GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

ARKANSAS STATE POLICE RETIREMENT SYSTEM

ANNUAL ACTUARIAL VALUATION AND THE
GAIN/LOSS ANALYSIS OF EXPERIENCE
JUNE 30, 2010

REPORT OF THE
ANNUAL ACTUARIAL VALUATION AND GAIN/LOSS ANALYSIS
OF THE
ARKANSAS STATE POLICE RETIREMENT SYSTEM

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November 18, 2010 (Revised)

The Board of Trustees
Arkansas State Police Retirement System
Little Rock, Arkansas

Ladies and Gentlemen:

The results of the ***Annual Actuarial Valuation of the Arkansas State Police Retirement System as of June 30, 2010, and the Gain/Loss Analysis of Experience among Active Members from July 1, 2009 to June 30, 2010*** are presented in this report. The valuation was based upon Retirement System provisions in effect on the valuation date. 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. The results of the valuation may not be applicable for other purposes.

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

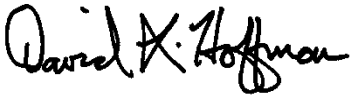
The actuarial methods and assumptions used in the valuation are summarized in Section D of this report.

The valuation was completed using generally accepted actuarial principles and in accordance with standards of practice prescribed by the Actuarial Standards Board. To the best of our knowledge, this report is complete and accurate and the methods and assumptions produced results which are reasonable.

The signing actuaries are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

Norman L. Jones, FSA, EA, MAAA



David L. Hoffman

DLH:mrb

OBJECTIVES AND STATUS

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

> "6.01. (a) The general financial objective of each Arkansas public employee retirement plan shall be to ***establish and receive contributions which, expressed as percents 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 (i) to fully cover the costs of benefit commitments being made to members for their service being rendered in such year and (ii) to make a level payment which if paid annually over a reasonable period of future years will fully cover the unfunded costs of benefit commitments for service previously rendered....."

Benefit Changes. The most recent benefit changes are reflected in the June 30, 2009 valuation. No benefit changes have been adopted for consideration in the June 30, 2010 valuation.

Assumption Changes. Assumptions were updated in the June 30, 2007 valuation.

Method Changes. There have been no changes in methods since the June 30, 2009 valuation.

ASPRS Status. Based upon the results of the June 30, 2010 actuarial valuation, ***ASPRS continues to satisfy the general financial objective*** of level contribution financing.

ASPRS Reserve Strength. As a by-product of achieving level contribution financing, actuarial accrued liabilities usually become more and more funded over a period of years. Funded ratios in the 70% to 80% range are common in public sector retirement plans. **The funded ratio of ASPRS** has been adversely affected by the recent market downturn (as has virtually all other public employee retirement systems in the country). On a funding value of assets basis, the System has a 63% funded ratio. On a market value of assets basis, the System has a 55% funded ratio.

Employer Contribution Rates. Based upon experience through June 30, 2010, the State Police contribution rate will be 44.67% of covered payroll for the fiscal year beginning July 1, 2010.

SECTION A

VALUATION RESULTS

COMPUTED ACTUARIAL ACCRUED LIABILITIES
AS OF JUNE 30, 2010

Actuarial Present Value of	(1) Total Present Value	(2) Portion Covered By Future Normal Cost Contributions	(3) Actuarial Accrued Liabilities (1) - (2)
Future benefits to be paid to current retirees, beneficiaries, future beneficiaries of current retirees, and current DROP members (not including DROP reserve)	$237,019,536	$ 0	$237,019,536
Age and service benefits based on service likely to be rendered by present active members (including DROP reserve)	136,101,970	44,522,941	91,579,029
Separation benefits likely to be paid present active and inactive members	7,358,765	4,798,077	2,560,688
Disability benefits likely to be paid present active members	6,174,826	4,422,809	1,752,017
Death-in-service benefits likely to be paid on behalf of present active members	1,278,214	589,708	688,506
Total	$387,933,311	$54,333,535	$333,599,776
Valuation assets			211,072,499
Unfunded actuarial accrued liabilities			$122,527,277

AMORTIZATION OF
UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)
JUNE 30, 2010

Description	Remaining Years	Amount
Active member UAAL		
Act 1071 of 1997#	30	$ 88,230,805
Remainder - Tier One	30	29,806,429
- Tier Two	30	4,490,043
Total Active		122,527,277
Total UAAL		**$122,527,277**

 # See page G-1.

COMPUTED EMPLOYER CONTRIBUTION RATES
AS OF JUNE 30, 2010
EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL

Contributions for	Contributions Expressed as Percents of Covered Payroll*
Normal Cost	
Age and service annuities	16.61 %
Separation benefits	1.79 %
Disability benefits	1.65 %
Death-in-service annuities	0.22 %
Total	20.27 %
Unfunded Actuarial Accrued Liabilites	
Tier One	42.81 %
Tier Two	1.82 %
Weighted Average	24.40 %
Total Computed Employer Contribution Rate	
Tier One	63.08 %
Tier Two	22.09 %
Weighted Average	44.67 %

* *Covered payroll includes all active members, including DROP participants.*

COMPUTED EMPLOYER CONTRIBUTION RATES
COMPARATIVE STATEMENT

June 30	Active Members in Valuation: Number	Active Members in Valuation: Average Pay $	Change in Average Pay %	Change in CPI: Inflation	UAAL Financing Period	Computed Employer Rate&
2001	558	36,125	(4.3)%	3.2 %	21	27.85%
2002@	510	38,584	6.8 %	1.1 %	20	30.72%
2003	495	39,730	3.0 %	2.1 %	19	37.46%
2004	477	44,700	12.5 %	3.3 %	18	43.83%
2005@#	488	44,539	(0.4)%	3.2 %	30	41.36%
2006	527	44,358	(0.4)%	4.1 %	30	40.04%
2007@	536	44,773	0.9 %	2.4 %	30	37.86%
2008	555	46,687	4.3 %	5.6 %	30	38.20%
2009@	539	49,714	6.5 %	(2.1)%	30	44.71%
2010	545	52,318	5.2 %	1.2 %	30	44.67%
10-Year Average			3.8%	**2.4 %**		

*After legislated changes in benefit provisions.*

& *Beginning in 1996, rate is based on active member payroll including DROP participants.*

@ *After changes in actuarial assumptions and/or methods.*

"Employer contributions" are the total of all types of revenue to the system except employee contributions by payroll deduction and investment return. "Employer contributions" include such revenues as court fines and other transfers.

SHORT CONDITION TEST – 10-YEAR COMPARATIVE STATEMENT

The Arkansas SPRS 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 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 valuation assets (cash and investments) are compared with:

1) Member accumulated contributions;
2) The liabilities for future benefits to present retired lives;
3) The employer financed portion of liabilities for service already rendered by non-retired members.

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

	Entry Age Accrued Liability				Portion of Present Values Covered By Valuation Assets			
Valuation Date June 30	(1) Active Members Contr.	(2) Retirees and Benef.	(3) Active Member (Employer Financed Portion)	Valuation Assets	(1)	(2)	(3)	Total
			($ in Millions)					
2001	$0.76	$108.05	$133.54	$229.92	100%	100%	91%	95%
2002@	0.76	129.70	121.30	223.77	100%	100%	77%	89%
2003	0.75	136.82	123.93	212.45	100%	100%	60%	81%
2004	0.58	144.61	130.53	201.83	100%	100%	43%	73%
2005#@	0.54	144.30	136.44	200.10	100%	100%	41%	71%
2006	0.47	143.63	147.07	210.34	100%	100%	45%	72%
2007@	0.51	158.34	148.81	233.13	100%	100%	50%	76%
2008	0.44	167.93	151.73	238.04	100%	100%	46%	74%
2009#@	0.45	169.43	156.06	206.32	100%	100%	23%	63%
2010	0.35	179.38	153.87	211.07	100%	100%	20%	63%

 # After legislated changes in benefit provisions.
@ After changes in actuarial assumptions and/or methods.

COMMENTS

Experience. Experience was unfavorable this year; specifically investment return (measured on a funding value basis). However, the overall adverse experience was offset by an additional $9.0 million contribution from the State. As a result, the funded status remained at 63% (see page A-5). On a market value basis, the funded status is 55% (up from 49% last year). As of June 30, 2010, $26.5 million of remaining cumulative investment losses are to be recognized in the next three years (see page B-14). If there are no new gains to offset scheduled investment recognition during this coming period, the employer contribution will increase by over 4% of payroll from the current level.

Annual Reserve Transfers

Each year reserve transfers are recommended so that there will be 100% funding in the Retirement Reserve Account and the Deferred Annuity Account. The Retirement Reserve Account is responsible for future annuity payments to present retired lives. The Deferred Annuity Account is responsible for future annuity payments to present inactive members.

