

ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL VALUATION AND EXPERIENCE
GAIN/(LOSS) ANALYSIS
JUNE 30, 2013

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November 14, 2013

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

Ladies and Gentlemen:

The results of the ***June 30, 2013 actuarial valuation*** of the Arkansas Public Employees Retirement System together with ***the annual gain and loss analysis*** for the year ended June 30, 2013 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.

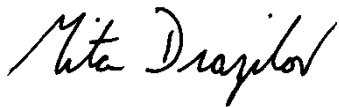
Board of Trustees
November 14, 2013
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This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, this report is complete and accurate and was made in accordance 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

SECTION A
VALUATION RESULTS

COMMENTS

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.

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, 2013 valuation.

Assumption Changes. Assumptions were updated in the June 30, 2013 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.

Method Changes. The actuarial cost method and amortization method were updated for the June 30, 2013 valuation in conjunction with the recently completed experience study.

APERS Status. Based upon the results of the June 30, 2013 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. **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 74% funded ratio. On a market value of assets basis, the System has a 77% funded ratio.

Employer Contribution Rates. Based upon experience through June 30, 2013, the State and Local Government contribution rate (including General Assembly members) will be 14.76% of covered payroll for the fiscal year beginning July 1, 2014.

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.

**EMPLOYER CONTRIBUTION RATES COMPUTED
FOR FISCAL YEAR BEGINNING JULY 1, 2014**

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)	7.58%
Separation benefits	1.51%
Disability benefits	0.60%
Death-in-service annuities	0.20%
Total	9.89%
Member contributions (ultimate)	2.74%
Employer Normal Cost	7.15%
Unfunded Actuarial Accrued Liabilities #	7.61% *
Total Employer Contribution	14.76%

* *Unfunded actuarial accrued liabilities were amortized over a 25 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, 2013

Present Resources and Expected Future Resources

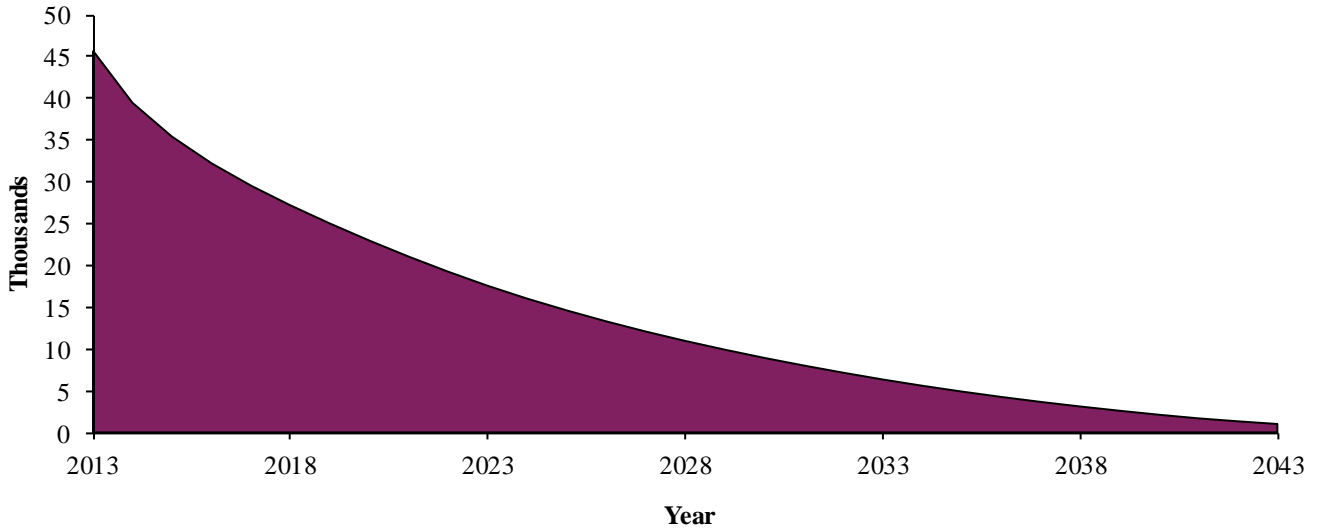
A.	Present Valuation Assets:	
	1. Net assets from system financial statements	\$6,418,518,612
	2. Market value adjustment	(259,184,841)
	3. Valuation assets	<u>6,159,333,771</u>
B.	Actuarial present value of expected future employer contributions:	
	1. For normal costs	945,244,370
	2. For unfunded actuarial accrued liability	2,124,833,614
	3. Total	<u>3,070,077,984</u>
C.	Actuarial present value of expected future member contributions	<u>393,310,982</u>
D.	Total Present and Expected Future Resources	<u><u>\$9,622,722,737</u></u>
A.	To retirees and beneficiaries:	
	1. Annual pensions	\$3,855,226,967
	2. DROP participants: future payments	696,058,215
	3. DROP Reserve: accrued balances	114,027,248
	4. Total	<u>4,665,312,430</u>
B.	To vested terminated members	390,559,640
C.	To present active members:	
	1. Allocated to service rendered prior to valuation date - actuarial accrued liability	3,228,295,315
	2. Allocated to service likely to be rendered after valuation date	1,338,555,352
	3. Total	<u>4,566,850,667</u>
D.	Total Actuarial Present Value of Expected Future Benefit Payments	<u><u>\$9,622,722,737</u></u>

**COMPUTED ACTUARIAL LIABILITIES AND
ALLOCATION USING ENTRY AGE ACTUARIAL COST METHOD
AS OF JUNE 30, 2013**

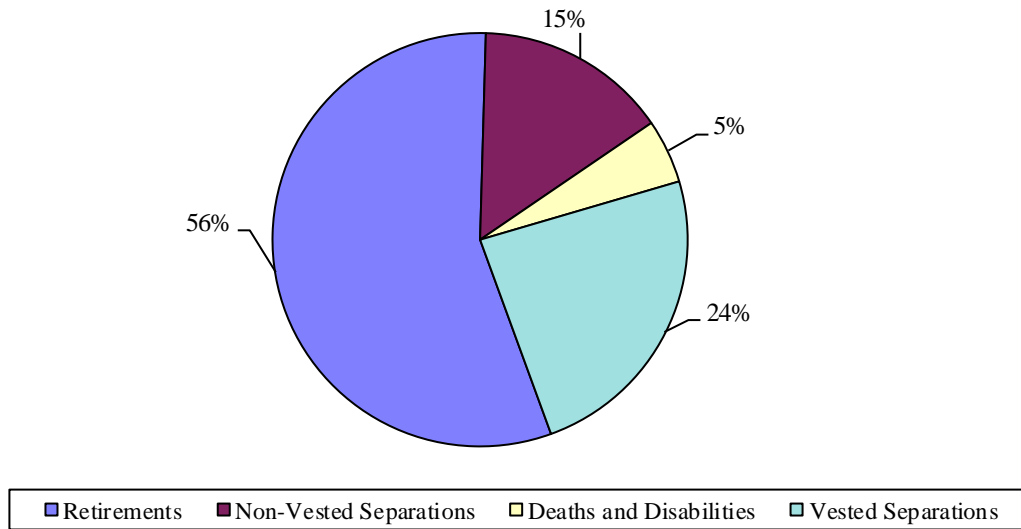
Actuarial Present Value of	Total Present Value	Portion Covered By Future Normal Cost Contributions	Actuarial Accrued Liabilities (1) - (2)
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	\$3,855,226,967	\$ 0	\$3,855,226,967
Age and service allowances based on total service likely to be rendered by present active members	4,050,188,930	1,025,909,966	3,024,278,964
DROP participant benefits likely to be paid to present active members and current DROP participants	810,085,463	0	810,085,463
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	660,656,725	204,369,927	456,286,798
Disability benefits likely to be paid to present active members	169,882,254	81,206,594	88,675,660
Death in service benefits likely to be paid on behalf of present active members	76,682,398	27,068,865	49,613,533
Total	\$9,622,722,737	\$1,338,555,352	\$8,284,167,385
Applicable assets (funding value)	6,159,333,771	0	6,159,333,771
Liabilities to be covered by future contributions	\$3,463,388,966	\$1,338,555,352	\$ 2,124,833,614

**EXPECTED DEVELOPMENT OF PRESENT POPULATION
JUNE 30, 2013**

Closed Group Population Projection



Expected Termination Type from Active Employment



The charts show the expected future development of the present population in simplified terms. The Retirement System presently covers 45,707 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 9 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, 2013 To:		Employer Accumulation Accounts After Transfers
		Deferred Annuity Accounts	Retirement Reserve Accounts	
State	\$1,872,216,295	\$15,471,295	\$302,759,902	\$ 1,553,985,098
Wildlife	(57,781,169)	25,976	2,594,460	(60,401,605)
Penitentiary	(379,817)	0	(0)	(379,816)
State Constitutional Officers	(1,589,589)	181,410	122,810	(1,893,809)
Governors	(5,965,263)	0	101,164	(6,066,427)
Quasi-Judicial	(699,850)	0	(0)	(699,850)
State Capitol Police	2,685,181	0	(927)	2,686,109
Administrative Officers Courts	481,834	0	(97,761)	579,595
Total State	1,808,967,622	15,678,681	305,479,647	1,487,809,294
General Assembly	(5,315,834)	155,954	1,236,415	(6,708,203)
County	352,130,141	5,266,377	77,838,266	269,025,498
County Constitutional Officers	(919,561)	0	99,906	(1,019,466)
Total County	351,210,580	5,266,377	77,938,171	268,006,032
Municipal	190,643,314	(297,084)	34,281,409	156,658,989
School	(33,598,778)	(2,540,303)	23,133,309	(54,191,784)
Non-State	6,905,073	249,856	906,509	5,748,709
Total	\$2,318,811,977	\$18,513,481	\$442,975,460	\$1,857,323,036

**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
2013	8,426	6,159	73.1	2,267	30	134		13.98
2013 #	8,284	6,159	74.3	2,125	25	126		14.76

* 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.

