedule of Funding Progress provides information about whether the financial strength of the Plan is improving or deteriorating over time.
- The Schedule of Employer Contributions provides historical information about the annual required contribution (ARC) and the percentage of the ARC that was actually contributed.

In addition to information required by GASB, we also provide an exhibit showing the present value of accumulated benefits under FASB Statement No. 35 and an exhibit showing the expected benefit payments for the System.



## Uniform Retirement System For Justices & Judges

### Table 12

#### Accounting Information for GASB 25

#### Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percent of Covered Payroll ((b) - (a))/(c)
7/1/2005	\$203,951,085	\$187,556,845	(\$16,394,240)	108.7%	\$24,814,338	-66.1%
7/1/2006	210,376,209	205,302,048	(5,074,161)	102.5%	27,488,381	-18.5%
7/1/2007	224,577,704	227,062,193	2,484,489	98.9%	32,191,938	7.7%
7/1/2008	235,297,077	244,062,321	8,765,244	96.4%	32,389,296	27.1%
7/1/2009	221,576,179	261,396,022	39,819,843	84.8%	33,579,668	118.6%
7/1/2010	230,010,299	282,765,405	52,755,106	81.3%	35,023,262	150.6%

Valuation Date	July 1, 2010
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Pay, Closed
Remaining Amortization Period	17 Years
Asset Valuation Method	5 Year Moving Average (see Appendix C)
Actuarial Assumptions:	
Investment Rate of Return	7.5%
Projected Salary Increases	5.5%
Cost of Living Adjustment	2%

**Uniform Retirement System For Justices & Judges****Table 13****Accounting Information for GASB 25****Schedule of Employer Contributions****For Fiscal Year Ended June 30**

Year End	Annual Required Contribution	Percentage Contributed
2005	\$ 2,234,175	21.3%
2006	4,441,184	17.8%
2007	5,936,316	20.6%
2008	7,615,245	22.2%
2009	8,169,214	27.5%
2010	10,778,833	80.8%



## Uniform Retirement System For Justices & Judges

### Table 13a

#### Accounting Information for GASB 27

	Fiscal Year End	
	June 30, 2011	June 30, 2010
Annual Required Contribution	\$ 12,518,554	\$ 10,778,833
Interest on Net Pension Obligation	628,375	472,230
Adjustment to Annual Required Contribution	(645,910)	(464,895)
Annual Pension Cost	<u>\$ 12,501,019</u>	<u>\$ 10,786,168</u>
Actual Contribution	*	8,704,232
Increase in Net Pension Obligation	*	2,081,936
Beginning of Year Net Pension Obligation	\$ 8,378,331	\$ 6,296,395
End of Year Net Pension Obligation	*	8,378,331
Interest Rate	7.50%	7.50%
Amortization Period	17	18
Amortization Factor	12.9714	13.5437

\* Not available until the end of the year.



## Uniform Retirement System For Justices & Judges

Table 14

### Actuarial Present Value of Accumulated Benefits

The actuarial present value of vested and nonvested accumulated System benefits is computed on an ongoing System basis in order to provide information on benefit liabilities calculated in accordance with Financial Accounting Standards Board Statement No. 35. In this calculation, a determination is made of all benefits earned by current participants as of the valuation date; the actuarial present value is then computed using demographic assumptions and an assumed interest rate. Assumptions regarding future salary and accrual of future benefit service are not necessary for this purpose. *An assumption of 2% annual future ad hoc cost-of-living increases is not reflected in this liability. Only System liabilities accrued (and in statute) as of the valuation date are included.*

	July 1	
	2010	2009
Vested benefits		
Active members	\$ 85,624,735	\$ 67,703,774
Terminated vested members	3,227,083	3,886,998
Unclaimed contributions	521,580	324,737
Retirees and beneficiaries	108,836,054	94,680,940
Supplemental medical insurance premiums	2,445,328	1,272,938
Total vested benefits	\$ 200,654,780	\$ 167,869,387
Nonvested benefits for active members	\$ 9,191,445	\$ 7,954,771
<b>Total accumulated benefits</b>	\$ 209,846,225	\$ 175,824,158
Market value of assets available for benefits	\$ 211,180,555	\$ 184,646,816
Funded ratio	100.6%	105.0%
Number of members		
Vested members		
Active members	157	110
Terminated vested members	12	13
Retirees and beneficiaries	210	200
Total vested members	379	323
Nonvested active members	114	164
<b>Total members</b>	493	487



## Uniform Retirement System For Justices & Judges

**Table 14 (continued)**

### Actuarial Present Value of Accumulated Benefits

A statement of changes in the actuarial present value of accumulated System benefits follows. This statement shows the effect of certain events on the actuarial present value shown on the previous page.

