

**ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**ACTUARIAL VALUATION AND EXPERIENCE**  
**GAIN/(LOSS) ANALYSIS**  
**JUNE 30, 2012**

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November 9, 2012

The Board of Trustees  
Arkansas Public Employees Retirement System  
Little Rock, Arkansas

Ladies and Gentlemen:

The results of the ***June 30, 2012 actuarial valuation*** of the Arkansas Public Employees Retirement System together with ***the annual gain and loss analysis*** for the year ended June 30, 2012 are presented in this report. The purpose of the valuation and gain/loss analysis is to measure funding progress in relation to the actuarial cost method, to determine employer contribution rates and to determine actuarial information for Governmental Accounting Standards Board (GASB) Statement Nos. 25 and 27.

This report should not be relied on for any other purpose than those described above. It was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with permission of the Board.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the economic and 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. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

***The actuarial methods and assumptions*** used in the actuarial valuation are summarized in Section E of this report. The assumptions are established by the Board after consulting with the actuary. The actuarial assumptions used for the valuation produce results which, individually and in the aggregate, are reasonable.

***The cooperation of the Executive Director and the APERS staff*** in furnishing the materials required for these valuations is acknowledged with appreciation.

Board of Trustees  
November 9, 2012  
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This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, this report is complete and accurate and was made in accordance with standards of practice promulgated by the Actuarial Standards Board and in conformance with Title 24 of the Arkansas Code.

The signing actuaries are independent of the plan sponsor.

Mita Drazilov is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

A handwritten signature in black ink that reads "Mita Drazilov". The signature is written in a cursive style with a large initial 'M'.

Mita D. Drazilov, ASA, MAAA

A handwritten signature in black ink that reads "David L. Hoffman". The signature is written in a cursive style with a large initial 'D'.

David L. Hoffman

DLH:bd

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**SECTION A**  
**VALUATION RESULTS**

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## COMMENTS

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**General Financial Objective.** Section 24-2-701 of the Arkansas Code provides as follows:

The general financial objective of each Arkansas public employee retirement plan shall be to establish and receive contributions that, expressed as percentages of active member payroll, will remain approximately level from generation to generation of Arkansas citizens. More specifically, contributions received each year shall be sufficient both:

- (1) To fully cover the costs of benefit commitments being made to members for their service being rendered in that year; and
  - (2)(A) To make a level payment that, if paid annually over a reasonable period of future years, will fully cover the unfunded costs of benefit commitments for service previously rendered.
  - (B) Alternatively, if the costs of benefit commitments for service previously rendered are overfunded, the plan may deduct a level payment that, if deducted annually over a reasonable period of future years, will fully liquidate the overfunded portion of such costs.
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**Benefit Changes.** The most recent benefit changes were reflected in the June 30, 2009 valuation. No benefit changes have been adopted for consideration in the June 30, 2012 valuation.

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**Assumption Changes.** Assumptions were updated in the June 30, 2008 valuation. A change to the retirement probabilities was made for the June 30, 2011 valuation to reflect the fact that employer contributions are now being received on DROP payroll. No further assumption changes have been adopted for consideration in the June 30, 2012 valuation.

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**Method Changes.** There have been no changes in methods since the June 30, 2011 valuation.

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**APERS Status.** Based upon the results of the June 30, 2012 actuarial valuation, **APERS continues to satisfy the general financial objective** of level contribution financing.

**APERS Reserve Strength.** As a by-product of achieving level contribution financing, actuarial accrued liabilities usually become more and more funded over a period of years. Funded ratios in the 70% to 80% range are common in public sector retirement plans. **The funded ratio of APERS** has been adversely affected by the market downturn in late 2008 and early 2009 (as has virtually all other public employee retirement systems in the country). On a funding value of assets basis, the System has a 69% funded ratio. On a market value of assets basis, the System has a 70% funded ratio.

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**Employer Contribution Rates.** Based upon experience through June 30, 2012, the State and Local Government contribution rate (including General Assembly members) will be 14.88% of covered payroll for the fiscal year beginning July 1, 2013.

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**District Judges.** Results for the District Judges are presented in Section D. These results are not included in any of the numbers presented in Sections A, B, C and G.

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**EMPLOYER CONTRIBUTION RATES COMPUTED  
FOR FISCAL YEAR BEGINNING JULY 1, 2013**

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Contribution for	Contributions Expressed as %'s of Active Payroll
	State and Local and General Assembly
Normal Cost:	
Age and service annuities (including DROP and reduced retirement)	8.92%
Separation benefits	1.96%
Disability benefits	0.60%
Death-in-service annuities	0.18%
Total	11.66%
Member contributions (ultimate)	5.00%
Employer Normal Cost	6.66%
Unfunded Actuarial Accrued Liabilities	8.22% *
<b>Total Employer Contribution</b>	<b>14.88%</b>

\* *Unfunded actuarial accrued liabilities were amortized over a 30 year period.*

# *Included in this total is the Wildlife rate fixed at 12% of payroll (in addition to the rate shown above) and the School rate fixed at 4% of payroll.*

*Note: State and Local payroll includes an estimate of payroll for DROP participants and retired members returned to work.*



**SUMMARY STATEMENT OF SYSTEM RESOURCES AND OBLIGATIONS**  
**YEAR ENDED JUNE 30, 2012**

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**Present Resources and Expected Future Resources**

A.	Present Valuation Assets:	
	1. Net assets from system financial statements	\$5,677,707,897
	2. Market value adjustment	(52,319,768)
	3. Valuation assets	5,625,388,129
B.	Actuarial present value of expected future employer contributions:	
	1. For normal costs	867,141,559
	2. For unfunded actuarial accrued liability	2,537,340,413
	3. Total	3,404,481,972
C.	Actuarial present value of expected future member contributions	650,956,442
D.	Total Present and Expected Future Resources	\$9,680,826,543
A.	To retirees and beneficiaries:	
	1. Annual pensions	\$3,518,710,523
	2. DROP participants: future payments	681,327,437
	3. DROP Reserve: accrued balances	118,092,902
	4. Total	4,318,130,862
B.	To vested terminated members	372,046,159
C.	To present active members:	
	1. Allocated to service rendered prior to valuation date - actuarial accrued liability	3,472,551,521
	2. Allocated to service likely to be rendered after valuation date	1,518,098,001
	3. Total	4,990,649,522
D.	Total Actuarial Present Value of Expected Future Benefit Payments	\$9,680,826,543

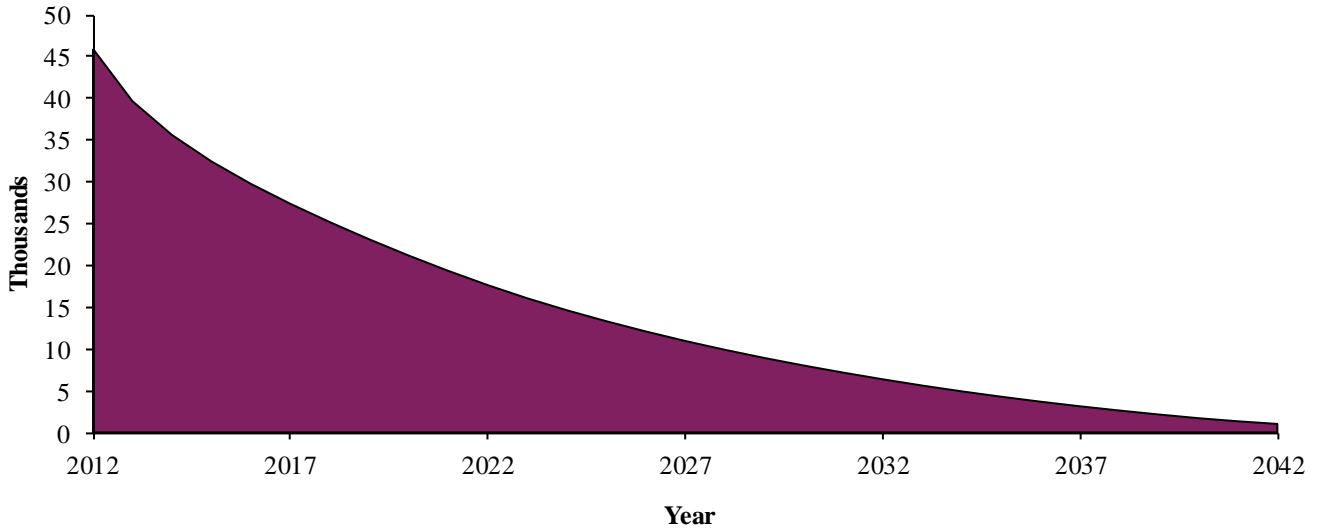
**COMPUTED ACTUARIAL LIABILITIES AND  
ALLOCATION USING ENTRY AGE ACTUARIAL COST METHOD  
AS OF JUNE 30, 2012**

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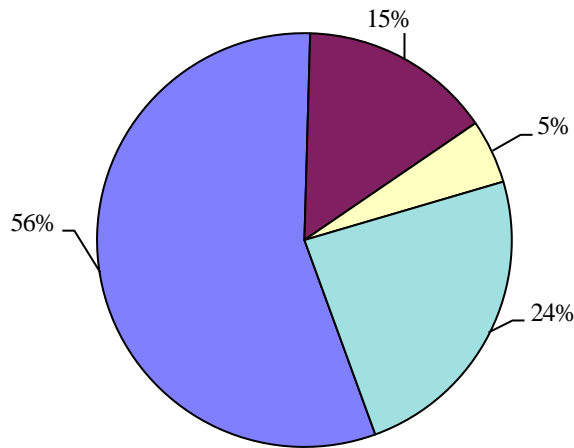
<b>Actuarial Present Value of</b>	<b>Total Present Value</b>	<b>Portion Covered By Future Normal Cost Contributions</b>	<b>Actuarial Accrued Liabilities (1) - (2)</b>
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	\$3,518,710,523	\$ 0	\$3,518,710,523
Age and service allowances based on total service likely to be rendered by present active members	4,411,609,525	1,161,357,990	3,250,251,535
DROP participant benefits likely to be paid to present active members and current DROP participants	889,420,339	0	889,420,339
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	636,306,545	255,186,285	381,120,260
Disability benefits likely to be paid to present active members	162,647,151	78,118,251	84,528,900
Death in service benefits likely to be paid on behalf of present active members	62,132,460	23,435,475	38,696,985
<b>Total</b>	<b>\$9,680,826,543</b>	<b>\$1,518,098,001</b>	<b>\$8,162,728,542</b>
Applicable Assets (Funding Value)	5,625,388,129	0	5,625,388,129
Liabilities to be covered by future Contributions	\$4,055,438,414	\$1,518,098,001	\$ 2,537,340,413

# EXPECTED DEVELOPMENT OF PRESENT POPULATION JUNE 30, 2012

## Closed Group Population Projection



## Expected Termination Type from Active Employment



■ Retirements ■ Non-Vested Separations ■ Deaths and Disabilities ■ Vested Separations

The charts show the expected future development of the present population in simplified terms. The Retirement System presently covers 45,937 active members. Eventually, 15% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for an employer provided benefit. About 80% of the present population is expected to receive monthly retirement benefits either by retiring directly from active service, retiring from DROP, or retiring from vested deferred status. About 5% of the present population is expected to become eligible for death-in-service or disability benefits. Within 8 years, over half of the covered membership is expected to consist of new hires.

**RECOMMENDED TRANSFERS  
TO FULLY FUND THE DEFERRED ANNUITY ACCOUNTS AND RETIREMENT RESERVE ACCOUNTS**

Each year the actuary recommends transfers to the Deferred Annuity Accounts and the Retirement Reserve Accounts from the Employer Accumulation Accounts. These transfers place in the Deferred Annuity Account and the Retirement Reserve Account sufficient assets to cover the computed liabilities for future deferred annuity payments to present reported inactive members and for future retirement annuities to present retired members.

This year's transfer amounts are given below:

Division	Employer Accumulation Accounts Before Transfers	Transfers as of July 1, 2012 To:		Employer Accumulation Accounts After Transfers
		Deferred Annuity Accounts	Retirement Reserve Accounts	
State	\$1,811,858,682	\$42,478,574	\$483,041,231	\$ 1,286,338,877
Wildlife	(44,401,592)	9,913	8,576,522	(52,988,027)
Penitentiary	(327,310)	0	0	(327,310)
State Constitutional Officers	(742,694)	(89,644)	1,084,868	(1,737,919)
Governors	(5,130,360)	0	348,686	(5,479,046)
Quasi-Judicial	(603,102)	0	0	(603,102)
State Capitol Police	2,257,121	0	0	2,257,121
Administrative Officers Courts	402,992	0	0	402,992
Total State	1,763,313,737	42,398,843	493,051,307	1,227,863,587
General Assembly	(3,296,566)	(43,607)	4,059,708	(7,312,667)
County	344,457,281	9,932,764	120,126,737	214,397,780
County Constitutional Officers	(851,518)	0	38,274	(889,792)
Total County	343,605,763	9,932,764	120,165,011	213,507,988
Municipal	183,869,779	7,543,399	57,116,489	119,209,892
School	(1,333,778)	(2,282,423)	52,444,291	(51,495,646)
Non-State	5,885,948	411,558	1,084,635	4,389,755
<b>Total</b>	<b>\$2,292,044,884</b>	<b>\$57,960,534</b>	<b>\$727,921,441</b>	<b>\$1,506,162,909</b>

**VALUATION RESULTS  
COMPARATIVE STATEMENT  
(\$ MILLIONS)**

Valuation Date June 30,	Actuarial Accrued Liabilities & Reserves	Valuation Assets	% Funded	Unfunded Actuarial Accrued Liabilities & Reserves			Contribution Rate Computed Percents	
				Dollars	Amortiz. Period *	% of Payroll	General Assembly	State & Local**
2001 @	\$4,111	\$ 4,342	105.6 %	\$(231)	50	(22) %	148.78 %	10.00 %
2002 #	4,398	4,404	100.1	(6)	6	(1)	150.95	10.00
2003 #	4,674	4,416	94.5	258	30	22	222.80	11.09
2004	5,005	4,438	88.7	567	30	48	201.39	12.54
2005 @#	5,619	4,584	81.6	1,035	22	85	459.47	12.54
2006	5,936	4,949	83.4	987	19	78	464.67	12.54
2007 @	6,174	5,498	89.1	676	18	52	410.58	11.01
2008 #	6,543	5,866	89.7	677	14	49	408.06	11.00
2009	6,894	5,413	78.5	1,481	30	103	521.36	12.23
2009 @	6,938	5,413	78.0	1,525	30	106	521.36	12.46
2010	7,304	5,409	74.1	1,895	30	124	518.69	13.47
2011 #	7,734	5,467	70.7	2,267	30	147	939.81	14.24
2012	8,163	5,625	68.9	2,538	30	151		14.88

\* Amortization period is for State division prior to 2001, State and Local division for 2001 and later and may be rounded above. General Assembly unfunded actuarial accrued liabilities are amortized over an 18-year period as of June 30, 2008.

\*\* Local Government rate was 6.00% for the 1998 valuation, 7.00% for the 1999 valuation, and 8.00% for the 2000 valuation. Beginning with the June 30, 2012 valuation, results include General Assembly.

@ After legislated changes in benefit provisions.

