

JONESBORO POLICE PENSION FUND

ACTUARIAL VALUATION

AS OF DECEMBER 31, 2009

Osborn, Carreiro & Associates, Inc.
Actuaries Consultants Analysts
Little Rock, Arkansas

Osborn, Carreiro & Associates, Inc.

ACTUARIES • CONSULTANTS • ANALYSTS

One Union National Plaza, Suite 1690
124 West Capitol Avenue
Little Rock, Arkansas 72201
(501) 376-8043
FAX (501) 376-7847

August 31, 2010

Board of Trustees
Jonesboro Police Pension Fund

Gentlemen:

This report presents the results of our actuarial valuation of the assets and liabilities of the Jonesboro Police Pension Fund as of December 31, 2009.

This valuation is required by Arkansas Code Annotated 24-11-205. The purpose of this report is to (1) evaluate the actuarial status of the Fund, (2) determine the level contribution requirement needed, (3) review the development of the Fund over the past several years, and (4) present certain actuarial items on page 9 for disclosure under Governmental Accounting Standards. This report is not intended for any other purpose.

The member and financial information used in this report was supplied by the Arkansas Fire & Police Pension Review Board. We did not audit this information, although we did review it for reasonableness and consistency.

I certify that this report has been prepared in accordance with generally accepted actuarial principles and practices. In my opinion, the actuarial methods used are appropriate and the actuarial assumptions produce results which, in the aggregate, are reasonable.

Sincerely,



Jody Carreiro, A.S.A., M.A.A.A.
Actuary

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EXHIBIT 1
CONTRIBUTIONS

The following contribution level reflects the payment of the current year Normal Cost for benefits attributable to said year (see Exhibit 2) plus an amount sufficient to pay off the Unfunded Actuarial Liability over a 5-year period. These costs DO NOT include the contributions due to the Local Police and Firefighters Retirement System ("LOPFI") for persons hired after 1982.

2010 Necessary Annual Contribution to pay:

1 Normal Cost, plus	\$	23,292
2 Pay off the Unfunded Actuarial Accrued Liability		<u>908,719</u>
3 Total necessary	\$	932,011
Less		
4 Expected Employee Contribution ERR	-	<u>2,048</u>
Necessary Employer Contribution (This is the amount needed in addition to investment income)	\$	<u>929,963</u>
Covered Payroll	\$	34,132
Necessary Employer Rate		<u>2724.58%</u>

These contributions assume that the dollar contribution grows at a rate of 4% per year. The contributions are assumed to be made continuously throughout the year.

The actual 2009 contribution was \$872,577 from the employer.

EXHIBIT 2

COSTS AND LIABILITIES

	December 31, 2009	
	Dollar	Percent
	<u>Amount</u>	<u>of pay</u>
A <u>Normal Cost</u> (Cost to fund current active members)		
1 Regular Retirement Benefits	\$ 17,398	50.97%
2 Voluntary Termination Benefits	579	1.70%
3 Survivors' Benefits	1,976	5.79%
4 Disability Benefits	3,339	9.78%
TOTAL	\$ 23,292	68.24%
B <u>Actuarial Accrued Liability</u>		
1 <u>Active Lives</u>		
Regular Retirement Benefits	\$ 241,654	
Voluntary Termination Benefits	3,523	
Survivors' Benefits	5,038	
Disability Benefits	13,546	
TOTAL ACTIVE LIVES	\$ 263,761	
2 <u>Deferred Retirement Option</u>		
DROP Accounts	\$ 0	
Future DROP Payments & Pensions	0	
TOTAL DROP	\$ 0	
3 <u>Inactive Lives</u>		
Retirees	\$ 11,311,394	
Disability Retirees	2,260,468	
Widows & Children	1,754,998	
TOTAL INACTIVE LIVES	\$ 15,326,860	
4 <u>Total Liability</u>	\$ 15,590,621	
C <u>Assets</u>	\$ 11,367,448	
D <u>Unfunded Actuarial Accrued Liability</u>	\$ 4,223,173	
E <u>Effect of Change in Assumptions (if applicable)</u>		
1 Change in Unfunded Accrued Liability	\$ 3,036,656	
2 Change in Necessary Employer Contribution	\$ 660,926	

EXHIBIT 3

SUMMARY OF FINANCIAL INFORMATION

(Items D-E, and G determined by Osborn, Carreiro and Associates, Inc.)