This year's transfer amounts are given below:

Employer Accum. Account Before Transfers	Transfers as of July 1, 2010 (from) to:		Employer Accum. Account After Transfers
	Deferred Annuity Account	Retirement Reserve Account	
$600,924	$(98,277)	$13,068,317	($12,369,116)

Conclusion

The computed employer contribution rate to satisfy the statutory funding requirements set forth in section 24-6-609 of the Arkansas Code (see page G-1) is 44.67% of covered payroll for the year beginning July 1, 2010. Actual revenues were greater than the statutory requirement for the last four years (nearly 200% during the year ended June 30, 2010 as shown on page F-2).

SECTION B

VALUATION DATA

SUMMARY OF NON-CONTRIBUTORY BENEFIT PROVISIONS (LAST CHANGED AS OF 7-1-2009)

The Non-Contributory Plan was created by Act 793 of 1977 and was effective January 1, 1978. All non-retired members are now covered by non-contributory benefits. Act 1071 of 1997 created a Tier Two benefit plan for all officers hired on or after April 3, 1997. Existing members of the plan in effect prior to this date (Tier One) had one year to elect coverage under Tier Two.

VOLUNTARY RETIREMENT

With a full benefit, after 30 years of actual service, regardless of age, or at age 65 with 5 actual years of service for Tier One and Tier Two. The age requirement is reduced by 1 month for every 2 months of Public Safety service credit, but not below age 52 for Tier One or age 55 for Tier Two members.

Public Safety service credit is granted at the rate of 1.5 months of credit for each month of actual Public Safety employment for Tier One. Service is credited at a rate of one for one in Tier Two.

With a reduced benefit, once a member's age is within 10 years of becoming eligible for full benefits. The reduction for Tier One is equal to 1/2 of 1% for each month retirement precedes Normal Retirement Age. The reduction for Tier Two is equal to 3/4 of 1% for each month retirement precedes Normal Retirement Age.

FINAL AVERAGE PAY (FAP)

Average of the highest 60 calendar months' pays for Tier One or 48 calendar months for Tier Two.

FULL AGE & SERVICE RETIREMENT BENEFIT

Tier One: 1.55% of FAP times years and months of credited service. Tier Two: 2.475% of FAP times credited service. If retirement is prior to age 62, an additional .322% of FAP times credited service will be paid until the retiree attains age 62 for Tier One or .513% of FAP times credited service for Tier Two.

Public Safety service credit is granted at the rate of 1.5 months of credit for each month of actual Public Safety employment for Tier One. Service is credited at a rate of one for one in Tier Two.

For Tier One, the portion of the SPRS benefit based on service before 1978 cannot be less than the amount provided by contributory provisions in effect at time of retirement; and if there is credited service for time prior to July 1, 1991, the benefit cannot be less than under the provisions in effect July 1, 1990, (using Social Security offset), plus increases granted since that date.

For Tier One, the minimum monthly benefit is $150 minus any age and beneficiary option reductions.

VESTED AND REDUCED EARLY RETIREMENT BENEFITS

5 years of actual service, and leaving System-covered employment before full retirement age.

Deferred full retirement benefit, based on service and pay at termination, begins when full retirement age would have been reached by continuing covered employment.

In place of a deferred full benefit, a qualifying member may elect an immediate reduced benefit, provided the member is within 10 years of full retirement age. The reduced amount is the full amount reduced by 1/2 of 1% for Tier One and/or 3/4 of 1% for Tier Two for each month of difference in benefit commencement ages.

DEATH WHILE IN SYSTEM COVERED EMPLOYMENT

Member's accumulated contributions before 1978 are refundable.

If the deceased member has 5 or more years of service and has qualifying dependents, monthly benefits are payable instead. A surviving spouse receives a benefit as if the member had retired and elected the joint & 75% survivor option. Payment begins immediately if the member was eligible for a full age and service benefit or had 20 years of service; or payment begins at the spouse's age 50 if the member had 15 or more years of service; or payment begins at the spouse's age 62 if the member had less than 15 years of service.

If a member is killed while in the official line of duty and the surviving spouse is eligible for a deferred benefit, then the surviving spouse may elect to receive a reduced benefit immediately. The reduction of the benefit shall be 1/2 of 1% per month for each of the first 60 months that the benefit commences before when it would have otherwise commenced, plus; 1/4 of 1% per month for each month more than 60 months that the benefit commences before when it would have otherwise commenced. However, the total reduction shall not be more than 50%.

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

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

TOTAL AND PERMANENT DISABILITY

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

Tier Two eligibility: Disabled after 5 years of service.

Amount is computed as an age and service benefit, based on service and pay to the time of disability.

DEATH AFTER RETIREMENT

Retiring member can provide protection for a beneficiary by electing an option which provides beneficiary protection by reducing the retired employee's benefit amount.

Under Tier One, if a straight life annuity is paid, upon the retiree's death, 50% of the retiree's benefit is continued to a surviving spouse. If the deceased retiree leaves children under age 18, 75% of the retiree's benefit is continued to the surviving spouse. If there is no surviving spouse, the 75% will be divided among the children under age 18.

Under Tier Two, if a straight life annuity is elected, no survivor benefit is payable.

BENEFIT INCREASES AFTER RETIREMENT

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

MEMBER CONTRIBUTIONS

None.

ARKANSAS STATE POLICE OFFICERS DEFERRED RETIREMENT OPTION PLAN – TIER I (Act 967 of 1995)

Tier One members with 30 years of credited service and who are eligible to receive a service retirement pension may participate.

Participating members may continue in employment for up to 7 years and have their accrued monthly benefit (at date of participation) credited to an individual account in the Deferred Retirement Option Plan in lieu of any further benefit accruals.

The Deferred Retirement Option Plan accounts accumulate with interest and are paid to the member at termination of active membership in either a lump sum or as an annuity of equivalent value. Interest is credited annually at a rate established by the Board of Trustees.

ARKANSAS STATE POLICE OFFICERS DEFERRED RETIREMENT OPTION PLAN – TIER II (Act 1242 of 2009)

Tier Two members with at least 30 years of actual service and is eligible to receive a service retirement pension may participate.

Participating members may continue in employment for up to 7 years and have seventy-two percent (72%) of their accrued monthly benefit (at date of participation) credited to an individual account in the Deferred Retirement Option Plan in lieu of any further benefit accruals.

The Deferred Retirement Option Plan accounts accumulate with interest and are paid to the member at termination of active membership in either a lump sum or as an annuity of equivalent value. Interest is credited annually to participant accounts at a rate established by the Arkansas State Police Retirement System Board of Trustees that shall not be greater than five percent (5%) nor less than one percent (1%) per annum.

RETIREES, BENEFICIARIES AND DROP PARTICIPANTS
JUNE 30, 2010
BY TYPE OF BENEFIT BEING PAID

Type of Benefit Being Paid	Number	Annual Pensions	Liability
Age & Service Retirees			
Life	68	$ 2,159,208	$ 18,584,796
A-120	1	35,832	352,500
B-50	286	11,436,379	137,173,584
B-75	2	15,480	181,284
Totals	357	13,646,899	156,292,164
Beneficiaries of Age & Service Retirees			
Life	24	356,830	4,548,948
B-50	45	756,278	6,657,816
B-75	0	0	0
Totals	69	1,113,108	11,206,764
Total Age & Service Retirees	426	14,760,007	167,498,928
Disability Retirees			
Life	13	223,620	2,373,456
B-50	23	683,448	8,083,176
B-75	1	3,384	59,220
Totals	37	910,452	10,515,852
Beneficiaries of Disability Retirees			
Life	2	13,716	174,768
B-50	3	22,224	240,804
B-75	0	0	0
Totals	5	35,940	415,572
Total Disability Retirees and Beneficiaries	42	946,392	10,931,424
Death-in-Service Beneficiaries	8	90,312	951,768
Total Retirees and Beneficiaries	476	$15,796,711	$179,382,120
DROP Participants	85	4,246,608	57,637,416
Total Retirees, Beneficiaries and DROP Participants	561	$20,043,319	$237,019,536

Also included in the valuation were 43 inactive members eligible to receive vested deferred benefits, commencing at normal retirement age, totaling $378,743 annually.