Present value of accrued benefit as of July 1, 2009	\$	175,824,158
Increase/(decrease) during the year attributable to:		
Benefits accrued and (gains)/losses		33,040,366
Increase due to interest		12,753,355
Benefits paid		(11,771,654)
Plan provision change		-
Net increase/(decrease)	\$	34,022,067
Present value of accrued benefit as of July 1, 2010	\$	209,846,225



## Uniform Retirement System For Justices & Judges

**Table 15**

### **Projected Benefit Payments**

The table below shows estimated benefits expected to be paid over the next ten years, based on the assumptions used in the valuation. The “Actives” column shows benefits expected to be paid to members currently active on July 1, 2010. The “Retirees” column shows benefits expected to be paid to all other members. This includes those who, as of July 1, 2010, are receiving benefit payments or who terminated employment and are entitled to a deferred vested benefit.

### **Retirement, Survivor, and Withdrawal Benefits**

Year Ending June 30	Actives	Retirees	Total
2011	\$ 1,892,000	\$ 11,729,000	\$ 13,621,000
2012	3,125,000	11,758,000	14,883,000
2013	4,539,000	11,736,000	16,275,000
2014	6,012,000	11,814,000	17,826,000
2015	7,703,000	11,781,000	19,484,000
2016	9,641,000	11,686,000	21,327,000
2017	11,433,000	11,566,000	22,999,000
2018	13,108,000	11,450,000	24,558,000
2019	14,908,000	11,296,000	26,204,000
2020	16,735,000	11,226,000	27,961,000

### **Supplemental Medical Premium Benefits**

Year Ending June 30	Actives	Retirees	Total
2011	\$ 22,000	\$ 146,000	\$ 168,000
2012	37,000	142,000	179,000
2013	54,000	137,000	191,000
2014	70,000	134,000	204,000
2015	86,000	130,000	216,000
2016	106,000	124,000	230,000
2017	122,000	118,000	240,000
2018	136,000	113,000	249,000
2019	148,000	109,000	257,000
2020	161,000	106,000	267,000



**State of Oklahoma  
Uniform Retirement System of Justices & Judges**

Following is a summary of the major System provisions used to determine the System’s financial position.

<b>Effective date and authority</b>	<p>Laws 1968, c. 128</p> <p>The System is provided for under Chapter 16, Sections 1101-1112 of Title 20 of the Oklahoma Statutes.</p>
<b>Administration</b>	<p>The State Judicial Retirement Fund is administered by the Board of Trustees of the Oklahoma Public Employees Retirement System. The Board acts as the fiduciary for investment and administration of the System.</p>
<b>Employees included</b>	<p>All Justices and Judges of the Supreme Court, Court of Criminal Appeals, Workers Compensation Court, Courts of Appeals or District Court who serve in the State of Oklahoma participate in the Uniform Retirement System for Justices and Judges.</p>
<b>Member contributions</b>	<p>Before September 1, 2005, basic member contributions equal 5% of salary, while married members could have elected an 8% contribution rate in order to provide survivor coverage. After September 1, 2005, the member contribution rate for all members is 8% of salary.</p>
<b>Employer contributions</b>	<p>Before July 1, 1997, the fund received an amount equal to 10% of the Court Fund receipts. After July 1, 1997, employer contributions were based on members’ salaries and a yearly schedule and, effective January 1 2001, were changed to 2% of the member’s salary. Effective for the fiscal years ending June 30, 2006, employer contributions increased to 3.0% of the member’s salary and will increase annually up to 22.0% for fiscal years ending June 30, 2019, and thereafter.</p>