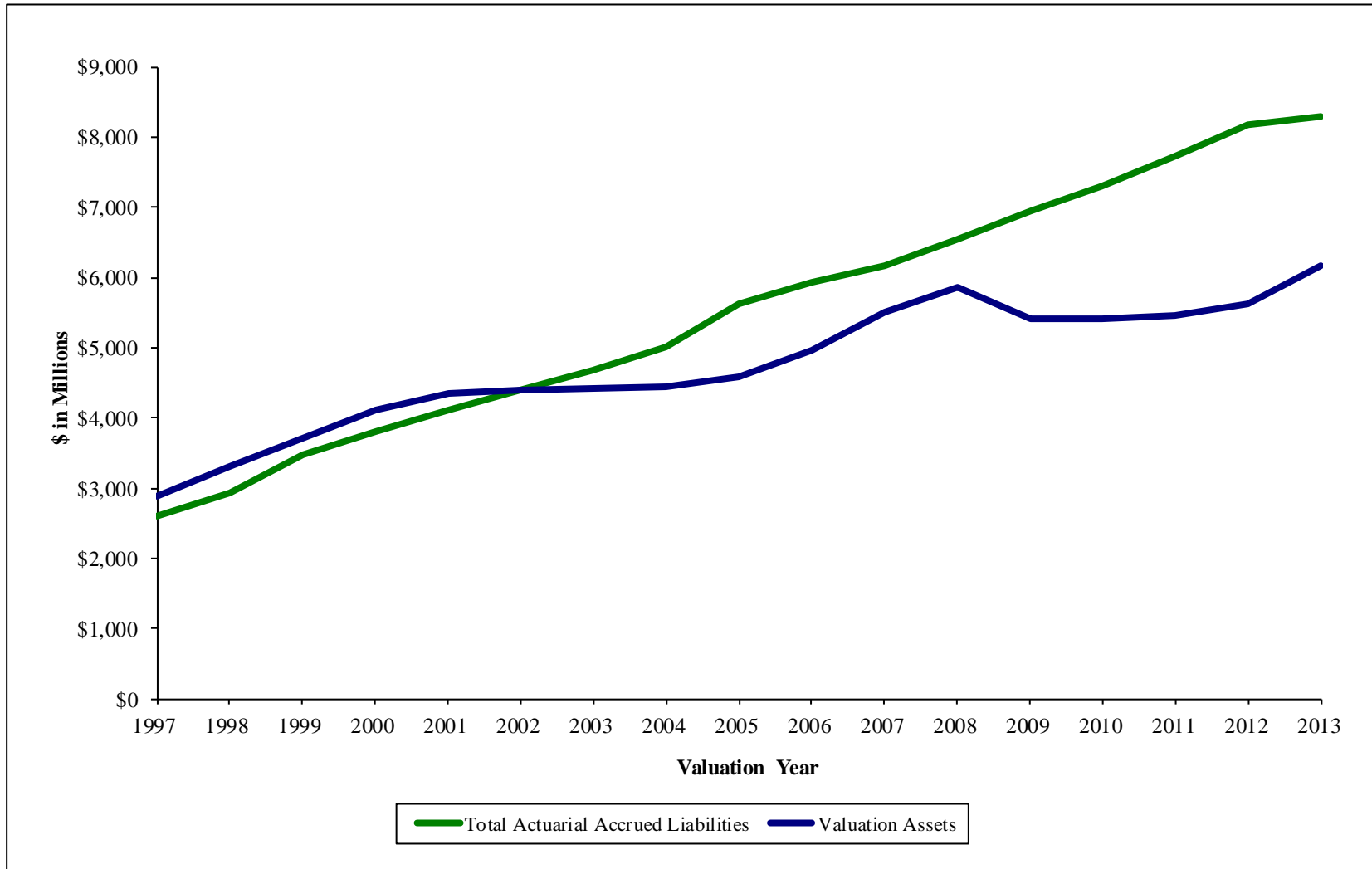
After changes in actuarial assumptions.

ACTIVE MEMBERS AND RETIRED LIVES HISTORICAL COMPARATIVE SCHEDULE

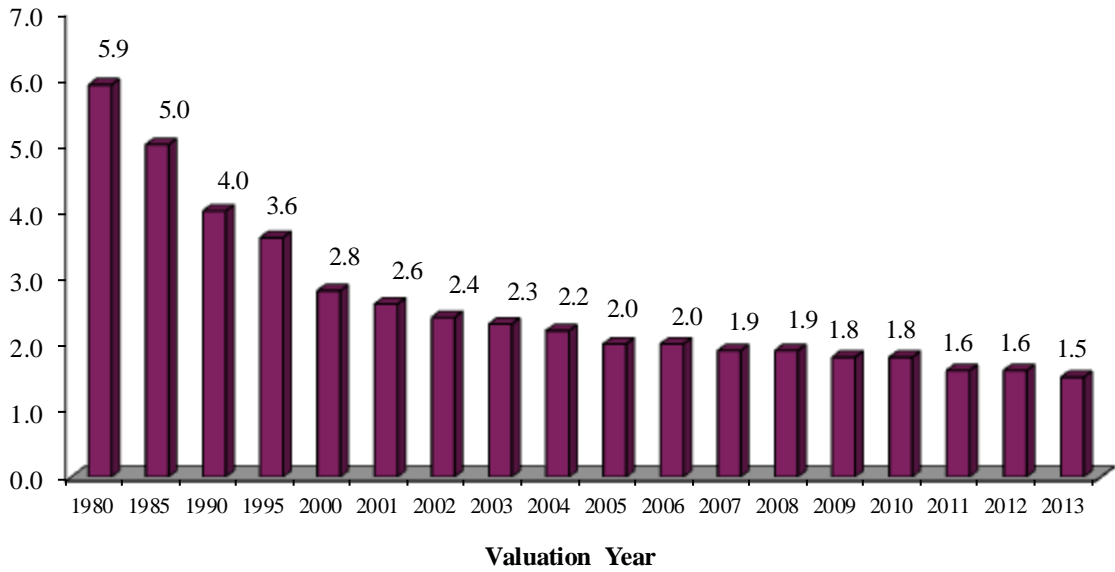
Valuation Date	Active Members				Retired Lives			
	No.	Valuation Payroll			No.	Active per Retired	Annual Benefits	
		\$ Millions	Average	% Incr.			\$ Millions	As a % of Pay
6/30/84	*	*	*	*	7,036	*	\$ 19.1	4.4%
6/30/85	*	*	*	*	7,331	*	22.0	4.8%
6/30/86	*	*	*	*	7,649	*	24.1	4.9%
6/30/87	*	*	*	*	8,074	*	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	24.3%
6/30/12	45,937	1,606.1	34,962	2.3%	29,282	1.6	399.5	24.9%
6/30/13	45,707	1,612.7	37,033	5.9%	30,533	1.5	426.2	26.4%

The above valuation payroll results do not include DROP payroll.

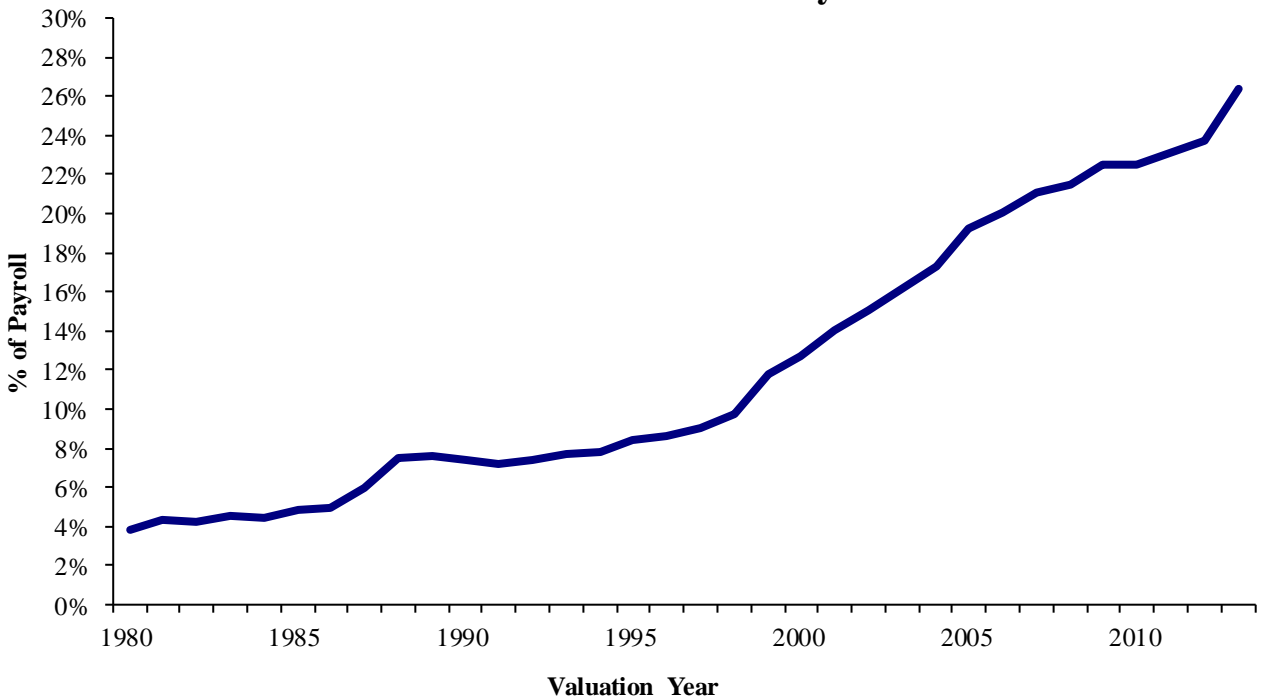
ACTUARIAL ACCRUED LIABILITIES & ASSETS



Active Members Per Retired Life



Retirement Benefits Being Paid as a Percent of Member Payroll



SHORT CONDITION TEST

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.