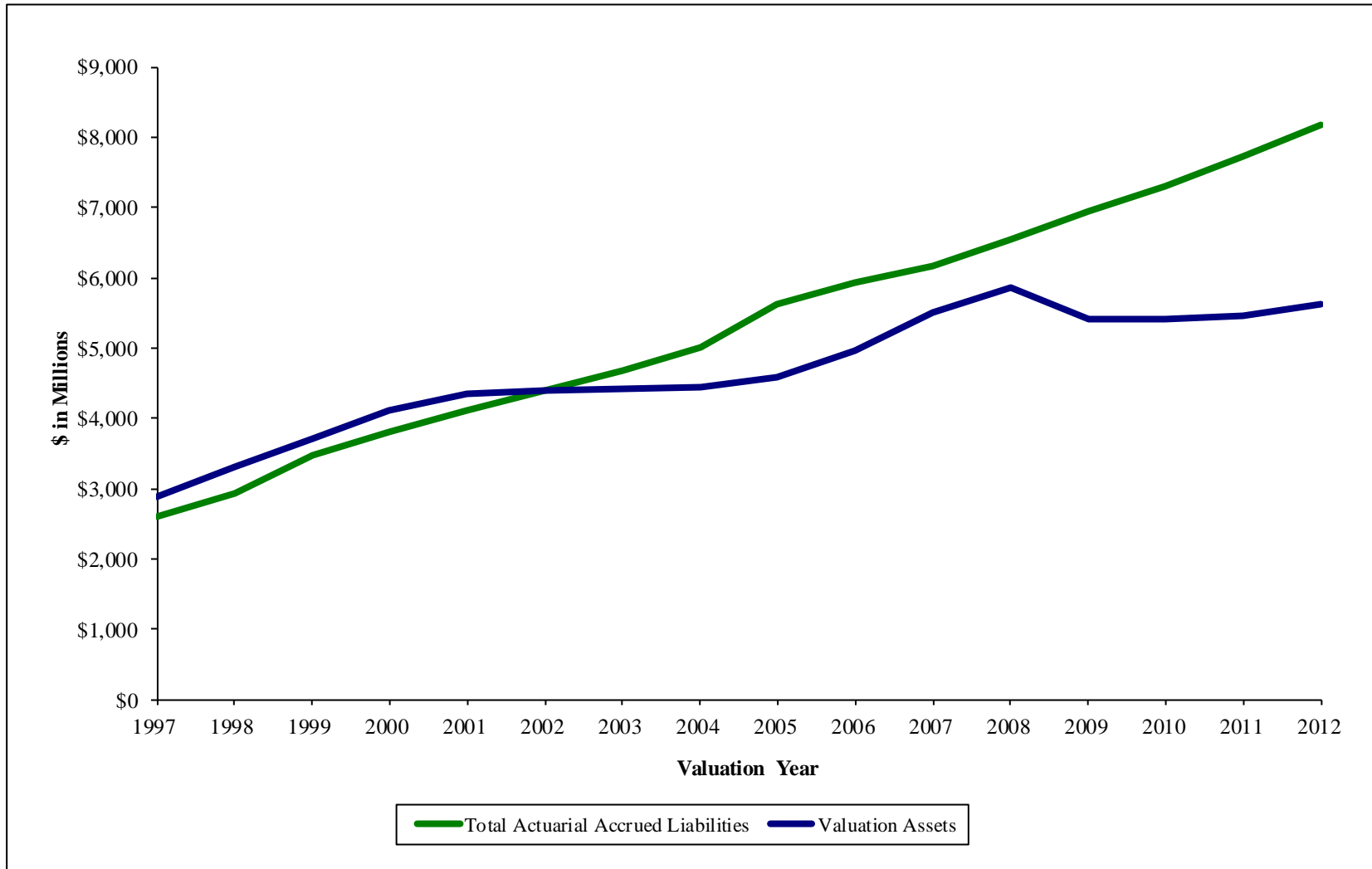
# After changes in actuarial assumptions.

## ACTIVE MEMBERS AND RETIRED LIVES HISTORICAL COMPARATIVE SCHEDULE

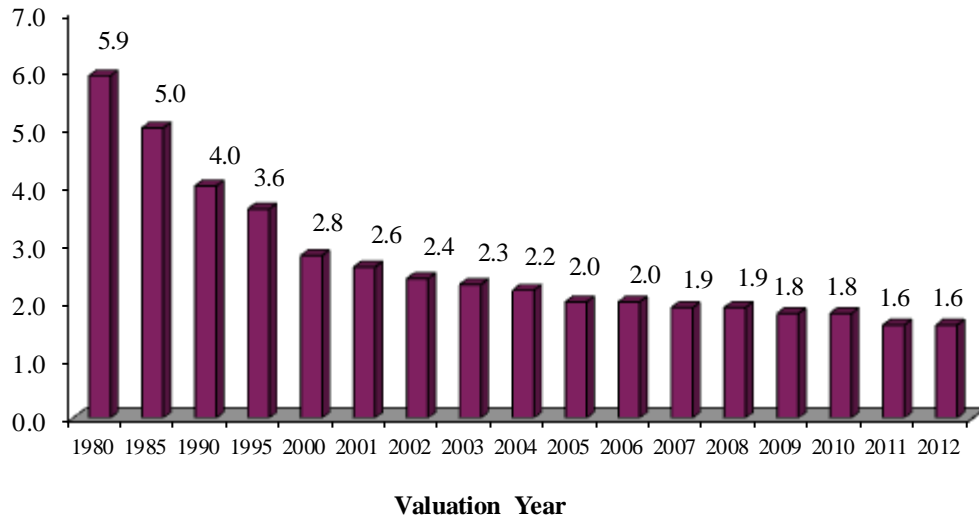
Valuation Date	Active Members				Retired Lives			
	No.	Valuation Payroll			No.	Active per Retired	Annual Benefits	
		\$ Millions	Average	% Incr.			\$ Millions	As a % of Pay
6/30/84	*	*	*	*	7,036	*	\$ 19.1	4.4%
6/30/85	*	*	*	*	7,331	*	22.0	4.8%
6/30/86	*	*	*	*	7,649	*	24.1	4.9%
6/30/87	*	*	*	*	8,074	*	30.2	6.0%
6/30/88	*	*	*	*	9,155	*	39.6	7.5%
6/30/89	*	*	*	*	9,418	*	42.9	7.6%
6/30/90	*	*	*	*	9,747	*	44.9	7.4%
6/30/91	*	*	*	*	10,110	*	49.2	7.6%
6/30/92	39,752	\$ 698.2	\$ 17,564	NA	10,456	3.8	51.9	7.4%
6/30/93	39,849	733.4	18,404	4.8%	10,840	3.7	56.8	7.7%
6/30/94	40,940	778.7	19,021	3.3%	11,213	3.7	60.7	7.8%
6/30/95	42,041	834.5	19,850	4.4%	11,683	3.6	70.1	8.4%
6/30/96	42,712	889.3	20,821	4.9%	12,073	3.5	76.2	8.6%
6/30/97	43,068	938.5	21,791	4.7%	12,644	3.4	84.8	9.0%
6/30/98	43,047	974.7	22,644	3.9%	13,480	3.2	94.6	9.7%
6/30/99	43,064	1,008.9	23,427	3.5%	14,688	2.9	119.3	11.8%
6/30/00	43,121	1,050.0	24,351	3.9%	15,544	2.8	133.6	12.7%
6/30/01	42,556	1,070.1	25,146	3.3%	16,643	2.6	150.0	14.0%
6/30/02	42,230	1,111.5	26,320	4.7%	17,748	2.4	167.6	15.1%
6/30/03	42,879	1,147.9	26,772	1.7%	18,838	2.3	186.0	16.2%
6/30/04	42,826	1,175.8	27,455	2.6%	19,872	2.2	203.4	17.3%
6/30/05	42,938	1,214.9	28,295	3.1%	21,080	2.0	232.9	19.2%
6/30/06	43,453	1,267.1	29,159	3.1%	22,234	2.0	254.7	20.1%
6/30/07	43,630	1,302.6	29,855	2.4%	22,409	1.9	274.8	21.1%
6/30/08	44,357	1,379.8	31,106	4.2%	23,555	1.9	297.0	21.5%
6/30/09	44,702	1,433.7	32,073	3.1%	24,972	1.8	323.1	22.5%
6/30/10	45,394	1,522.7	33,544	4.6%	25,880	1.8	342.2	22.5%
6/30/11	45,145	1,542.9	34,177	1.9%	28,137	1.6	375.7	23.1%
6/30/12	45,937	1,606.1	34,962	2.3%	29,282	1.6	399.5	23.7%

The above valuation payroll results do not include DROP payroll.

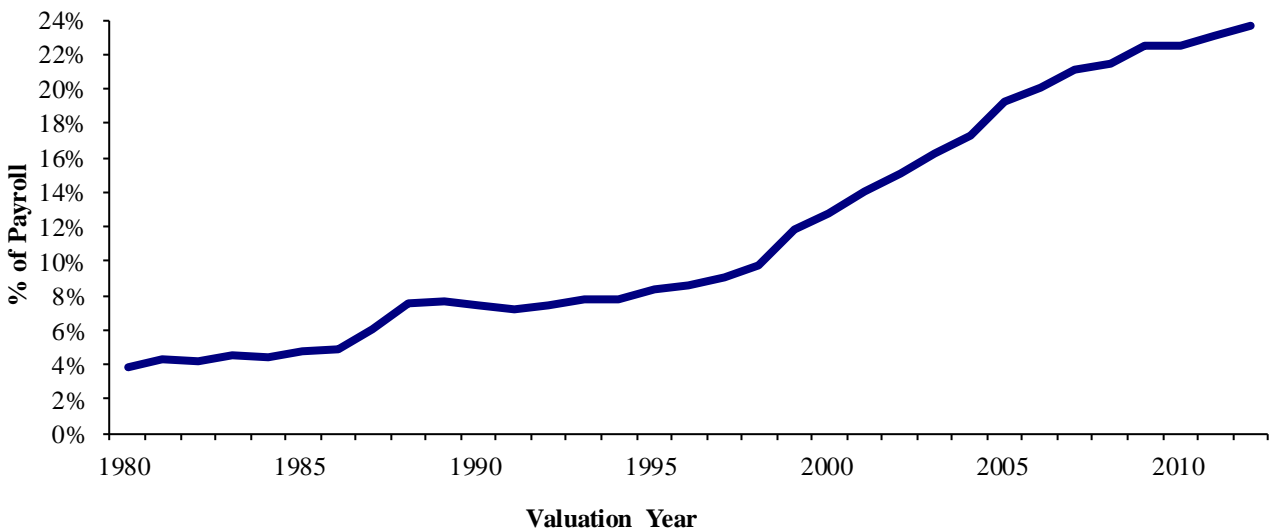
## ACTUARIAL ACCRUED LIABILITIES & ASSETS



### Active Members Per Retired Life



### Retirement Benefits Being Paid as a Percent of Member Payroll





## SHORT CONDITION TEST

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The APERS funding objective is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will *pay all promised benefits when due -- the ultimate test of financial soundness*. Testing for level contribution rates is *the* long-term condition test.

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*A short condition test* is one means of checking a System's progress under its funding program. In a short condition test, the Plan's present assets (cash and investments) are compared with:

- 1) Active member contributions on deposit;
- 2) The liabilities for future benefits to present retired lives;
- 3) The liabilities for service already rendered by active members.

In a System that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in unusual circumstances). In addition, the liabilities for service already rendered by active members (liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the System. Liability 3 being fully funded is uncommon.

**SHORT CONDITION TEST**  
**10-YEAR COMPARATIVE STATEMENT**  
**(\$ IN MILLIONS)**

Val'n. Date: June 30	Entry Age Accrued Liability			Valuation Assets	Portion of Present Values Covered by Present Assets				
	(1)	(2)	(3)		(1)	(2)	(3)	Total	
	Active Member Contr.	Retirees and Benef.	Active Members (Employer Financed Portion)						
<i>STATE DIVISION (including sub-divisions)</i>									
1998@	\$17.2	\$ 640.3	\$1,395.9	\$2,328.5	100%	100%	119%	113%	
1999@#	16.9	784.0	1,634.2	2,637.1	100%	100%	112%	108%	
2000	15.8	747.5	1,865.7	2,943.3	100%	100%	117%	112%	
<i>LOCAL GOVERNMENT DIVISION</i>									
1998@	\$ 8.8	\$ 337.9	\$ 501.1	\$ 968.1	100%	100%	124%	114%	
1999#	8.8	446.9	587.9	1,074.7	100%	100%	105%	103%	
2000	7.6	440.0	706.0	1,178.1	100%	100%	103%	102%	
<i>STATE AND LOCAL GOVERNMENT DIVISION</i>									
2001#	\$23.4	\$1,305.0	\$2,759.2	\$4,335.5	100%	100%	109%	106%	
2002@	20.5	1,502.7	2,850.8	4,397.2	100%	100%	101%	101%	
2003@	20.5	1,624.7	3,004.7	4,408.3	100%	100%	92%	95%	
2004	20.5	1,762.2	3,197.6	4,429.9	100%	100%	83%	89%	
2005@	15.5	1,878.2	3,701.7	4,576.1	100%	100%	72%	82%	
2006	15.5	1,990.6	3,907.3	4,941.1	100%	100%	75%	84%	
2007#	29.7	2,268.5	3,856.7	5,489.3	100%	100%	83%	89%	
2008@	45.8	2,463.9	4,014.9	5,858.1	100%	100%	83%	90%	
2009	66.4	2,750.3	4,059.9	5,406.8	100%	100%	64%	79%	
2009#	66.4	2,750.3	4,103.5	5,406.8	100%	100%	63%	78%	
2010	92.8	2,928.7	4,266.1	5,403.5	100%	100%	56%	74%	
2011@	119.2	3,268.3	4,327.8	5,462.6	100%	100%	48%	71%	
2012	122.1	3,518.7	4,521.9	5,625.4	100%	100%	44%	69%	

# After legislated changes in benefit provisions.

@ After changes in actuarial assumptions.

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**SECTION B**  
**VALUATION DATA**

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**SUMMARY OF PROVISIONS EVALUATED**  
**(EXCLUDES SPECIAL PROVISIONS FOR GENERAL ASSEMBLY)**  
**(LAST CHANGED AS OF 7/1/2009)**

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The Old Contributory Plan is available to persons who became members of APERS before January 1, 1978. The Non-Contributory Plan applies to all persons first hired after January 1, 1978 and before July 1, 2005 in APERS-covered employment. The New Contributory Plan applies to all persons hired after July 1, 2005 in APERS-covered employment or Non-Contributory members who elected to participate in the New Contributory Plan before January 1, 2005.

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**New Contributory Plan**

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**Non-Contributory Plan**

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**VOLUNTARY RETIREMENT**

*With a full benefit*, after either (a) age 65 with 5 years of service, or (b) 28 years of actual service, regardless of age. For sheriff and public safety members, the age 65 requirement is reduced 1 month for each 2 months of actual service, but not below age 55 (age 52 for sheriff members with a minimum of 10 years of actual service).

*With a full benefit*, after either (a) age 65 with 5 years of service, or (b) 28 years of actual service, regardless of age. For sheriff and public safety members, the age 65 requirement is reduced 1 month for each 2 months of actual service, but not below age 55 (age 52 for sheriff members with a minimum of 10 years of actual service).

*With a reduced benefit*, after age 55 with 5 years of service or any age with 25 years of service. The reduction is equal to ½ of 1% for each month retirement proceeds normal retirement age or 1% for each month below 28 years of actual service, whichever is less.

*With a reduced benefit*, after age 55 with 5 years of service or any age with 25 years of service. The reduction is equal to ½ of 1% for each month retirement proceeds normal retirement age or 1% for each month below 28 years of actual service, whichever is less.

**FINAL AVERAGE COMPENSATION (FAC)**

Average of highest 36 calendar months of covered compensation.

Average of highest 36 calendar months of covered compensation.

**FULL AGE & SERVICE RETIREMENT BENEFIT**

2.00% of FAC times years of service (2.03% for service prior to July 1, 2007), plus .5% of FAC times years of service over 28 years for service after July 1, 2009. The minimum monthly benefit is \$150 minus any age and beneficiary option reductions.

1.72% of FAC times years and months of credited service (1.75% for service prior to July 1, 2007), plus .5% of FAC times years of service over 28 years for service after July 1, 2009. If retirement is prior to age 62, an additional .33% of FAC times years of service will be paid until age 62. The portion of the APERS benefit based on service before 1978 cannot be less than the amount provided by contributory provisions in effect at the time of retirement. The minimum monthly benefit is \$150 minus any age and beneficiary option reductions.

# SUMMARY OF PROVISIONS EVALUATED

---

## New Contributory Plan

## Non-Contributory Plan

---

### BENEFIT INCREASES AFTER RETIREMENT

Annually, there will be a cost-of-living adjustment equal to 3% of the current benefit.