**Oklahoma  
Uniform Retirement System of Justices & Judges**

<b>Service considered</b>	Any Justice or Judge who becomes a member of the System when first eligible will receive credit for all years of service with the Supreme Court, Court of Criminal Appeals, Workers' Compensation Court, Court of Appeals, or District Court within the State of Oklahoma.
<b>Compensation considered</b>	Salary received by the Justice or Judge while serving in the referenced courts.
<b>Final average salary</b>	The average monthly salary received during the thirty-six highest months of active service as a Justice or Judge.
<b>Eligibility for benefits</b>	A Justice or Judge must complete eight years of service to be eligible for any benefit from the System. A member who leaves the System, for any reason, prior to the completion of eight years of service is entitled only to a return of his/her accumulated contributions without interest.
<b>Normal retirement</b>	<p>A member who completes eight years of service and attains age 65, or completes ten years of service and attains age 60, or completes eight years of service and whose sum of years of service and age equals or exceeds 80, may begin receiving retirement benefits at his/her request.</p> <p>The benefit, payable monthly for the life of the member, is equal to 4% of average monthly salary multiplied by the number of years in service. In no event, however, will the benefit exceed 100% of final average salary.</p>
<b>Disability retirement</b>	A member who completes fifteen years of service, attains age 55, and is ordered to retire by reason of disability is eligible for disability retirement benefits. The benefit, payable for life, is calculated in the same manner as a normal retirement benefit.
<b>Survivor coverage</b>	The spouse of a deceased active member who had met normal or vested retirement provisions may elect a spouse's benefit. The spouse's benefit is the benefit that would have been paid if the member had retired and elected the reduced benefit with the joint and 100% survivor option (Option B),



**State of Oklahoma  
Uniform Retirement System of Justices & Judges**

**Survivor coverage  
(continued)**

or a 50% unreduced benefit for certain married participants making 8% of pay contributions prior to September 1, 2005. Spouses of members who made the voluntary contributions prior to July 1, 1999 and die or retire after July 1, 1999 may receive up to 65% of the unreduced benefit. If the member has ten years of service and the death is determined to be employment related, this benefit is payable immediately to the spouse. Otherwise, the benefit is payable to the spouse on the date the deceased member would have been eligible. This benefit is payable only to the surviving spouse of a member and they must be married 90 days prior to the member's termination of employment as a Justice or Judge.

**Optional forms of  
retirement benefits**

The Maximum Benefit is an unreduced single life annuity with a guaranteed refund of the contribution accumulation. Three other types of benefit payments are available to retiring members:

Option A – A reduced benefit with Joint and 50% Survivor annuity and a return to the unreduced amount if the joint annuitant dies.

Option B – A reduced benefit with Joint and 100% Survivor annuity and a return to the unreduced amount if the joint annuitant dies.

Original Surviving Spouse Plan – An unreduced benefit with Joint and 50% Survivor annuity available only to members who made additional voluntary survivor benefit contributions of 3% of salary prior to September 1, 2005. Spouses of members who made the voluntary contributions prior to July 1, 1999 and die or retire after July 1, 1999 may receive up to 65% of the unreduced benefit.

For married members, spousal consent is required for any option other than Option A.

**Postretirement death benefit**

Upon the death of any retired member, a \$5,000 lump-sum death benefit will be paid to the member's beneficiary. If there is no beneficiary, then the benefit will be paid to the estate.



**State of Oklahoma  
Uniform Retirement System of Justices & Judges**

**Minimum benefits**

In no event will a member, or the estate of a member receive an amount or amounts less than the member's accumulated contributions without interest.

If a former member is not eligible for any other benefit from the System, the member will receive a transfer of these contributions. Similarly, if a member dies while having no spousal coverage, or upon the death of a spouse receiving survivor benefits, the member's beneficiary will receive the excess of the accumulated contributions over all benefits received by either the member, or the member and spouse combined.

**Supplemental medical insurance**

The System contributes the lesser of \$105 per month or the Medicare Supplement Premium to the Oklahoma State and Education Employee's Group Health Insurance Program for members receiving retirement benefits.

**Expenses**

The expenses of administering the retirement system are paid from the retirement trust fund.



## State of Oklahoma Uniform Retirement System of Justices & Judges

### Entry age Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the individual Entry Age Level Percent of Pay actuarial cost. Sometimes called the “funding method,” this is a particular technique used by actuaries for establishing the amount of the annual actuarial cost of pension benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the System is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Entry Age Actuarial Cost method, the **Normal Cost** is computed as the level percentage of pay which, if paid from the earliest time each member would have been eligible to join the System if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the System.