RETIREES, BENEFICIARIES AND DROP PARTICIPANTS
BY ATTAINED AGES
AS OF JUNE 30, 2010

Attained Ages	Age and Service No.	Age and Service Annual Benefits	Disabilities No.	Disabilities Annual Benefits	Death in Service No.	Death in Service Annual Benefits	DROP Participants No.	DROP Participants Annual Benefits
Under 40			1	$ 7,512				
40-44	2	$ 9,840	4	37,368				
45-49	3	58,958	3	52,884			3	$ 96,072
50-54	23	588,438	7	154,140			32	1,614,864
55-59	57	1,780,330	9	257,400			43	2,203,752
60-64	113	4,317,444	11	295,008	3	$26,508	7	331,920
65-69	90	3,428,365	5	107,232	1	12,000		
70-74	58	2,078,100	2	34,848	1	21,900		
75-79	44	1,400,712			1	10,356		
80-84	22	664,308			1	13,992		
85-89	10	341,556			1	5,556		
Over 90	4	91,956						
Totals	**426**	**$14,760,007**	**42**	**$946,392**	**8**	**$90,312**	**85**	**$4,246,608**

RETIREES, BENEFICIARIES AND DROP PARTICIPANTS IN ACTUARIAL VALUATIONS COMPARATIVE STATEMENT

	Number			Annual Pensions		
June 30	Retirees & Beneficiaries	DROP Participants	Total	Retirees & Beneficiaries	DROP Participants	Total
2000	355	65	420	$ 8,157,336	$2,437,224	$10,594,560
2001	371	81	452	8,556,672	3,074,148	11,630,820
2002	411	63	474	10,270,548	2,367,156	12,637,704
2003	425	71	496	10,855,440	2,769,192	13,624,632
2004	434	75	509	11,588,904	2,855,088	14,443,992
2005	436	72	508	11,740,680	2,939,784	14,680,464
2006	435	75	510	12,404,615	3,141,876	15,546,491
2007	428	80	508	13,275,239	3,926,772	17,202,011
2008	445	82	527	14,201,027	4,029,012	18,230,039
2009	455	95	550	14,833,696	4,706,004	19,539,700
2010	476	85	561	15,796,711	4,246,608	20,043,319

SCHEDULE OF AVERAGE BENEFIT PAYMENTS
(VOLUNTARY RETIREMENTS STILL RECEIVING BENEFITS AS OF JUNE 30, 2010)

	Years Credited Service				
	10-14	**15-19**	**20-24**	**25-29**	**30+**
Retirement Effective Dates July 1, 2009 to June 30, 2010					
Average Monthly Benefit	$ 470.00	$ 657.00	$ 1,521.00		$2,396.67
Average Monthly FAS	2,968.67	1,839.58	4,099.42		4,520.08
Number of Active Retirees	1	1	1		3
Retirement Effective Dates July 1, 2008 to June 30, 2009					
Average Monthly Benefit	581.50				2,313.00
Average Monthly FAS	1,680.71				4,041.83
Number of Active Retirees	2				5
Retirement Effective Dates July 1, 2007 to June 30, 2008					
Average Monthly Benefit		834.00		$ 2,038.00	3,006.67
Average Monthly FAS		2,276.25		3,410.58	4,730.03
Number of Active Retirees		1		1	3
Retirement Effective Dates July 1, 2006 to June 30, 2007					
Average Monthly Benefit	840.50		1,530.00	2,926.50	3,484.07
Average Monthly FAS	781.29		2,865.83	3,741.50	5,165.73
Number of Active Retirees	2		1	2	4
Retirement Effective Dates July 1, 2005 to June 30, 2006					
Average Monthly Benefit		2,361.00	622.00	1,665.00	3,373.33
Average Monthly FAS		3,513.17	3,962.17	4,269.42	4,544.28
Number of Active Retirees		1	1	1	3
Retirement Effective Dates July 1, 2005 to June 30, 2010					
Average Monthly Benefit	662.80	1,284.00	1,224.33	2,389.00	2,879.52
Average Monthly FAS	1,578.53	2,543.00	3,642.47	3,790.75	4,569.74
Number of Active Retirees	5	3	3	4	18

SCHEDULE OF NEW RETIREES AND DROP PARTICIPANTS DURING THE PERIOD OF JULY 1, 2009 TO JUNE 30, 2010

RETIREES AND DROP PARTICIPANTS

	Age & Service	Disability
Number	19	1
Average Age	55.89	44.83
Average Service	26.16	13.00
Average Monthly Benefit	$ 1,962.63	$ 1,038.60

RETIREES ONLY

	Age & Service	Disability
Number	5	1
Average Age	56.00	44.83
Average Service	34.33	13.00
Average Monthly Benefit	$ 542.67	$ 1,038.60

ACTIVE MEMBERS
AS OF JUNE 30, 2010
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
20-24	10							10	$ 348,282
25-29	41	6						47	1,834,377
30-34	34	24	14					72	3,055,983
35-39	21	34	39	1				95	4,334,107
40-44	16	5	66	17	1			105	5,074,944
45-49	8	2	23	27	28			88	4,826,277
50-54		2	2	6	20	8	1	39	2,476,964
55-59		1	1	1	1			4	213,803
62									
Base Totals	**130**	**74**	**145**	**52**	**50**	**8**	**1**	**460**	**$22,164,737**
DROP Participants							85	85	6,348,576
Grand Totals	**130**	**74**	**145**	**52**	**50**	**8**	**86**	**545**	**$28,513,313**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

	Average
Age:	42.0 years
Service:	14.3 years
Salary:	$52,318

ACTIVE MEMBERS IN ACTUARIAL VALUATIONS COMPARATIVE STATEMENT

June 30	No.	Group Averages Age	Service	Pay
1992	483	41.5 yrs.	15.5 yrs.	$30,485
1993	484	42.3	16.3	33,427
1994	480	42.8	16.8	34,934
1995	494	42.2	16.0	36,622
1996	513#	41.8	15.6	36,468
1997	503#	41.7	16.0	36,141
1998	564#	39.9	14.2	35,137
1999	565#	40.7	14.8	36,084
2000	542#	41.3	14.0	37,733
2001	558#	41.5	14.0	36,125
2002	510#	41.5	14.1	38,584
2003	495#	42.0	14.5	39,730
2004	477#	42.2	16.2	44,700
2005	488#	42.8	16.7	44,539
2006	527#	41.3	14.5	44,358
2007	536#	41.4	14.5	44,773
2008	555#	41.3	14.1	46,687
2009	539#	42.0	15.0	49,714
2010	545#	42.0	14.3	52,318

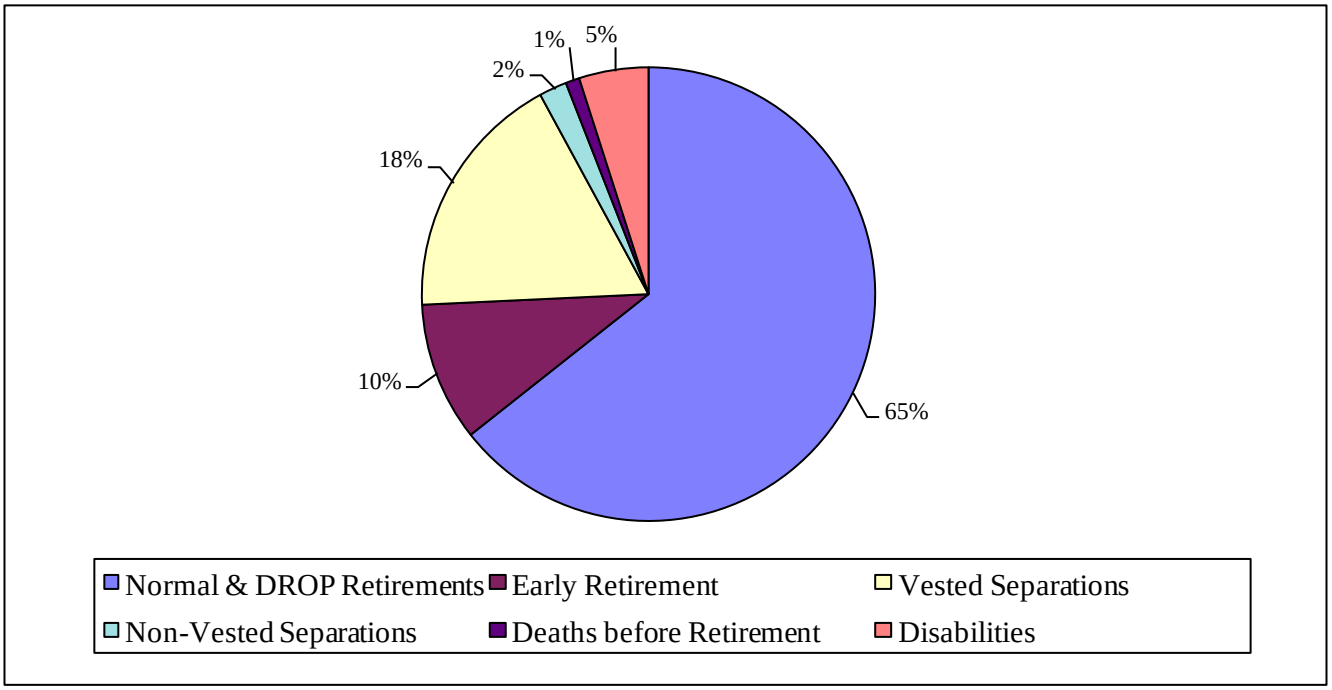
 # Includes DROP participants.