Annually, there will be a cost-of-living adjustment equal to 3% of the current benefit.

### MEMBER CONTRIBUTION RATES

5% of covered compensation (pre-tax). Member contributions are refundable if APERS-covered employment terminates before a monthly benefit is payable. Members will earn interest on the contributions at a rate of 4% annually.

No employee contributions for service after January 1, 1978. If there is service before January 1, 1978, contributions for that period are refundable later in the same manner as under the Contributory Plan.

### VESTED RETIREMENT BENEFITS

5 years service, and leaving APERS-covered employment before full retirement age. Deferred full retirement benefit, based on service and pay at termination, begins at age 65. A death benefit is payable to surviving spouse of member who dies before benefit commencement.

5 years service and leaving APERS-covered employment before full retirement age. Deferred full retirement benefit, based on service and pay at termination, begins at age 65. A death benefit is payable to surviving spouse of member who dies before benefit commencement.

In place of deferred full benefit, at age 55 or older a qualifying member can elect an immediate reduced benefit.

In place of deferred full benefit, at age 55 or older a qualifying member can elect an immediate reduced benefit.

### TOTAL AND PERMANENT DISABILITY

Disabled after 5 years service, including credit for 18 of the 24 months preceding disability.

Disabled after 5 years service, including credit for 18 of the 24 months preceding disability.

Amount is computed as an age & service benefit, based on service and pay at disability.

Amount is computed as an age & service benefit, based on service and compensation at disability.

# SUMMARY OF PROVISIONS EVALUATED

---

## New Contributory Plan

## Non-Contributory Plan

---

### DEATH AFTER RETIREMENT

If death occurs before total monthly benefit payments equal member's accumulated contributions, the difference is refunded.

A retiring member can also elect an optional form of benefit, which provides beneficiary protection paid for by reducing the retired member's benefit amount. Should the member elect a straight life benefit and die within 12 months of the date of retirement, a benefit may be payable to the surviving spouse under certain conditions.

Member contributions before 1978 are protected in the same manner as under the Contributory Plan.

A retiring member can also elect an optional form of benefit, which provides beneficiary protection paid for by reducing the retired member's benefit amount. Should the member elect a straight life benefit and die within 12 months of the date of retirement, a benefit may be payable to the surviving spouse under certain conditions.

### DEATH WHILE IN APERS-COVERED EMPLOYMENT

Member's accumulated contributions are refundable.

If the member had 5 years service, monthly benefits are payable instead. Surviving spouse receives a benefit computed as if member had retired and elected the Joint & 75% Survivor Option. Payment begins immediately.

Each dependent child receives benefit of 10% of compensation (maximum of 25% for all children).

Dependent parents benefits are payable if neither spouse nor children's benefits are payable.

Member's accumulated contributions before 1978 are refundable.

If the member had 5 years service, monthly benefits are payable instead. Surviving spouse receives a benefit computed as if member had retired and elected the Joint & 75% Survivor Option. Payment begins immediately.

Each dependent child receives benefit of 10% of compensation (maximum of 25% for all children).

Dependent parents benefits are payable if neither spouse nor children's benefits are payable.

## SUMMARY OF PROVISIONS EVALUATED CREDITED SERVICE

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Membership Group	Service Credits
Public Safety Members (including State Capitol Police and Wildlife Sub-Division members) hired before July 1, 1997	1-1/2 times regular rate with 5 years actual service required to meet benefit eligibility rules.
Governor (hired before July 1, 1999)	3 times regular rate with 5 years actual service required to meet death-in-service eligibility and 4 years actual service required for other benefit eligibility.
Elected State Constitutional Officers (hired before July 1, 1999)	2-1/2 times regular rate with 5 years actual service required to meet benefit eligibility.
General Assembly	Regular crediting rate with 5 years of actual service required to meet death-in-service eligibility and 10 years of actual service required for other benefit eligibility.
Other Elected Public Officials (municipal and county officials)	2 times regular rate with 5 years actual service required to meet benefit eligibility.
All Other Members	Regular rate.

### **ARKANSAS PUBLIC EMPLOYEES DEFERRED RETIREMENT OPTION PLAN**

Members with 28 years of actual service in APERS or in combination with a reciprocal system are eligible to participate.

Members, for a maximum of 7 years, may continue employment and have 75% of their accrued benefit (at date of participation with 30 or more years of service) paid into the Deferred Retirement Option Plan in lieu of any further benefit accruals.

The payments into the Deferred Retirement Option Plan accumulate with interest at a rate established by the Board. The interest is paid on the mean balance and is paid to the member at termination of active membership in either a lump sum or as an annuity.

Employer contributions continue for members participating in the DROP.

**SUMMARY OF PROVISIONS EVALUATED**  
**GENERAL ASSEMBLY DIVISION**  
**ADDITIONAL BENEFIT PROVISIONS**

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**VOLUNTARY RETIREMENT ELIGIBILITY**

Age 65 with 10 or more years of credited service, 28 years of actual service regardless of age, or age 55 with 12 or more years of actual service, 10 of which must be as a member of the General Assembly. In addition, a member of the general Assembly who was a member of the General Assembly on July 1, 1979, or holding any other Arkansas elective office on July 1, 1979, is eligible to retire with 17.5 years of actual service regardless of age.

**VESTING**

Termination of employment prior to normal retirement age after completing 10 or more years of credited service.

**RETIREMENT BENEFIT**

\$35.00 per month times years of General Assembly service. The amount is \$40.00 per month per year of service for any member who served as Speaker of the House of Representatives or President Pro Tempore of the Senate.

**DISABILITY**

Eligibility: 10 years of credited service.

Amount: Accrued retirement benefit.

**DEATH-IN-SERVICE**

Eligibility: 5 years of service.

Amount - Less than 10 years in General Assembly: Same as for regular members.

Amount - 10 or more years in General Assembly: 100% of the benefit the member would have been entitled to had he or she been at retirement age payable to an eligible surviving spouse.

**DEATH-AFTER-RETIREMENT**

100% of the benefit the member was receiving payable to an eligible surviving spouse.

**PARTICIPATION**

A member of the General Assembly may, at any time, elect either (i) to be covered by regular benefit provisions, or (ii) to discontinue an APERS membership.



**SUMMARY OF PROVISIONS EVALUATED**  
**ILLUSTRATION OF BENEFIT CHANGES DURING RECENT**  
**YEARS OF RETIREMENT & RELATED CHANGES IN PURCHASING POWER**

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Year Ended June 30	Increase Beginning of Year	Benefit Dollars In Year	Inflation (Loss) In Year#	Purchasing Power At Year End	
				1985 \$	% of 1985
1985	--	\$ 8,000	(3.7)%	\$8,000	100%
1986	\$ 240	8,240	(1.7)%	8,102	101%
1987	240	8,480	(3.7)%	8,041	101%
1988	240	8,720	(3.9)%	7,958	99%
1989	240	8,960	(5.1)%	7,780	97%
1990	240	9,200	(4.7)%	7,630	95%
1991	240	9,440	(4.7)%	7,478	93%
1992	661	10,101	(3.1)%	7,761	97%
1993	303	10,404	(3.0)%	7,761	97%
1994	584	10,988	(2.5)%	7,996	100%
1995	275	11,263	(3.0)%	7,958	99%
1996	1,064	12,327	(2.8)%	8,472	106%
1997	345	12,672	(3.0)%	8,506	106%
1998	760	13,432	(2.3)%	8,761	110%
1999	309	13,741	(1.7)%	8,896	111%
2000	990	14,731	(3.7)%	9,194	115%
2001	442	15,173	(3.2)%	9,172	115%
2002	713	15,886	(1.1)%	9,502	119%
2003	477	16,363	(2.1)%	9,586	120%
2004	491	16,854	(3.0)%	9,586	120%
2005	506	17,360	(3.2)%	9,570	120%
2006	521	17,881	(4.1)%	9,465	118%
2007	715	18,596	(2.4)%	9,617	120%
2008	558	19,154	(5.6)%	9,380	118%
2009	575	19,729	2.1 %	9,864	123%
2010	592	20,321	(1.2)%	10,036	125%
2011	610	20,931	(3.6)%	9,962	125%
2012	628	21,559	(1.4)%	10,118	126%
2013	647	22,205			

# Based on Consumer Price Index, All Urban Consumers, United States City Average (July values).

**REVENUES AND EXPENDITURES**  
**JULY 1, 2011 THROUGH JUNE 30, 2012**  
**MARKET VALUE**  
**(\$ IN MILLIONS)**

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	<b>Totals</b>
<b>Balance 7/1/2011</b>	<b>\$5,785.0</b>
Revenues	
Member contributions	40.1
Employer contributions	229.6
Transfers	7.2
Other	1.9
Investment return*	(30.3)
Total	248.5
Expenditures	
Benefits paid	365.4
Expenses	6.5
Total	371.9
Reserve Adjustments	16.0
<b>Balance 6/30/2012</b>	<b>\$5,677.7</b>

\* Net of investment expenses.

Note: Results may not total due to rounding.

**REPORTED ACCRUED ASSETS AVAILABLE FOR BENEFITS  
JUNE 30, 2012**

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<b>Retirement System Account</b>	<b>Reported Assets June 30, 2012</b>
Employer Accumulation Account	\$ 1,506,162,909 *
Members Deposit Account	151,306,071
Members Deposit Interest Reserve	11,184,511
Retirement Reserve Account	3,518,710,523 *
Deferred Annuity Reserve Account	372,046,159 *
DROP Reserve	118,092,902
Miscellaneous Reserves	204,823
Total Market Value	<u>5,677,707,897</u>
Funding Value of Assets	5,625,388,129
Valuation Asset Adjustment	(52,319,768)
Adjusted Employer Accum. Account	\$ 1,453,843,140

\* After recommended reserve transfers (see page A-6).

**REPORTED ACCRUED ASSETS AVAILABLE FOR BENEFITS**  
**JUNE 30, 2012**  
**(CONCLUDED)**

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*The Employers Accumulation Account* represents employer contributions accumulated for benefits on behalf of present members.

*The Members Deposit Account* represents member contributions accumulated for (1) monthly benefits at retirement, and (2) refunds upon termination if monthly benefits are not payable.

*The Members Deposit Interest Reserve Account* represents interest credited on member contributions.

*The Retirement Reserve Account* represents reserves, from employer and member contributions, held for the monthly benefits being paid to present retired lives.

*The Deferred Annuity Account* represents employer reserves held for future monthly benefits to present inactive members.

*In financing the liabilities*, the above Fund balances were applied to the actuarial accrued liabilities.

## DEVELOPMENT OF FUNDING VALUE OF ASSETS

Valuation Date June 30:	2011	2012	2013	2014	2015
A. Funding Value Beginning of Year	\$ 5,409,167,459	\$ 5,467,472,476			
B. Market Value End of Year	5,784,994,854	5,677,707,897			
C. Market Value Beginning of Year	4,714,159,955	5,784,994,854			
D. Non-Investment Net Cash Flow	(110,288,609)	(86,550,171)			
E. Investment Income					
E1. Market Total: B - C - D	1,181,123,508	(20,736,786)			
E2. Assumed Rate	8.00%	8.00%			
E3. Amount for Immediate Recognition	428,378,433	433,980,193			
E4. Amount for Phased-In Recognition	752,745,075	(454,716,979)			
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.25 x E4	188,186,269	(113,679,245)			
F2. First Prior Year	16,984,966	188,186,269	\$(113,679,245)		
F3. Second Prior Year	(281,006,360)	16,984,966	188,186,269	\$(113,679,245)	
F4. Third Prior Year	(183,949,682)	(281,006,359)	16,984,965	188,186,268	\$(113,679,244)
F5. Total Phase-Ins	(259,784,807)	(189,514,369)	91,491,989	74,507,023	(113,679,244)
G. Preliminary Funding Value End of Year: A + D + E3 + F5	\$ 5,467,472,476	\$ 5,625,388,129			
H. Adjustment to Minimum of 75% of B, Maximum 125% of B	0	0			
<b>I. Funding Value End of Year</b>	<b>\$ 5,467,472,476</b>	<b>\$ 5,625,388,129</b>			
J. Difference Between Market & Funding Value	317,522,378	52,319,768			
<b>K. Recognized Rate of Return</b>	<b>3.1%</b>	<b>4.5%</b>			
L. Market Rate of Return	25.4%	(0.4)%			
M. Ratio of Funding Value to Market Value	95%	99%			

The Funding Value of Assets recognizes assumed investment return (line E3) fully each year. Differences between actual and assumed investment return (Line E4) are phased-in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than Market Value. If assumed rates are exactly realized for 3 consecutive years, Funding Value will become equal to Market Value.

## SUMMARY OF ANNUITANTS ON ROLLS

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*Retirees and beneficiaries (including DROP participants) on rolls included* in the valuation totaled 29,282, involving annual annuities of \$399,524,028, distributed as follows:

Division	Number	Annuities Being Paid July 1, 2012	
		Monthly	Annualized
State & Local	27,303	\$ 28,396,534	\$ 340,758,408
General Assembly	126	163,705	1,964,460
Governor	6	16,709	200,508
Wildlife	96	280,043	3,360,516
State Constitutional Officers	5	15,739	188,868
Penitentiary	0	0	0
<b>Sub-total</b>	<b>27,536</b>	<b>28,872,730</b>	<b>346,472,760</b>
DROP	1,746	4,420,939	53,051,268
<b>Totals</b>	<b>29,282</b>	<b>\$ 33,293,669</b>	<b>\$ 399,524,028</b>

*Inactive members*, entitled to deferred annuities, included in the valuation totaled 13,053, involving estimated deferred monthly annuities of \$5,083,039, distributed as follows:

Division	Number of Inactive Members	Estimated Deferred Annuities	
		Monthly	Annualized
State and Local	12,985	\$ 5,069,441	\$ 60,833,287
General Assembly	59	9,253	111,036
Wildlife	8	3,656	43,875
State Constitutional Officers	1	689	8,271
<b>Totals</b>	<b>13,053</b>	<b>\$ 5,083,039</b>	<b>\$ 60,996,469</b>

**RETIREMENT SYSTEM TOTALS  
ANNUITIES BEING PAID RETIREES AND BENEFICIARIES  
AND DROP PARTICIPANTS  
JUNE 30, 2012  
BY ATTAINED AGE AND TYPE OF RETIREMENT**

Attained Ages	DROP		Age & Service*		Disability		Death-in-Service		Totals	
	No.	Annual Amount	No.	Annual Annuities	No.	Annual Annuities	No.	Annual Annuities	No.	Annual Annuities
Under 40			150	\$ 855,672	103	\$ 383,304		\$ -	253	\$ 1,238,976
40-44		\$ -	44	344,820	70	447,420	1	5,652	115	797,892
45-49	26	797,196	118	2,035,572	164	1,155,060			308	3,987,828
50-54	358	10,740,120	572	12,630,036	343	2,648,760	2	13,728	1,275	26,032,644
55-59	749	24,193,716	2,167	40,420,944	583	5,013,216	2	11,712	3,501	69,639,588
60-64	470	13,854,696	4,197	65,252,508	785	6,577,956	1	4,800	5,453	85,689,960
65-69	123	2,936,352	5,495	69,033,960	577	4,513,056	3	13,200	6,198	76,496,568
70-74	16	403,356	4,381	49,633,128	275	2,175,912	5	36,528	4,677	52,248,924
75-79	4	125,832	3,344	37,271,460	119	1,104,228	9	85,692	3,476	38,587,212
80-84			2,117	23,768,964	42	398,628	10	61,584	2,169	24,229,176
85-89			1,168	13,528,440	12	99,552	7	32,568	1,187	13,660,560
90-94			478	5,351,364	5	36,204	8	57,624	491	5,445,192
95-99			124	1,235,292			3	17,316	127	1,252,608
Over 100			41	179,100	9	30,912	2	6,888	52	216,900
<b>Totals</b>	<b>1,746</b>	<b>\$53,051,268</b>	<b>24,396</b>	<b>\$321,541,260</b>	<b>3,087</b>	<b>\$24,584,208</b>	<b>53</b>	<b>\$347,292</b>	<b>29,282</b>	<b>\$399,524,028</b>

\* Including survivor beneficiaries of deceased retirees and QDRO alternate payees.