The **Actuarial Accrued Liability** under this method, at any point in time, is the theoretical amount of the fund that would have accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The **Unfunded Actuarial Accrued Liability** is the excess of the actuarial accrued liability over the actuarial value of System assets actually on hand on the valuation date.

Under this method, experience gains or losses, i.e. decreases or increases in actuarial accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

### Asset Valuation Method

The actuarial value of assets is based on a five-year moving average of expected and actual market values determined as follows:

- at the beginning of each fiscal year, a preliminary expected actuarial asset value is calculated as the sum of the previous year’s actuarial value increased with a year’s interest at the System valuation rate plus net cash flow adjusted for interest (at the same rate) to the end of the previous fiscal year;
- the expected actuarial asset value is set equal to the preliminary expected actuarial value plus the unrecognized investment gains and losses as of the beginning of the previous fiscal year;
- the difference between the expected actuarial asset value and the market value is the investment gain or loss for the previous fiscal year;



**State of Oklahoma  
Uniform Retirement System of Justices & Judges**

- the (final) actuarial asset value is the preliminary value plus 20% of the investment gains and losses for each of the five previous fiscal years, but in no case more than 120% of the market value or less than 80% of the market value.

**Amortization Method**

The Unfunded Actuarial Accrued Liability is amortized as a level percentage of payroll over a 20-year period commencing July 1, 2007. Given a stable active workforce, this amortization method is expected to produce a payment stream that remains level as a percent of covered payroll.

**Valuation Procedures**

The actuarial accrued liability held for nonvested, inactive members who have a break in service, or for nonvested members who have quit or been terminated, even if a break in service has not occurred as of the valuation date, is equal to the amount of the individual's unclaimed contributions.

The wages used in the projection of benefits and liabilities are actual earnings for the year ending June 30, 2010 increased by the salary scale to develop expected earnings for the current valuation year. Earnings are annualized for members with less than twelve months of reported earnings.

In computing accrued benefits, average earnings are determined using actual pay history provided for valuation purposes.

The calculations for the required employer contribution are determined as of mid-year. This is a reasonable estimate since contributions are made on a monthly basis throughout the year.

We did not value the 415 limit for active participants. The impact was assumed to be *de minimus*.

The compensation limitation under IRC Section 401(a)(17) is considered in this valuation.

Liability is included for members who appear to be deferred vested, but who are not in the vested data provided. An estimated benefit was calculated based on pay and service reported for prior valuations. A corrected benefit and status will be provided by the System when the actual benefit and status have been finalized.

Members who are contributing to the System, but have not yet filled out an enrollment application, are included as active members. Where data elements are missing, reasonable estimates are used. Service is estimated based on hours worked. Age is based on average entry age for other members. Gender is assigned in proportion to the overall group.



State of Oklahoma  
Uniform Retirement System of Justices & Judges

The System uses an assumption of a 2% annual COLA each year in developing liabilities and contribution rates. The System does not have an automatic COLA provision, but ad hoc COLAs have historically been granted by the Legislature every other year, with the exception of 2010. In order to avoid actuarial gains in the years in which a COLA is not granted and an actuarial loss in the years in which a COLA is granted, the System’s liabilities include a “COLA Reserve”. The COLA Reserve is included in the actuarial accrued liability to account for expected cost of living adjustments to the benefits of retired participants that have not been granted by the valuation date. Any ad hoc increase granted will decrease the reserve amount by the cost of the benefit increase. When the cost of an ad hoc increase is greater than the amount of the reserve, the reserve is set to zero and the period for calculating ungranted COLA increases is set to the valuation date.