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%
2013@	147.9	3,855.2	4,281.1	6,159.3	100%	100%	50%	74%

After legislated changes in benefit provisions.

@ After changes in actuarial assumptions.

SECTION B
VALUATION DATA

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

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.

New Contributory Plan

Non-Contributory Plan

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.

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.

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.

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.

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).

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.

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

SUMMARY OF PROVISIONS EVALUATED CREDITED SERVICE

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

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

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	(2.0)%	10,221	128%
2014	666	22,871			

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

REVENUES AND EXPENDITURES
JULY 1, 2012 THROUGH JUNE 30, 2013
MARKET VALUE
(\$ IN MILLIONS)

	Totals
Balance 7/1/2012	\$5,677.7
Revenues	
Member contributions	43.1
Employer contributions	249.5
Transfers	5.8
Other	2.3
Investment return*	850.0
Total	1,150.6
Expenditures	
Benefits paid	403.6
Expenses	7.0
Total	410.6
Reserve Adjustments	0.8
Balance 6/30/2013	\$6,418.5

* Net of investment expenses.

Note: Results may not total due to rounding.

**REPORTED ACCRUED ASSETS AVAILABLE FOR BENEFITS
JUNE 30, 2013**

Retirement System Account	Reported Assets June 30, 2013
Employer Accumulation Account	\$ 1,857,323,036 *
Members Deposit Account	184,625,059
Members Deposit Interest Reserve	16,645,263
Retirement Reserve Account	3,855,226,967 *
Deferred Annuity Reserve Account	390,559,640 *
DROP Reserve	114,027,248
Miscellaneous Reserves	111,399
Total Market Value	<u>6,418,518,612</u>
Funding Value of Assets	6,159,333,771
Valuation Asset Adjustment	(259,184,841)
Adjusted Employer Accum. Account	\$ 1,598,138,195

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

REPORTED ACCRUED ASSETS AVAILABLE FOR BENEFITS
JUNE 30, 2013
(CONCLUDED)

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	2016
A. Funding Value Beginning of Year	\$ 5,409,167,459	\$ 5,467,472,476	\$ 5,625,388,129			
B. Market Value End of Year	5,784,994,854	5,677,707,897	6,418,518,612			
C. Market Value Beginning of Year	4,714,159,955	5,784,994,854	5,677,707,897			
D. Non-Investment Net Cash Flow	(110,288,609)	(86,550,171)	(102,964,014)			
E. Investment Income						
E1. Market Total: B - C - D	1,181,123,508	(20,736,786)	843,774,729			
E2. Assumed Rate	8.00%	8.00%	8.00%			
E3. Amount for Immediate Recognition	428,378,433	433,980,193	445,965,313			
E4. Amount for Phased-In Recognition	752,745,075	(454,716,979)	397,809,416			
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.25 x E4	188,186,269	(113,679,245)	99,452,354			
F2. First Prior Year	16,984,966	188,186,269	(113,679,245)	\$ 99,452,354		
F3. Second Prior Year	(281,006,360)	16,984,966	188,186,269	(113,679,245)	\$ 99,452,354	
F4. Third Prior Year	(183,949,682)	(281,006,359)	16,984,965	188,186,268	(113,679,244)	\$ 99,452,354
F5. Total Phase-Ins	(259,784,807)	(189,514,369)	190,944,343	173,959,377	(14,226,890)	99,452,354
G. Preliminary Funding Value End of Year: A + D + E3 + F5	\$ 5,467,472,476	\$ 5,625,388,129	\$ 6,159,333,771			
H. Adjustment to Minimum of 75% of B, Maximum 125% of B	0	0	0			
I. Funding Value End of Year	\$ 5,467,472,476	\$ 5,625,388,129	\$ 6,159,333,771			
J. Difference Between Market & Funding Value	317,522,378	52,319,768	259,184,841			
K. Recognized Rate of Return	3.1%	4.5%	11.4%			
L. Market Rate of Return	25.4%	(0.4)%	15.0%			
M. Ratio of Funding Value to Market Value	95%	99%	96%			

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

Retirees and beneficiaries (including DROP participants) on rolls included in the valuation totaled 30,533, involving annual annuities of \$426,198,681, distributed as follows:

Division	Number	Annuities Being Paid July 1, 2013	
		Monthly	Annualized
State & Local	28,568	\$ 30,546,222	\$ 366,554,661
General Assembly	128	165,844	1,990,128
Governor	6	17,185	206,220
Wildlife	93	282,289	3,387,471
State Constitutional Officers	5	16,189	194,265
Penitentiary	0	0	0
Sub-total	28,800	31,027,729	372,332,745
DROP	1,733	4,488,828	53,865,936
Totals	30,533	\$ 35,516,557	\$ 426,198,681

Inactive members, entitled to deferred annuities, included in the valuation totaled 13,267, involving estimated deferred monthly annuities of \$5,253,754, distributed as follows:

Division	Number of Inactive Members	Estimated Deferred Annuities	
		Monthly	Annualized
State and Local	13,199	\$ 5,236,607	\$ 62,839,283
General Assembly	58	11,478	137,730
Wildlife	8	3,656	43,876
State Constitutional Officers	2	2,013	24,156
Totals	13,267	\$ 5,253,754	\$ 63,045,045

**RETIREMENT SYSTEM TOTALS
 ANNUITIES BEING PAID RETIREES AND BENEFICIARIES
 AND DROP PARTICIPANTS
 JUNE 30, 2013
 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			147	\$ 839,958	84	\$ 325,836		\$ -	231	\$ 1,165,794
40-44		\$ -	34	222,379	68	433,704	1	5,820	103	661,903
45-49	34	911,748	124	1,979,205	160	1,166,232			318	4,057,185
50-54	344	10,677,864	525	11,739,291	342	2,820,348	1	5,532	1,212	25,243,035
55-59	702	23,542,392	2,293	41,625,666	592	5,123,052	2	14,556	3,589	70,305,666
60-64	503	14,938,644	4,399	71,050,226	775	6,658,572	1	6,132	5,678	92,653,574
65-69	128	3,143,628	5,820	76,143,888	650	5,368,776	4	18,540	6,602	84,674,832
70-74	18	523,764	4,685	55,178,616	292	2,346,156	5	37,632	5,000	58,086,168
75-79	3	70,272	3,480	40,011,324	144	1,300,572	5	53,532	3,632	41,435,700
80-84	1	57,624	2,191	25,205,292	43	416,700	10	75,192	2,245	25,754,808
85-89			1,201	14,342,004	13	131,568	6	37,332	1,220	14,510,904
90-94			476	5,551,656	4	34,284	7	47,988	487	5,633,928
95-99			149	1,676,016			5	30,384	154	1,706,400
Over 100			52	272,172	9	33,072	1	3,540	62	308,784
Totals	1,733	\$53,865,936	25,576	\$345,837,693	3,176	\$26,158,872	48	\$336,180	30,533	\$ 426,198,681