A. <u>INCOME</u>	Year Ended 12/31/2007	Year Ended 12/31/2008	Year Ended 12/31/2009
1 <u>Employee Contributions</u>	\$ 5,075	\$ 2,376	\$ 2,199
2 <u>Employer Contributions</u>			
Employer/Court Fines/Other	125,330	118,958	132,623
Insurance Tax	0	0	272,940
Local Millage	386,456	395,094	467,014
3 <u>Other Income</u>			
Guarantee Fund	0	0	0
LOPFI Subsidy	0	0	0
Police Supplement (Act 1452 of 1999)	24,000	24,000	23,400
Future Supplement (Act 1373 of 2003)	68,832	33,096	29,913
Other Income/Donations	0	0	0
Adjustment to prior year asset value	0	0	0
4 <u>Net Investment Income</u>	717,339	43,053	(422,520)
TOTAL INCOME	\$ 1,327,032	\$ 616,577	\$ 505,569
B. <u>EXPENSES</u>			
1 <u>Administrative</u>	\$ 900	\$ 4,450	\$ 6,032
2 <u>Benefits Paid</u>			
Monthly Benefits	896,175	969,332	951,710
Police Supplements	24,000	24,000	23,400
Future Supplements	68,832	33,096	29,913
DROP Payouts	0	162,342	0
3 <u>Refunds</u>	0	733	0
TOTAL EXPENSES	\$ 989,907	\$ 1,193,953	\$ 1,011,055

EXHIBIT 3 (Continued)

C	<u>ASSETS (at book value)</u>	<u>12/31/2007</u>	12/31/2008	<u>12/31/2009</u>
1	Cash & Checking Accounts	\$ 0	\$ 575	\$ 7,303
2	Bank Deposits	823,703	2,009,120	1,531,519
3	Savings and Loan Deposits	0	0	0
4	Other Cash Equivalents	0	0	0
5	US Govt. Securities	2,895,230	2,279,325	1,601,803
6	Non-US Govt Securities	0	0	0
7	Mortgages	1,650,596	996,918	0
8	Corporate Bonds	2,870,241	2,079,187	1,587,873
9	Common Stocks	3,064,580	3,362,058	5,493,199
10	Other	209	0	0
11	Payables	0	0	0
	TOTAL ASSETS	\$ 11,304,559	\$ 10,727,183	\$ 10,221,697
D.	<u>RATIO OF ASSETS TO ANNUAL EXPENSES:</u>	11.4	9.0	10.1
E.	<u>NET INVESTMENT RETURN:</u> (Book Value Basis)	6.7%	0.4%	-4.0%

Exhibit 3 (Continued)