Economic Assumptions

<b>Investment Return:</b>	7.5% net of investment expenses per annum, compounded annually
<b>Salary Increases:</b>	5.5% per year
<b>Payroll Growth:</b>	4.25% per year
<b>Ad hoc benefit increase assumption:</b>	
<b>Monthly benefits</b>	2% per year
<b>Medical supplement</b>	No increases assumed
<b>Projection of 410(a)(17) compensation limit</b>	Projected with inflation at 3.0%

Demographic Assumptions

**Retirement age:**

Active members

<u>Attained Age</u>	<u>Annual Rates of Retirement Per 100 Eligible Members</u>
Below 62	10
62 - 65	25
66 - 67	10
68 - 69	30
70	20
71 - 74	10
75+	100



**State of Oklahoma  
Uniform Retirement System of Justices & Judges**

Deferred vested members	Participants with deferred benefits are assumed to commence benefits on a date provided by URSJJ. Actives expected to terminate with a vested benefit are expected to commence benefits at age 60.
<b>Mortality Rates:</b>	
Active Participants and nondisabled pensioners	RP-2000 Combined Active/Retired Healthy Mortality Table projected to 2010 using Scale AA, setback 1 year.
Disabled pensioners	RP-2000 Combined Active/Retired Healthy Mortality Table projected to 2010 using Scale AA set forward 14 years.
<b>Separation Rates:</b>	
Separation for all reasons other than death	2% for all years of service.
<b>Disability Rates:</b>	
	0%
<b>Marital Status:</b>	
Age difference	Males are assumed to be four years older than spouses.
Percentage married	85%
<b>Other Assumptions:</b>	
Provisions for expenses	Administrative expenses, as budgeted for the Oklahoma Uniform Retirement System for Justices and Judges.
Form of payment	Active members who were contributing 8% of pay as of August 31, 2005, are assumed to retire with an unreduced benefit payable as a 50% Joint and Survivor annuity. All other members are assumed to retire with a life-only annuity.



### Uniform Retirement System For Justices & Judges

	Actuarial Valuation as of		%
	7/1/2010	7/1/2009	
1. Active members			
a. Number	271	274	-1.1%
b. Annual compensation	\$ 35,023,262	\$ 33,579,668	4.3%
c. Average annual compensation	\$ 129,237	\$ 122,554	5.5%
d. Average age	57.1	57.0	0.1%
e. Average service	11.9	12.2	-2.8%
2. Accumulated member contributions			
a. Active members	\$ 20,976,808	\$ 20,120,183	4.3%
b. Unclaimed contribution amounts	\$ 521,580	\$ 324,737	60.6%
c. Total	\$ 21,498,388	\$ 20,444,920	5.2%
3. Vested terminated members			
a. Number	12	13	-7.7%
b. Annual deferred benefits	\$ 485,361	\$ 538,787	-9.9%
c. Average annual deferred benefit	\$ 40,447	\$ 41,445	-2.4%
d. Annual supplemental medical insurance premiums	\$ 15,120	\$ 16,380	-7.7%
4. Retired members			
a. Number	157	148	6.1%
b. Annual retirement benefits	\$ 10,484,788	\$ 9,279,624	13.0%
c. Average annual retirement benefit	\$ 66,782	\$ 62,700	6.5%
d. Annual supplemental medical insurance premiums	\$ 146,160	\$ 136,080	7.4%
5. Beneficiaries			
a. Number	51	50	2.0%
b. Annual retirement benefits	\$ 1,201,241	\$ 1,149,890	4.5%
c. Average annual retirement benefit	\$ 23,554	\$ 22,998	2.4%
6. Disabled members			
a. Number	2	2	0.0%
b. Annual retirement benefits	\$ 115,952	\$ 115,952	0.0%
c. Average annual retirement benefit	\$ 57,976	\$ 57,976	0.0%
d. Annual supplemental medical insurance premiums	\$ 2,520	\$ 2,520	0.0%
7. Total members included in valuation	493	487	1.2%



### Uniform Retirement System For Justices & Judges

	Receiving Benefits					Total Members
	Active Members	Vested Terminated	Retirees	Disability Retirees	Benefici- aries	
<b>As of July 1, 2009</b>	<b>274</b>	<b>13</b>	<b>148</b>	<b>2</b>	<b>50</b>	<b>487</b>
Age retirements	(14)	(2)	16	0	0	0
Disability retirements	0	0	0	0	0	0
Deaths without payments continuing	0	0	(4)	0	(3)	(7)
Deaths with payments continuing	0	0	(4)	0	4	0
Nonvested terminations/refund of contributions	(3)	0	0	0	0	(3)
Vested terminations	(1)	1	0	0	0	0
Transfers	0	0	0	0	0	0
Data adjustments	0	0	1	0	0	1
Rehires	0	0	0	0	0	0
New entrants during the year	15	0	0	0	0	15
Net change	(3)	(1)	9	0	1	6
<b>As of July 1, 2010</b>	<b>271</b>	<b>12</b>	<b>157</b>	<b>2</b>	<b>51</b>	<b>493</b>