TIER ONE AND TIER TWO PARTICIPANTS AS OF JUNE 30, 2010

	No.	Group Averages Age	Service	Pay
Tier One	150	46.4 yrs.	18.5 yrs.	$58,037
Tier One - DROP	85	56.3	34.9	74,689
Tier Two	310	35.8	6.6	43,417
Total	545	42.0	14.3	$52,318

DEVELOPMENT OF PRESENT POPULATION
JUNE 30, 2010

Expected Terminations from Active Employment for Current Active Members



The chart shows the expected future development of the present population in simplified terms. The retirement system presently covers 460 active members. Eventually, 2% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for a monthly benefit. 93% of the present population is expected to receive monthly retirement benefits either by retiring directly from active service, or by separating from service without withdrawing contributions. 6% of the present population is expected to become eligible for death-in-service or disability benefits.

REPORTED ASSETS
APPLICABLE TO BENEFIT LIABILITIES

Reserve Account	Fund Balance		
	Tier One	Tier Two	Total
Member Deposit Account	$ 347,590	$ 85,979	$ 433,569
MDA Interest Reserve	(48,644)	6,546	(42,098)
Employers Accumulation Account*	(28,517,149)	17,086,637	(11,430,512)
Retirement Reserve Account*	179,382,156	0	179,382,156
Deferred Annuity Account*	1,336,590	0	1,336,590
DROP Reserve	14,903,441	0	14,903,441
Misc. Reserve Accounts	1,095	0	1,095
Total	**$167,405,079**	**$17,179,162**	**$184,584,241**
Funding Value Adjustment	**24,023,009**	**2,465,249**	**26,488,258**
Valuation Assets	**$191,428,088**	**$19,644,411**	**$211,072,499**

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

REVENUES & EXPENDITURES

Assets Beginning of Year - Funding Value		**$206,318,631**
Revenues:	Member Contributions	0
	Employer Contributions[&]	6,257,424
	Tier One Supplemental	14,290,550
	Other Sources*	2,682,529
	Recognized Investment Income	2,580,879
	Other	63,621
	Total Revenue	25,875,003
Expenditures:	Retirement Benefits Paid	20,319,683
	Refund of Member Contributions	0
	Administrative Expenses	79,878
	Investment Expenses	721,574
	Other	0
	Total Expenditures	21,121,135
Assets End of Year - Funding Value		**$211,072,499**

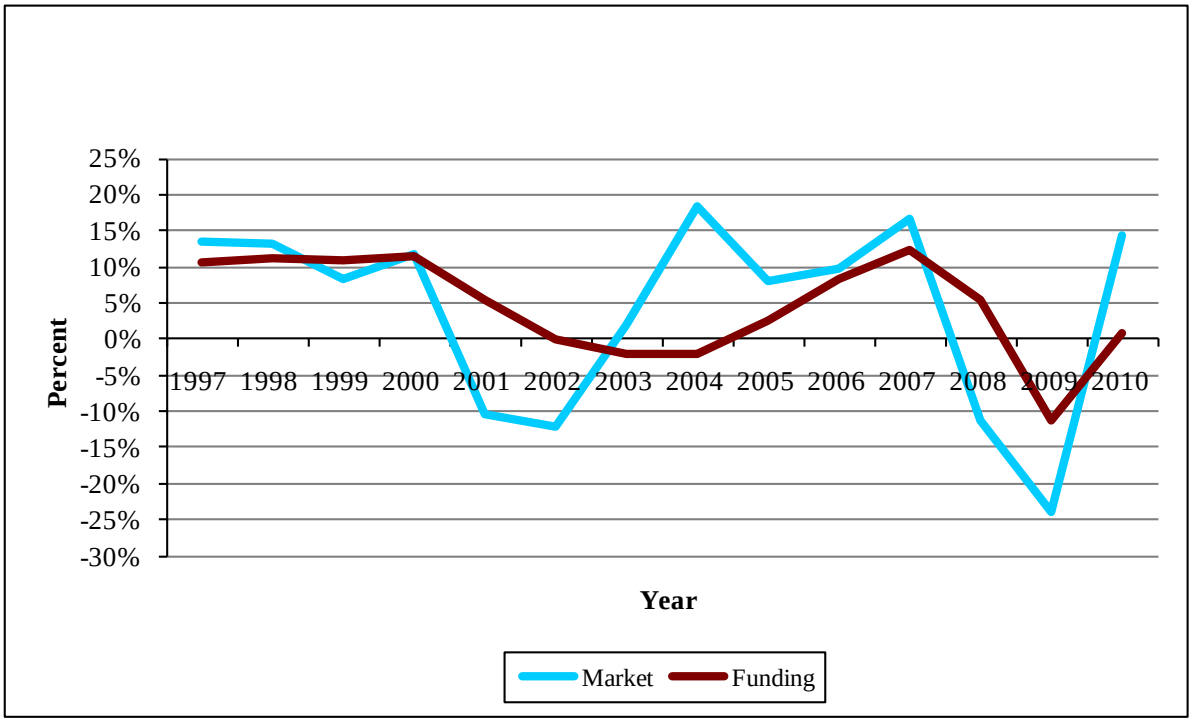
& 22% of payroll; Tier One – 3,337,571; Tier Two - $2,919,853.
** Additional appropriation for Tier One.*

DEVELOPMENT OF FUNDING VALUE OF ASSETS

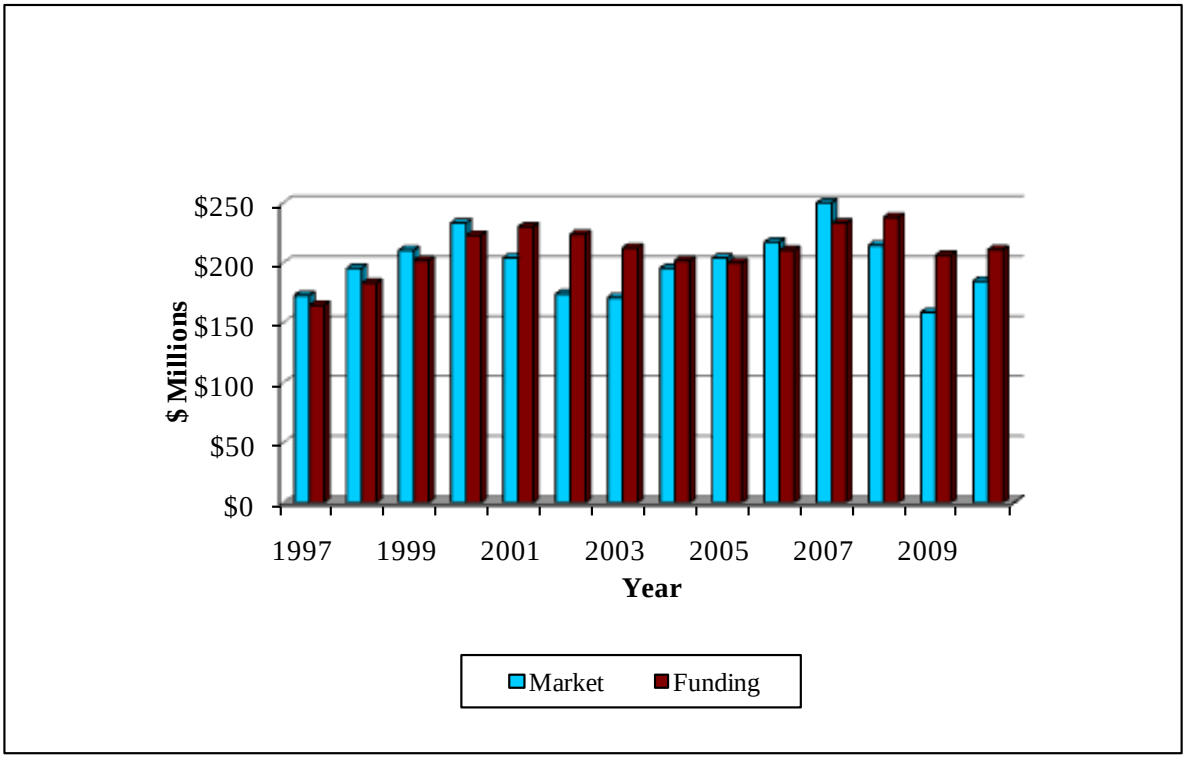
Valuation Date June 30:	2008	2009	2010	2011	2012	2013
A. Funding Value Beginning of Year	$233,125,447	$238,038,951	$206,318,631			
B. Market Value End of Year	214,700,690	158,706,639	184,584,242			
C. Market Value Beginning of Year	249,936,945	214,700,690	158,706,639			
D. Non-Investment Net Cash Flow	(7,436,512)	(4,940,260)	2,974,441			
E. Investment Return:						
E1. Market Total: B-C-D	(27,799,743)	(51,053,791)	22,903,162			
E2. Assumed Rate	7.75%	7.75%	8.00%			
E3. Amount for Immediate Recognition	17,782,642	18,258,965	16,622,942			
E4. Amount for Phased-In Recognition	(45,582,385)	(69,312,756)	6,280,220			
F. Phased-In Recognition of Investment Return:						
F1. Current Year: 0.25xE4	(11,395,596)	(17,328,189)	1,570,055			
F2. First Prior Year	4,883,440	(11,395,596)	(9,901,413)	$ 1,570,055		
F3. Second Prior Year	1,081,649	4,883,440	(11,395,596)	(9,901,413)	$ 1,570,055	
F4. Third Prior Year	(2,119)	1,081,649	4,883,439	(11,395,597)	(9,901,412)	$1,570,055
F5. Total Recognized Investment Gain (Loss)	(5,432,626)	(22,758,696)	(14,843,515)	(19,726,955)	(8,331,357)	1,570,055
G. Funding Value End of Year: A+D+E3+F5	238,038,951	228,598,960	211,072,499			
G1. 130% of Market Value Corridor		206,318,631	239,959,515			
G2. 70% of Market Value Corridor		111,094,647	129,208,969			
Funding Value End of Year	238,038,951	**206,318,631**	**211,072,499**			
H. Difference Between Market & Funding Values	(23,338,261)	(47,611,992)	(26,488,257)			
I. Recognized Rate of Return	**5.4%**	**(11.4%)**	**0.9%**			
J. Market Value Rate of Return	(11.3%)	(24.1%)	14.3%			
K. Ratio of Funding Value to Market Value	110.9%	130.0%	114.4%			