**ANNUITIES BEING PAID JUNE 30, 2012  
BY TYPE OF ANNUITY**

<u>Type of Annuity</u>	<u>Number</u>	<u>Annual Annuities</u>
Age & Service Retirees		
Life	17,229	\$ 231,567,168
Option A- 60 ( 5 years certain)	1,008	12,422,460
Option A-120 (10 years certain)	1,842	21,167,052
Option B- 50 (joint and 50% survivor)	1,031	18,235,320
Option B- 75 (joint and 75% survivor)	1,843	25,235,424
Option B-100 (joint and 100% survivor)	70	1,352,832
Totals	23,023	309,980,256
Beneficiaries of Age & Service Retirees		
Life	232	1,658,328
Option A- 60	17	165,204
Option A-120	217	1,837,656
Option B- 50	296	2,167,476
Option B- 75	440	4,084,056
Option B-100	33	590,016
Totals	1,235	10,502,736
Total Age & Service Retirees & Beneficiaries	24,258	320,482,992
Disability Retirees		
Life	1,894	15,843,516
Option A- 60	133	1,063,140
Option A-120	286	2,251,176
Option B- 50	133	1,078,932
Option B- 75	225	1,713,804
Option B-100	0	0
Totals	2,671	21,950,568
Beneficiaries of Disability Retirees		
Life	60	346,476
Option A- 60	0	0
Option A-120	0	0
Option B- 50	1	13,764
Option B- 75	355	2,273,400
Option B-100	0	0
Beneficiaries of Disability Retirees	416	2,633,640
Total Disability Retirees & Beneficiaries	3,087	24,584,208
QDRO Alternate Payees	138	1,058,268
Death-in-Service Beneficiaries	53	347,292
<b>Total Retirees &amp; Beneficiaries</b>	<b>27,536</b>	<b>346,472,760</b>
DROP Participants	1,746	53,051,268
<b>Total Including DROP Participants</b>	<b>29,282</b>	<b>\$ 399,524,028</b>

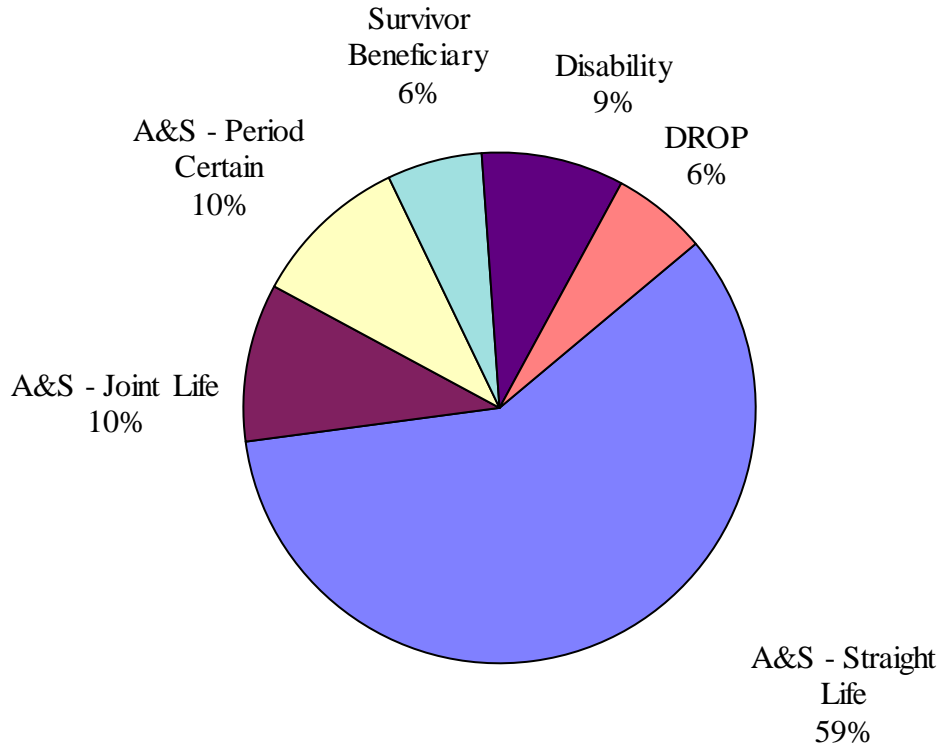


**SCHEDULE OF AVERAGE BENEFIT PAYMENTS  
(VOLUNTARY RETIREMENTS STILL RECEIVING  
BENEFITS AS OF JUNE 30, 2012)**

	Years of Credited Service				
	10-14	15-19	20-24	25-29	30+
<b>Retirement Effective Dates</b> <b>July 1, 2011 to June 30, 2012</b>					
Average Monthly Benefit	\$ 354.54	\$ 764.09	\$ 1,140.50	\$1,751.45	\$2,145.22
Average Monthly FAS	2,135.55	2,831.24	3,166.26	3,663.00	3,661.38
Number of Active Retirees	794	227	190	251	102
<b>Retirement Effective Dates</b> <b>July 1, 2010 to June 30, 2011</b>					
Average Monthly Benefit	368.73	770.76	1,074.74	1,597.87	2,422.67
Average Monthly FAS	2,151.36	2,709.28	2,993.73	3,304.80	3,849.58
Number of Active Retirees	675	205	188	240	140
<b>Retirement Effective Dates</b> <b>July 1, 2009 to June 30, 2010</b>					
Average Monthly Benefit	327.50	705.82	929.63	1,699.30	2,286.53
Average Monthly FAS	1,954.99	2,547.07	2,645.95	3,277.83	3,721.79
Number of Active Retirees	620	181	158	206	97
<b>Retirement Effective Dates</b> <b>July 1, 2008 to June 30, 2009</b>					
Average Monthly Benefit	334.18	719.11	977.31	1,847.78	2,194.01
Average Monthly FAS	1,869.83	2,529.22	2,653.22	3,218.86	3,347.38
Number of Active Retirees	681	227	189	359	163
<b>Retirement Effective Dates</b> <b>July 1, 2007 to June 30, 2008</b>					
Average Monthly Benefit	351.44	780.80	888.93	1,870.48	2,423.83
Average Monthly FAS	1,881.92	2,485.70	2,370.10	3,246.79	3,643.83
Number of Active Retirees	532	177	166	340	84
<b>Retirement Effective Dates</b> <b>July 1, 2007 to June 30, 2012</b>					
Average Monthly Benefit	347.66	747.93	1,007.75	1,771.11	2,288.40
Average Monthly FAS	2,009.21	2,628.53	2,780.43	3,329.00	3,626.49
Number of Active Retirees	3,302	1,017	891	1,396	586

**ANNUITIES BEING PAID BY TYPE**  
**JUNE 30, 2012**

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**NEW RETIREES**  
**JUNE 30, 2012**

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	<u>New Retirees June 30, 2012</u>	
	<u>Age &amp; Service</u>	<u>Disability</u>
<b>Number</b>	1,547	113
<b>Average Age (yrs.)</b>	61.4	55.1
<b>Average Service (yrs.)</b>	16.5	15.8
<b>Average Monthly Benefit</b>	855.86	774.39

**RETIREMENT SYSTEM TOTALS  
 ANNUITIES LIKELY TO BE PAID PRESENT INACTIVE MEMBERS  
 JUNE 30, 2012  
 BY ATTAINED AGE**

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Attained Ages	No.	Estimated Annual Annuities
Under 40	2,267	\$ 8,465,910
40-44	2,146	9,132,035
45-49	2,358	11,470,231
50-54	2,634	13,555,454
55-59	1,936	10,213,526
60-64	1,184	5,983,996
65-69	528	2,175,317
<b>Totals</b>	<b>13,053</b>	<b>\$ 60,996,469</b>

**LIABILITIES FOR DEFERRED ANNUITIES JUNE 30, 2012**

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Number of Inactive Members	Estimated Annual Annuities	Annuity Liabilities
13,053	\$ 60,996,469	\$ 372,046,159

**STATE AND LOCAL DIVISION  
(EXCLUDING GENERAL ASSEMBLY)  
ACTIVE MEMBERS\* IN VALUATION JUNE 30, 2012  
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 plus	No.	Valuation Payroll <sup>#</sup>
Under 20	269							269	\$ 4,970,376
20-24	2,375	39						2,414	59,093,949
25-29	3,232	791	21					4,044	117,786,010
30-34	2,514	1,690	464	8				4,676	151,033,579
35-39	2,027	1,456	1,041	247	10	3		4,784	165,029,215
40-44	1,879	1,331	1,106	725	309	34	14	5,398	194,784,615
45-49	1,915	1,280	1,067	742	762	343	48	6,157	223,315,303
50-54	1,535	1,253	1,077	768	751	637	230	6,251	239,783,914
55-59	1,305	1,140	1,082	764	735	592	260	5,878	226,161,085
60	220	196	192	165	109	81	39	1,002	37,226,204
61	193	188	135	135	126	92	42	911	34,854,283
62	145	169	169	99	111	82	30	805	30,709,333
63	149	158	111	101	85	59	27	690	25,691,969
64	78	136	104	75	100	59	25	577	22,293,417
65	95	107	109	59	70	39	30	509	18,918,969
66	56	78	81	52	41	32	16	356	13,407,903
67	42	46	39	28	27	19	11	212	7,751,579
68	47	41	44	21	16	15	12	196	6,928,909
69	34	40	35	16	16	17	8	166	5,685,886
70 & over	132	143	136	63	62	54	41	631	20,453,400
<b>Totals</b>	<b>18,242</b>	<b>10,282</b>	<b>7,013</b>	<b>4,068</b>	<b>3,330</b>	<b>2,158</b>	<b>833</b>	<b>45,926</b>	<b>\$1,605,879,898</b>

\* Not including DROP participants.

# For the June 30, 2012 valuation, reported payroll was adjusted by 26/27 for employees of State agencies to reflect 27 pay periods during the valuation year.

**Group Averages**

Age:	44.8 years
Service:	9.3 years
Annual Pay:	\$34,967

**GENERAL ASSEMBLY SUB-DIVISION  
ACTIVE MEMBERS IN VALUATION JUNE 30, 2012  
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Age	Years of Service to Valuation Date							No.	Valuation Payroll
	0-4	5-9	10-14	15-19	20-24	25-27	28 Plus		
25-29									
30-34									\$ -
35-39									
40-44		1						1	15,868
45-49									
50-54		1			1			2	31,736
55-59			1					1	15,868
60									
61									
62									
63									
64			1	1				2	31,736
65				1				1	15,868
66									
67									
68		1						1	15,868
69									
70				1				1	15,868
71									
72									
73				1				1	15,868
74				1				1	15,868
<b>Totals</b>		<b>3</b>	<b>2</b>	<b>5</b>	<b>1</b>			<b>11</b>	<b>\$ 174,548</b>

While not used in the computations, the following *group averages* are computed and shown for their general interest.

**Group Averages**

Age:	61.8 years
Service:	14.2 years
Annual Pay:	\$15,868

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**SECTION C**  
**GAIN/(LOSS) ANALYSIS**

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## GAIN/(LOSS) ANALYSIS COMMENTS

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*Purpose of Gain/(Loss) Analysis.* Regular actuarial valuations give valuable information about the composite change in unfunded actuarial accrued liabilities – whether or not the liabilities are increasing or decreasing and by how much.

But valuations do not show the portion of the change attributable to each risk area within the Retirement System: the rate of investment return which plan assets earn; the rates of withdrawal of active members who leave covered employment; the rates of mortality; the rates of disability; the rates of pay increases; and the ages at actual retirement. In an actuarial valuation, assumptions must be made as to what these rates will be, for the next year and for decades in the future.

*The objective of a gain and loss analysis is to determine the portion of the change in actuarial condition (unfunded actuarial accrued liabilities) attributable to each risk area.*

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The fact that actual experience differs from assumed experience is to be expected – *the future cannot be predicted with precision*. The economic risk areas (particularly investment return and pay increases) are volatile. Inflation directly affects economic risk areas, and inflation seems to defy reliable prediction.

Changes in the valuation assumed experience for a risk area should be made when the differences between assumed and actual experience have been observed to be sizable and persistent. A gain and loss analysis covering a relatively short period may or may not be indicative of *long-term trends, which are the basis of actuarial assumptions*.

**CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES  
DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012**

---

	<b>Total (\$ in millions)</b>
(1) UAAL* at beginning of year	\$ 2,266.6
(2) Normal cost from last valuation	108.1
(3) Actual employer contributions	229.6
(4) Interest accrual: $[(1) + \frac{1}{2}[(2) - (3)]] \times .080$	176.5
(5) Expected UAAL before changes: $(1) + (2) - (3) + (4)$	2,321.6
(6) Increase from benefit changes	0.0
(7) Changes from revised actuarial assumptions and methods	0.0
(8) New entrant liabilities	35.4
(9) Expected UAAL after changes: $(5) + (6) + (7) + (8)$	2,357.0
(10) Actual UAAL at end of year	2,537.3
(11) Gain/(Loss): (9) - (10)	\$ (180.3)

\* *Unfunded actuarial accrued liability.*



**GAINS/(LOSSES) BY RISK AREA  
DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012**

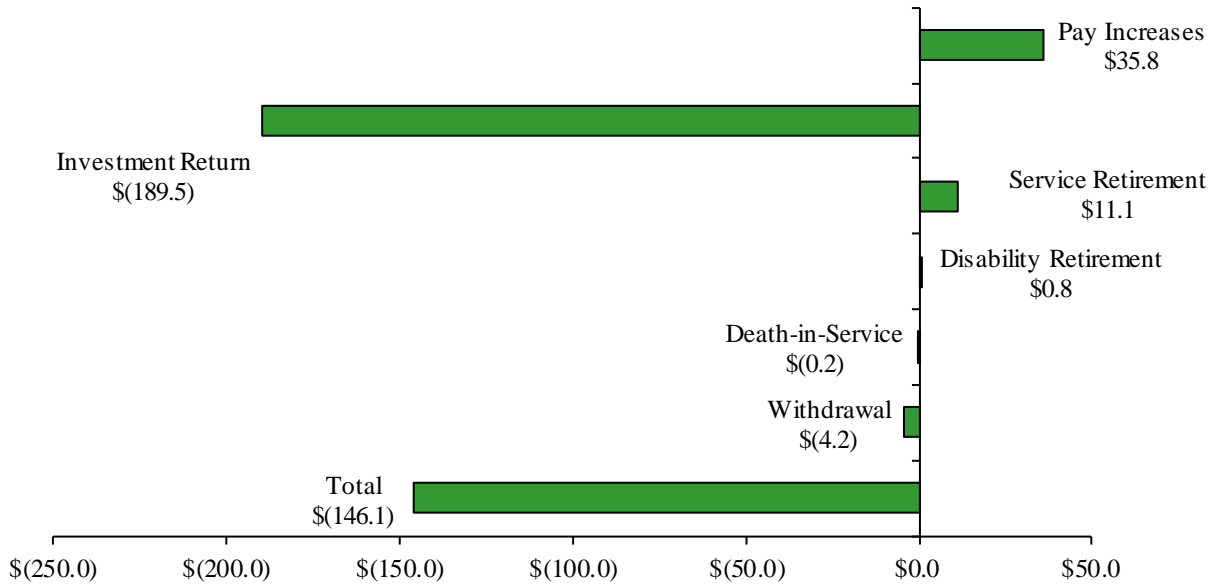
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<u>Type of Risk Area</u>	<u>Total (\$ in millions)</u>	<u>% of Accrued Liabilities</u>
<b>ECONOMIC RISK AREAS .....</b>		
<i>Pay Increases.</i> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	\$ 35.8	0.4 %
<i>Investment Return.</i> If there is greater investment return than assumed, there is a gain. If less return, a loss.	(189.5)	(2.3)%
<b>NON-ECONOMIC RISK AREAS .....</b>		
<i>Non-Casualty Retirements.</i> If members retire at older ages or with lower final average pays than assumed, there is a gain. If younger ages or higher average pays, a loss.	11.1	0.1 %
<i>Disability Retirements.</i> If there are fewer disabilities than assumed, there is a gain. If more, a loss.	0.8	0.0 %
<i>Death-in-Service Benefits.</i> If there are fewer claims than assumed, there is a gain. If more, a loss.	(0.2)	0.0 %
<i>Withdrawal.</i> If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.	(4.2)	(0.1)%
<b>Total Active Member Actuarial Gains/(Losses)</b>	<b>\$ (146.1)</b>	<b>(1.8)%</b>
<i>Retired Life Mortality.</i>	25.6	0.3 %
<i>Other.</i> Includes data adjustments at retirement, timing of financial transactions, and miscellaneous unidentified sources.	(59.7)	(0.7)%
<b>Total Actuarial Gains/(Losses)</b>	<b>\$ (180.3)</b>	<b>(2.2)%</b>

