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March 26, 2013

Mr. David B. Clark
Executive Director
Arkansas Local Police and Fire Retirement System
620 W. 3rd, Suite 200
Little Rock, Arkansas 72201-2212

Re: Actuarial Analysis of Senate Bill 137

Dear Mr. Clark:

As requested, enclosed is our Actuarial Analysis of Senate Bill 137 (SB 137) for the Arkansas Local Police and Fire Retirement System.

Please call if you have any questions or comments.

Respectfully submitted,

David L. Hoffman

Heidi G. Barry, ASA, MAAA

DLH:HGB:bd

ARKANSAS LOCAL POLICE AND FIRE RETIREMENT SYSTEM
ACTUARIAL ANALYSIS OF SB 137
AS OF DECEMBER 31, 2011

Requested By:	Mr. David B. Clark, Executive Director Arkansas Local Police and Fire Retirement System
Date:	March 26, 2013
Submitted By:	David L. Hoffman and Heidi G. Barry, ASA, MAAA Gabriel, Roeder, Smith & Company

As requested, we have determined the expected increase in employer contribution rates that would result from certain proposed benefit changes for members covered in the Arkansas Local Police and Fire Retirement System. This supplemental report was requested by the Executive Director.

The date of the study was December 31, 2011. This supplemental valuation does not predict the result of the December 31, 2012 valuation or of any other future actuarial valuation. (Future activities can affect future valuation results in an unpredictable manner.) Rather, the supplemental valuation gives an indication of the probable effect of the proposed changes on future valuations without comment on the complete end result of the future valuations.

This report is intended to describe the financial effect of the proposed plan changes. No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

The actuary submitting this statement is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries required to render the actuarial opinion contained herein.

The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.

If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

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The actuarial methods were the same as those used in the regular valuation as of December 31, 2011. The assumptions used were those adopted by the Board at their December 6, 2012 meeting. In particular the economic assumptions used in the supplemental actuarial valuation were net investment return of 8.0% per year and wage inflation of 4.0% per year. Changes in actuarial accrued liabilities were amortized as a level-percent-of-payroll over a 30-year period.

A summary of active member data as of December 31, 2011 for all current **Benefit Program 1** employers follows:

Paid Service Members	Number Active	Payroll	Average	
			Age	Service
Paid Service - Benefit Program 1	5,197	$ 231,207,198	38.6 years	11.4 years

A summary of active member data as of December 31, 2011 for current **Benefit Program 2** employers follows:

Paid Service Members	Number Active	Payroll	Average	
			Age	Service
Paid Service - Benefit Program 2	750	$ 37,572,598	39.1 years	12.5 years

A summary of active member data as of December 31, 2011 for current **Volunteer** employers follows:

Number Active	Average	
	Age	Service
7,034	40.8 years	9.5 years

A summary of active member data as of December 31, 2011 for current **DROP** employers follows:

Paid Service Members	Number Active	Annual Benefit
DROP - Benefit Program 1	42	$ 821,376
DROP - Benefit Program 2	8	117,636

PRESENT PROVISIONS:

DROP (Deferred Retirement Option Plan). Paid service members who have attained age 55 with at least 20 years of service or members with at least 28 years of service may participate. A participant with 28 years of service will receive 75% of his accrued benefit at time of DROP election while in the DROP, payable into the participant's DROP account (which will be credited with 6% interest annually). A participant with less than 28 years of service will receive 72% of his accrued benefit at time of DROP election while in the DROP, payable into the participant's DROP account (which will be credited with 6% interest annually). The duration of participation in the Local Police and Fire Deferred Retirement Option Plan for active paid service police officers and firefighters shall not exceed **five (5)** years. The member's monthly retirement benefit shall not change unless the retirement annuity as defined in § 24-10-602 is increased.

Member Contributions. Each member contributes 8.5% of his covered pay if his covered employment is resulting in Paid Service credit and is not covered by Social Security. For other covered employment conditions, each member contributes 2.5% of his covered pay. The Member Deposit Account is awarded interest credit of 3% annually.

Voluntary Retirement. Age 60 with at least **5** years of credited service, age 55 with at least 20 years of credited service or any age with 28 or more years of credited service.

Vested Termination Annuity. **5** years of credited service

Non-Duty Disability Annuity. **5** or more years of credited service

Non-Duty Death-in-Service. **5** years of service

Military and Reciprocal Service Purchase. A member shall accrue **five (5)** years of actual service in order to be eligible to purchase service.