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.

COMPARISON OF RATES OF RETURN



COMPARISON OF ASSET VALUES



SECTION C

RESULTS OF GAIN/LOSS ANALYSIS

COMMENTS

Purpose of Gain/Loss Analysis. Regular actuarial valuations provide information about the composite change in unfunded actuarial accrued liabilities -- whether or not the liabilities are increasing or decreasing and by how much. However, valuations do not show the portion of the change attributable to each risk area within the retirement system financial mechanism: 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 are 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 unfunded actuarial accrued liabilities that is 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.

Changes in actuarial assumptions 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 financial assumptions***.

The Arkansas State Police Retirement System had a net experience loss of $9.5 million during the 2009-2010 observation year. Recognized investment return below the assumed rate produced a loss of $14.8 million which was offset by small gains from other sources. Further details are shown on pages C-2 to C-6.

DERIVATION OF EXPERIENCE GAIN/LOSS
YEAR ENDED JUNE 30, 2010
(IN $1,000'S)

Actual experience will not (except by coincidence) coincide exactly with assumed experience. Gains and losses often cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain/loss is shown below.

(1) UAAL * at start of year	$ 121,445
(2) Normal cost from last valuation	5,766
(3) Employer contributions	23,231
(4) Interest accrual: (1) x 0.08 + ((2) - (3)) x 0.04	9,017
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	112,997
(6) Change for revised actuarial assumptions and/or valuation methods	0
(7) Change from benefit changes	0
(8) Expected UAAL after changes: (5) + (6) + (7)	112,997
(9) Actual UAAL at end of year	122,527
(10) Gain/loss: (8) - (9)	$ (9,530)
(11) Gain/loss as percent of actuarial accrued liablities at start of year	(2.9%)

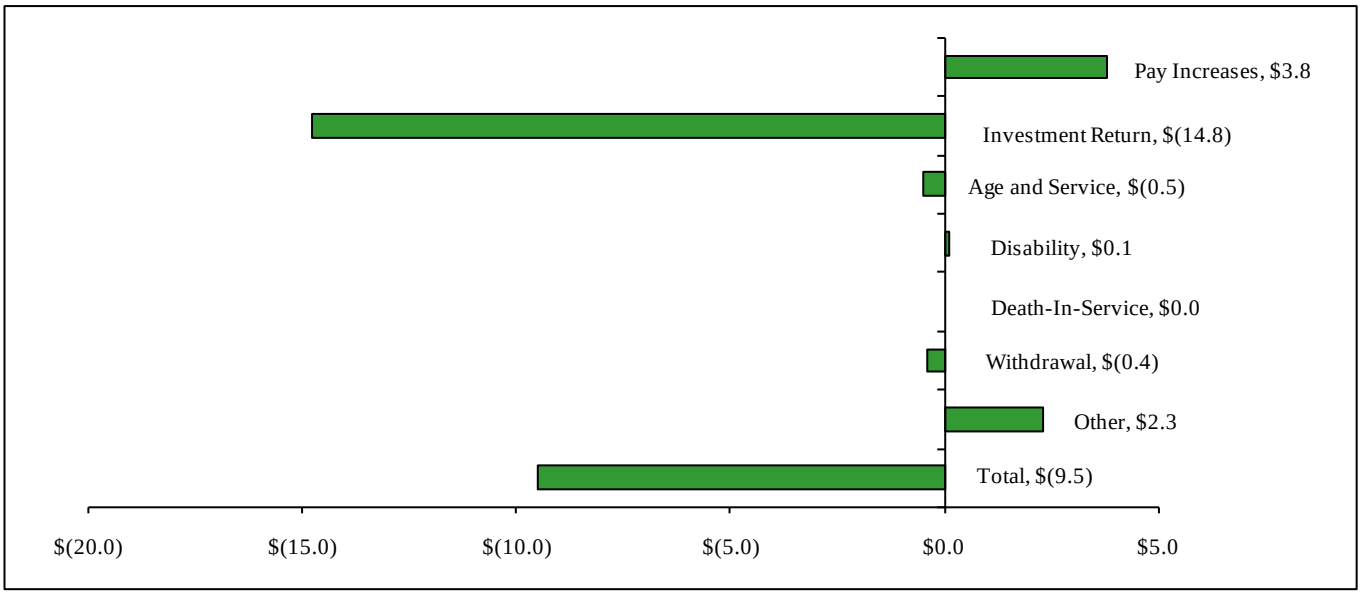
* *Unfunded actuarial accrued liability.*

GAINS & LOSSES BY RISK AREA
DURING THE PERIOD JULY 1, 2009 TO JUNE 30, 2010

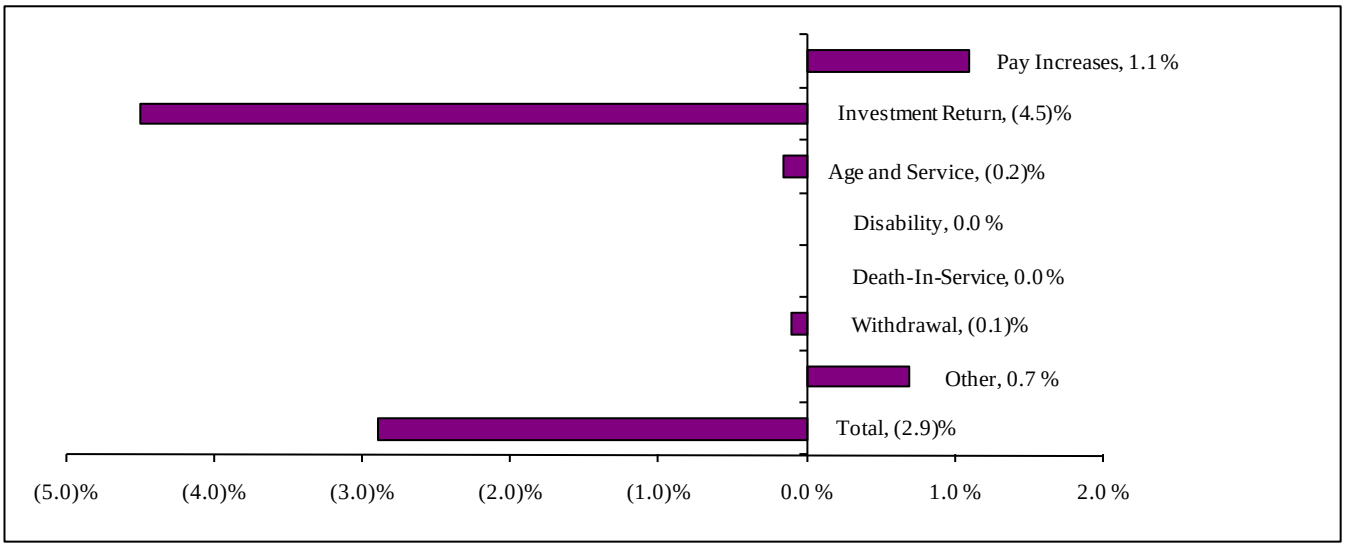
Type of Risk Area	Gain/Loss in Period $ Millions	Gain/Loss in Period Percent of Liabilities
ECONOMIC RISK AREAS		
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	$3.8	1.1 %
Investment Return. If there is greater recognized investment return than assumed, there is a gain. If less return, a loss.	(14.8)	(4.5)%
NON-ECONOMIC RISK AREAS		
Age & Service Retirements. 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.	(0.5)	(0.2)%
Disability Retirements. If there are fewer disabilities than assumed, there is a gain. If more, a loss.	0.1	0.0 %
Death-in-Service Benefits. If there are fewer claims than assumed, there is a gain. If more, a loss.	0.0	0.0 %
Withdrawal. If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.	(0.4)	(0.1)%
Actuarial Gain/Loss	$(11.8)	(3.6)%
Other. Gains and losses resulting from group size change, data adjustments, timing of financial transactions, and retiree mortality.	2.3	0.7 %
TOTAL GAIN (OR LOSS) DURING PERIOD	**$(9.5)**	**(2.9)%**