	<u>12/31/2005</u>	<u>12/31/2006</u>	<u>12/31/2007</u>	<u>12/31/2008</u>	<u>12/31/2009</u>
F. <u>TOTAL MARKET VALUE</u>					
1. Market Value, end of year (Used for GASB calculations, page 9)	11,101,821	11,316,430	11,512,584	9,853,752	10,346,360
2. Market Value, beginning of year	11,150,670	11,101,821	11,316,430	11,512,584	9,853,752
G. <u>DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS</u>					
1. Actuarial Value of Assets, beginning of year	11,380,169	11,571,546	11,690,728	11,809,331	11,298,182
2. Non Investment Net Cash Flow	(422,875)	(468,364)	(380,214)	(620,429)	(82,966)
3. Development of Investment Income					
(a) Total Market Investment Income (F1-F2-G2)	374,026	682,973	576,368	(1,038,403)	575,574
(b) Assumed Rate for Immediate Recognition	6%	6%	6%	5%	5%
(c) Amount for Immediate Recognition (6% G1)	682,810	694,293	701,444	590,467	564,909
(d) Amount for Phased In Recognition (a-c)	(308,784)	(11,320)	(125,076)	(1,628,870)	10,665
(e) Phased In Recognition					
Current year : 20% of 3(c)	(61,757)	(2,264)	(25,015)	(325,774)	2,133
First Prior Year	(66,377)	(61,757)	(2,264)	(25,015)	(325,774)
Second Prior Year	(47,214)	(66,377)	(61,757)	(2,264)	(25,015)
Third Prior Year	70,865	(47,214)	(66,377)	(61,757)	(2,264)
Fourth Prior Year	35,925	70,865	(47,214)	(66,377)	(61,757)
Total Phased In Recognition	(68,558)	(106,747)	(202,627)	(481,187)	(412,677)
(f) Actuarial Value Investment Income (3(c) + 3(e))	614,252	587,546	498,817	109,280	152,232
4. Actuarial Value of Assets, End of year (1 + 2 + 3(f))	11,571,546	11,690,728	11,809,331	11,298,182	11,367,448
5. Net Investment Return on the Actuarial Value of Assets	5.5%	5.2%	4.3%	1.0%	1.4%

Note: The Pension Review Board's Board Rule #11 first applies this methodology to determine the Actuarial Value of Assets for the 12/31/99 actuarial valuation report. Different methods were used to determine the Actuarial Value of Assets for the 12/31/98 and earlier reports.

EXHIBIT 3 (Continued)

ACCOUNTING INFORMATION

This page is included to provide the information required by the Governmental Accounting Standards Board Statement No. 25 and 27. The values below are based on the assumptions contained in Exhibit 8.

The Annual Pension Cost disclosed in this exhibit will almost always differ from the actual cash contribution to the fund. We must emphasize that these disclosures are shown in the city's financial statements; Sound actuarial projections should be used to determine the actual cash contribution requirements.

RECONCILIATION OF NET PENSION OBLIGATION (NPO)

	2008	2009	2010
1. Actuarially Required Contribution	479,614	713,876	1,149,676
2. Interest on NPO	(226,533)	(159,262)	(83,550)
3. Adjustment to (1)	(851,295)	(718,192)	(599,262)
4. Annual Pension Cost (1)+(2)-(3)	1,104,376	1,272,806	1,665,388
5. Actual Contribution Made	514,052	872,577	
6. Increase in NPO (4)-(5)	590,324	400,229	
7. NPO Beginning of Year	(3,775,558)	(3,185,234)	(2,785,005)
8. NPO End of Year	(3,185,234)	(2,785,005)	

REQUIRED SUPPLEMENTARY INFORMATION

(a)	(b)	(c)	(d)	(e)	(f)	(g)
Actuarial Valuation Date	Market Value of Plan Assets	Entry Age Actuarial Accrued Liability	Unfunded Accrued Liability (UAL) (c)-(b)	Funded Ratio (b)/(c)	Annual Covered Payroll	UAL as a % of Covered Payroll (d)/(f)
12/31/2003	10,930,059	10,061,669	(868,390)	108.6%	28,818	-3013.4%
12/31/2005	11,101,821	10,628,327	(473,494)	104.5%	36,132	-1310.5%
12/31/2007 a	11,512,584	13,580,714	2,068,130	84.8%	36,132	5723.8%
12/31/2008	9,853,752	12,959,753	3,106,001	76.0%	36,132	8596.3%
12/31/2009 b	10,346,360	12,553,965	2,207,605	82.4%	33,398	6610.0%
12/31/2009 c	10,346,360	15,590,621	5,244,261	66.4%	33,398	15702.4%

a Includes change in assumptions to 5% discount rate and 83GAM mortality.

b Before change in discount assumption for 12/31/2009, if applicable.

c Includes change in assumptions to 3% discount rate and 83GAM mortality.

EXHIBIT 4

COMPARISON WITH PRIOR YEARS

This exhibit compares current valuation results with those of prior years.