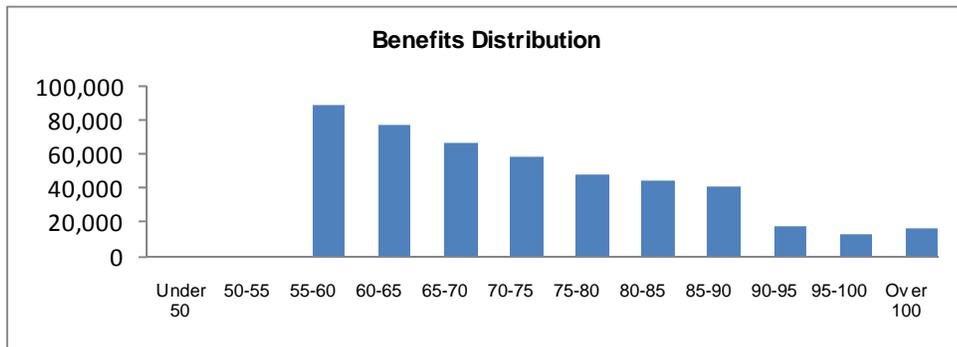
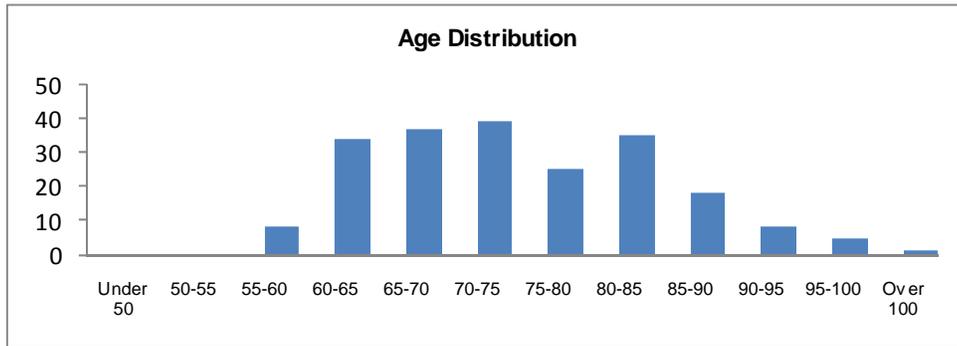
**Uniform Retirement System For Justices & Judges**

	Active	Retired	Terminated	
			Vested	Total
Records submitted on data file	271	370	11	652
Remove deceased retirees	0	(160)	0	(160)
Remove unusable data	0	0	0	0
Remove those with another status	(1)	0	0	(1)
Add those with no application	1	0	0	1
Add assumed vesteds	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
<b>Total valued</b>	<b>271</b>	<b>210</b>	<b>12</b>	<b>493</b>



### Uniform Retirement System For Justices & Judges

Age	Number			Annual Benefits		
	Male	Female	Total	Male	Female	Total
Under 50	0	0	0	\$0	\$0	\$0
50-55	0	0	0	0	0	0
55-60	5	3	8	519,933	192,704	712,637
60-65	27	7	34	2,289,443	346,222	2,635,665
65-70	26	11	37	1,788,125	670,355	2,458,480
70-75	35	4	39	2,151,148	136,397	2,287,545
75-80	17	8	25	986,546	202,862	1,189,408
80-85	24	11	35	1,290,054	263,046	1,553,100
85-90	11	7	18	575,578	163,880	739,458
90-95	1	7	8	51,381	91,941	143,322
95-100	0	5	5	0	66,147	66,147
Over 100	0	1	1	0	16,219	16,219
<b>Total</b>	<b>146</b>	<b>64</b>	<b>210</b>	<b>\$9,652,208</b>	<b>\$2,149,772</b>	<b>\$11,801,981</b>





**State of Oklahoma  
Uniform Retirement System of Justices & Judges**

**Accrued Benefit**

The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.