GAINS & LOSSES BY RISK AREA
ACTUARIAL GAIN/LOSS EXPERIENCE
2009-2010 YEAR

Amount as $ Millions



% of Accrued Liabilities



GAINS & LOSSES BY RISK AREA
COMPARATIVE STATEMENT
($ IN MILLIONS)

Year Ending June 30	Gain/Loss by Risk Area							Total Experience Gain/Loss		Accrued Liability End of Year
	Pay Increases	Investments	Age & Service Retirement	Disability	Death-in-Service	Withdrawal	Other	Dollars	% of AAL	
1992	$(1.3)	$ 0.1	$ 0.1	$0.1	$ 0.2	$(0.5)	$0.0	$(1.3)	(1.0)%	$127.9
1993	(2.4)	4.3	0.1	0.1	0.2	(0.6)	(1.6)	0.1	0.1 %	141.7
1994	0.8	(2.2)	(0.1)	(0.2)	(0.2)	(0.4)	0.3	(2.0)	(1.4)%	152.0
1995	(2.2)	(5.2)	(0.3)	(0.2)	(0.3)	(0.4)	(0.3)	(8.9)	(5.8)%	170.0
1996@	2.1	1.8	(0.9)	0.1	0.0	0.3	0.5	3.9	2.3 %	181.0
1997	1.8	4.1	(0.2)	0.1	0.0	(0.1)	0.3	6.0	3.3 %	190.7
1998	3.0	5.6	(0.7)	0.1	0.0	0.4	(4.1)	4.3	2.2 %	203.5
1999	1.6	5.6	(0.7)	0.1	0.0	(0.5)	(2.0)	4.1	2.0 %	221.2
2000	1.5	7.5	0.7	0.1	0.0	(0.1)	0.8	10.5	4.8 %	233.0
2001	1.5	(5.0)	0.6	0.1	(0.2)	(0.1)	1.3	(1.8)	(0.8)%	242.4
2002	1.5	(18.0)	0.1	0.1	0.1	0.4	3.5	(12.3)	(5.1)%	251.8
2003	1.3	(21.9)	0.0	0.0	0.0	2.8	21.2	3.4	1.3 %	261.5
2004	(8.0)	(20.5)	0.1	0.1	0.0	4.7	1.1	(22.5)	(8.6)%	275.7
2005	1.7	(10.3)	0.0	0.1	0.0	0.0	(3.5)	(12.0)	(4.2)%	281.3
2006	0.5	1.3	(0.1)	0.1	0.0	0.4	(0.6)	1.6	0.6 %	291.2
2007@	2.5	9.6	(0.4)	0.2	0.0	2.9	(3.5)	11.3	3.9 %	307.7
2008	(2.0)	(5.4)	(0.7)	0.0	0.0	0.4	(0.8)	(8.5)	(2.8)%	320.1
2009@	(0.7)	(45.0)	(1.6)	0.1	0.0	(0.2)	1.5	(45.9)	(14.4)%	325.9
2010	3.8	(14.8)	(0.5)	0.1	0.0	(0.4)	2.3	(9.5)	(2.9)%	333.6

@ Revised actuarial assumptions and/or methods.

INVESTMENT GAIN/LOSS
DURING THE PERIOD JULY 1, 2009 TO JUNE 30, 2010

		$ Millions
1.	Total Assets Beginning of Year - Funding Value	$206.32
2.	Total Assets End of Year - Funding Value	
	a. Actual	211.07
	b. If net investment return had been 8.0%*	225.91
3.	Gain/Loss: 2(a) minus 2(b)	$(14.84)

* *"Investment return" as used in this Gain/Loss Analysis means essentially: assumed return plus/minus phase-in recognition of cumulative market gains or losses (see page B-14).*

SALARY INCREASES
BY AGE GROUP
MEMBERS ACTIVE BOTH BEGINNING AND END OF YEAR
DURING THE PERIOD OF JULY 1, 2009 TO JUNE 30, 2010

Age Groups	Expected Increase	Actual Increase
25- 29	7.7%	4.0%
30- 34	7.1%	3.9%
35- 39	6.9%	4.6%
40- 44	6.3%	4.3%
45- 49	5.3%	3.6%
50- 54	4.8%	5.3%
55- 59	4.5%	3.6%

ACTIVE MEMBERS WHO SEPARATED FROM ACTIVE MEMBERSHIP DURING THE PERIOD FROM JULY 1, 2009 TO JUNE 30, 2010

Age	Normal Retirement		Death in Service		Disability Retirement		Terminated Vested		Non-Vested Separations	
Groups	**A**	**E**	**A**	**E**	**A**	**E**	**A**	**E**	**A**	**E**
20-24										0.2
25-29								0.4	1	2.1
30-34						0.1	2	2.3	2	1.4
35-39						0.3	2	2.7	1	0.7
40-44	1			0.1	1	0.4	1	2.0	1	0.3
45-49	1	0.7		0.1		0.5	1	0.9	1	0.1
50-54	1	1.6				0.2		0.1		
55-59	1	0.6								
60-64	1	0.8								
65										
Totals	**5**	**3.7**		**0.2**	**1**	**1.5**	**6**	**8.4**	**6**	**4.8**

A: Actual

E: Expected

SECTION D

ACTUARIAL METHODS AND ASSUMPTIONS

SUMMARY OF ACTUARIAL ASSUMPTIONS USED FOR STATE POLICE 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 administrative and investment expenses). The assumed real rate of return is the portion of investment return which is more than the wage inflation rate. Considering assumed wage inflation of 4.00%, the 8.00% investment return rate translates to an effective assumed real rate of return of 4.00%. The wage inflation assumption was revised for the June 30, 2007 valuation and the investment assumption was revised for the June 30, 2009 valuation.

Pay increase assumptions for individual active members are shown on page D-5. Part of the assumption for each age is for a merit and/or seniority increase, and the other 4.00% recognizes wage inflation. This includes a component for price inflation of 3.00% and a component for real wage growth at 1.00%.

Total active member payroll is assumed to increase 4.00% a year, which is the portion of the individual pay increase assumptions recognizing inflation.

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

Non-Economic Assumptions

The mortality tables used to measure retired life mortality were the RP-2000 Combined mortality table for males and the RP-2000 Combined mortality table for females setback 2 years. Related values are shown on page D-3. The mortality rates used in evaluating disability allowances were the RP-2000 Combined mortality tables, set forward 10 years for males and set forward 8 years for females.

The probabilities of retirement for members eligible to retire are shown on page D-4.

The probabilities of withdrawal from service, death-in-service and disability are shown for sample ages on page D-5.

The ultimate entry-age normal actuarial cost method of the valuation was used in determining liabilities and normal cost. The normal cost is based on the benefits applicable to new hires and is based upon the characteristics of Tier 2 members.

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 & interest) which are level percent-of-payroll contributions.

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.

The data about persons now covered and about present assets was 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
RP-2000 COMBINED MORTALITY
AND 8.00% INTEREST

Sample Ages	Single Life Retirement Values			
	Present Value of $1 Monthly for Life Increasing 3% Annually		Future Life Expectancy (Years)	
	Men	Women	Men	Women
50	$184.07	$196.02	30.80	35.49
55	169.19	183.50	26.18	30.77
60	151.93	168.55	21.74	26.17
65	132.86	151.49	17.61	21.78
70	112.78	133.05	13.88	17.75
75	92.14	113.53	10.57	14.08
80	72.10	93.69	7.75	10.85

Sample Attained Ages	$100 Benefit Increasing 3% Yearly
55	$100.00
60	115.93
65	134.39
70	155.79
75	180.60
80	209.36

PROBABILITIES OF RETIREMENT FOR MEMBERS ELIGIBLE TO RETIRE

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year		Years of Service	Percent of Eligible Active Members Retiring Within Next Year
	Tier One	Tier Two		Tier One & Tier Two
47	2%	-		
48	2%	-		
49	2%	-		
50	6%	2%	30	30%
51	6%	2%	31	35%
52	5%	2%	32	40%
53	5%	6%	33	50%
54	10%	6%	34	60%
55	15%	25%	35	100%
56	20%	20%		
57	25%	18%		
58	30%	18%		
59	35%	20%		
60	40%	25%		
61	50%	30%		
62	60%	100%		
63	80%	100%		
64	100%	100%		
65	100%	100%		

A member is assumed to be eligible to retire at age 52 (55 for Tier Two) with 17 years of service, or at any age with 30 years of service. A member is assumed to be eligible to retire early at age 47 (50 for Tier 2) with 17 years of service. For a Tier 2 member with 30 or more years of service at the beginning of a year, the percents shown for service based retirement (30 or more years) take precedence over the percents associated with age based retirement.