Valuation Date	Full Paid Active Members		Actuarial Computed Employer Contribution		Assets	Total Plan		
	No.	Annual Payroll	Percent of Pay	Dollar Amount		Unfunded Actuarial Liability	Normal Cost Percent	Funded Percent
12/31/1984	32	522,841	34.9%	182,461	1,801,321	1,265,684	25.8%	58.7%
12/31/1986	29	526,003	32.9%	173,172	2,570,869	933,702	25.7%	73.4%
12/31/1987	25	474,230	32.9%	156,196	2,973,174	815,336	25.6%	78.5%
12/31/1989	19	398,687	32.0%	127,520	3,864,423	744,999	28.7%	83.8%
12/31/1991	16	373,176	25.3%	94,510	4,869,981	139,565	29.2%	97.2%
12/31/1993 *	16	416,348	24.1%	100,261	5,783,567	(22,881)	30.5%	100.4%
12/31/1995 *	12	335,858	47.0%	157,934	6,711,760	666,466	36.6%	91.0%
12/31/1997 *	7	219,187	55.2%	121,046	7,690,226	488,984	36.2%	94.0%
12/31/1999 *	4	141,674	41.2%	58,349	8,712,701	75,995	39.8%	99.1%
12/31/2001 *	2	85,109	0.0%	0	9,676,146	(527,701)	40.4%	105.8%
12/31/2003 *	1	28,818	0.0%	0	10,778,065	(716,396)	36.0%	107.1%
12/31/2005 *	1	36,132	0.0%	0	11,571,543	(943,216)	36.0%	108.9%
12/31/2007 *	1	33,398	1235.7%	412,705	11,809,330	1,771,384	0.0%	87.0%
12/31/2008	1	33,985	1235.7%	388,193	11,298,181	1,661,572	45.9%	87.2%
12/31/2009 *	1	34,132	1235.7%	929,963	11,367,448	4,223,173	68.2%	72.9%

*Benefits or assumptions changed

Note: Normal cost prior to 12/31/89 is net of 6% employee contributions.

EXHIBIT 5

SHORT CONDITION TEST

The Arkansas General Assembly has stated that the funding objective for these plans is to pay for benefits with contributions that remain level as a percentage of employee payroll. Thus, the long-term condition test is met when the actual contributions are fairly level and are paid when due.

A short condition test can be used to measure a plan's progress. Under the short condition test, the fund's assets are compared with:

- 1) Active member contributions;
- 2) The liabilities for future benefits to the present retirees and inactive members;
- 3) The liabilities for service already rendered by active members.

If the plan has been following level cost funding, liability (1) and liability (2) above will almost always be fully covered by the rest of the present assets. In addition, liability (3) above will at least partially funded.

The larger the funded portion of liability (3), the stronger the condition of the fund. For a closed fund i.e., one like yours, where no new members are admitted, the funded portion of liability (3) should be steadily increasing.

The following table illustrates the history of the short condition test for this plan:

Valuation Date	<u>Computed Actuarial Liabilities</u>			Valuation Assets	<u>Portion of Liabilities covered by Assets</u>		
	(1) Active Members Contributions	(2) Retirees, Inactives, and DROPS	(3) Actives-Employer Financed		(1)	(2)	(3)
12/31/1984	179,545	1,321,728	1,565,732	1,801,321	100%	100%	19%
12/31/1986	222,557	1,441,356	1,840,658	2,570,869	100%	100%	49%
12/31/1987	213,597	1,761,756	1,813,157	2,973,174	100%	100%	55%
12/31/1989	195,864	2,925,980	1,487,578	3,864,423	100%	100%	50%
12/31/1991	199,054	3,354,921	1,455,571	4,869,981	100%	100%	90%
12/31/1993	247,239	3,561,538	1,951,909	5,783,567	100%	100%	101%
12/31/1995	202,967	5,281,895	1,893,364	6,711,760	100%	100%	65%
12/31/1997	132,387	6,863,159	1,183,664	7,690,226	100%	100%	59%
12/31/1999	96,139	7,720,195	972,362	8,712,701	100%	100%	92%
12/31/2001	55,981	8,403,773	688,691	9,676,146	100%	100%	177%
12/31/2003	4,630	9,985,686	71,353	10,778,065	100%	100%	1104%
12/31/2005	8,586	10,508,665	111,076	11,571,543	100%	100%	949%
12/31/2007	12,583	13,414,468	153,663	11,809,330	100%	88%	0%
12/31/2008	14,574	12,776,203	168,976	11,298,181	100%	88%	0%
12/31/2009	18,972	15,326,860	244,789	11,367,448	100%	74%	0%