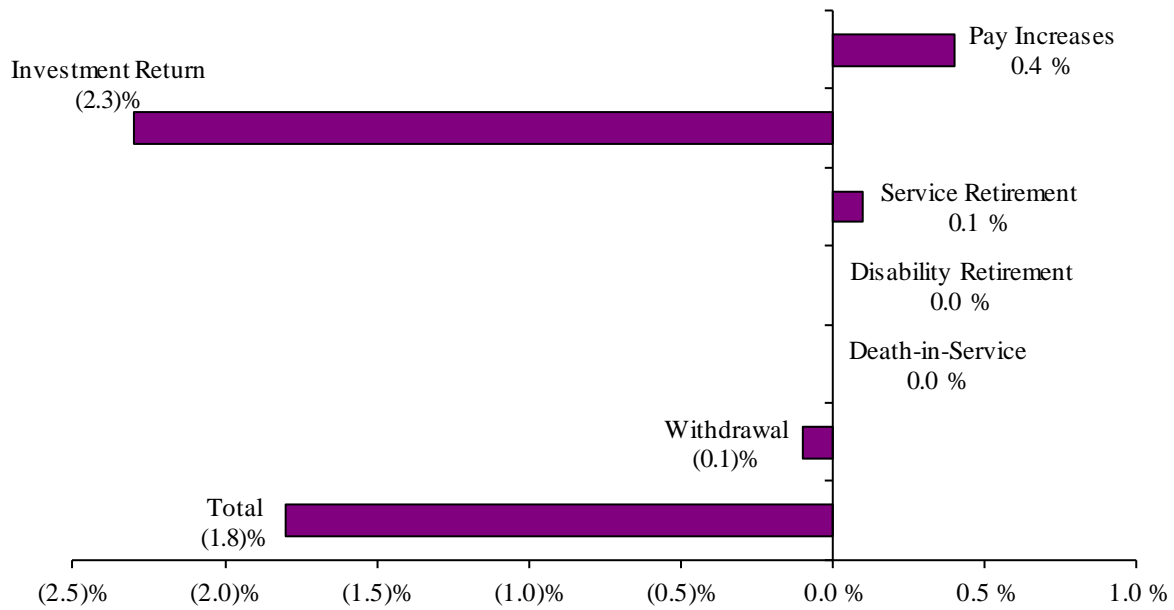
**ACTUARIAL GAINS/(LOSSES)  
ACTIVE MEMBERS  
2011-2012 PLAN YEAR**

---

**Amount in \$ Millions**



**% of Accrued Liabilities**



**ACTUARIAL GAINS/(LOSSES) BY RISK AREA**  
**ACTIVE MEMBERS - COMPARATIVE STATEMENT**  
**(\$ IN MILLIONS)**

Year Ending June 30	Gain/(Loss) By Risk Area						Total Experience Gain/(Loss)		Accrued Liability End of Year
	Pay Increases	Invest- ments	Age & Service		Death In Service	Withdrawal	Dollars	% of AAL	
			Retirement	Disability					
1992	\$2.7	\$27.9	\$ 2.7	\$ 1.2	\$ 2.1	\$(6.1)	\$30.5	3.2 %	\$ 1,607.6 *
1993	(2.6)	36.3	1.6	1.3	3.1	4.2	43.9	2.7 %	1,711.3
1994	26.0	21.5	3.8	1.4	2.4	(2.2)	52.9	3.1 %	1,853.8
1995	32.0	68.1	(2.1)	(1.5)	(3.0)	(1.7)	91.8	4.5 %	2,057.4
1996	(0.7)	103.5	5.7	2.9	1.4	5.3	118.1	5.8 %	2,290.6
1997	(2.2)	155.3	7.7	3.6	1.9	4.9	171.2	7.5 %	2,605.6
1998	18.2	197.4	(4.4)	4.2	2.1	20.6	238.1	9.1 %	2,882.5
1999	(0.6)	153.1	(0.3)	3.2	(0.1)	25.8	181.1	5.5 %	3,478.7
2000	(13.1)	134.1	2.2	2.8	(0.1)	20.7	146.6	4.2 %	3,803.4
2001	31.3	(37.0)	3.3	3.0	0.1	18.9	19.6	0.5 %	4,111.0
2002	5.4	(247.1)	3.7	(2.5)	0.5	(4.2)	(244.2)	(5.6)%	4,398.0
2003	36.0	(292.6)	11.2	3.3	(0.1)	15.2	(227.0)	(4.9)%	4,398.0
2004	16.2	(274.0)	18.4	0.5	0.2	8.6	(230.0)	(4.6)%	5,004.5
2005	46.7	(143.4)	20.1	0.5	0.5	28.5	(47.1)	(0.8)%	5,619.4
2006	(15.4)	46.5	17.0	0.8	0.0	11.4	60.3	1.0 %	5,936.3
2007	53.2	215.5	12.4	0.8	0.1	17.2	299.2	4.8 %	6,173.8
2008	(35.8)	(0.5)	(1.4)	0.9	0.1	10.0	(26.7)	(0.4)%	6,542.7
2009	1.9	(808.1)	(7.3)	1.1	0.0	4.9	(807.5)	(11.6)%	6,937.9
2010	(2.8)	(319.7)	(2.1)	2.4	(0.1)	(7.7)	(330.0)	(4.5)%	7,304.2
2011	65.1	(259.8)	10.7	(5.9)	(0.1)	7.7	(182.3)	(2.4)%	7,734.1
2012	35.8	(189.5)	11.1	0.8	(0.2)	(4.2)	(146.1)	(1.8)%	8,162.7

\* Excludes liability for retired lives.

**DEVELOPMENT OF GAIN/(LOSS)  
FROM INVESTMENT RETURN\*  
DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012**

---

	<u>\$ Millions</u>
1. Total Assets Beginning of Year	\$5,467.5
2. Total Assets End of Year (Funding Value)	
a. Actual	5,625.4
b. If net investment return had been 8.00%	<u>5,814.9</u>
3. Gain/(Loss): 2a. minus 2b.	\$(189.5)

\* *“Investment return” as used in this Gain/(Loss) Analysis means essentially: assumed investment income; plus/minus a four year phase-in of differences between actual and assumed investment return (see page B-10).*

**ACTIVE MEMBERS WHO BECAME AGE & SERVICE RETIREES  
DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012  
(RETIREMENT WITH UNREDUCED BENEFIT  
BEGINNING IMMEDIATELY)  
ATTAINED AGE OF 65 OR OLDER WITH LESS  
THAN 28 YEARS OF SERVICE**

---

Ages	State & Local Retirements	
	Actual#	Expected
65	76	119
66	49	57
67	44	49
68	15	30
69	16	26
70	13	21
71	15	17
72	6	13
73	7	12
74	3	7
75 & Up	28	30
	<b>272</b>	<b>381</b>

# Additionally, there were 53 new age and service retirees with less than 28 years of non-reciprocal service and under the age of 65.

Averages, in Years:

Age at retirement	68.3
Service at retirement	14.2

**ACTIVE MEMBERS WHO BECAME REDUCED EARLY RETIREES  
DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012  
(EARLY RETIREMENTS WITH REDUCED BENEFITS  
BEGINNING IMMEDIATELY)**

Ages	State & Local Early Retirement	
	Actual#	Expected
55	14	13
56	8	12
57	9	19
58	22	19
59	19	23
60	19	26
61	28	36
62	119	98
63	70	69
64	82	53
<b>Totals</b>	<b>390</b>	<b>368</b>

# Additionally, there were 25 new early retirees under the age of 55.

Averages, in Years:

Age at retirement	61.3
Service at retirement	15.7

**ACTIVE MEMBERS WHO RETIRED OR ENTERED THE DROP  
DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012  
(28 OR MORE YEARS OF SERVICE)**

---

Service	State & Local			
	Retirement		DROP	
	Actual	Expected	Actual	Expected
28	45	52	151	184
29	18	30	30	42
30	16	24	27	33
31	11	15	9	17
32	7	13	12	12
33	7	12	9	13
34	6	7	2	8
35	4	5	21	
36	4	6		
37	1	31		
38 & Up	11	136		
<b>Totals</b>	<b>130</b>	<b>330</b>	<b>261</b>	<b>309</b>

Averages, in Years:

Age at retirement	59.5	57.1
Service at retirement	31.7	28.9

**ACTIVE MEMBERS WHO BECAME DISABILITY RETIREES  
DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012  
(AND WHO WERE ACTIVE MEMBERS AS OF JUNE 30, 2011)**

---

Ages	State & Local Disabilities	
	Actual	Expected
20- 24		
25- 29		1
30- 34	2	2
35- 39		3
40- 44	6	6
45- 49	9	12
50- 54	11	21
55- 59	34	32
60 & Up	32	30
	<b>94</b>	<b>107</b>

Averages, in Years:

Age at retirement	55.3
Service at retirement	15.6



**ACTIVE MEMBERS WHO LEFT ACTIVE STATUS WITH A  
DEFERRED BENEFIT PAYABLE  
DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012  
(VESTED SEPARATIONS)**

---

Ages	State & Local Vested Separations	
	Actual	Expected
Below 30	122	118
30- 34	242	203
35- 39	197	173
40- 44	216	168
45- 49	209	151
50- 54	210	130
55- 59	137	88
60 & Up	165	50
<b>Totals</b>	<b>1,498</b>	<b>1,081</b>

Averages, in Years:

Age at termination	47.7
Service at termination	10.8

**ACTIVE MEMBERS WHO LEFT ACTIVE STATUS WITH  
NO BENEFIT PAYABLE  
DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012  
(NON-VESTED SEPARATIONS)**

---

Service at Termination	State & Local Non-Vested Separations	
	Actual	Expected
0	1,411	1,571
1	812	891
2	577	641
3	423	430
4	2	0
	<b>3,225</b>	<b>3,533</b>

Averages, in Years:

Age at termination	44.7
Service at termination	1.5

**MEMBERS ACTIVE BOTH BEGINNING AND END OF YEAR  
SALARY INCREASES BY AGE GROUP  
DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012**

---

Age Groups	Number	Beginning Pay	Ending Pay		Percentage Increase	
			Expected	Actual	Expected	Actual
Below 25	1,482	\$ 33,922,899	\$ 37,373,782	\$ 38,251,443	10.2%	12.8%
25- 29	3,044	87,021,492	94,088,767	94,843,925	8.1%	9.0%
30- 34	3,852	122,514,763	130,818,105	130,512,594	6.8%	6.5%
35- 39	4,159	142,272,648	151,031,446	150,180,466	6.2%	5.6%
40- 44	4,855	172,076,565	181,984,961	181,190,645	5.8%	5.3%
45- 49	5,395	196,287,372	206,797,619	205,083,745	5.4%	4.5%
50- 54	5,779	218,021,102	228,967,132	227,236,325	5.0%	4.2%
55- 59	5,374	202,173,448	211,877,774	210,163,754	4.8%	4.0%
60-64	3,541	131,439,836	137,403,279	135,988,082	4.5%	3.5%
65 & Over	1,702	58,946,537	61,304,398	60,975,269	4.0%	3.4%
<b>Totals</b>	<b>39,183</b>				<b>5.6%</b>	<b>5.1%</b>

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**SECTION D**

**DISTRICT JUDGES – VALUATION RESULTS,  
VALUATION DATA, AND FINANCIAL PRINCIPLES**

---

**DISTRICT JUDGES**  
**EMPLOYER CONTRIBUTION RATES COMPUTED JUNE 30, 2012**

---

Contribution for	Contributions Expressed as %'s of Active Payroll and Old Plan Annual \$	
	New Plan and Paid-Off Old Plan	Still Paying Old Plan
Normal Cost:		
Age and service annuities (including reduced retirement)	17.17%	
Separation benefits	1.34%	
Disability benefits	1.36%	
Death-in-service annuities	0.00%	
Total	19.87%	
Member contributions	5.00%	
Employer Normal Cost	14.87%	
Unfunded Actuarial Accrued Liabilities	10.22% *	\$968,017 **
<b>Total Employer Contribution</b>	<b>25.09%</b>	<b>\$968,017</b>

\* *Unfunded actuarial accrued liabilities were amortized over a 25 year period.*

\*\* *Unfunded actuarial accrued liabilities were amortized over a 23 year period.*

**DISTRICT JUDGES**  
**SUMMARY STATEMENT OF SYSTEM RESOURCES AND OBLIGATIONS**  
**YEAR ENDED JUNE 30, 2012**

---

**Present Resources and Expected Future Resources**

	<b>Totals</b>
A. Present Valuation Assets:	
1. Net assets from system financial statements	\$13,899,330
2. Market value adjustment	26,020
3. Valuation assets	13,925,350
B. Actuarial present value of expected future employer contributions:	
1. For normal costs	2,295,186
2. For unfunded actuarial accrued liability	14,418,018
3. Total	16,713,204
C. Actuarial present value of expected future member contributions	773,003
D. Total Present and Expected Future Resources	\$31,411,557

**Actuarial Present Value of Expected Future Benefit Payments and Reserves**

A. To retirees and beneficiaries	\$ 12,141,310
B. To vested terminated members	9,788,027
C. To present active members:	
1. Allocated to service rendered prior to valuation date - actuarial accrued liability	6,414,031
2. Allocated to service likely to be rendered after valuation date	3,068,189
3. Total	9,482,220
D. Reserve	0
E. Total Actuarial Present Value of Expected Future Benefit Payments	\$31,411,557

**DISTRICT JUDGES  
COMPUTED ACTUARIAL LIABILITIES AND  
ALLOCATION USING ENTRY AGE ACTUARIAL COST METHOD  
AS OF JUNE 30, 2012**

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<b>Actuarial Present Value of</b>	<b>(1) Total Present Value</b>	<b>(2) Portion Covered By Future Normal Cost Contributions</b>	<b>Actuarial Accrued Liabilities (1) - (2)</b>
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	\$12,141,310	\$ 0	\$12,141,310
Age and service allowances based on total service likely to be rendered by present active members	8,940,184	2,623,796	6,316,388
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	10,075,151	223,659	9,851,492
Disability benefits likely to be paid to present active members	254,912	220,734	34,178
Death in service benefits likely to be paid on behalf of present active members	0	0	0
<b>Total</b>	<b>\$31,411,557</b>	<b>\$3,068,189</b>	<b>\$28,343,368</b>
Applicable Assets (Funding Value)	13,925,350	0	13,925,350
Liabilities to be covered by future contributions	\$17,486,207	\$3,068,189	\$14,418,018

**DISTRICT JUDGES**  
**SUMMARY OF PROVISIONS EVALUATED**

---

<b>VOLUNTARY RETIREMENT</b>	<i>With a full benefit</i> , after either (a) age 50 with 20 years of eligibility service, (b) age 60 with 16 years of eligibility service, or (c) age 65 with 8 years of eligibility service.
<b>FINAL AVERAGE COMPENSATION (FAC)</b>	Average of the final three calendar years of employment.
<b>BENEFIT SERVICE</b>	Service performed on or after January 1, 2005.
<b>ELIGIBILITY SERVICE</b>	Benefit service plus service in Old Local District Judges Plan.
<b>FULL AGE &amp; SERVICE RETIREMENT BENEFIT</b>	2.50% of FAC times actual service.
<b>BENEFIT INCREASES AFTER RETIREMENT</b>	Annually, there will be a cost-of-living adjustment equal to 3% of the current benefit.
<b>MEMBER CONTRIBUTION RATES</b>	Active members contribute 5% of their salaries. If a member leaves service before becoming eligible to retire, accumulated contributions may be refunded.
<b>VESTED RETIREMENT BENEFITS</b>	8 years of eligibility service. Deferred full retirement benefit, based on benefit service and pay at termination, begins when member would have been eligible for voluntary retirement.
<b>TOTAL AND PERMANENT DISABILITY</b>	An active member with 3 or more consecutive years of eligibility service who becomes totally and permanently disabled may be retired and receive a disability annuity computed in the same manner as an age and service annuity.
<b>DEATH AFTER RETIREMENT</b>	If the member was eligible for normal retirement at the time of death, an eligible beneficiary will begin receiving a 50% joint and survivor pension computed in the same manner as a service retirement pension as if the member had retired the last day of his life.