**Actuarial Accrued Liability**

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

**Actuarial Assumptions**

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement, and retirement; changes in compensation, rates of investment earnings, and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.

**Actuarial Cost Method**

A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

**Actuarial 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 Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

**Actuarial Present Value**

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions.

**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 pension plan.

**Actuarial Value of Assets**

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.



**Actuarially Equivalent**

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

**Amortization Payment**

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

**Deferred Vested Participant**

A vested member who has terminated employment prior to early or normal retirement age who does not withdraw his or her contributions and is, therefore, due a retirement benefit at a later date.

**Entry Age Actuarial Cost Method**

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

**Market Value of Assets**

The fair value of cash, investments and other property belonging to a pension plan that could be acquired by exchanging them on the open market.

**Normal Cost**

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method Projected Benefits

**Projected Benefits**

Those pension plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits.

**Unaccrued Benefit**

The excess of an individual's Projected Benefits over the Accrued Benefits as of a specified date.

**Unfunded Actuarial Accrued Liability**

The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

**Withdrawal Liability**

The liability due to an active member terminating employment with a deferred vested benefit.



**ADDENDUM**

**State of Oklahoma  
Uniform Retirement System of Justices & Judges**

**CERTIFICATION**

We have prepared an actuarial valuation of the State of Oklahoma Uniform Retirement System for Justices & Judges as of July 1, 2010, for the fiscal year ending June 30, 2011. The results of the valuation are set forth in this addendum, which reflects the benefit provisions in effect on July 1, 2010.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System’s staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete, or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

The results in this Addendum have been prepared for the sole purpose of meeting the Board of Trustees’ requirement to submit this information to the Oklahoma State Pension Commission, based on the following prescribed assumptions (20 Okla.Stat, Section 1108(D)):

- Interest rate: 7.50%
- COLA assumption: 2.00%
- Mortality: RP-2000 Mortality Table for Employees, Healthy Retirees and Disabled Retirees with Mortality Projected Forward from 2000 using Scale AA.
- Amortization period: 30 years, open period
- Sources of all contributions and revenues, including dedicated tax free revenue and federal monies

All other assumptions, methodologies, and System provisions used are consistent with those used in the July 1, 2010 valuation.

The results shown in this Addendum are not consistent with those in the July 1, 2010, valuation. The July 1, 2010, valuation results were determined in accordance with generally accepted actuarial principles and practices that are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying opinion and supporting recommendations of the American Academy of Actuaries. The results shown in this Addendum are not based on the assumptions and methodologies adopted by the Board of Trustees.

We are available to answer any questions on the material contained in this report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

*Alisa Bennett*

Alisa Bennett, FSA, EA, FCA, MAAA

October 15, 2010

Date

*Patrice Beckham*

Patrice Beckham, FSA, EA, MAAA

October 15, 2010

Date



## ADDENDUM

### State of Oklahoma Uniform Retirement System of Justices & Judges

#### SUMMARY OF VALUATION RESULTS UNDER PRESCRIBED ASSUMPTIONS

This supplemental report has been prepared to present the results of a valuation of the State of Oklahoma Uniform Retirement System of Justices & Judges as of July 1, 2010, based on the prescribed assumptions under 20 Okla.Stat, Section 1108(D), of current statutes and regulations issued thereunder.

A summary of principal valuation results from the current and the prior valuation follows.

	Actuarial Valuation as of		Change Between Years	
	July 1, 2010	July 1, 2009	Amount	Percent
<b>Summary of Costs</b>				
Required employer contribution for current year	\$ 11,133,994	\$ 9,898,005	\$ 1,235,989	12.5%
Actual employer contributions received in prior year	8,704,232	2,243,701	6,460,531	287.9%
<b>Funded Status</b>				
Actuarial accrued liability	\$ 277,111,001	\$ 258,162,962	\$ 18,948,039	7.3%
Actuarial value of assets	230,010,299	221,576,179	8,434,120	3.8%
Unfunded actuarial accrued liability	47,100,702	36,586,783	10,513,919	28.7%
Funded ratio	83.0%	85.8%	-2.8%	-3.3%
<b>Market Value of Assets and Additional Liabilities</b>				
Market value of assets	\$ 211,180,555	\$ 184,646,816	\$ 26,533,739	14.4%
Present Value of projected future System benefits	360,152,979	331,861,414	28,291,565	8.5%