Exhibit 6

Employee Profile

Employee data needed for the valuation was obtained from the records furnished by the Arkansas Fire and Police Pension Review Board. The following table shows a detailed breakdown of the present participants by the number of participants and total salary.

Actives

Age		<i>Years of Service</i>							Total
		0-5	5-10	10-15	15-20	20-25	25-30	30 and Over	
Under 25	Count	0	0	0	0	0	0	0	0
	Salary	0	0	0	0	0	0	0	0
25-29	Count	0	0	0	0	0	0	0	0
	Salary	0	0	0	0	0	0	0	0
30-34	Count	0	0	0	0	0	0	0	0
	Salary	0	0	0	0	0	0	0	0
35-39	Count	0	0	0	0	0	0	0	0
	Salary	0	0	0	0	0	0	0	0
40-44	Count	0	0	0	0	0	0	0	0
	Salary	0	0	0	0	0	0	0	0
45-49	Count	0	0	0	0	0	0	0	0
	Salary	0	0	0	0	0	0	0	0
50-54	Count	0	0	0	0	0	0	0	0
	Salary	0	0	0	0	0	0	0	0
55-59	Count	0	0	1	0	0	0	0	1
	Salary	0	0	34,132	0	0	0	0	34,132
60-64	Count	0	0	0	0	0	0	0	0
	Salary	0	0	0	0	0	0	0	0
65 & Over	Count	0	0	0	0	0	0	0	0
	Salary	0	0	0	0	0	0	0	0
Unknown Age	Count	0	0	0	0	0	0	0	0
	Salary	0	0	0	0	0	0	0	0
Total	Count	0	0	1	0	0	0	0	1
	Salary	0	0	34,132	0	0	0	0	34,132

Exhibit 6

Inactive Profile

Employee data needed for the valuation was obtained from the records furnished by the Arkansas Fire and Police Pension Review Board. The following table shows a detailed breakdown of the present payees by the number of payees and total annual benefit.

Retirees and Survivors

Age		Years Since Retirement							Total
		0-1	1-2	2-3	3-4	4-5	5-10	10 and Over	
Under 40	Count	0	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0	0
40-44	Count	0	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0	0
45-49	Count	0	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0	0
50-54	Count	0	0	0	0	0	1	0	1
	Benefit	0	0	0	0	0	40,457	0	40,457
55-59	Count	0	0	1	0	0	1	6	8
	Benefit	0	0	28,952	0	0	24,669	137,687	191,308
60-64	Count	0	0	0	0	1	3	5	9
	Benefit	0	0	0	0	27,555	29,379	125,116	182,050
65-69	Count	0	0	0	0	0	3	5	8
	Benefit	0	0	0	0	0	94,870	117,056	211,926
70-74	Count	0	0	0	0	0	2	2	4
	Benefit	0	0	0	0	0	57,019	53,828	110,847
75-79	Count	0	0	0	0	0	0	5	5
	Benefit	0	0	0	0	0	0	99,543	99,543
80-84	Count	0	0	0	0	0	0	4	4
	Benefit	0	0	0	0	0	0	74,330	74,330
85 & Over	Count	0	0	0	0	0	0	2	2
	Benefit	0	0	0	0	0	0	44,764	44,764
Unknown Age	Count	0	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0	0
Total	Count	0	0	1	0	1	10	29	41
	Benefit	0	0	28,952	0	27,555	246,394	652,324	955,225

This includes 26 retirees with annual benefit of \$621,583
 This includes 8 disableds with annual benefit of \$169,000
 This includes 7 survivors with annual benefit of \$164,642

Exhibit 6

Deferred Retirement Option Plan Profile

Employee data needed for the valuation was obtained from the records furnished by the Arkansas Fire and Police Pension Review Board. The following table shows a detailed breakdown of the current participants on DROP by the number of participants and total annual DROP benefit.