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

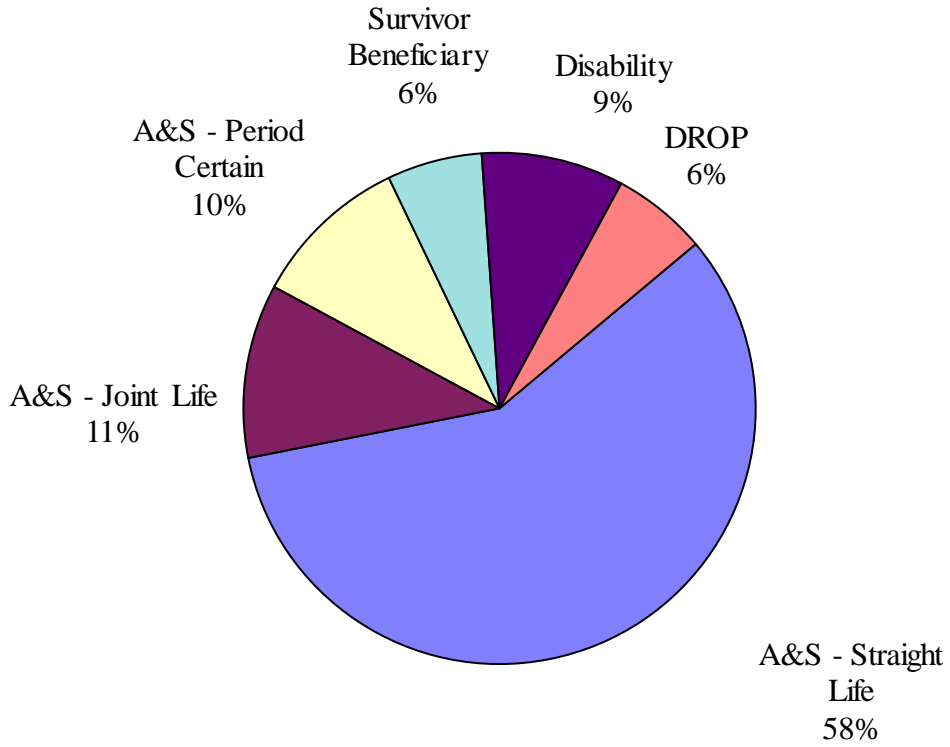
ANNUITIES BEING PAID JUNE 30, 2013
BY TYPE OF ANNUITY

<u>Type of Annuity</u>	<u>Number</u>	<u>Annual Annuities</u>
Age & Service Retirees		
Life	17,815	\$ 245,946,462
Option A- 60 (5 years certain)	1,095	13,684,607
Option A-120 (10 years certain)	2,025	23,568,989
Option B- 50 (joint and 50% survivor)	1,124	20,461,200
Option B- 75 (joint and 75% survivor)	2,043	28,543,492
Option B-100 (joint and 100% survivor)	68	1,362,424
Totals	<u>24,170</u>	<u>333,567,174</u>
Beneficiaries of Age & Service Retirees		
Life	222	1,669,246
Option A- 60	21	182,109
Option A-120	201	1,780,542
Option B- 50	303	2,346,975
Option B- 75	478	4,556,194
Option B-100	32	590,016
Totals	<u>1,257</u>	<u>11,125,082</u>
Total Age & Service Retirees & Beneficiaries	<u>25,427</u>	<u>344,692,256</u>
Disability Retirees		
Life	1,954	16,794,456
Option A- 60	136	1,106,424
Option A-120	317	2,582,640
Option B- 50	142	1,225,992
Option B- 75	238	1,881,672
Option B-100	0	0
Totals	<u>2,787</u>	<u>23,591,184</u>
Beneficiaries of Disability Retirees		
Life	57	332,208
Option A- 60	0	0
Option A-120	0	0
Option B- 50	0	0
Option B- 75	332	2,235,480
Option B-100	0	0
Beneficiaries of Disability Retirees	<u>389</u>	<u>2,567,688</u>
Total Disability Retirees & Beneficiaries	<u>3,176</u>	<u>26,158,872</u>
QDRO Alternate Payees	<u>149</u>	<u>1,145,437</u>
Death-in-Service Beneficiaries	<u>48</u>	<u>336,180</u>
Total Retirees & Beneficiaries	<u>28,800</u>	<u>372,332,745</u>
DROP Participants	<u>1,733</u>	<u>53,865,936</u>
Total Including DROP Participants	<u>30,533</u>	<u>\$ 426,198,681</u>

**SCHEDULE OF AVERAGE BENEFIT PAYMENTS
(VOLUNTARY RETIREMENTS STILL RECEIVING
BENEFITS AS OF JUNE 30, 2013)**

	Years of Credited Service				
	10-14	15-19	20-24	25-29	30+
Retirement Effective Dates July 1, 2012 to June 30, 2013					
Average Monthly Benefit	\$ 385.55	\$ 757.98	\$ 1,198.84	\$1,626.45	\$2,444.26
Average Monthly FAS	2,337.73	2,819.21	3,278.63	3,481.46	4,131.90
Number of Active Retirees	866	228	202	266	148
Retirement Effective Dates July 1, 2011 to June 30, 2012					
Average Monthly Benefit	352.20	781.98	1,119.41	1,874.67	2,328.65
Average Monthly FAS	2,140.13	2,842.01	3,143.09	3,732.86	3,680.46
Number of Active Retirees	780	223	189	262	101
Retirement Effective Dates July 1, 2010 to June 30, 2011					
Average Monthly Benefit	362.01	785.98	1,080.11	1,703.85	2,554.97
Average Monthly FAS	2,167.54	2,694.46	2,984.43	3,381.81	3,892.70
Number of Active Retirees	658	201	185	259	143
Retirement Effective Dates July 1, 2009 to June 30, 2010					
Average Monthly Benefit	340.09	708.20	965.34	1,797.06	2,460.06
Average Monthly FAS	1,948.64	2,540.19	2,604.87	3,316.45	3,785.95
Number of Active Retirees	624	181	160	216	101
Retirement Effective Dates July 1, 2008 to June 30, 2009					
Average Monthly Benefit	332.96	728.41	996.94	1,894.06	2,295.40
Average Monthly FAS	1,871.61	2,515.15	2,644.84	3,224.59	3,387.96
Number of Active Retirees	671	224	185	375	173
Retirement Effective Dates July 1, 2008 to June 30, 2013					
Average Monthly Benefit	356.33	753.58	1,077.57	1,787.76	2,414.23
Average Monthly FAS	2,109.43	2,688.08	2,947.36	3,414.76	3,766.37
Number of Active Retirees	3,599	1,057	921	1,378	666

**ANNUITIES BEING PAID BY TYPE
JUNE 30, 2013**



**NEW RETIREES
JUNE 30, 2013**

	<u>New Retirees June 30, 2013</u>	
	<u>Age & Service</u>	<u>Disability</u>
Number	1,695	116
Average Age (yrs.)	61.8	55.9
Average Service (yrs.)	17.0	14.8
Average Monthly Benefit	904.38	770.41

**RETIREMENT SYSTEM TOTALS
 ANNUITIES LIKELY TO BE PAID PRESENT INACTIVE MEMBERS
 JUNE 30, 2013
 BY ATTAINED AGE**

Attained Ages	No.	Estimated Annual Annuities
Under 40	2,242	\$ 8,784,594
40-44	2,124	9,230,393
45-49	2,430	11,804,419
50-54	2,630	13,967,667
55-59	1,948	10,041,302
60-64	1,302	6,750,164
65-69	591	2,466,506
Totals	13,267	\$ 63,045,045

LIABILITIES FOR DEFERRED ANNUITIES JUNE 30, 2013

Number of Inactive Members	Estimated Annual Annuities	Annuity Liabilities
13,267	\$ 63,045,045	\$ 390,559,640

**STATE AND LOCAL DIVISION
(EXCLUDING GENERAL ASSEMBLY)
ACTIVE MEMBERS* IN VALUATION JUNE 30, 2013
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
Under 20	217							217	\$ 3,206,000
20-24	2,275	38						2,313	55,161,989
25-29	3,177	839	19					4,035	117,388,349
30-34	2,554	1,734	472	13				4,773	156,260,629
35-39	1,968	1,454	1,024	288	4	4		4,742	165,136,984
40-44	1,858	1,347	1,129	762	262	32	15	5,405	197,240,959
45-49	1,972	1,236	1,030	805	687	345	57	6,132	225,325,150
50-54	1,487	1,281	1,055	827	709	629	200	6,188	237,207,130
55-59	1,247	1,168	982	774	686	601	266	5,724	222,847,194
60	228	195	214	173	121	91	53	1,075	42,060,072
61	181	187	183	143	110	83	42	929	34,819,844
62	160	167	122	126	105	86	33	799	30,958,891
63	103	163	124	94	82	65	26	657	25,511,317
64	114	128	108	85	72	54	23	584	22,230,408
65	66	106	93	65	67	56	21	474	18,396,013
66	81	80	75	55	48	33	20	392	14,521,124
67	38	71	69	38	34	20	16	286	11,008,784
68	33	35	36	25	19	14	8	170	6,283,248
69	44	34	26	27	10	11	10	162	5,800,677
70 & over	115	153	141	73	64	55	45	646	21,253,775
Totals	17,918	10,416	6,902	4,373	3,080	2,179	835	45,703	\$1,612,618,537

* Not including DROP participants.

Group Averages

Age:	44.9 years
Service:	9.3 years
Annual Pay:	\$35,285

**GENERAL ASSEMBLY SUB-DIVISION
ACTIVE MEMBERS IN VALUATION JUNE 30, 2013
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									
55-59			2					2	31,736
60									
61									
62									
63									
64									
65									
66									
67									
68									
69			1					1	15,868
70									
71									
72									
73									
74									
Totals		1	3					4	\$ 63,472

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

Group Averages

Age:	56.0 years
Service:	10.5 years
Annual Pay:	\$15,868

SECTION C
GAIN/(LOSS) ANALYSIS

GAIN/(LOSS) ANALYSIS COMMENTS

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.

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, 2012 TO JUNE 30, 2013**

	Total (\$ in millions)
(1) UAAL* at beginning of year	\$ 2,537.3
(2) Normal cost from last valuation	112.3
(3) Actual employer contributions	249.5
(4) Interest accrual: $[(1) + \frac{1}{2}[(2) - (3)]] \times .080$	197.5
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	2,597.6
(6) Increase from benefit changes	0.0
(7) Changes from revised actuarial assumptions and methods	(141.8)
(8) New entrant liabilities	39.2
(9) Expected UAAL after changes: (5) + (6) + (7) + (8)	2,495.0
(10) Actual UAAL at end of year	2,124.8
<hr/>	
(11) Gain/(Loss): (9) - (10)	\$ 370.2