PROPOSED PROVISIONS:

DROP (Deferred Retirement Option Plan). Paid service members who have attained age 55 with at least 20 years of service or members with at least 28 years of service may participate. A participant with 28 years of service will receive 75% of his accrued benefit at time of DROP election while in the DROP, payable into the participant's DROP account (which will be credited with 6% interest annually). A participant with less than 28 years of service will receive 72% of his accrued benefit at time of DROP election while in the DROP, payable into the participant's DROP account (which will be credited with 6% interest annually). The duration of participation in the Local Police and Fire Deferred Retirement Option Plan for active paid service police officers and firefighters shall not exceed **seven (7)** years. When a member has reached year six (6) of participation in the Local Police and Fire Deferred Retirement Option Plan under § 24-10-706, the amount of the benefit calculated at the time of enrollment in the plan shall be redetermined consistent with § 24-10-602. The redetermined amount shall be the amount of the benefit as of the immediately preceding July 1 increased by 3%.

Member Contributions. Each member contributes 8.5% of his covered pay if his covered employment is resulting in Paid Service credit and is not covered by Social Security. For other covered employment conditions, each member contributes 2.5% of his covered pay. Beginning July 1, 2013, the Board shall cease awarding interest to each member's deposit account.

For New Hires as of July 1, 2013

Voluntary Retirement. Age 60 with at least **10** years of credited service, age 55 with at least 20 years of credited service or any age with 28 or more years of credited service.

Vested Termination Annuity. **10** years of credited service

Non-Duty Disability Annuity. **10** or more years of credited service

Non-Duty Death-in-Service. **10** years of service

Military and Reciprocal Service Purchase. A member shall accrue **ten (10)** years of actual service in order to be eligible to purchase service.

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Actuarial Statement: The following shows the computed increase in the average paid service employer contribution rate that is expected to result from this proposed benefit change:

	Increase in Computed Employer Contributions as Percent-of-Payroll			
	Current Retirement Assumptions		Alternate Retirement Assumptions	
Contributions for	**BP1**	**BP2**	**BP1**	**BP2**
Normal Cost	(0.01)%	(0.02)%	(0.08)%	(0.10)%
Unfunded Accrued Liabilities	(0.01)	(0.02)%	(0.13)	(0.08)%
Total	(0.02)%	(0.04)%	(0.21)%	(0.18)%

Comment A: The change in the Unfunded Accrued Liability amortization above considers both current and future active members and participating DROP members.

Comment B: The figures shown in this report are based on the data, methods, and plan provisions used in the December 31, 2011 actuarial valuation. The assumptions used were those adopted by the Board at their December 6, 2012 meeting.

Comment C: The 10-year vesting requirement applies only to members hired on or after July 1, 2013. The effect of that change is not reflected above; rather the reduction in employer costs will emerge gradually over a 20-30 year period. Using current retirement assumptions (see Comment D) the savings resulting from this change will be 0.20% of new hire payroll, 0.19% of new hire payroll and $4.98 per newly hired member per month for Benefit Program 1 Paid Service, Benefit Program 2 Paid Service and Volunteer Service employers, respectively if the proposal is implemented. The savings resulting from this change, using the alternate assumptions, will be 0.27% of new hire payroll for both Benefit Program 1 and Benefit Program 2. Current active members as of December 31, 2011 were used to estimate the effect on future active members.

Comment D: Assumptions are made for the probability of an eligible member leaving employment after meeting the service eligibility requirement (whether or not the member participates in the DROP). Extending the period of the DROP from 5 years to 7 years may change the way members behave. We have included an alternate retirement pattern assumption for illustration purposes. If the proposal is implemented, we will look at experience as it emerges to determine if current assumptions are reasonable.

Below are the current and alternate assumptions used in this valuation.

	Percents of Paid Active Members Retiring within Next Year	
Years of Service	Current Assumption	Alternate Assumption
28	25 %	25 %
29	15	15
30	15	15
31	20	15
32	35	30
33	40	35
34	100	50
35	100	100

Comment E: Please note that cessation of the MDA interest credit affects only participants who either choose to withdraw their contributions and forfeit benefits or whose employment ends before they are vested in any benefit. The typical annual savings that will result is only the interest paid on any refunded contributions and has been included in the results above.