It was assumed that members eligible to enter the DROP will do so to maximize the value of their benefits.

SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE AND SERVICE RETIREMENT & INDIVIDUAL PAY INCREASES

Sample Ages	Percent of Active Members Separating Within the Next Year				Pay Increase Assumptions for Active Members		
	Death				Merit &	Base	Increase
	Male	Female	Disability	Other	Seniority	(Economic)	Next Year
20	0.02%	0.01%	0.05%	5.50%	3.84%	4.00%	7.84%
25	0.02%	0.01%	0.09%	5.50%	3.84%	4.00%	7.84%
30	0.02%	0.01%	0.19%	5.50%	3.64%	4.00%	7.64%
35	0.04%	0.02%	0.30%	4.18%	2.82%	4.00%	6.82%
40	0.05%	0.04%	0.43%	2.64%	2.89%	4.00%	6.89%
45	0.08%	0.06%	0.55%	1.43%	1.85%	4.00%	5.85%
50	0.11%	0.08%	0.66%	0.55%	0.92%	4.00%	4.92%
55	0.18%	0.14%	0.79%	0.00%	0.50%	4.00%	4.50%

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS
JUNE 30, 2010

Marriage Assumption:	95% of males and 95% of females are assumed to be married for purposes of death-in-service benefits. 90% of males and 90% of females are assumed to be married for purposes of death-after-retirement benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
Pay Increase Timing:	Beginning of 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 are assumed to occur mid-year.
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.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Disability and withdrawal decrements do not operate during the period a member is assumed to be eligible for an unreduced benefit.
DROP Participants:	For members participating in the DROP, reported payroll is multiplied by 3.7 to estimate present value of future salary.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Tier One DROP Interest Credit:	Interest is assumed to be credited at the rate assumed for plan investment return.
Tier Two DROP Interest Credit:	Interest is assumed to be credited at 5.0%.

SECTION E

FINANCIAL PRINCIPLES

FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES OF ASPRS

Promises Made, and Eventually Paid. As each year is completed, ASPRS in effect hands an "IOU" to each member then acquiring a year of service credit --- the "IOU" says: "The Arkansas State Police 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?

The law governing ASPRS financing intends that this year's taxpayers contribute the money to cover the IOUs being handed out this year. By following this principle, funds will be accumulated during members' periods of active participation which, when combined with investment income, will be sufficient to pay promised benefits throughout the years of retirement.

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 members and employers.

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

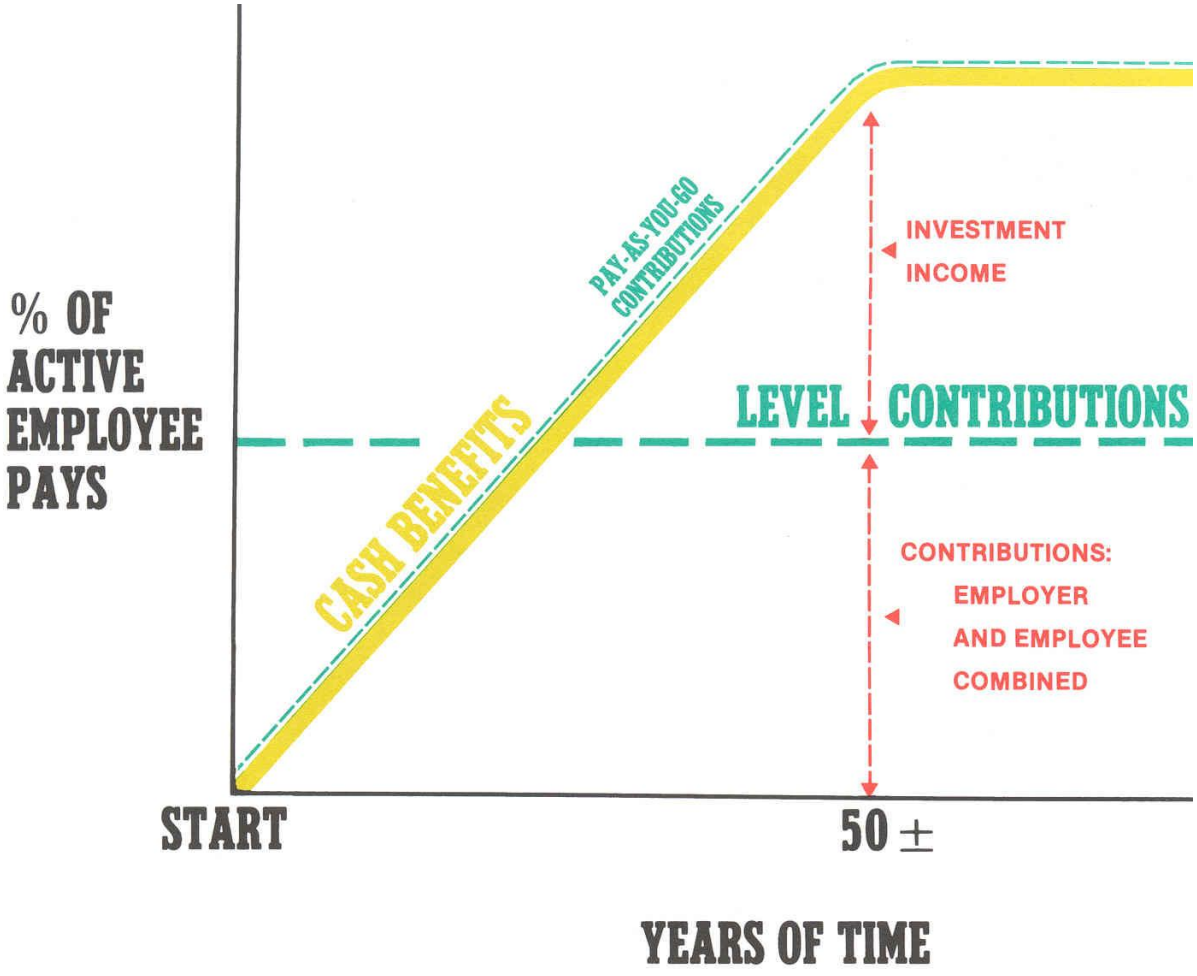
> Normal Cost (the cost of members' service being rendered this year)
> ... plus ...
> Interest on Unfunded Actuarial Accrued Liabilities (unfunded accrued liabilities are the difference between: liabilities for members' service already rendered; and the accrued assets of SPRS).

Computing Contributions to Support Fund Benefits. From a given schedule of benefits and from the employee data and asset data provided, the actuary determines 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 income which plan assets will earn; the rates of withdrawal of active members who leave covered employment before qualifying for any monthly benefit; 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. Only the subsequent actual experience of the plan can indicate the degree of accuracy of the assumptions.

Reconciling Differences Between Assumed Experience and Actual Experience. Once actual experience has occurred and been observed, it will not coincide exactly with assumed experience, regardless of the wisdom of the assumptions or the skill of the actuary and the many calculations made. SPRS 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 opposite 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 equalizes contributions between the generations.

The actuarial valuation is the mathematical process by which the level contribution rate is determined, and the flow of activity constituting the valuation may be summarized as follows:

A. ***Census Data***, furnished by plan administrator.
- Retirees now receiving benefits
- Former members with vested benefits not yet payable
- Active members

B. + ***Asset Data*** (cash & investments), furnished by the plan administrator.

C. + **Benefit provisions** that establish eligibility and amounts of payments to members.

D. + ***Assumptions concerning future experience in various risk areas***, which assumptions are established by the Board of Trustees after consulting with the actuary.