DROP Participants

		<i>Years Since Electing DROP</i>						Total
		0-1	1-2	2-3	3-4	4-5	5-10	
Under 40	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0
40-44	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0
45-49	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0
50-54	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0
55-59	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0
60-64	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0
65-69	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0
70-74	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0
75 & Over	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0
Unknown Age	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0
Total	Count	0	0	0	0	0	0	0
	Benefit	0	0	0	0	0	0	0

EXHIBIT 7

PRINCIPLE PROVISIONS OF THE PLAN

<u>EMPLOYEE</u>	Member of Police Department
<u>EMPLOYER</u>	Jonesboro Police Department
<u>MEMBERSHIP</u>	Condition of Employment. Police officers hired after 1982 must join the statewide Local Police and Firefighters Retirement System
<u>CREDITABLE SERVICE</u>	Determined on basis of service since employment
<u>CONTRIBUTIONS</u>	
<u>Employee</u>	6% of salary. Refundable if member terminates before retirement eligibility.
<u>Employer</u>	<ol style="list-style-type: none">1. Matching contribution equal to employee contribution2. State Insurance Premium Tax turnback3. Local Millage4. 10% of all fines & forfeitures collected by the Police Department.
<u>FINAL SALARY</u>	Highest salary for any continuous twelve-month period of time worked prior to retirement.
<u>DEFERRED RETIREMENT OPTION PLAN</u>	This plan has elected to participate in the Deferred Retirement Option Plan effective 01/10/1994. Members who elect to participate have a DROP account that is increased by the monthly amount of their retirement as if they had retired as of the date DROP was elected. Has not elected coverage under Act 1457 of 1999.
<u>RETIREMENT BENEFITS</u>	
<u>Eligibility</u>	20 Years of Service regardless of age.
<u>Benefit</u>	65% of Final Salary, but not less than \$9,360. If service exceeds 20 years, the annual benefit is increased by \$240 for each year over 20, up to \$1,200/year extra. If service is more than 25 years, member receives an extra 1.25% (for each year over 25) of Final Salary, payable once the retiree reaches age 60. The benefit cannot exceed 100% of Final Salary.

EXHIBIT 7 (Continued)

DEATH BENEFITS

Eligibility

Death of an active member or member receiving benefits.

Benefit

1. Widow receives same amount as member is receiving or eligible for, excluding the 1.25% additional formula for service over 25 years.
2. Each child under age 18 (23 if still in school) receives \$1,500/year. If no surviving spouse, child receives spouse's benefit to age 18.
3. If no widow or children, widowed mother receives \$1,500/year.

DISABILITY BENEFITS

Eligibility

Permanent physical or mental disability. Five year service requirement unless disability is incurred in the line of duty.

Benefit

Non-duty disability

Retirement benefit but not less than \$9,360/year.

Duty related disability

Retirement benefit but not less than 65% of Final Salary and not less than \$9,360/year.

EXHIBIT 8

ACTUARIAL METHODS AND ASSUMPTIONS

The assumptions for this valuation have been selected in accordance with Actuarial Standards of Practice No. 27. The asset valuation method is prescribed in Arkansas Code Annotated 24-11-207. This prescribed asset valuation method directly impacts the investment return assumption. The assumed salary growth is restricted by A.C.A. 24-11-205 in relation to the investment return assumption.

ACTUARIAL COST METHOD

The "entry age normal" cost method has been used.

PRE-RETIREMENT MORTALITY

Deaths have been projected on the basis of the 1983 Group Annuity Table for Males, set back five years for females. Mortality rates at a few sample ages are:

<u>Age</u>	<u>Mortality rate per 1,000</u>
25	0.464
35	0.860
45	2.183
55	6.131

The 1971 Group Annuity Table for Males, set back five years for females was used before the 12/31/2007 Valuation.