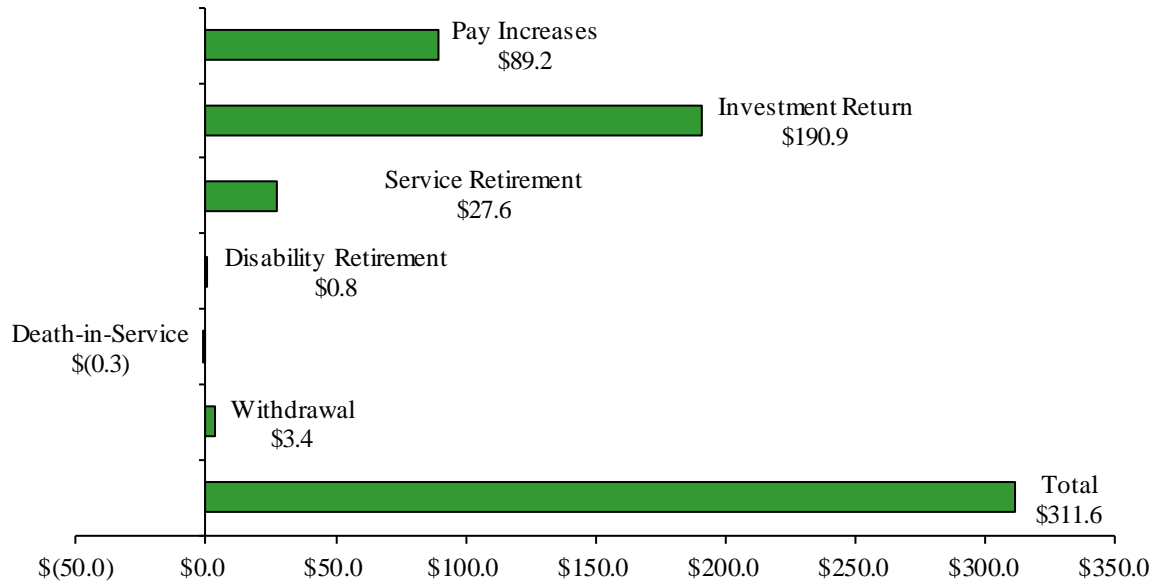
* *Unfunded actuarial accrued liability.*

**GAINS/(LOSSES) BY RISK AREA
DURING THE PERIOD JULY 1, 2012 TO JUNE 30, 2013**

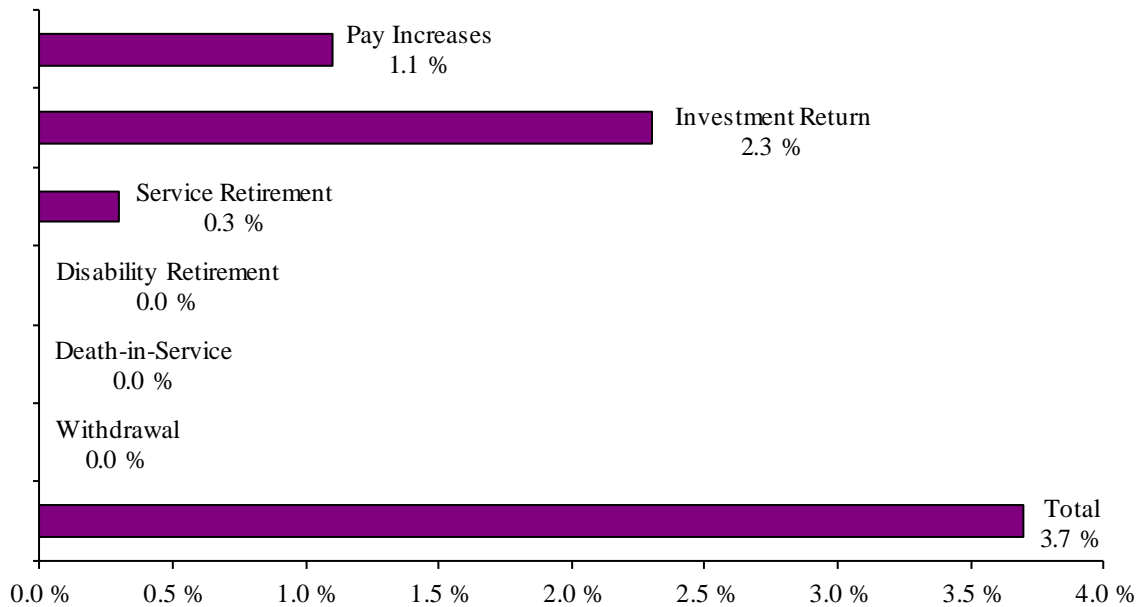
<u>Type of Risk Area</u>	<u>Total (\$ in millions)</u>	<u>% of Accrued Liabilities</u>
ECONOMIC RISK AREAS		
<i>Pay Increases.</i> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	\$ 89.2	1.1 %
<i>Investment Return.</i> If there is greater investment return than assumed, there is a gain. If less return, a loss.	190.9	2.3 %
NON-ECONOMIC RISK AREAS		
<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.	27.6	0.3 %
<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.	(0.3)	0.0 %
<i>Withdrawal.</i> If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.	3.4	0.0 %
Total Active Member Actuarial Gains/(Losses)	\$ 311.6	3.7 %
<i>Retired Life Mortality.</i>	42.8	0.5 %
<i>Other.</i> Includes data adjustments at retirement, timing of financial transactions, and miscellaneous unidentified sources.	\$ 15.8	0.2 %
Total Actuarial Gains/(Losses)	\$ 370.2	4.4 %

**ACTUARIAL GAINS/(LOSSES)
ACTIVE MEMBERS
2012-2013 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 Retirement	Disability	Death In Service	Withdrawal	Dollars	% of AAL	
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
2013	89.2	190.9	27.6	0.8	(0.3)	3.4	311.6	3.7 %	8,284.2

**DEVELOPMENT OF GAIN/(LOSS)
FROM INVESTMENT RETURN*
DURING THE PERIOD JULY 1, 2012 TO JUNE 30, 2013**

	<u>\$ Millions</u>
1. Total Assets Beginning of Year	\$ 5,625.4
2. Total Assets End of Year (Funding Value)	
a. Actual	\$ 6,159.3
b. If net investment return had been 8.00%	<u>\$ 5,968.4</u>
3. Gain/(Loss): 2a. minus 2b.	\$ 190.9

* *“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, 2012 TO JUNE 30, 2013
(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	94	107
66	84	90
67	30	45
68	35	30
69	28	28
70	15	22
71	15	17
72	14	14
73	11	12
74	8	11
75 & Up	23	36
	357	414

Additionally, there were 27 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 68.4

Service at retirement 14.6

**ACTIVE MEMBERS WHO BECAME REDUCED EARLY RETIREES
DURING THE PERIOD JULY 1, 2012 TO JUNE 30, 2013
(EARLY RETIREMENTS WITH REDUCED BENEFITS
BEGINNING IMMEDIATELY)**

Ages	State & Local Early Retirement	
	Actual#	Expected
55	12	12
56	21	13
57	24	17
58	26	19
59	36	25
60	26	29
61	33	34
62	111	96
63	80	71
64	71	50
Totals	440	364

Additionally, there were 40 new early retirees under the age of 55.

Averages, in Years:

Age at retirement	60.5
Service at retirement	15.2

**ACTIVE MEMBERS WHO RETIRED OR ENTERED THE DROP
DURING THE PERIOD JULY 1, 2012 TO JUNE 30, 2013
(28 OR MORE YEARS OF SERVICE)**

Service	State & Local			
	Retirement		DROP	
	Actual	Expected	Actual	Expected
28	34	55	185	n/a
29	29	36	36	n/a
30	16	21	25	n/a
31	15	16	15	n/a
32	9	12	9	n/a
33	14	9	6	n/a
34	7	8	4	n/a
35	6	7	15	n/a
36	3	3		
37	6	4		
38 & Up	31	159		
Totals	170	329	295	

Averages, in Years:

Age at retirement	60.7	56.9
Service at retirement	33.4	29.2

**ACTIVE MEMBERS WHO BECAME DISABILITY RETIREES
DURING THE PERIOD JULY 1, 2012 TO JUNE 30, 2013
(AND WHO WERE ACTIVE MEMBERS AS OF JUNE 30, 2012)**

Ages	State & Local Disabilities	
	Actual	Expected
20- 24		
25- 29		1
30- 34		2
35- 39	2	3
40- 44	3	6
45- 49	7	12
50- 54	18	21
55- 59	36	33
60 & Up	27	31
	93	109

Averages, in Years:

Age at retirement 55.7

Service at retirement 15.1

**ACTIVE MEMBERS WHO LEFT ACTIVE STATUS WITH A
DEFERRED BENEFIT PAYABLE
DURING THE PERIOD JULY 1, 2012 TO JUNE 30, 2013
(VESTED SEPARATIONS)**

Ages	State & Local Vested Separations	
	Actual	Expected
Below 30	144	124
30- 34	270	212
35- 39	234	172
40- 44	223	168
45- 49	240	147
50- 54	246	127
55- 59	154	84
60 & Up	162	48
Totals	1,673	1,081

Averages, in Years:

Age at termination 47.5

Service at termination 10.8

**ACTIVE MEMBERS WHO LEFT ACTIVE STATUS WITH
NO BENEFIT PAYABLE
DURING THE PERIOD JULY 1, 2012 TO JUNE 30, 2013
(NON-VESTED SEPARATIONS)**

Service at Termination	State & Local Non-Vested Separations	
	Actual	Expected
0	1,795	2,084
1	919	1,037
2	527	619
3	427	458
4		117
	3,668	4,314

Averages, in Years:

Age at termination	45.2
Service at termination	1.5

**MEMBERS ACTIVE BOTH BEGINNING AND END OF YEAR
SALARY INCREASES BY AGE GROUP
DURING THE PERIOD JULY 1, 2012 TO JUNE 30, 2013**

Age Groups	Number	Beginning Pay	Ending Pay		Percentage Increase	
			Expected	Actual	Expected	Actual
Below 25	1,455	\$ 36,043,948	\$ 39,712,935	\$ 37,891,464	10.2%	5.1%
25- 29	3,092	90,698,653	98,062,181	96,368,706	8.1%	6.3%
30- 34	3,954	128,868,159	137,587,099	134,957,933	6.8%	4.7%
35- 39	4,137	145,325,496	154,269,960	151,090,100	6.2%	4.0%
40- 44	4,842	177,001,451	187,189,105	182,907,554	5.8%	3.3%
45- 49	5,391	200,463,509	211,198,780	206,599,323	5.4%	3.1%
50- 54	5,688	218,466,851	229,432,759	224,323,081	5.0%	2.7%
55- 59	5,274	203,184,151	212,936,990	208,707,795	4.8%	2.7%
60-64	3,555	135,379,913	141,527,404	138,350,599	4.5%	2.2%
65 & Over	1,781	63,773,781	66,324,732	65,185,013	4.0%	2.2%
Totals	39,169				5.6%	3.4%

SECTION D

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

DISTRICT JUDGES
EMPLOYER CONTRIBUTION RATES COMPUTED JUNE 30, 2013

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)	17.61%	
Separation benefits	1.35%	
Disability benefits	1.37%	
Death-in-service annuities	0.00%	
Total	20.33%	
Member contributions	5.00%	
Employer Normal Cost	15.33%	
Unfunded Actuarial Accrued Liabilities	10.49% *	\$927,183 **
Total Employer Contribution	25.82%	\$927,183

* Unfunded actuarial accrued liabilities were amortized over a 15 year period.