**DISTRICT JUDGES  
REVENUES AND EXPENDITURES  
JULY 1, 2011 THROUGH JUNE 30, 2012  
MARKET VALUE\***

---

	Plan		Totals
	New Plan and Paid-Off Old Plan	Still Paying Old Plan	
<b>Balance 7/1/2011</b>	\$9,664,591	\$3,682,816	\$13,347,407
Adjustment	0	0	0
Revenues			
Member contributions	168,577	0	168,577
Employer contributions	841,791	1,003,558	1,845,349
Other	0	0	0
Investment return	(16,916)	(6,291)	(23,207)
Total	\$993,452	\$997,267	\$ 1,990,719
Expenditures			
Benefits paid	417,840	959,596	1,377,436
Refunds	0	0	0
Expenses	44,725	16,635	61,360
Total	\$ 462,565	\$976,231	\$ 1,438,796
Preliminary Balance	\$10,195,478	\$3,703,852	\$13,899,330
Employer Paid Off Old Liability	0	0	0
<b>Balance 6/30/2012</b>	<b>\$10,195,478</b>	<b>\$3,703,852</b>	<b>\$13,899,330</b>

Note: Results may not total due to rounding.

\* Results based upon preliminary June 30, 2012 asset values reported in August 2012.

**DEVELOPMENT OF FUNDING VALUE OF ASSETS  
NEW PLAN AND PAID-OFF OLD PLAN  
JUNE 30, 2012**

Valuation Date June 30:	2011	2012	2013	2014	2015
A. Funding Value Beginning of Year	\$ 8,190,817	\$ 9,267,914			
B. Market Value End of Year	9,664,591	10,195,478			
C. Market Value Beginning of Year	7,228,045	9,664,591			
D. Non-Investment Net Cash Flow	595,476	592,528			
E. Investment Income					
E1. Market Total: B - C - D	1,841,070	(61,641)			
E2. Assumed Rate	8.00%	8.00%			
E3. Amount for Immediate Recognition	678,779	764,830			
E4. Amount for Phased-In Recognition	1,162,291	(826,471)			
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.25 x E4	290,573	\$(206,618)			
F2. First Prior Year	12,687	290,573	\$(206,618)		
F3. Second Prior Year	(500,418)	12,687	290,573	\$(206,618)	
F4. Third Prior Year	0	(500,416)	12,688	290,572	\$(206,617)
F5. Total Phase-Ins	(197,158)	(403,774)	96,643	83,954	(206,617)
G. Preliminary Funding Value End of Year: A + D + E3 + F5	9,267,914	10,221,498			
H. Adjustment to Minimum of 75% of B, Maximum 125% of B	0	0			
<b>I. Funding Value End of Year</b>	<b>9,267,914</b>	<b>10,221,498</b>			
J. Difference Between Market & Funding Value	396,677	(26,020)			
<b>K. Recognized Rate of Return</b>	<b>5.7%</b>	<b>3.8%</b>			
L. Market Rate of Return	24.5%	(0.6)%			

The Funding Value of Assets recognizes assumed investment return (line E3) fully each year. Differences between actual and assumed investment return (Line E4) are phased-in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than Market Value. If assumed rates are exactly realized for 3 consecutive years, Funding Value will become equal to Market Value.

**DISTRICT JUDGES**  
**SUMMARY OF ANNUITANTS ON ROLLS**

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*Retirees and beneficiaries on rolls included* in the valuation totaled 134, involving monthly annuities of \$114,217, distributed as follows:

Plan	Number of Retired Members	Annuities Being Paid July 1, 2011	
		Monthly	Annualized
New Plan	11	\$ 5,303	\$ 63,641
Old Plan Paid Off	26	29,395	352,746
Still Paying Old Plan	97	79,519	954,225
<b>Totals</b>	<b>134</b>	<b>\$114,217</b>	<b>\$1,370,612</b>

A retiree's monthly benefit may be allocated to more than one employer or more than one plan. The actual number of retired members as of June 30, 2012 was reported to be 101, consisting of 90 original retirees and 11 survivors.

*Inactive members*, entitled to deferred annuities, included in the valuation totaled 139, involving estimated deferred monthly annuities of \$90,945 distributed as follows:

Plan	Number of Inactive Members	Estimated Deferred Annuities	
		Monthly	Annualized
New Plan	5	\$ 3,780	\$ 45,354
Old Plan Paid Off	43	33,513	402,161
Still Paying Old Plan	91	53,652	643,822
<b>Totals</b>	<b>139</b>	<b>\$90,945</b>	<b>\$1,091,337</b>

An inactive member's monthly benefit may be allocated to more than one employer or more than one plan. The actual number of deferred members as of June 30, 2012 was reported to be 115.

## DISTRICT JUDGES DETAIL BY EMPLOYER

Employer	ER ID	Participants Covered		Retiree	Deferred	Retiree	Deferred	Total	Assets	Unfunded	23-year
		Deferred	Retired	Mon. Ben. 7/1/2012	Mon. Ben. 7/1/2012	Liability 6/30/2012	Liability 6/30/2012	Liability 6/30/2012	Allocated 6/30/2012	Liability	Payoff of Unfunded Liability
Ashdown	90141	2	2	\$ 466.28	\$ 550.08	\$ 39,610	\$ 68,268	\$ 107,878	\$ 30,488	\$ 77,390	\$ 7,179
Ashdown (County)	90941	2	2	771.63	910.30	66,782	112,974	179,756	50,970	128,786	11,946
Batesville	90132	2	1	859.69	514.54	104,663	55,362	160,025	31,829	128,196	11,891
Batesville (Independence Co.)	90932	2	1	859.69	514.54	104,663	55,362	160,025	31,791	128,234	11,895
Beebe	90511	0	1	1,016.67	0.00	105,987	0	105,987	(4,417)	110,404	10,241
Benton	90962	1	2	2,398.38	666.67	248,272	78,506	326,778	114,693	212,085	19,673
Benton County - West	90204	2	1	1,000.00	892.53	120,242	95,296	215,538	102,001	113,537	10,532
Berryville	90108	1	2	256.97	475.94	21,955	63,256	85,211	28,368	56,843	5,273
Berryville (County)	90908	2	3	1,356.17	700.94	167,939	81,550	249,489	82,421	167,068	15,498
Biscoe	90159	0	1	150.00	0.00	19,303	0	19,303	178	19,125	1,774
Bryant	90133	0	1	1,035.00	0.00	103,862	0	103,862	(14,462)	118,324	10,976
Cabot	90143	3	0	0.00	1,651.12	0	184,480	184,480	120,140	64,340	5,968
Clarendon	90148	1	0	0.00	444.72	0	52,304	52,304	28,050	24,254	2,250
Conway	90123	1	2	3,413.05	966.66	371,930	74,978	446,908	192,680	254,228	23,582
Dequeen	90166	0	3	4,034.33	0.00	416,988	0	416,988	(75)	417,063	38,687
Dermott	90109	2	1	312.50	205.08	37,720	16,056	53,776	2,778	50,998	4,731
Dermott (County)	90909	2	1	312.50	205.08	37,720	16,056	53,776	2,778	50,998	4,731
Devalls Bluff	90359	0	1	225.00	0.00	29,179	0	29,179	348	28,831	2,674
Dewitt	90101	1	1	733.48	519.44	73,490	62,016	135,506	42,810	92,696	8,598
Dumas	90121	2	2	1,208.92	1,564.42	144,068	177,351	321,419	70,626	250,793	23,263
East Camden	90252	2	1	531.53	136.07	65,215	8,469	73,684	20,995	52,689	4,887
Elkins	90172	2	0	0.00	1,074.68	0	119,017	119,017	60,429	58,588	5,435
Greenwood	90265	0	1	771.00	0.00	93,473	0	93,473	(5,410)	98,883	9,172
Hamburg	90202	1	1	450.00	457.19	36,554	51,557	88,111	32,762	55,349	5,134
Hampton	90107	1	1	696.00	850.46	66,851	98,602	165,453	87,078	78,375	7,270
Hazen	90459	0	1	683.33	0.00	92,812	0	92,812	2,577	90,235	8,370
Helena	90154	2	2	523.51	27.72	32,683	1,052	33,735	(17,684)	51,419	4,770
Helena (County)	90954	2	2	523.51	27.72	32,683	1,052	33,735	(17,684)	51,419	4,770
Hope	90110	0	2	762.50	0.00	81,795	0	81,795	(19,355)	101,150	9,383
Hope (County)	90929	0	2	762.50	0.00	81,795	0	81,795	(19,355)	101,150	9,383
Hot Springs	90126	4	3	5,501.75	3,592.02	570,321	265,107	835,428	132,368	703,060	65,215

## DISTRICT JUDGES DETAIL BY EMPLOYER

Employer	ER ID	Participants Covered		Retiree	Deferred	Retiree	Deferred	Total	Assets	Unfunded Liability	23-year Payoff of Unfunded Liability
		Deferred Vested	Retired	Mon. Ben. 7/1/2012	Mon. Ben. 7/1/2012	Liability 6/30/2012	Liability 6/30/2012	Liability 6/30/2012	Allocated 6/30/2012		
Hoxie	90138	1	1	\$ 298.39	\$ 366.27	\$ 34,693	\$ 41,950	\$ 76,643	\$ 27,342	\$ 49,301	\$ 4,573
Lawrence County	90938	1	1	365.24	651.75	42,465	74,647	117,112	46,982	70,130	6,505
Little Rock	90260	15	10	19,306.17	10,421.58	2,147,176	1,154,267	3,301,443	823,294	2,478,149	229,872
Magnolia	90114	0	1	641.98	0.00	61,240	0	61,240	(4,117)	65,357	6,062
Magnolia (Columbia County)	90914	0	1	641.98	0.00	61,240	0	61,240	(4,013)	65,253	6,053
Marked Tree	90256	0	1	948.14	0.00	85,572	0	85,572	(6,052)	91,624	8,499
Marshall	90964	0	1	701.31	0.00	73,904	0	73,904	31,073	42,831	3,973
McCroy	90274	0	1	90.00	0.00	9,287	0	9,287	3,513	5,774	536
Mt. Home	90103	1	4	3,055.71	1,237.29	305,424	152,622	458,046	67,539	390,507	36,223
Newport	90134	1	3	1,555.70	234.22	152,171	19,749	171,920	40,821	131,099	12,161
North Little Rock	90460	12	9	9,420.26	11,565.05	813,820	1,317,996	2,131,816	450,246	1,681,570	155,981
Osceola	90247	1	2	781.25	648.60	46,611	87,743	134,354	28,009	106,345	9,864
Ozark	90124	1	1	531.72	593.47	63,834	70,227	134,061	45,003	89,058	8,261
Ozark (County)	90924	1	1	531.72	593.47	63,834	70,227	134,061	43,344	90,717	8,415
Pocahontas	90161	1	2	579.76	210.07	71,112	16,024	87,136	16,337	70,799	6,567
Pocahontas (County)	90961	1	2	579.76	210.07	71,112	16,024	87,136	16,337	70,799	6,567
Prairie Grove	90372	1	2	1,861.93	233.23	208,641	22,449	231,090	11,371	219,719	20,381
Rison	90113	1	0	0.00	780.00	0	90,433	90,433	53,798	36,635	3,398
Russellville	90158	1	1	597.51	1,218.49	71,780	68,156	139,936	62,902	77,034	7,146
Searcy	90273	1	2	1,383.33	1,179.36	130,430	148,651	279,081	78,019	201,062	18,650
Stuttgart	90201	2	1	283.90	951.56	23,649	109,062	132,711	58,556	74,155	6,879
Stuttgart	90901	2	1	346.98	1,163.02	28,903	133,298	162,201	71,839	90,362	8,382
Trumann	90356	1	0	0.00	224.77	0	18,863	18,863	(9,360)	28,223	2,618
Tyronza	90456	1	1	850.64	40.12	108,677	2,561	111,238	70,314	40,924	3,796
Walnut Ridge	90238	1	2	809.44	632.29	65,248	72,418	137,666	39,401	98,265	9,115
West Helena	90254	2	0	0.00	1,048.27	0	119,275	119,275	67,821	51,454	4,773
West Memphis	90218	2	1	833.34	2,500.99	94,808	280,394	375,202	368,898	6,304	585
Wynne	90519	0	1	906.73	0.00	109,718	0	109,718	33,919	75,799	7,031
<b>UAL&gt;0 as of 6/30/2012</b>		<b>91</b>	<b>97</b>	<b>\$79,518.78</b>	<b>\$53,651.86</b>	<b>\$8,313,904</b>	<b>\$5,825,707</b>	<b>\$14,139,611</b>	<b>\$3,703,852</b>	<b>\$10,435,759</b>	<b>\$968,017</b>

**DISTRICT JUDGES**  
**ACTIVE MEMBERS IN VALUATION JUNE 30, 2012**  
**BY ATTAINED AGE AND YEARS OF ELIGIBILITY SERVICE**

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Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 plus	No.	Valuation Payroll
Under 20									\$ -
20-24									
25-29									
30-34									
35-39									
40-44		1						1	33,190
45-49		1	2					3	182,761
50-54		6	1	1				8	485,623
55-59		7	1	1	1	1		11	570,960
60			1					1	47,356
61			1	1				2	143,975
62				1				1	121,815
63		1			2	3		6	407,690
64		3			1		1	5	338,353
65		1			1	2		4	363,007
66							1	1	46,638
67							1	1	35,250
68		1						1	20,754
69					1		2	3	279,874
70 & over		2	1	2	1		1	7	297,736
<b>Totals</b>		<b>23</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>55</b>	<b>\$3,374,982</b>

**Group Averages**

Age:	60.7 years
Benefit Service:	7.3 years
Eligibility Service:	15.7 years
Annual Pay:	\$61,363

**DISTRICT JUDGES**  
**CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES**  
**DURING THE PERIOD JULY 1, 2011 TO JUNE 30, 2012**

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	New Plan and Paid Off Old Plan	Still Paying Old Plan	Total
(1) UAAL* at beginning of year	\$4,074,739	\$10,499,379	\$14,574,118
(2) Normal cost from last valuation	670,946	-	670,946
(3) Actual contributions	1,010,368	1,003,558	2,013,926
(4) Interest accrual: [(1) + ½[(2) - (3)]]x .080	312,402	799,808	1,112,210
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	4,047,719	10,295,629	14,343,348
(6) Increase from benefit changes	-	-	-
(7) Changes from revised actuarial assumptions and methods	-	-	-
(8) Expected UAAL after changes: (5) + (6) + (7)	4,047,719	10,295,629	14,343,348
(9) Actual UAAL at end of year	3,982,259	10,435,759	14,418,018
(10) Gain/(Loss): (8) - (9)	\$65,460	\$(140,130)	\$(74,670)

\* *Unfunded actuarial accrued liability.*

**DISTRICT JUDGES  
GASB STATEMENTS NO. 25 AND NO. 27  
REQUIRED ACTUARIAL INFORMATION  
SCHEDULE OF FUNDING PROGRESS**

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<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Entry Age AAL (b)</b>	<b>UAAL (b)-(a)</b>	<b>Funded Ratio (a)/(b)</b>	<b>Annual Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll [(b-a)/(c)]</b>
12/31/04	\$ 0	\$ 0	\$ 0	100.0 %	\$1,841,022	0.0%
6/30/05	7,569,919	24,134,114	16,564,195	31.4 %	3,222,495	514.0%
6/30/06	10,141,040	24,943,381	14,802,341	40.7 %	3,313,454	446.7%
6/30/07	12,582,548	24,387,433	11,804,885	51.6 %	3,366,861	350.6%
6/30/08 @	12,398,225	24,797,303	12,399,078	50.0 %	3,526,319	351.6%
6/30/09	10,004,394	25,671,893	15,667,499	39.0 %	3,368,169	465.2%
6/30/10	11,112,521	26,775,249	15,662,728	41.5 %	3,554,044	440.7%
6/30/11	12,950,730	27,524,848	14,574,118	47.1 %	3,345,497	435.6%
6/30/12	13,925,350	28,343,368	14,418,018	49.1 %	3,374,982	427.2%

@ After changes in actuarial assumptions and methods.