POST RETIREMENT MORTALITY

The 1983 Group Annuity Mortality Table was used. For females, the male table was used with a five-year setback. The life expectancy according to this table is as follows:

<u>Age</u>	<u>Males</u>	<u>Females</u>
55	24.87	29.23
65	16.74	20.68

The 1971 Group Annuity Table for Males, set back five years for females was used before the 12/31/2007 Valuation.

VOLUNTARY TERMINATIONS

Annual termination rates at a few sample ages are:

<u>Age</u>	<u>Termination rate per 1,000</u>
20	50
25	45
30	39
35	23
40	9
45	5
50	5
55	5

EXHIBIT 8 (continued)

When a person had less than 4 years of service, we assumed that his chances of voluntary termination were a multiple of thereafter rates, with the following multiples being used:

1st year	2.85
2nd year	2.00
3rd year	1.50
4th year	1.15

ASSUMED INVESTMENT RETURN

3.0% (was 5.0% for the December 31, 2008 valuation)

DISABILITIES

We continued the disability rates used in prior reports. Disability rates at a few sample ages are:

<u>Age</u>	<u>Disability rate per 1,000</u>
20	0.8
25	0.8
30	0.8
35	0.8
40	2.0
45	2.6
50	4.9
55	8.9
60	14.1

One third of the disabilities were assumed to be service related.

For mortality after disability, we assumed rates based on the Eleventh Actuarial Valuation of the Railroad Retirement System, for occupational disabilities

ASSET VALUATION

See Exhibit 3, Part G

EXHIBIT 8 (continued)

SALARY GROWTH

We have used the salary scale used in prior reports. Annual assumed growth at a few sample ages is:

<u>Age</u>	<u>ANNUAL SALARY INCREASE</u>		
	<u>Base</u>	<u>Merit</u>	<u>Total</u>
20	4.0%	4.0%	8.0%
25	4.0%	3.2%	7.2%
30	4.0%	2.8%	6.8%
35	4.0%	2.5%	6.5%
40	4.0%	2.2%	6.2%
45	4.0%	1.7%	5.7%
50	4.0%	1.2%	5.2%
55	4.0%	0.7%	4.7%
60	4.0%	0.2%	4.2%

EXPECTED RETIREMENT AND DROP PATTERN

Since the plan allows full benefits at ages younger than the traditional "65", an assumption that will have an important impact is what percentage of people who are eligible for this early retirement will actually take advantage of it.

This will depend on intangible things such as the economy, health, financial ability to retire, Social Security eligibility, and work patterns. Based on recent experience, we are using the following assumed rates:

<u>Age</u>	<u>Retirement rate per 1,000</u>	
	<u>Retirement</u>	<u>DROP</u>
40-59	133	267
60+	1,000	0

Note: A member was assumed to be eligible for retirement or DROP after attaining age 40 with 20 years of service. It is also assumed that twice the normal number will retire or elect DROP in the first year of eligibility.

EXHIBIT 8 (continued)

RETIREMENT PATTERN AFTER
ELECTION OF DROP

Once a person is on DROP (Deferred Retirement Option Program), they were assumed to retiree from the department as follows:

<u>Years on DROP</u>	<u>Retirement rate per 1,000</u>
1	100
2	200
3	200
4	300
5 or more	1,000

Osborn, Carreiro & Associates, Inc.

ACTUARIES • CONSULTANTS • ANALYSTS

One Union National Plaza, Suite 1690
124 West Capitol Avenue
Little Rock, Arkansas 72201
(501) 376-8043
FAX (501) 376-7847

September 1, 2010

Mr. David Clark, Executive Director
Arkansas Fire and Police Pension Review Board
620 West Third, Suite 200
Little Rock, AR 72201

Re: 2009 DROP Interest Rate Certification
Jonesboro Police

Dear David:

The Deferred Retirement Option Plan (DROP) was established by Act 757 and Act 1004 of 1993. These acts state that the interest rate credited to the DROP accounts would be certified by the actuary for the pension funds. This letter will certify the interest rate as described in the law to be credited for the year 2009.

