

**Arkansas Local Fire and Police  
Pension and Relief Funds**

Summary of  
Actuarial Valuation Data and Results  
As of December 31, 2011

Prepared by:  
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August 22, 2012  
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August 22, 2012

Arkansas Fire & Police Pension Review Board  
620 West Third  
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Ladies and Gentlemen:

We have completed the actuarial valuations of the 150 Fire and Police Pension Funds as of December 31, 2011. This report contains summary information from those valuations, as well as comparable information from the December 31, 2008 and 2009 valuations.

The following table shows the progress of the funds over the last several years:

	<u>12/31/2008</u>	<u>12/31/2009</u>	<u>12/31/2010</u>	<u>12/31/2011</u>
Plans Valued	178	157	150	144
Number of Active Members	106	89	79	63
Number on DROP	117	85	64	52
Number of Retirees/Benefit	3,483	3,221	3,102	2,999
Assets	406,668,898	372,097,352	354,638,783	332,273,115
Unfunded Actuarial Accrued Liability	218,943,000	311,036,314	301,432,808	301,641,466
Market Value of Assets	336,205,101	353,025,678	346,508,810	322,028,740
Unfunded AL on Market Value	289,406,797	330,107,988	309,562,781	311,885,841
Percent of Liability Funded:				
Police	63%	52%	52%	50%
Full Paid Fire	66%	54%	53%	51%
Volunteer & Part-Paid Fire	68%	72%	76%	79%
Reported Employer Contribution as a Percent of Actuarially Determined Contributions				
Police	44%	33%	33%	34%
Full Paid Fire	46%	31%	30%	31%
Volunteer & Part-Paid Fire	46%	87%	99%	103%

## FORMAT OF REPORT

Following this cover letter, our report contains the following exhibits:

- EXHIBIT 1 – Summarizes various information as of December 31, 2011, broken out by Police, Full Paid Fire, and Volunteer Fire.
- EXHIBIT 2 – Compares the December 31, 2011 valuation results with those of December 31, 2010, 2009 and 2008.
- EXHIBIT 3 – Develops a "funded status", and summarizes information for each "funded status".
- EXHIBIT 4 – Summarizes the number of plans by various funding criteria.
- EXHIBIT 5 – Summary of Rates of Return.
- EXHIBIT 6 – Lists certain financial values for all of the plans valued at December 31, 2011.

## PROGRESS OF FUNDING

The percentage of actuarial accrued liabilities that are covered by assets had generally increased over the ten years before 2008 for police and full-paid fire funds, even after benefit increases. The market changes of 2008-2009 had a significant negative impact on the plans.

The following table shows how many plans improved/reduced their percentage of valuation assets to actuarial accrued liabilities since December 31, 2010:

	Number of Plans That <u>Improved</u>	Number of Plans That <u>Declined</u>
Police	6	9
Full Paid Fire	20	17
Volunteer/Part Paid Fire	78	47

Overall, the actual employer contributions to the plans are still less than the actuarially required amounts for police and paid firefighter funds. Of course, some plans receive more contributions than required, while others receive less than required.

You can see that there was some general improvement in funding this year over the previous year. Since the valuation interest rates were the same for 2009, 2010 and 2011, this is good general measurement of the progress of funding.

## FUNDED STATUS

Exhibit 3 (pages 6 to 9) develops six categories of "funded status" and shows how many plans fall into each group.

Funded status A and B currently meet the Board's definition of "actuarially sound". Funded status C plans do not currently meet the definition of "actuarially sound", but are projected to be "actuarially sound" some time in the future. Funded status D plans are not making the required contributions. Funded status E plans have enough assets to last about three years, while funded status F plans don't have enough assets for one year's benefit payments.

The following table shows how many plans improved/reduced their funded status since December 31, 2010:

	Number of Plans That <u>Improved</u>	Number of Plans That <u>Declined</u>
Police	1	1
Full Paid Fire	6	7
Volunteer/Part Paid Fire	46	24

A review of Exhibit 3, and the graph on page 9, shows that the bulk of "at risk" plans are in funded status D. These plans with a status of D have a total shortfall of \$46.8 million in contributions. In other words, the employer contributions to these plans are \$46.8 million less than the actuarially computed contributions. This number is about the same as \$47.8 million from last year.

## INVESTMENT RETURNS

As you know, the PRB decided to tier the investment return assumption for this year's valuations. In general, the smallest plans had the worst history of investment earnings and most did not have professional investment advice. Exhibit 5 shows the 2011 (market) investment returns as well as the five year average returns. This exhibit also notes the assumed returns used for the 2009, 2010 and 2011 valuations. The 2009 valuation reports were the most recent adjustment to valuation rates based on the five year average returns. I have included in Exhibit 6 the valuation interest rate for each plan.

## **OUTLOOK FOR INSOLVENT PLANS**

Exhibit 6 lists some financial and actuarial information for each plan. Because of the market conditions of 2008, several more plans are projected to deplete their assets, including several larger plans. This is an area we have discussed with the board in detail. This continues to deserve much attention since 90% of the total liability of these plans are those with status D or lower.

An “early indicator” projection using the 5% investment projection for all plans (the most prevalent large plan rate) is usually part of this exhibit. Plans that are earning less than 5% per year could be in more imminent danger than the early indicator shows. The increased allocation of premium tax to small communities has significantly reduced the number of possible insolvencies. The new allocation formula, Act 979 of 2011, changes this calculation significantly. We will provide the early indicator in a report to the board in December with a discussion of projected insolvent plans.

## **DATA RECEIVED FROM PLANS**

The results of these valuations are based on the financial and participant data supplied by each plan. We did not audit this data, although we did review it for reasonableness and consistency.

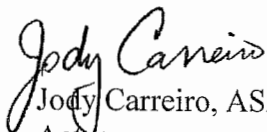
In total, we returned more than 21 plan reports because of missing or incorrect data. Despite our significant efforts (preparing checklists, printing collection packets with the previous year’s numbers, etc.) and the efforts by staff, this rate is still about 15%. This does not include many follow up calls trying to correct the base benefits.

We did have to footnote three reports because of data quality issues based on our professional standards.

We made two significant changes last valuation cycle. First, we provided an Excel spreadsheet with all of the data collection information on it for each plan. We corrected and expanded the data checks this year. We also provided all of the valuation reports in portable document format (pdf) instead of on paper.

If you have any questions or comments, please feel free to contact us.

Sincerely,

  
Jody Carreiro, ASA, MAAA, FCA, EA  
Actuary