** Unfunded actuarial accrued liabilities were amortized over a 22 year period.

DISTRICT JUDGES
SUMMARY STATEMENT OF SYSTEM RESOURCES AND OBLIGATIONS
YEAR ENDED JUNE 30, 2013

Present Resources and Expected Future Resources

	Totals
A. Present Valuation Assets:	
1. Net assets from system financial statements	\$16,419,261
2. Market value adjustment	(328,725)
3. Valuation assets	16,090,536
B. Actuarial present value of expected future employer contributions:	
1. For normal costs	1,991,262
2. For unfunded actuarial accrued liability	12,733,173
3. Total	14,724,435
C. Actuarial present value of expected future member contributions	653,281
D. Total Present and Expected Future Resources	\$31,468,252

Actuarial Present Value of Expected Future Benefit Payments and Reserves

A. To retirees and beneficiaries	\$ 13,527,861
B. To vested terminated members	8,652,776
C. To present active members:	
1. Allocated to service rendered prior to valuation date - actuarial accrued liability	6,643,072
2. Allocated to service likely to be rendered after valuation date	2,644,543
3. Total	9,287,615
D. Reserve	0
E. Total Actuarial Present Value of Expected Future Benefit Payments	\$31,468,252

**DISTRICT JUDGES
COMPUTED ACTUARIAL LIABILITIES AND
ALLOCATION USING ENTRY AGE ACTUARIAL COST METHOD
AS OF JUNE 30, 2013**

Actuarial Present Value of	(1) Total Present Value	(2) Portion Covered By Future Normal Cost Contributions	Actuarial Accrued Liabilities (1) - (2)
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	\$13,527,861	\$ 0	\$13,527,861
Age and service allowances based on total service likely to be rendered by present active members	8,822,516	2,266,776	6,555,740
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	8,899,967	190,802	8,709,165
Disability benefits likely to be paid to present active members	217,908	186,965	30,943
Death in service benefits likely to be paid on behalf of present active members	0	0	0
Total	\$31,468,252	\$2,644,543	\$28,823,709
Applicable Assets (Funding Value)	16,090,536	0	16,090,536
Liabilities to be covered by future contributions	\$15,377,716	\$2,644,543	\$12,733,173

DISTRICT JUDGES
SUMMARY OF PROVISIONS EVALUATED

VOLUNTARY RETIREMENT	<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.
FINAL AVERAGE COMPENSATION (FAC)	Average of the final three calendar years of employment.
BENEFIT SERVICE	Service performed on or after January 1, 2005.
ELIGIBILITY SERVICE	Benefit service plus service in Old Local District Judges Plan.
FULL AGE & SERVICE RETIREMENT BENEFIT	2.50% of FAC times actual service.
BENEFIT INCREASES AFTER RETIREMENT	Annually, there will be a cost-of-living adjustment equal to 3% of the current benefit.
MEMBER CONTRIBUTION RATES	Active members contribute 5% of their salaries. If a member leaves service before becoming eligible to retire, accumulated contributions may be refunded.
VESTED RETIREMENT BENEFITS	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.
TOTAL AND PERMANENT DISABILITY	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.
DEATH AFTER RETIREMENT	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, 2012 THROUGH JUNE 30, 2013
MARKET VALUE**

	Plan		Totals
	New Plan and Paid-Off Old Plan	Still Paying Old Plan	
Balance 7/1/2012	\$10,195,478	\$3,703,852	\$13,899,330
Adjustment	368,898	(368,898)	0
Revenues			
Member contributions	162,209	0	162,209
Employer contributions	822,633	1,046,677	1,869,310
Other	0	0	0
Investment return	1,518,565	473,359	1,991,924
Total	\$2,503,407	\$1,520,036	\$ 4,023,443
Expenditures			
Benefits paid	460,729	967,082	1,427,811
Refunds	0	0	0
Expenses	57,712	17,989	75,701
Total	\$ 518,441	\$985,071	\$ 1,503,512
Preliminary Balance	\$12,549,342	\$3,869,919	\$16,419,261
Employer Paid Off Old Liability	152,455	(152,455)	0
Balance 6/30/2013	\$12,701,797	\$3,717,464	\$16,419,261

Note: Results may not total due to rounding.

**DEVELOPMENT OF FUNDING VALUE OF ASSETS
NEW PLAN AND PAID-OFF OLD PLAN
JUNE 30, 2013**

Valuation Date June 30:	2012	2013	2014	2015	2016
A. Funding Value Beginning of Year	\$ 9,267,914	\$ 10,221,498			
B. Market Value End of Year	10,195,478	12,701,797			
C. Market Value Beginning of Year	9,664,591	10,195,478			
D. Non-Investment Net Cash Flow	592,528	1,045,466			
E. Investment Income					
E1. Market Total: B - C - D	(61,641)	1,460,853			
E2. Assumed Rate	8.00%	8.00%			
E3. Amount for Immediate Recognition	764,830	859,002			
E4. Amount for Phased-In Recognition	(826,471)	601,851			
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.25 x E4	\$(206,618)	150,463			
F2. First Prior Year	290,573	(206,618)	\$ 150,463		
F3. Second Prior Year	12,687	290,573	(206,618)	\$ 150,463	
F4. Third Prior Year	(500,416)	12,688	290,572	(206,617)	\$ 150,462
F5. Total Phase-Ins	(403,774)	247,106	234,417	(56,154)	150,462
G. Preliminary Funding Value End of Year: A + D + E3 + F5	10,221,498	12,373,072			
H. Adjustment to Minimum of 75% of B, Maximum 125% of B	0	0			
I. Funding Value End of Year	10,221,498	12,373,072			
J. Difference Between Market & Funding Value	(26,020)	328,725			
K. Recognized Rate of Return	3.8%	10.3%			
L. Market Rate of Return	(0.6)%	13.6%			
M. Ratio of Funding Value to Market Value	100%	97%			

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

Retirees and beneficiaries on rolls included in the valuation totaled 145, involving monthly annuities of \$124,088, distributed as follows:

Plan	Number of Retired Members	Annuities Being Paid July 1, 2013	
		Monthly	Annualized
New Plan	18	\$ 9,365	\$ 112,378
Old Plan Paid Off	31	33,397	400,770
Still Paying Old Plan	96	81,326	975,911
Totals	145	\$ 124,088	\$ 1,489,059

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, 2013 was reported to be 104, consisting of 91 original retirees and 13 survivors.

Inactive members, entitled to deferred annuities, included in the valuation totaled 126, involving estimated deferred monthly annuities of \$78,861 distributed as follows:

Plan	Number of Inactive Members	Estimated Deferred Annuities	
		Monthly	Annualized
New Plan	5	\$ 3,780	\$ 45,354
Old Plan Paid Off	40	30,629	367,547
Still Paying Old Plan	81	44,452	533,424
Totals	126	\$ 78,861	\$ 946,325

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, 2013 was reported to be 106.