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

SECTION F

ACTUARIAL AND REQUIRED SUPPLEMENTAL INFORMATION REQUIRED BY STATEMENT 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)	UAL as a Percentage of Covered Payroll [(b-a)/(c)]
6/30/1994	$121.80	$151.97	$30.17	80.1%	$16.90	178.6%
6/30/1995	126.50	170.00	43.51	74.4%	18.14	239.9%
6/30/1996	149.15	180.50	31.35	82.6%	18.43	170.1%
6/30/1997	164.66	190.73	26.07	86.3%	18.98	137.4%
6/30/1998	183.00	204.10	21.10	89.7%	19.65	107.4%
6/30/1999	201.75	221.17	19.42	91.2%	20.94	92.7%
6/30/2000	222.87	232.99	10.12	95.7%	21.31	47.5%
6/30/2001	229.92	242.35	12.43	94.9%	21.86	56.9%
6/30/2002	223.77	251.76	28.00	88.9%	20.76	134.9%
6/30/2003	212.45	261.50	49.05	81.2%	20.50	239.2%
6/30/2004	201.83	275.72	73.89	73.2%	22.36	330.5%
6/30/2005 #@	200.10	281.28	81.18	71.1%	22.52	360.5%
6/30/2006	210.34	291.17	80.82	72.2%	23.38	345.7%
6/30/2007 @	233.13	307.66	74.53	75.8%	24.00	310.6%
6/30/2008	238.04	320.10	82.06	74.4%	25.91	316.7%
6/30/2009	228.60	334.01	105.42	68.4%	26.80	393.4%
6/30/2009 #@	206.32	325.94	119.62	63.3%	26.80	446.4%
6/30/2010	211.07	333.60	122.53	63.3%	28.51	429.7%

 # After legislated changes in benefit provisions.
@ After changes in actuarial assumptions or methods.

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

Year Ended June 30	Annual Required Contribution	Percent Contributed
1994	$ 6,031,718	81.08%
1995	6,596,421	79.48%
1996	7,127,246	81.56%
1997	6,704,081	91.16%
1998	6,768,125	106.56%
1999	6,454,835	104.55%
2000	6,356,114	109.16%
2001	5,883,192	120.77%
2002	5,780,658	119.39%
2003	6,298,145	107.80%
2004	8,375,966	90.71%
2005	9,869,227	79.70%
2006	9,988,919	96.59%
2007	9,852,432	116.39%
2008	9,996,439	116.56%
2009	10,535,605	115.25%
2010	12,748,302	161.18%

GASB STATEMENT NO. 27
REQUIRED ACTUARIAL INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Valuation Date	Fiscal Year	Computed Employer Rate	Payroll*	ARC#	Interest on NPO	ARC Adjustment	Amort. Factor	Pension Cost	Contri-bution	Change in NPO	NPO Balance	Valuation Interest
6/30/1990	6/30/1991	25.96%	12,477,776	3,567,631	(57,512)	(38,554)	21.31	3,548,674	4,139,200	(590,526)	(1,412,121)	7.00%
6/30/1991	6/30/1992	41.08%	13,484,672	3,401,192	(98,848)	(75,515)	18.70	3,377,858	4,432,441	(1,054,583)	(2,466,704)	7.50%
6/30/1992	6/30/1993	36.07%	14,724,158	5,816,478	(185,003)	(133,987)	18.41	5,765,463	4,752,809	1,012,654	(1,454,050)	7.50%
6/30/1993	6/30/1994	35.70%	16,895,570	6,031,718	(109,054)	(78,810)	18.45	6,001,475	4,890,468	1,111,007	(343,043)	7.50%
6/30/1994	6/30/1995	36.37%	18,136,985	6,596,421	(25,728)	(16,421)	20.89	6,587,115	5,243,004	1,344,111	1,001,067	7.50%
6/30/1995	6/30/1996	38.68%	18,426,178	7,127,246	75,080	62,960	15.90	7,139,365	5,813,020	1,326,345	2,327,413	7.75%
6/30/1996	6/30/1997	35.33%	18,975,605	6,704,081	180,375	132,843	17.52	6,751,613	6,111,256	640,357	2,967,769	7.75%
6/30/1997	6/30/1998	34.44%	19,651,932	6,768,125	230,002	136,665	17.03	6,861,462	7,212,031	(350,569)	2,617,201	7.75%
6/30/1998	6/30/1999	30.82%	20,943,657	6,454,835	199,919	179,538	16.53	6,475,216	6,748,482	(273,266)	2,343,934	7.75%
6/30/1999	6/30/2000	29.82%	21,314,937	6,356,114	202,833	163,473	16.01	6,395,474	6,938,423	(542,949)	1,800,986	7.75%
6/30/2000	6/30/2001	26.91%	21,862,475	5,883,192	181,655	151,417	15.48	5,913,430	7,105,059	(1,191,629)	609,357	7.75%
6/30/2001	6/30/2002	27.85%	20,756,403	5,780,658	139,576	125,592	14.34	5,794,643	6,901,552	(1,106,909)	(497,553)	7.75%
6/30/2002	6/30/2003	30.72%	20,501,775	6,298,145	47,225	44,092	13.82	6,301,278	6,789,368	(488,090)	(985,643)	7.75%
6/30/2003	6/30/2004	37.46%	22,359,759	8,375,966	(38,560)	(37,438)	13.29	8,374,844	7,597,519	777,325	(208,318)	7.75%
6/30/2004	6/30/2005	43.83%	22,517,060	9,869,227	(76,387)	(52,849)	18.65	9,845,690	7,865,734	1,979,956	1,771,638	7.75%
6/30/2005	6/30/2006	41.36%	24,151,157	9,988,919	(16,145)	(11,170)	18.65	9,983,944	9,648,121	335,823	2,107,460	7.75%
6/30/2006	6/30/2007	40.04%	24,606,473	9,852,432	137,302	97,772	18.12	9,891,961	11,467,568	(1,575,607)	531,853	7.75%
6/30/2007	6/30/2008	37.86%	26,403,696	9,996,439	163,328	116,306	18.12	10,043,462	11,651,406	(1,607,945)	(1,076,091)	7.75%
6/30/2008	6/30/2009	38.20%	27,580,117	10,535,605	(83,397)	(59,387)	18.12	10,511,595	12,142,060	(1,630,465)	(2,706,556)	7.75%
6/30/2009	6/30/2010	44.71%	28,513,313	12,748,302	(209,758)	(153,694)	17.61	12,692,238	20,547,974	(7,855,736)	(10,562,292)	8.00%

** Actual pay.*

 # ARC: Payroll multiplied by computed employer rate for the year, for FY 1994 and later.

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

Valuation Date	June 30, 2010
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent-of-Payroll
Remaining Amortization Period	30 year open
Asset Valuation Method	4 year smoothed market
Actuarial Assumptions:	
Investment Rate of Return	8.00%
Projected Salary Increases	4.00%
Including Price Inflation at	4.00%
Cost-of-living Adjustments	
Retirees and beneficiaries receiving benefits	476
Terminated plan members entitled to but not yet receiving benefits	43
DROP members	85
Active plan members	460
Total	1,064

SECTION G

APPENDIX I

STATUTORY EMPLOYER CONTRIBUTIONS
ARKANSAS CODE SECTION 24-6-209

24-6-209. Employer's contribution.

(a) The Department of Arkansas State Police, as employer, shall make contributions to the Arkansas State Police Retirement System of twenty-two percent (22%) of active member payroll.

(b) The Director of the Department of Finance and Administration, at the request of the Executive Secretary of the Arkansas State Police Retirement System, is authorized and directed to make annual transfers on each June 30 to the State Police Retirement Fund from the remainder of insurance premium taxes enumerated in A.C.A. 19-6-301(27) before they are transferred to General Revenues enumerated in A.C.A. 19-6-201(19) such amounts of money necessary to amortize the unfunded liabilities over a period not to exceed thirty (30) years for those members not covered by the provisions of A.C.A. 24-6-401 et. seq. These transfers are intended to cover the unfunded accrued actuarial liabilities of the State Police Retirement Fund and shall not be used for the purpose of providing any benefit enhancements for the State Police Retirement System. Members of the Tier One-State Police Retirement System shall not be entitled to any benefit enhancements from these transfers unless funds from sources other than insurance premium taxes are found to provide for the retirement benefit enhancements. The amount of the transfer shall be determined by computing the dollar amount required based on the actuarially determined employer rate in the most recent annual actuarial valuation and subtracting from that amount the statutory contribution amount specified in subsection (a) of this section, the court fees provided by Act 1256 of 1995, and the driver's license renewal fees provided by Act 730 of 1995.

(c) The intent of this section is to provide for funding of any amounts of unfunded accrued actuarial liabilities of the Tier One-State Police Retirement Fund existing on June 30, 1997. These transfers shall be limited in use solely for the purpose of paying those liabilities and nothing more. In the event the transfers under this section exceed eight hundred thousand dollars $(800,000) per fiscal year, the Executive Secretary of the Arkansas State Police Retirement System shall notify the Joint Committee on Public Retirement and Social Security Programs which shall then review the use of the funds and the benefit provisions of the systems and the actuarial reports on the retirement systems to ensure compliance with the intended purpose of the funds.

November 18, 2010

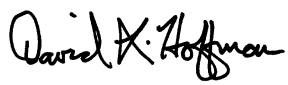
Ms. Gail H. Stone
Executive Secretary
Arkansas State Police Retirement System
One Union National Plaza
124 West Capitol, 4th Floor
Little Rock, Arkansas 72201

Re: State Police Retirement System Report of the June 30, 2010 Actuarial Valuation and the 2009/2010 Gain/Loss Analysis

Dear Gail:

Please find enclosed 20 copies of this report. As usual, your comments and questions are welcome.

Sincerely,



David L. Hoffman

DLH:rmn
Enclosures