This information on pages D-12 through D-14 is presented in draft form for review by the System's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the System's financial statements.



**DISTRICT JUDGES**  
**GASB STATEMENTS NO. 25 AND NO. 27 REQUIRED ACTUARIAL INFORMATION**

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**Schedule of Employer Contributions**

Year Ended June 30	Annual Required Contribution	Percent Contributed
2005*	\$ 357,182	102%
2006*	1,859,139	110%
2007	1,732,368	106%
2008	1,525,167	110%
2009	1,581,100	102%
2010	1,906,776	93%
2011	1,950,782	95%
2012	1,805,741	102%

\* 2005 and 2006 information was taken from the report of the previous actuary and was not audited by GRS.

**NPO Development**

	July 1, 2007 - June 30, 2008	July 1, 2008 - June 30, 2009	July 1, 2009 - June 30, 2010	July 1, 2010 - June 30, 2011	July 1, 2011 - June 30, 2012
1. Annual Required Contribution (ARC)	\$1,525,167	\$1,581,100	\$1,906,776	\$1,950,782	\$1,805,741
2. Interest on Net Pension Obligation (NPO)	(24,657)	(36,302)	(38,657)	(28,156)	(19,642)
3. Adjustment to (1)	(31,637)	(39,213)	(42,065)	(30,963)	(21,850)
4. Annual Pension Cost (1)+(2)-(3)	1,532,147	1,584,011	1,910,184	1,953,589	1,807,949
5. Actual Contribution Made	1,677,709	1,613,454	1,778,923	1,847,163	1,845,349
6. Increase in NPO (4)-(5)	(145,562)	(29,443)	131,261	106,426	(37,400)
7. NPO Beginning of Year	(308,209)	(453,771)	(483,214)	(351,953)	(245,527)
8. NPO End of Year	(453,771)	(483,214)	(351,953)	(245,527)	(282,927)

New Plan and Paid-Off Old Plan contributions are determined as a percent of pay and contributed periodically throughout the year. The ARC shown for fiscal year ended June 30, 2012 is equal to the percent of payroll contribution computed as of June 30, 2011 times projected payroll plus the computed Still Paying Old Plan dollar contribution for unfunded actuarial liability as of June 30, 2011.

**DISTRICT JUDGES**  
**GASB STATEMENTS NO. 25 AND NO. 27**  
**REQUIRED SUPPLEMENTARY INFORMATION**

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The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest valuation date follows:

Valuation Date	6/30/2012
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Dollar (New Plan and Paid Off Old Plan) Level Dollar (Still Paying Old Plan)
Remaining Amortization Period	25 year closed (New Plan and Paid Off Old Plan) 23 year closed (Still Paying Old Plan)
Asset Valuation Method	4-Year Smoothed Market with 25% Corridor (New Plan and Paid Off Old Plan) Market Value (Still Paying Old Plan)
Actuarial Assumptions:	
Investment Rate of Return	8.0%
Projected Salary Increases Including Inflation at	4.7% - 9.8%
Cost-of-living Adjustments	4.0%
	3.0% Annual Compounded Increase on benefits for service after January 1, 2005

	<u>Number</u>
Retirees and beneficiaries receiving benefits	101
Terminated plan members entitled to but not yet receiving benefits	115
Current active plan members	<u>55</u>
Total	271

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## **SECTION E**

### **ACTUARIAL METHODS AND ASSUMPTIONS AND OTHER TECHNICAL ASSUMPTIONS**

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**SUMMARY OF ASSUMPTIONS USED FOR  
APERS ACTUARIAL VALUATIONS  
ASSUMPTIONS ADOPTED BY BOARD OF TRUSTEES  
AFTER CONSULTING WITH ACTUARY**

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***ECONOMIC ASSUMPTIONS***

*The investment return rate* used in making the valuation was 8.00% per year, compounded annually (net after investment and administrative expenses). This rate of return is not the assumed real rate of return. The real rate of return is the portion of investment return which is more than the wage inflation rate. Considering the assumed wage inflation rate of 4.0%, the 8.00% investment return rate translates to an assumed net real rate of return of 4.0%. This assumption was first used for the June 30, 2002 valuation and for the District Judges division for the June 30, 2007 valuation.

*Pay increase assumptions* for individual active members are shown on pages E-9 and E-11. Part of the assumption for each age is for a merit and/or seniority increase, and the other 4.0% recognizes wage inflation. These assumptions were first used for the June 30, 2008 valuation and for the District Judges division for the June 30, 2007 valuation.

*Total active member payroll* is assumed to increase 4.0% a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. This assumption was first used for the June 30, 2002 valuation and for the District Judges division for the June 30, 2007 valuation.

*The number of active members* is assumed to continue at the present number.

***NON-ECONOMIC ASSUMPTIONS***

*The mortality table* used to measure retired life mortality was the RP-2000 Combined Healthy Table projected to 2015 using Projection Scale AA, set forward 2 years for men. Related values are shown on page E-4. This assumption was first used for the June 30, 2008 valuation. Based upon the experience observed during the most recent experience study, it appears that the current table provides for an approximate 15% margin for future mortality improvement.

***The probabilities of retirement*** for members eligible to retire are shown on pages E-5 through E-8. These probabilities were first used for the June 30, 2011 valuation and for the District Judges division for the June 30, 2007 valuation.

***The probabilities of withdrawal*** from service, ***death-in-service*** and ***disability*** are shown for sample ages on pages E-9 through E-11. These probabilities were first used for the June 30, 2008 valuation and for the District Judges division for the June 30, 2007 valuation.

***The ultimate entry-age normal actuarial cost method of the valuation*** was used in determining liabilities and normal cost (not including the District Judges division). The normal cost is based on the benefits and contribution rate applicable to new hires. While 5.0% of member contributions are assumed in developing the employer normal cost, until such time as all members become contributory, the System will not receive 5.0% of payroll for member contributions. To account for this difference, 5.0% of the present value of future salary for all non-contributory members has been added to the actuarial accrued liability. ***The individual entry-age normal actuarial cost method*** was used in determining liabilities and normal cost for the District Judges division.

Differences in the past between assumed experience and actual experience (actuarial gains and losses) become part of actuarial accrued liabilities.

Unfunded actuarial accrued liabilities are amortized to produce contribution amounts (principal and interest) which are level percent of payroll contributions. For the District Judges division, Old Plan Still Paying unfunded actuarial accrued liabilities are amortized as a level dollar contribution.

***Recognizing the special circumstances of the General Assembly division***, modifications of the above assumptions were made where appropriate.

***Present assets (cash & investments) were valued on a market related basis in which differences between actual and assumed returns are phased-in over a four year period (including District Judges New Plan and Paid Off Old Plan). The funding value of assets may not deviate from the market value of assets by more than 25%. District Judges Still Paying Old Plan present assets (cash & investments) were valued on a market value basis.***

*The data about persons now covered and about present assets* were furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the Actuary.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA).

**SINGLE LIFE RETIREMENT VALUES**  
**BASED ON RP -2000 COMBINED, PROJECTED TO 2015**  
**8.00% INTEREST**  
**JUNE 30, 2012**

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Sample Attained Ages	Present Value of \$1.00 Monthly for Life		Present Value of \$1.00 Monthly for Life Increasing 3% Annually		Future Life Expectancy (Years)	
	Men	Women	Men	Women	Men	Women
40	\$ 145.15	\$ 147.67	\$ 206.27	\$ 213.28	39.93	44.05
45	141.08	144.37	196.01	204.36	35.15	39.19
50	135.38	139.78	183.34	193.40	30.40	34.38
55	127.66	133.53	168.05	180.10	25.75	29.64
60	117.86	125.50	150.47	164.62	21.30	25.08
65	106.19	115.70	131.24	147.34	17.19	20.80
70	92.55	104.31	110.57	128.75	13.42	16.86
75	76.91	91.31	88.83	109.13	10.04	13.29
80	60.72	76.72	67.92	88.78	7.19	10.09
85	45.92	61.21	49.94	68.73	5.01	7.35

Sample Attained Ages	Benefit Increasing 3.0% Yearly	Portion of Age 60 Lives Still Alive	
		Men	Women
60	\$100	100 %	100 %
65	116	96	96
70	134	89	91
75	155	79	81
80	180	63	68

The mortality table was set forward 10 years for disabilities.

Based on RP-2000 Combined Healthy male and female mortality tables projected to 2015 using Projection Scale AA, set forward 2 years for males.

**STATE AND LOCAL GOVERNMENT DIVISION**  
**AGE-BASED RETIREMENT**  
**JUNE 30, 2012**

---

Retirement Ages (with less than 28 years of service)	Percent of Eligible Active Members Retiring Within Next Year	
	Unreduced	Reduced
55		2 %
56		2
57		3
58		3
59		4
60		5
61		7
62		20
63		18
64		15
65	25 %	
66	25	
67	25	
68	20	
69	20	
70	20	
71	20	
72	20	
73	20	
74-77	20	
78	20	
79	20	
80-82	20	
83	20	
84	20	
85	100	

A member was assumed eligible for unreduced retirement after attaining age 65 with 5 years of service or 28 years regardless of age. A member was assumed eligible for reduced retirement after attaining age 55 with 10 or more years of service.



**STATE AND LOCAL GOVERNMENT DIVISION**  
**SERVICE BASED RETIREMENT**  
**JUNE 30, 2012**

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<b>Service</b>	<b>Percent of Eligible Active Members Retiring Within Next Year</b>
28	15 %
29	10
30	5
31	5
32	40
33	30
34	30
35	30
36	30
37	30
38	100

**GENERAL ASSEMBLY DIVISION  
 PROBABILITIES OF RETIREMENT  
 FOR MEMBERS ELIGIBLE TO RETIRE  
 JUNE 30, 2012**

---

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year
50	30 %
51	30
52	30
53	30
54	30
55	30
56	30
57	30
58	30
59	30
60	30
61	30
62	50
63	30
64	30
65	50
66	30
67-79	20
80	100

Member may retire at age 50 with 20 or more years of service, age 60 with 16 or more years of service, or age 65 with 8 or more years of service.

**DISTRICT JUDGES DIVISION  
AGE-BASED RETIREMENT  
JUNE 30, 2012**

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<b>Retirement Ages</b>	<b>Percent of Eligible Active Members Retiring Within Next Year</b>
50	10 %
51	10
52	10
53	10
54	10
55	12
56	12
57	14
58	14
59	14
60	18
61	18
62-73	30
74	100

Members may retire at age 50 with 20 or more years of service, age 60 with 16 or more years of service, or age 65 with 8 or more years of service.

**STATE AND LOCAL GOVERNMENT DIVISION**  
**SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE SERVICE RETIREMENT**  
**JUNE 30, 2012**

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Sample Ages	Years of Service	Percent of Active Members Separating within the Next Year						Pay Increase Assumptions For An Individual Employee		
		Withdrawal		Death		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
		Men	Women	Men	Women	Men	Women			
	0	40.0 %	40.0 %							
	1	25.0	25.0							
	2	20.0	20.0							
	3	15.0	15.0							
	4	12.0	12.0							
20	5+	10.0	10.0	0.01 %	0.01 %	0.01 %	0.01 %	6.60 %	4.00 %	10.60 %
25		10.0	10.0	0.02	0.01	0.05	0.05	5.10	4.00	9.10
30		8.8	8.8	0.03	0.01	0.08	0.08	3.20	4.00	7.20
35		6.2	6.2	0.04	0.02	0.10	0.10	2.30	4.00	6.30
40		4.4	4.4	0.05	0.03	0.15	0.15	1.90	4.00	5.90
45		3.4	3.4	0.07	0.04	0.20	0.20	1.50	4.00	5.50
50		2.7	2.7	0.10	0.06	0.40	0.40	1.10	4.00	5.10
55		1.9	1.9	0.18	0.12	0.70	0.70	0.80	4.00	4.80
60		1.2	1.2	0.35	0.23	1.00	1.00	0.70	4.00	4.70

Pay increase rates are age based only, and not service based.

**GENERAL ASSEMBLY DIVISION  
SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE  
SERVICE RETIREMENT  
JUNE 30, 2012**

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Sample Ages	Years of Service	Percent of Active Members Separating within the Next Year					
		Withdrawal		Death		Disability	
		Men	Women	Men	Women	Men	Women
	0	30.0 %	30.0 %				
	1	25.0	25.0				
	2	20.0	20.0				
	3	15.0	15.0				
	4	12.0	12.0				
20	5+	9.0	9.0	0.01 %	0.01 %	0.06 %	0.06 %
25		8.3	8.3	0.02	0.01	0.06	0.06
30		5.3	5.3	0.03	0.01	0.06	0.06
35		3.0	3.0	0.04	0.02	0.06	0.06
40		2.6	2.6	0.05	0.03	0.16	0.16
45		2.4	2.4	0.07	0.04	0.22	0.22
50		1.1	1.1	0.10	0.06	0.39	0.39
55		0.8	0.8	0.18	0.12	0.71	0.71
60		0.8	0.8	0.35	0.23	1.13	1.13

**DISTRICT JUDGES  
SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE  
SERVICE RETIREMENT  
JUNE 30, 2012**

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Sample Ages	Percent of Active Members Separating within the Next Year				Pay Increase Assumptions For An Individual Employee		
	Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next
	Men	Women	Men	Women			
20	2.0 %	2.0 %	0.08 %	0.08 %	2.70 %	4.00 %	6.70 %
25	2.0	2.0	0.08	0.08	2.60	4.00	6.60
30	2.0	2.0	0.08	0.08	2.20	4.00	6.20
35	2.0	2.0	0.08	0.08	1.90	4.00	5.90
40	2.0	2.0	0.20	0.20	1.40	4.00	5.40
45	2.0	2.0	0.27	0.27	1.20	4.00	5.20
50	2.0	2.0	0.49	0.49	0.70	4.00	4.70
55	2.0	2.0	0.89	0.89	0.70	4.00	4.70
60	2.0	2.0	1.41	1.41	0.00	4.00	4.00

**SUMMARY OF ASSUMPTIONS USED**  
**JUNE 30, 2012**  
**MISCELLANEOUS AND TECHNICAL ASSUMPTIONS**

---

***Marriage Assumption.*** 80% of males and 80% of females are assumed to be married for purposes of death-in-service benefits. District Judges division - 100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. 80% of males and 80% of females are assumed to be married for purposes of death-after-retirement benefits for active member valuation purposes.

***Pay Increase Timing.*** Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.

***Decrement Timing.*** Decrements of all types are assumed to occur mid-year.

***Other Liability Adjustments.*** The normal cost was increased by 1% of payroll to account for reciprocal service and reinstatement of service.