DISTRICT JUDGES DETAIL BY EMPLOYER

Employer	ER ID	Participants Covered		Retiree	Deferred	Retiree	Deferred	Total	Assets	Unfunded	22-year
		Deferred	Retired	Mon. Ben. 7/1/2013	Mon. Ben. 7/1/2013	Liability 6/30/2013	Liability 6/30/2013	Liability 6/30/2013	Allocated 6/30/2013	Liability	Payoff of Unfunded Liability
Ashdown	90141	2	2	\$ 466.28	\$ 550.08	\$ 38,923	\$ 68,436	\$ 107,359	\$ 36,292	\$ 71,067	\$ 6,702
Ashdown (County)	90941	2	2	771.63	910.30	65,787	113,251	179,038	60,715	118,323	11,159
Batesville	90132	2	1	859.69	514.54	104,552	55,939	160,491	37,805	122,686	11,570
Batesville (Independence Co.)	90932	2	1	859.69	514.54	104,552	55,939	160,491	37,766	122,725	11,574
Beebe	90511	0	1	1,016.67	0.00	104,814	0	104,814	(7,104)	111,918	10,555
Benton	90962	0	2	2,398.38	0.00	245,356	0	245,356	120,448	124,908	11,780
Benton County - West	90204	2	1	1,000.00	892.53	120,121	104,029	224,150	114,197	109,953	10,369
Berryville	90108	1	2	256.97	475.94	21,635	62,902	84,537	34,533	50,004	4,716
Berryville (County)	90908	2	3	1,356.17	700.94	166,826	82,747	249,573	92,714	156,859	14,794
Biscoe	90159	0	1	150.00	0.00	19,204	0	19,204	174	19,030	1,795
Bryant	90133	0	1	1,035.00	0.00	104,037	0	104,037	(17,955)	121,992	11,505
Cabot	90143	3	0	0.00	1,651.12	0	189,112	189,112	142,722	46,390	4,375
Clarendon	90148	1	0	0.00	444.72	0	56,587	56,587	34,236	22,351	2,108
Conway	90123	1	2	3,413.05	966.66	368,117	81,580	449,697	200,133	249,564	23,536
Dequeen	90166	0	3	4,406.12	0.00	447,255	0	447,255	(17,213)	464,468	43,803
Dermott	90109	2	1	312.50	205.08	37,367	17,380	54,747	4,200	50,547	4,767
Dermott (County)	90909	2	1	312.50	205.08	37,367	17,380	54,747	4,200	50,547	4,767
Devalls Bluff	90359	0	1	225.00	0.00	29,037	0	29,037	367	28,670	2,704
Dewitt	90101	1	1	733.48	519.44	73,621	65,204	138,825	48,368	90,457	8,531
Dumas	90121	2	2	1,208.92	1,564.42	143,644	180,184	323,828	89,502	234,326	22,099
East Camden	90252	2	1	531.53	136.07	64,783	9,263	74,046	22,236	51,810	4,886
Elkins	90172	2	0	0.00	1,074.68	0	120,442	120,442	74,384	46,058	4,344
Greenwood	90265	0	1	771.00	0.00	92,828	0	92,828	(6,225)	99,053	9,342
Hamburg	90202	1	1	450.00	457.19	36,868	56,321	93,189	37,326	55,863	5,268
Hampton	90107	1	1	696.00	850.46	66,055	98,530	164,585	97,673	66,912	6,310
Hazen	90459	0	1	683.33	0.00	92,481	0	92,481	3,106	89,375	8,429
Helena	90154	2	1	384.38	27.72	22,650	1,186	23,836	(20,942)	44,778	4,223
Helena (County)	90954	2	1	384.38	27.72	22,650	1,186	23,836	(20,942)	44,778	4,223
Hope	90110	0	2	762.50	0.00	81,741	0	81,741	(21,717)	103,458	9,757
Hope (County)	90929	0	2	762.50	0.00	81,741	0	81,741	(21,717)	103,458	9,757
Hot Springs	90126	4	3	5,501.75	3,592.02	569,103	289,240	858,343	149,369	708,974	66,862

DISTRICT JUDGES DETAIL BY EMPLOYER

Employer	ER ID	Participants Covered		Retiree	Deferred	Retiree	Deferred	Total	Assets	Unfunded Liability	22-year Payoff of Unfunded Liability
		Deferred	Retired	Mon. Ben. 7/1/2013	Mon. Ben. 7/1/2013	Liability 6/30/2013	Liability 6/30/2013	Liability 6/30/2013	Allocated 6/30/2013		
Hoxie	90138	0	2	\$ 664.66	\$ 0.00	\$ 76,594	\$ 0	\$ 76,594	\$ 29,745	\$ 46,849	\$ 4,418
Lawrence County	90938	0	2	1,016.99	0.00	117,041	0	117,041	51,412	65,629	6,189
Little Rock	90260	15	9	19,056.17	10,403.30	2,132,155	1,200,182	3,332,337	935,664	2,396,673	226,026
Magnolia	90114	0	1	641.98	0.00	61,505	0	61,505	(6,426)	67,931	6,406
Magnolia (Columbia County)	90914	0	1	641.98	0.00	61,505	0	61,505	(6,317)	67,822	6,396
Marked Tree	90256	0	1	948.14	0.00	83,941	0	83,941	(6,869)	90,810	8,564
Marshall	90964	0	1	701.31	0.00	73,939	0	73,939	30,523	43,416	4,094
McCroy	90274	0	1	90.00	0.00	9,150	0	9,150	3,407	5,743	542
Mt. Home	90103	1	3	2,696.33	1,237.29	272,997	152,383	425,380	76,177	349,203	32,933
Newport	90134	1	3	1,555.70	234.22	150,177	21,490	171,667	39,383	132,284	12,475
North Little Rock	90460	11	9	10,588.85	9,354.80	1,024,466	1,048,731	2,073,197	555,045	1,518,152	143,174
Osceola	90247	1	2	781.25	648.60	45,396	94,790	140,186	32,310	107,876	10,174
Ozark	90124	1	1	531.72	593.47	63,229	70,159	133,388	53,082	80,306	7,574
Ozark (County)	90924	1	1	531.72	593.47	63,229	70,159	133,388	51,364	82,024	7,736
Pocahontas	90161	1	2	579.76	210.07	70,706	17,476	88,182	18,125	70,057	6,607
Pocahontas (County)	90961	1	2	579.76	210.07	70,706	17,476	88,182	18,125	70,057	6,607
Prairie Grove	90372	1	2	1,861.93	233.23	206,808	24,364	231,172	10,811	220,361	20,782
Rison	90113	1	0	0.00	780.00	0	90,367	90,367	64,684	25,683	2,422
Searcy	90273	1	2	1,383.33	1,179.36	128,296	147,748	276,044	90,735	185,309	17,476
Stuttgart	90201	1	2	704.61	530.85	61,515	70,517	132,032	65,673	66,359	6,258
Stuttgart	90901	1	2	861.18	648.82	75,184	86,188	161,372	80,547	80,825	7,622
Trumann	90356	1	0	0.00	224.77	0	20,545	20,545	(7,828)	28,373	2,676
Tyronza	90456	1	1	850.64	40.12	108,463	2,759	111,222	72,957	38,265	3,609
Walnut Ridge	90238	0	3	1,441.73	0.00	137,784	0	137,784	40,030	97,754	9,219
West Helena	90254	2	0	0.00	1,048.27	0	119,866	119,866	82,068	37,798	3,565
Wynne	90519	0	1	906.73	0.00	108,916	0	108,916	34,386	74,530	7,029
UAL>0 as of 6/30/2013		81	96	\$81,325.89	\$44,451.96	\$8,566,817	\$4,982,038	\$13,548,855	\$3,717,464	\$9,831,391	\$927,183

DISTRICT JUDGES
ACTIVE MEMBERS IN VALUATION JUNE 30, 2013
BY ATTAINED AGE AND YEARS OF ELIGIBILITY 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
Under 20									\$ -
20-24									
25-29									
30-34									
35-39									
40-44		1						1	33,776
45-49			1					1	121,815
50-54		4	3					7	410,322
55-59		5	1	2	1	1		10	602,641
60									
61			1					1	48,841
62			1	1				2	144,111
63				1				1	121,815
64		1			2	2	1	6	434,640
65		2			1		1	4	327,128
66		1			1			2	243,630
67							1	1	73,201
68							1	1	36,172
69		1						1	21,745
70 & over		2		1	1		2	6	369,628
Totals		17	7	5	6	3	6	44	\$2,989,465

Group Averages

Age:	60.9 years
Benefit Service:	8.3 years
Eligibility Service:	16.6 years
Annual Pay:	\$67,942

DISTRICT JUDGES
CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES
DURING THE PERIOD JULY 1, 2012 TO JUNE 30, 2013

	New Plan and Paid Off Old Plan	Still Paying Old Plan	Total
(1) UAAL* at beginning of year	\$3,982,259	\$10,435,759	\$14,418,018
(2) Normal cost from last valuation	594,007	-	594,007
(3) Actual contributions	984,842	1,046,677	2,031,519
(4) Interest accrual: [(1) + ½[(2) - (3)]]x .080	302,947	792,994	1,095,941
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	3,894,371	10,182,076	14,076,447
(6) Increase from benefit changes	-	-	-
(7) Changes from revised actuarial assumptions and methods	308,267	198,126	506,393
(8) Expected UAAL after changes: (5) + (6) + (7)	4,202,638	10,380,202	14,582,840
(9) Actual UAAL at end of year	2,901,782	9,831,391	12,733,173
(10) Gain/(Loss): (8) - (9)	\$1,300,856	\$548,811	\$1,849,667

* *Unfunded actuarial accrued liability.*

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

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)]
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%
6/30/13	16,090,536	28,317,316	12,226,780	56.8 %	2,989,465	409.0%
6/30/13 @	16,090,536	28,823,709	12,733,173	55.8 %	2,989,465	425.9%

@ 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

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%
2013	1,814,954	103%

* 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	July 1, 2012 - June 30, 2013
1. Annual Required Contribution (ARC)	\$1,525,167	\$1,581,100	\$1,906,776	\$1,950,782	\$1,805,741	\$1,814,954
2. Interest on Net Pension Obligation (NPO)	(24,657)	(36,302)	(38,657)	(28,156)	(19,642)	(22,634)
3. Adjustment to (1)	(31,637)	(39,213)	(42,065)	(30,963)	(21,850)	(25,497)
4. Annual Pension Cost (1)+(2)-(3)	1,532,147	1,584,011	1,910,184	1,953,589	1,807,949	1,817,817
5. Actual Contribution Made	1,677,709	1,613,454	1,778,923	1,847,163	1,845,349	1,869,310
6. Increase in NPO (4)-(5)	(145,562)	(29,443)	131,261	106,426	(37,400)	(51,493)
7. NPO Beginning of Year	(308,209)	(453,771)	(483,214)	(351,953)	(245,527)	(282,927)
8. NPO End of Year	(453,771)	(483,214)	(351,953)	(245,527)	(282,927)	(334,420)

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, 2013 is equal to the percent of payroll contribution computed as of June 30, 2012 times projected payroll plus the computed Still Paying Old Plan dollar contribution for unfunded actuarial liability as of June 30, 2012.