## ADDENDUM

### State of Oklahoma Uniform Retirement System of Justices & Judges

#### SUMMARY OF VALUATION RESULTS UNDER PRESCRIBED ASSUMPTIONS (continued)

This supplemental report has been prepared to present the results of a valuation of the State of Oklahoma Uniform Retirement System of Justices & Judges as of July 1, 2010, based on the prescribed assumptions under 20 Okla.Stat, Section 1108(D), of current statutes and regulations issued thereunder.

A summary of principal valuation results from the current and the prior valuation follows.

	Actuarial Valuation as of		Percent Change in Amount
	July 1, 2010 Amount	July 1, 2009 Amount	
<b>Summary of Contribution Requirements</b>			
1. Expected annual payroll	\$ 35,023,262	\$ 33,579,668	4.3%
2. Total normal cost	\$ 11,319,510	\$ 10,515,601	7.6%
3. Unfunded actuarial accrued liability	\$ 47,100,702	\$ 36,586,783	28.7%
4. Amortization of unfunded actuarial accrued liability over 30 years*	\$ 2,453,047	\$ 1,905,473	28.7%
5. Budgeted expenses (provided by the System)	\$ 163,298	\$ 163,304	0.0%
6. Total required contribution (2) + (4) + (5)	\$ 13,935,855	\$ 12,584,378	10.7%
7. Estimated member contributions	\$ 2,801,861	\$ 2,686,373	4.3%
8. Required employer contributions (6) - (7), not less than \$0	\$ 11,133,994	\$ 9,898,005	12.5%
9. Previous year's actual contribution			
a. Member	\$ 2,599,341	\$ 2,774,837	-6.3%
b. Employer	8,704,232	2,243,701	287.9%
c. Total	\$ 11,303,573	\$ 5,018,538	125.2%

\*Amortized as a level percent of payroll



## ADDENDUM

### State of Oklahoma Uniform Retirement System of Justices & Judges

#### UNFUNDED ACTUARIAL ACCRUED LIABILITY

This supplemental report has been prepared to present the results of a valuation of the State of Oklahoma Uniform Retirement System of Justices & Judges as of July 1, 2010, based on the prescribed assumptions under 20 Okla.Stat, Section 1108(D), of current statutes and regulations issued thereunder.

The actuarial accrued liability is the present value of projected future System benefits allocated to past service by the actuarial funding method being used.

	July 1, 2010	July 1, 2009
1. Actuarial present value of benefits		
a. Active members	\$ 229,207,401	\$ 216,915,219
b. Terminated vested members and other inactive	3,941,448	5,071,711
c. Retirees, disableds, and beneficiaries	127,004,130	109,874,484
d. Total (a) + (b) + (c)	<u>\$ 360,152,979</u>	<u>\$ 331,861,414</u>
2. Actuarial present value of future normal costs	\$ 83,041,978	\$ 73,698,452
3. Total actuarial accrued liability (1) - (2)	\$ 277,111,001	\$ 258,162,962
4. Actuarial value of assets	\$ 230,010,299	\$ 221,576,179
5. Unfunded actuarial accrued liability (3) - (4)	\$ 47,100,702	\$ 36,586,783



## ADDENDUM

### State of Oklahoma Uniform Retirement System of Justices & Judges

#### NORMAL COST

This supplemental report has been prepared to present the results of a valuation of the State of Oklahoma Uniform Retirement System of Justices & Judges as of July 1, 2010, based on the prescribed assumptions under 20 Okla.Stat, Section 1108(D), of current statutes and regulations issued thereunder.

The components of normal cost under the System's funding method are:

<b>Component</b>	<b>July 1, 2010</b>	<b>July 1, 2009</b>
Retirement benefits	\$ 10,201,165	\$ 9,304,121
Withdrawal benefits	769,332	840,068
Death benefits	156,184	158,535
Refunds	87,751	106,828
Supplemental medical insurance premiums	<u>105,078</u>	<u>106,049</u>
Total normal cost	\$ 11,319,510	\$ 10,515,601