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

***Benefit Service.*** Exact fractional service is used to determine the amount of benefit payable.

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

***Normal Form of Benefit.*** The assumed normal form of benefit is the straight life form.

***District Judges Division Old Plan Deferred Members.*** For members that are eligible for a deferred benefit in the Old Plan and are currently active in the New Plan, it is assumed that the deferred benefit will commence at the first age at which the member is eligible to receive the benefit.

***Incidence of Contributions.*** Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.

***DROP Duration.*** We assume on average the total DROP duration is 4 years for those members currently participating in the DROP.

**SUMMARY OF ASSUMPTIONS USED**  
**JUNE 30, 2012**  
**MISCELLANEOUS AND TECHNICAL ASSUMPTIONS**

---

***DROP Interest Credit.*** The current interest rate credit for DROP accounts is assumed to be 3.0%.

***Payroll for DROP Participants and Retired Members Returned to Work.*** Employers now contribute on the pays of DROP participants and retired members returned to work. We estimated payroll subject to this provision. For the June 30, 2012 valuation the estimated payroll for these members was \$80,000,000.

***Pre-Retirement Mortality.*** The weighting of duty and ordinary deaths-in-service is 0%/100%.



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**SECTION F**  
**FINANCIAL PRINCIPLES**

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## **FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES OF APERS**

***Promises Made, and To Be Paid For.*** As each year is completed, APERS in effect hands an “IOU” to each member then acquiring a year of service credit --- the “IOU” says: “The Arkansas Public Employees Retirement System owes you one year’s worth of retirement benefits, payments in cash commencing when you qualify for retirement.”

The related *key financial questions* are:

***Which generation of taxpayers contributes the money to cover the IOU?***

***The present taxpayers***, who receive the benefit of the member’s present year of service? ***Or the future taxpayers***, who happen to be in Arkansas at the time the IOU becomes a cash demand, years and often decades later?

***The law governing APERS financing intends that this year’s taxpayers contribute the money to cover the IOUs being handed out this year.*** With this financial objective, ***the employer contribution rate is expected to remain approximately level from generation to generation of taxpayers.***

There are systems which have a design for deferring contributions to future taxpayers. Lured by a lower contribution rate now, they put aside the consequence that the contribution rate must then relentlessly grow to a level much higher than would be required if a level contribution pattern were followed.

An inevitable by-product of the level-cost design is the accumulation of reserve assets, for decades, and the income produced when the assets are invested. ***Investment income*** becomes ***the third and largest contributor*** for benefits to employees, and is interlocked with the contribution amounts required from employees and employers.

Translated to actuarial terminology, this level-cost objective means that the contribution rates must total at least the following:

Normal Cost (the cost of members' service being rendered this year)

... plus ...

Interest on Unfunded Actuarial Accrued Liabilities (unfunded actuarial accrued liabilities are the difference between: the actuarial accrued liabilities for service already rendered and the actuarial value of assets).

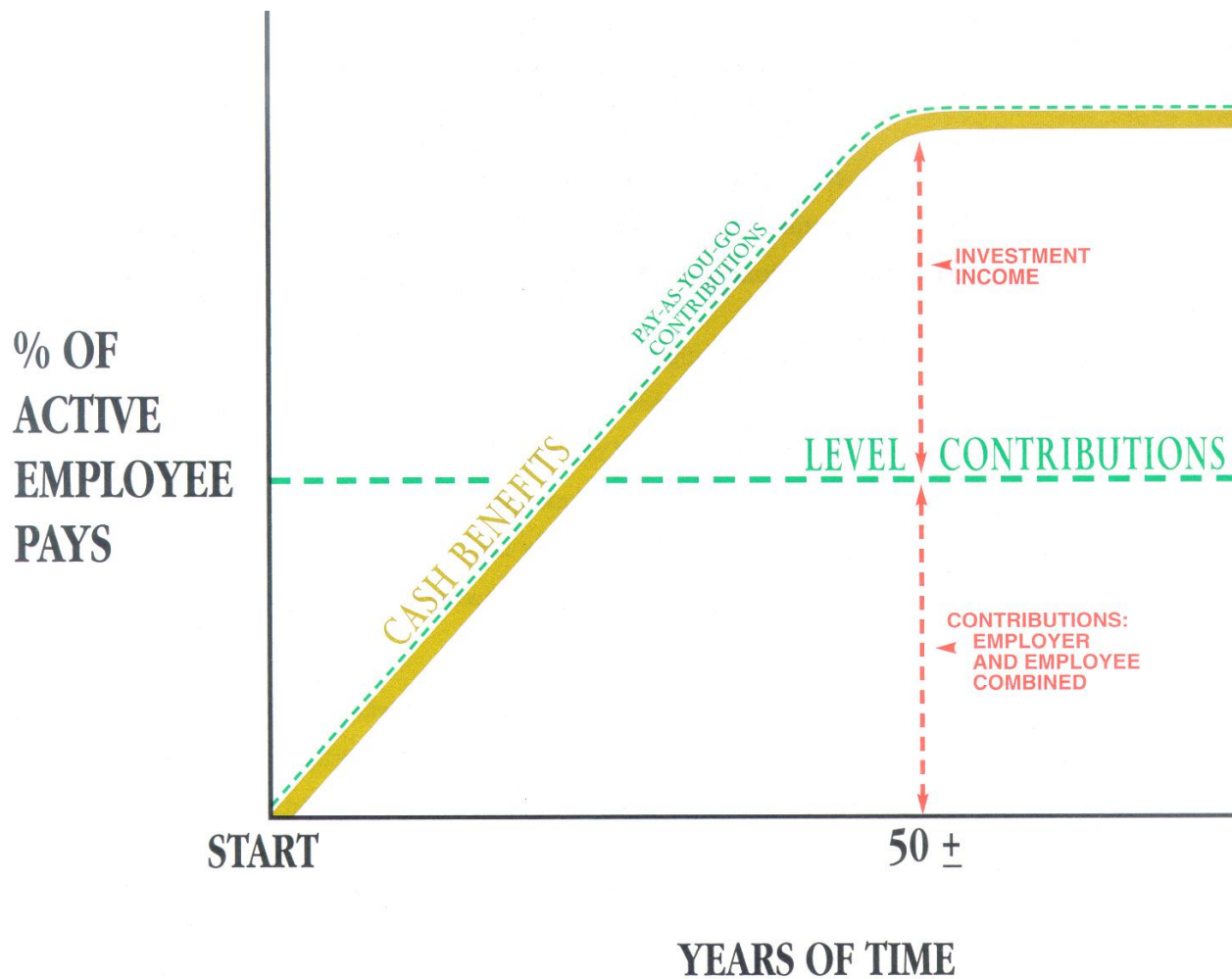
***Computing Contributions to Support Fund Benefits.*** From a given schedule of benefits and from employee and asset data, the actuary calculates the contribution rates to support the benefits by means of ***an actuarial valuation and a funding method.***

An actuarial valuation has a number of ingredients such as: the rate of investment return which plan assets will earn; the rates of withdrawal of active members who leave covered employment; the rates of mortality; the rates of disability; the rates of pay increases; and the assumed age or ages at actual retirement.

In an actuarial valuation, assumptions must be made as to what the above rates will be for the next year and for decades in the future. The assumptions are established by the Retirement Board after receiving the advice of the actuary.

***Reconciling Differences Between Assumed Experience and Actual Experience.*** Once actual experience has occurred and has been observed, it will not coincide exactly with assumed experience, regardless of the skill of the actuary and the many calculations made. The future cannot be predicted with 100% precision.

APERS copes with these continually changing differences by having annual actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is ***continuing adjustments in financial position.***



**CASH BENEFITS LINE.** This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

**LEVEL CONTRIBUTION LINE.** Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

Economic Risk Areas

- Rates of investment return
- Rates of pay increase
- Changes in active member group size

Non-Economic Risk Areas

- Ages at actual retirement
- Rates of mortality
- Rates of withdrawal of active members (turnover)
- Rates of disability

## THE ACTUARIAL VALUATION PROCESS

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*The financing diagram* on the preceding page shows the relationship between *the two fundamentally different philosophies of paying* for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) which is thus an *increasing contribution method*; and, the *level contribution method* which attempts to equalize contributions between the generations.

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*The actuarial valuation* is the mathematical process by which the level contribution rate is determined. The activity constituting the valuation may be summarized as follows:

- A. **Census Data**, including:
  - Retired lives now receiving benefits
  - Former employees with vested benefits not yet payable
  - Active employees
- B. + **Asset data** (cash & investments)
- C. + **Benefit provisions** that establish eligibility and amounts of payments to members
- D. + **Assumptions concerning future experience** in various risk areas
- E. + **The funding method** for employer contributions (the long-term, planned pattern for employer contributions)
- F. + **Mathematically combining the assumptions, the funding method, and the data**
- G. = Determination of:
  - Plan Financial position; and/or
  - New Employer Contribution Rate

## GLOSSARY

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***Actuarial Accrued Liability.*** The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability.”

***Accrued Service.*** The service credited under the plan which was rendered before the date of the actuarial valuation.

***Accumulated Benefit Obligation.*** The actuarial present value of vested and non-vested benefits based on service to date and past and current salary levels.

***Actuarial Assumptions.*** Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

***Actuarial Cost Method.*** A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future plan benefits” between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”

***Actuarial Equivalent.*** A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

***Actuarial Present Value.*** The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

***Amortization.*** Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

## GLOSSARY

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***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 valuation dates, in accordance with the actuarial cost method being used.

***Normal Cost.*** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as “current service cost.” Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

***Plan Termination Liability.*** The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for future service and salary. The termination liability will generally be less than the liabilities computed on a “going concern” basis and is not normally determined in a routine actuarial valuation.

***Reserve Account.*** An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

***Unfunded Actuarial Accrued Liability.*** The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as “unfunded accrued liability.”

***Valuation Assets.*** The value of current plan assets recognized for valuation purposes. Generally based on a phase-in of differences between actual and assumed market rates of return.

## MEANING OF “UNFUNDED ACTUARIAL ACCRUED LIABILITIES”

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“*Actuarial accrued liabilities*” are *the present value of the portions of promised benefits that are not covered by future normal cost contributions* --- a liability has been established (“accrued”) because the service has been rendered but the resulting monthly cash benefit may not be payable until years in the future.

If “actuarial accrued liabilities” at any time exceed the plan’s accrued assets (cash & investments), the difference is “*unfunded actuarial accrued liabilities.*” This is the common condition. It is less common when a plan’s assets equal or exceed the plan’s “actuarial accrued liabilities.”

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Each time a plan adds a new benefit which applies to service already rendered, an “actuarial accrued liability” is created, which is also an “unfunded actuarial accrued liability” because the plan can’t print instant cash to cover the value of the new benefit promises. Payment for such unfunded actuarial accrued liabilities is spread over a period of years, commonly in the 15-30 year range.

Unfunded actuarial accrued liabilities can occur in another way: if actual plan experience is less favorable than assumed, the difference is added to unfunded actuarial accrued liabilities. For example, in plans where benefits are directly related to an employee’s pay near time of retirement, unfunded actuarial accrued liabilities increased rapidly during the 1970’s because unexpected rates of pay increase created additional actuarial accrued liabilities which could not be matched by reasonable investment results. Most of the unexpected pay increases were the direct result of inflation, which is a very destructive force on financial stability.

---

The existence of unfunded actuarial accrued liabilities is not bad but the changes from year to year in the amount of unfunded actuarial accrued liabilities are important --- “bad” or “good” or somewhere in between.

Nor are unfunded actuarial accrued liabilities a bill payable immediately, but it is important that policy-makers prevent the amount from becoming unreasonably high and *it is vital for plans to have a sound method for making payments toward them* so that they are controlled.



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## **SECTION G**

### **ACTUARIAL SUPPLEMENTAL INFORMATION REQUIRED BY STATEMENTS NO. 25 AND NO. 27 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD**

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

**GASB STATEMENTS NO. 25 AND NO. 27**  
**REQUIRED ACTUARIAL INFORMATION**  
**SCHEDULE OF FUNDING PROGRESS**  
**(\$ MILLIONS)**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Entry Age AAL (b)	UAAL (b)-(a)	Funded Ratio (a)/(b)	Annual Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/(c)]
6/30/95	\$2,248	\$2,060	\$ (188)	109.1 %	\$ 835	(22.5)%
6/30/96	2,522	2,291	(231)	110.1 %	889	(26.0)%
6/30/97	2,876	2,607	(269)	110.3 %	939	(28.6)%
6/30/98 @ #	3,297	2,921	(376)	112.9 %	975	(38.6)%
6/30/99 @	3,712	3,479	(233)	106.7 %	1,009	(23.1)%
6/30/00	4,121	3,803	(318)	108.4 %	1,050	(30.3)%
6/30/01 @	4,342	4,111	(231)	105.6 %	1,070	(21.6)%
6/30/02 #	4,404	4,398	(6)	100.1 %	1,112	(0.5)%
6/30/03 #	4,416	4,674	258	94.5 %	1,148	22.5%
6/30/04	4,438	5,005	567	88.7 %	1,176	48.2%
6/30/05	4,584	5,323	739	86.1 %	1,215	60.8%
6/30/05 @ #	4,584	5,619	1,035	81.6 %	1,215	85.2%
6/30/06	4,949	5,936	987	83.4 %	1,267	77.9%
6/30/07 @	5,498	6,174	676	89.1 %	1,303	51.9%
6/30/08 #	5,866	6,543	677	89.7 %	1,380	49.1%
6/30/09 @	5,413	6,938	1,525	78.0 %	1,434	106.3%
6/30/10	5,409	7,304	1,895	74.1 %	1,523	124.4%
6/30/11 #	5,467	7,734	2,267	70.7 %	1,623	139.7%
6/30/12	5,625	8,163	2,538	68.9 %	1,686	150.5%

@ After legislated changes in benefit provisions.

# After changes in actuarial assumptions.

Please note that the difference between columns (b) and (a) may not equal the UAAL due to rounding.

**GASB STATEMENTS NO. 25 AND NO. 27**  
**REQUIRED ACTUARIAL INFORMATION**  
**SCHEDULE OF EMPLOYER CONTRIBUTIONS**

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<b>Year Ended June 30</b>	<b>Annual Required Contribution</b>	<b>Percent Contributed</b>
1994	\$ 75,710,660	100%
1995	75,028,320	100%
1996	76,772,911	100%
1997	82,050,663	100%
1998	87,528,945	100%
1999	93,322,444	100%
2000	96,348,947	100%
2001	100,925,338	100%
2002	109,037,491	100%
2003	115,690,798	100%
2004	118,419,346	100%
2005	135,027,447	100%
2006	158,152,183	100%
2007	163,223,695	100%
2008	173,462,377	100%
2009	159,232,361	100%
2010	169,604,041	100%
2011	195,628,572	100%
2012	229,631,149	100%

**GASB STATEMENTS NO. 25 AND NO. 27**  
**REQUIRED SUPPLEMENTARY INFORMATION**

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The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest valuation date follows:

Valuation Date	June 30, 2012
Actuarial Cost Method	Ultimate Entry Age Normal
Amortization Method	Level Percent-of-Payroll
Remaining Amortization Period	30 year open
Asset Valuation Method	4-Year Smoothed Market with 25% Corridor
Actuarial Assumptions:	
Investment Rate of Return	8.0%
Projected Salary Increases Including Inflation at	4.7% - 10.6%
Cost-of-Living Adjustments	4.0%
	3.0% Annual Compounded Increase

	<u>Number</u>
Retirees and beneficiaries receiving benefits #	29,282
Terminated plan members entitled to but not yet receiving benefits	13,053
Active plan members	<u>45,937</u>
Total	88,272

# Includes DROP participants.

November 9, 2012

Ms. Gail H. Stone, Executive Director  
Arkansas Public Employees Retirement System  
One Union National Plaza  
124 West Capitol, Suite 400  
Little Rock, Arkansas 72201

**Re: Report of the June 30, 2012 Actuarial Valuation and Gain/(Loss) Analysis of  
Financial Experience**

Dear Gail:

Enclosed are 40 copies of this report.

Sincerely,



Mita D. Drazilov, ASA, MAAA

MDD:bd  
Enclosures

cc: David Hoffman