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

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	6/30/2013
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	15 year closed (New Plan and Paid Off Old Plan) 22 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	4.0% - 7.71%
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	104
Terminated plan members entitled to but not yet receiving benefits	106
Current active plan members	<u>44</u>
Total	254

SECTION E

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

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

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-8 and E-10. 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 mortality table, projected to 2020 using Projection Scale BB, set-forward 2 years for males and 1 year for females. Related values are shown on page E-3. This assumption was first used for the June 30, 2013 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. This assumption was first used for the June 30, 2013 valuation.

The probabilities of retirement for members eligible to retire are shown on pages E-4 through E-7. These probabilities were first used for the June 30, 2013 valuation and for the June 30, 2007 valuation for the District Judges division.

The probabilities of withdrawal from service, *death-in-service* and *disability* are shown for sample ages on pages E-8 through E-10. These probabilities were first used for the June 30, 2013 valuation and for the District Judges division for the June 30, 2013 valuation.

The individual entry-age normal actuarial cost method of the valuation was used in determining liabilities and normal cost.

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 2020
8.00% INTEREST
JUNE 30, 2013

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	\$ 145.04	\$ 147.43	\$ 206.65	\$ 213.07	40.56	44.21
45	141.04	144.18	196.66	204.34	35.81	39.39
50	135.62	139.80	184.55	193.75	31.13	34.64
55	128.53	133.91	170.25	180.99	26.58	29.98
60	119.63	126.19	153.88	165.93	22.23	25.44
65	108.84	116.61	135.67	148.87	18.14	21.14
70	95.93	105.29	115.71	130.29	14.35	17.16
75	81.36	92.36	94.91	110.69	10.95	13.56
80	65.82	77.97	74.32	90.48	8.02	10.35
85	50.26	62.79	55.06	70.67	5.60	7.59

Sample Attained Ages	Benefit Increasing 3.0% Yearly	Portion of Age 60 Lives Still Alive	
		Men	Women
60	\$100	100 %	100 %
65	116	96	97
70	134	90	92
75	155	80	84
80	180	66	72

The mortality table was set forward 10 years for disabilities.

Based on RP-2000 Combined Healthy mortality table, projected to 2020 using Projection Scale BB, set-forward 2 years for males and 1 year for females.

**STATE AND LOCAL GOVERNMENT DIVISION
AGE-BASED RETIREMENT
JUNE 30, 2013**

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		5
62		18
63		17
64		13
65	23 %	
66	23	
67	23	
68	15	
69	15	
70	17	
71	17	
72	17	
73	17	
74-77	20	
78	15	
79	20	
80-82	20	
83	20	
84	20	
85 & Over	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, 2013

Service	Percent of Eligible Active Members Retiring Within Next Year
28	15 %
29	13
30	11
31	11
32	12
33	12
34	12
35	20
36	25
37	25
38	30
39	30
40 & Over	100

**GENERAL ASSEMBLY DIVISION
 PROBABILITIES OF RETIREMENT
 FOR MEMBERS ELIGIBLE TO RETIRE
 JUNE 30, 2013**

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 & Over	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, 2013**

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year
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 & Over	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, 2013

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	0.02 %	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	0.06	0.03	0.15	0.15	1.90	4.00	5.90
45		3.4	3.4	0.08	0.05	0.20	0.20	1.50	4.00	5.50
50		2.7	2.7	0.13	0.08	0.40	0.40	1.10	4.00	5.10
55		1.9	1.9	0.22	0.12	0.70	0.70	0.80	4.00	4.80
60		1.2	1.2	0.37	0.21	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, 2013**

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	0.02 %	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	0.06	0.04	0.16	0.16
45		2.4	2.4	0.08	0.06	0.22	0.22
50		1.1	1.1	0.13	0.09	0.39	0.39
55		0.8	0.8	0.22	0.14	0.71	0.71
60		0.8	0.8	0.37	0.23	1.13	1.13

DISTRICT JUDGES
SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE
SERVICE RETIREMENT
JUNE 30, 2013

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, 2013
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. Active member non-refund normal costs and actuarial accrued liabilities were increased by 1.5% to reflect non-reported reciprocal 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, 2013
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, 2013 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%.

SECTION F
FINANCIAL PRINCIPLES

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).

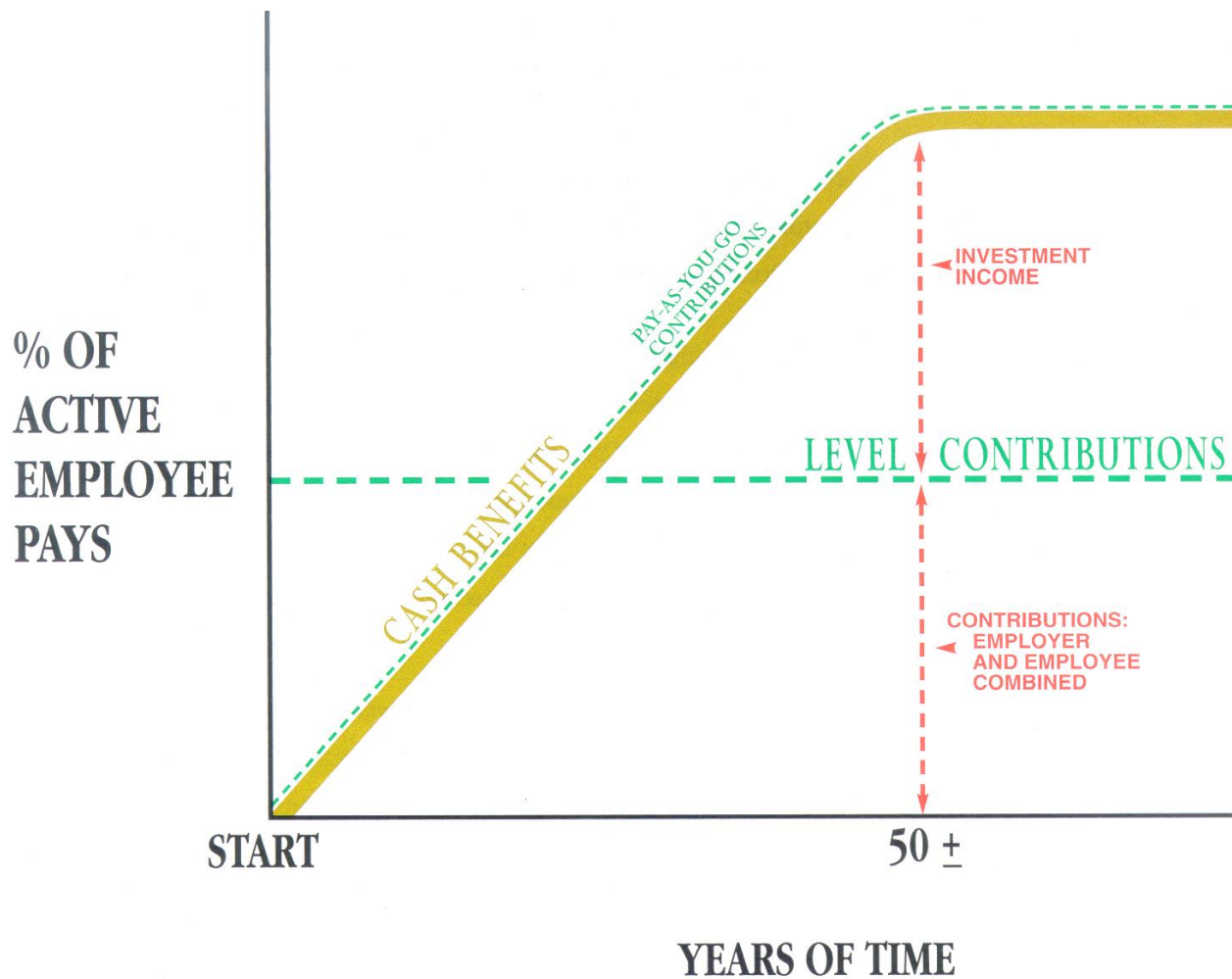
Computing Contributions to Support Fund Benefits. From a given schedule of benefits and from employee and asset data, the actuary calculates the contribution rates to support the benefits by means of ***an actuarial valuation and a funding method.***

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

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.

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

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

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”

“*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.”

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.

SECTION G

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

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%
6/30/13	6,159	8,426	2,267	73.1 %	1,693	133.9%
6/30/13 #	6,159	8,284	2,125	74.3 %	1,693	125.5%

@ 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**

Year Ended June 30	Annual Required Contribution	Percent Contributed
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%
2013	249,540,632	100%

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

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, 2013
Actuarial Cost Method	Entry Age Normal Cost
Amortization Method	Level Percent-of-Payroll
Remaining Amortization Period	25 year closed
Asset Valuation Method	4-Year Smoothed Market with 25% Corridor
Actuarial Assumptions:	
Investment Rate of Return	8.0%
Projected Salary Increases Including Inflation at	4.0% - 10.6%
Cost-of-Living Adjustments	4.0%
	3.0% Annual Compounded Increase

	<u>Number</u>
Retirees and beneficiaries receiving benefits #	30,533
Terminated plan members entitled to but not yet receiving benefits	13,267
Active plan members	<u>45,707</u>
Total	89,507

Includes DROP participants.

November 14, 2013

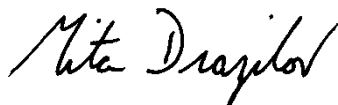
Ms. Gail H. Stone, Executive Director
Arkansas Public Employees Retirement System
One Union National Plaza
124 West Capitol, Suite 400
Little Rock, Arkansas 72201

**Re: Report of the June 30, 2013 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