Pension Fund	Jonesboro Police	
	First 5 years	Second 5 years (if applicable)
1. Net Market Rate of Return	5.87%	5.87%
2. Less 2.0%	- 2.00%	- 2.00%
3. Preliminary DROP Rate	3.87%	3.87%
4. Minimum Rate (2009 valuation rate or 0% for second column)	5.00%	0.00%
5. Certified Drop Rate Greater of (3) or (4)	5.00%	3.87%

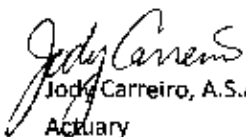
The above rate is certified to be the rate to be credited to DROP accounts in 2009. The Market Value Rate of Return was based on the financial reports provided by the Arkansas Fire and Police Pension Review Board. These reports were not audited, but were reviewed for reasonableness and completeness.

The Pension Review Board in its meeting March 10, 2009 voted to reiterate to plans that the interest rate certified in this letter is the rate to be applied on the DROP accounts for 2009. The PRB understands that this is being given to you 6 months after the end of the year and may cause you to have to adjust distributions that were made during 2009. They also interpreted the rate of return shown here to mean the market value based rate of return.

Please note that for a plan to remain qualified it cannot pay benefits above the IRS 415 limits.

If you have any questions or comments, please let me know.

Sincerely,


Jody Carreiro, A.S.A., M.A.A.A.
Actuary



ARKANSAS FIRE & POLICE PENSION REVIEW BOARD

620 W. 3rd, Suite 200
Little Rock, Arkansas 72201-2223
Telephone: (501) 682-1745
Toll-Free: (866) 859-1745
Fax: (501) 682-1751
email: info@lopfi-prb.com
website: www.lopfi-prb.com

To: Board of Trustees
JONESBORO Police Pension and Relief Fund

From: PRB Staff

Re: 2009 Actuarial Valuation

Date: August 31, 2010

Under state law the actuary for the PRB tests each local fire and police pension fund for actuarial soundness. Effective with this report, the PRB has implemented an annual valuation cycle to assist each fund in monitoring the funding progress of their pension fund. The enclosed valuation for December 31, 2009, answers the following questions about your fund:

- | | <u>YES</u> | <u>NO</u> |
|---|------------|-------------------------------------|
| 1. Does income meet or exceed the Necessary Employer Contribution (see page 4)? | _____ | <input checked="" type="checkbox"/> |
| 2. Is the funded percentage at least 97% (see page 10), OR are there enough assets to cover: all active member contributions; all payments to current beneficiaries; and 100% of all future payments earned by active members (see page 11)? | _____ | <input checked="" type="checkbox"/> |
| 3. Is the pension fund actuarially sound? (YES response to item 1 <u>and</u> 2) | _____ | <input checked="" type="checkbox"/> |



ARKANSAS FIRE & POLICE PENSION REVIEW BOARD

620 W. 3rd, Suite 200
Little Rock, Arkansas 72201-2223
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Toll-Free: (866) 659-1745
Fax: (501) 682-1751
email: info@loppi-prb.com
website: www.loppi-prb.com

To: Local Pension Fund Board of Trustees
From: Arkansas Fire and Police Pension Review Board (PRB)
Re: 2009 Certified DROP Interest Rate-**AMENDED**
Date: September 1, 2010

This memo and attached letter replace the July 8, 2010 versions. The July 8th information used an incorrect method to calculate the DROP interest rate. Please replace and use this corrected letter. Again, do not use the information communicated in the July 8th letter.

The enclosed letter from the PRB's actuary provides the certified rate to award interest to the DROP accounts for your local fire and/or police pension fund. The rate is located in item 5 and used for the 2009 year.

For pension funds with enhancements to DROP i.e. extended the DROP period beyond 5 years; DROP accounts left on deposit; and/or continued employment after DROP, the rate used for these cases, also for the 2009 year, is located in item 5, but in the column on the right.

Should you have questions, please contact Denise Reed at one of the above phone numbers. Thank you.